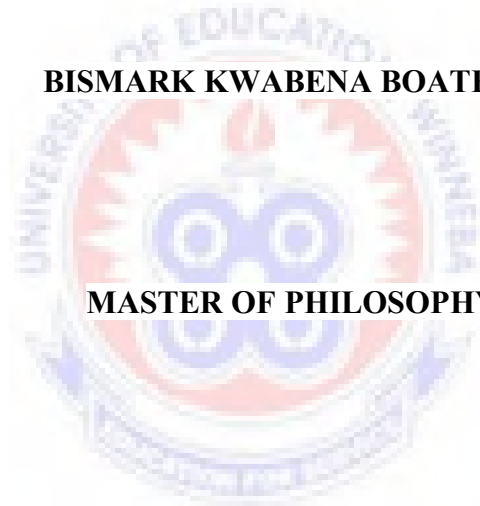


UNIVERSITY OF EDUCATION, WINNEBA

**PERCEPTIONS OF THE PEOPLE ON “OPERATION VANGUARD” IN THE
UPPER DENKYIRA WEST DISTRICT IN THE CENTRAL REGION OF
GHANA**

BISMARCK KWABENA BOATENG

MASTER OF PHILOSOPHY



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**A thesis in the Department of Social Studies Education,
Faculty of Social Sciences, submitted to the School of
Graduate Studies in partial fulfillment
of the requirements for the award of the degree of
Master of Philosophy
(Social Studies)
in the University of Education, Winneba**

MAY, 2020

DECLARATION

Student's Declaration

I, Bismark Kwabena Boateng, hereby declare that this research, with the exception of quotations and references contained in published works, which have all been duly identified and acknowledged has not been submitted either in part or whole for another degree elsewhere.

Signature:

Date:

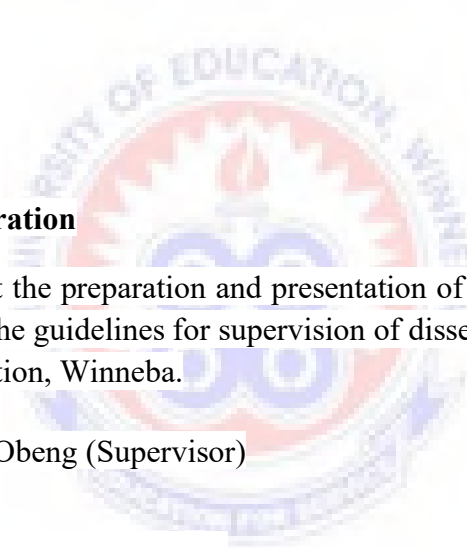
Supervisor's Declaration

I hereby declare that the preparation and presentation of this work were supervised in accordance with the guidelines for supervision of dissertation as laid down by the University of Education, Winneba.

Dr. Ignatius Joseph Obeng (Supervisor)

Signature:

Date:



DEDICATION

To my son, Israel Kwabena Oduro-Boateng



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A study of this nature cannot be successfully completed without the support of certain personalities. I wish, therefore to acknowledge such personalities for their immeasurable contributions to the success of my research. First of all, I wish to thank the almighty God for providing me with his divine protection throughout the period that I worked on my study.

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ABSTRACT

The study was designed to examine the prospects and challenges of Operation Vanguard in the Upper Denkyira West District. In conducting the study, the case study design was used. A sample size of twenty-two participants was selected for the study using the purposive and convenient sampling techniques. The data were analysed qualitatively. The main findings from the research are that Operation Vanguard has two other parallel operations running alongside it. These are GalamSTOP and the Small-Scale Miners Association Task Force. Operation Vanguard appears militarised involving the use of weapons and force on miners. The operation is faced with challenges, including military limitations, political challenges and economic challenges. There were socio-cultural factors that were also affecting Operation Vanguard. In terms of prospects, the future of Operation Vanguard appears bleak and unpredictable. Based on the findings from the research, it was recommended that community leaders and chiefs should be involved in the fight against illegal mining. In addition, there is the need for Parliament to pass a law to regulate the activities of Operation Vanguard. Moreover, Operation Vanguard should not work in isolation, but rather it should team up with various groups in the District, including traditional and religious authorities, Assembly and Unit Committee members to stop illegal mining in the District. This will offer Operation Vanguard the necessary cooperation from the local people to contribute to its success. The local people must also be introduced to other forms of alternative livelihood methods to reduce their over-dependence on mining for their survival.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Illegal mining is a major issue that is widespread in developing countries in Africa, Asia, Oceania, and Central and South America. In 2013, the World Bank reported that Artisanal Small-Scale Mining (ASM) occurs in approximately 80 countries worldwide; and there are approximately 100 million artisanal miners globally (World Bank, 2013). The World Bank also estimated that about 100 million people – workers and their families - depend on artisanal mining compared to about 7 million people worldwide in industrial mining.

The nature of illegal mining and its persistence attract attention at all levels. There are three dimensions that have attracted this attention. As Hilson (2001) explained, illegal mining has been happening all over the world for centuries. Second, Parry (2014) explained that: illegal mining is now occurring at a much faster rate and at proportions that are not leaving enough time for the land to replenish and regenerate itself. The concern is that greater demands placed on the land by an ever-increasing human population is putting much strain and drain on the carrying capacity of the earth as well as encouraging faster depletion of the limited natural resources in a haphazard manner that threatens sustainability. The third is that the nature of illegal mining is such that the lives of miners are always at risk. One report suggested that it is rife with brazen criminality that is viscerally shocking and relatively arcane (Human Rights Watch, 2012).

According to Human Rights Watch (2012), criminality is not only about illegal mining but that in India, for example, it involves the extraction of minerals from a

land that a mine operator has no legal right to work on; in some cases, this takes place in deep hidden isolated forests, and it occurs as rapid fly-by-night operations with only a handful of machines and labourers working at the peril of their lives.

Aside these concerns, there have been multiple issues that affect any meaningful effort to deal with illegal mining. The whole organisation of illegal mining is such that the sector represents an important livelihood and income source for the poverty affected local populations in many developing countries where the practice is rampant (Pegg, 2006). One record suggested that illegal mining accounts for 15 to 20 per cent of global non-fuel mineral production and is an important source of revenue for miners, their communities and local governments, especially when the activity is focused on mining high-value minerals such as gold, silver and gemstones (Inter-governmental Forum on Mining, Minerals, Metals and Sustainable Development, 2017). Also, the Inter-governmental Forum on Mining, Minerals, Metals and Sustainable Development estimated that about 50 percent of the total number of illegal mining involves gold extraction, contributing to 90 per cent of total employment in gold mining (Levin, 2014). It is estimated that the contribution of illegal mining to global gold production is about 20 percent (World Bank, 2013).

In Africa, there are major issues about illegal mining everywhere (Mawowa, 2013). It is widespread and a major issue from Angola through Nigeria, South Africa, the Democratic Republic of Congo and Uganda to Zimbabwe. Illegal mining operations have led to major environmental problems, deaths and serious national political discussions (Adeyemi & Olagunju, 2017). One major dynamic was the case in South Africa, where the state had to make difficult choices – to rescue and let go of illegal miners trapped in a pit, who were on hunger strike for fear that they would be arrested

once they are saved by the state. Such situations have increased concerns about finding ways to end illegal mining.

Ghana has a long history of illegal mining activities with increasing participation by local and foreign nationals (Gyekye, 2018). According to the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (2017), Ghana, Ivory Coast, Mali, and Tanzania are four countries with an average of 500,000 to 1 million miners in Africa in 2014.

Recognising the potential of the sector concerning employment and revenue generation, the government of Ghana legalised small-scale mining in 1989 to regulate the activities to sustain the environment (Parry, 2014). The Minerals and Mining Law (PNDC Law 153) sought to register and regulate the activities of mining companies. However, illegal mining has spread across the mining communities in the country because of the perceived difficulties of obtaining mining license by Ghanaians, together with the entry of foreign nationals into the sector (Parry, 2014). Since 2005, an estimated 50,000 Chinese have left their country to pursue mostly illegally mining activities in Ghana (Hilson et al., 2014).

In Ghana, the emergence of illegal small-scale mining has been considered as a threat to the environment and a national issue (Ministry of Lands and Natural Resources, 2017). Research has shown that illegal mining negatively with environmental protection, cocoa productivity and other sustainable livelihoods in rural communities (Laari, 2018). Its co-existence with other economic activities has received mixed reactions from stakeholders because it is believed that most of the illegal small-scale mining activities cost the nation more than its accruing benefits. The Ghana Cocoa Board has been concerned about the impacts of illegal mining on cocoa productivity

where farmers are destroying their farmlands for illegal gold mining (Ghana Cocoa Board, 2017). As a result, the cocoa sector, which forms the significant part of agriculture is seen to be the most affected by illegal mining. Some have been concerned about examining how illegal mining impacts the well-being of people in the mining communities. Questions have also been raised about the net effect of illegal mining on rural livelihoods (Hilson, 2001). The considerations and the national consequences of people transferring from other economic activities into small-scale mining have been highlighted (Ghana News Agency, 2013).

Given the dangers associated with illegal mining, much efforts have been made to address it, but all were largely unsuccessful. There seemed to be several reasons for this. First, illegal mining has been regarded as a means to an end, especially for residents in communities where the minerals are discovered (Yeboah, 2014). Second, illegal mining has emerged as another form of predominant economic activities for the natives and migrants in various areas (Mantey, Nyarko & Owusu-Nimo, 2016). Also, it seems that people from all walks of life in the society are involved in illegal mining. In terms of gender, reports indicate that men and women have different tasks along the mineral processing chain, with men being more present in the extraction phase, and women in mineral processing and the delivery of auxiliary services (Armah et al., 2016; Hinton, Veiga & Beinhoff, 2003).

This research is necessitated by the formation of Operation Vanguard in 2017 as the solution to end illegal mining in Ghana. The report indicated that Nana Akuffo-Addo launched Operation Vanguard on 31 July, 2017, in fulfilment of his promise of stopping illegal mining activities, otherwise known as ‘galamsey’ (the local Ghanaian name for illegal mining) in the three most ravaged regions Ashanti, Eastern and Weste

rn in order to protect the nation's forest and water bodies (Awiah, 2017; Citi FM online, 2017; GhanaWeb, 2017). However, two years since the start of Operation Vanguard, there are several reports with cases of increasing illegal mining operations in the country.

The Upper Denkyira West District is one of the major areas where illegal mining appears to persist. Personal observations indicate that illegal small-scale miners continue to operate. Also, anecdotal evidence alleged cases of illegal gold mining indicating that Operation Vanguard does not appear to have stopped illegal mining. The Upper Denkyira West District is one of the areas where the Operation Vanguard Joint Task Force is located. Consequently, this research sought to explore the nature, challenges and prospects of Operation Vanguard, using the case of Upper Denkyira West, where mining is known to be a major economic activity and where an Operation Vanguard team is stationed.

1.2 Statement of the Problem

Illegal mining persists in Ghana despite huge investments in militarised operations to end it. Despite the failure of several past militarised operations to end illegal mining, the Ghana government has adopted another military-styled operation, Operation Vanguard, in a renewed attempt to end illegal mining in Ghana. However, there are emerging concerns that this operation may not succeed as reports do not seem to suggest that illegal mining activities are stopping. Though the informal nature and the whole un-mechanised operation generally results in low productivity, there are arguments to the effect that illegal mining is the mainstay of some local communities and a major contributor to family income as well as the major source of livelihood to people in the communities where it is rampant. Although illegal small-scale mining

has been seen as a threat to the national economy on various fronts, it has various immediate economic benefits for those involved in it.

Since the launch of Operation Vanguard, there have been reports of arrests, extortion of money from galamsey operators, burning and seizure of mining equipment and brutalities, including killings (Modern Ghana, 2017; Abdulai, 2017). Many have been arrested, prosecuted and jailed (Abdulai, 2017). However, little has been reported in terms of the extent to which Operation Vanguard is on its course to achieve the goal of ending illegal mining. Also, much of what is known about the nature and activities of Operation Vanguard is based on media reportage and hearsay evidence. Consequently, there is little knowledge about the nature of its operation, the challenges to the operation and the prospects it portends in ending illegal mining in Ghana.

Personal observations and anecdotal evidence from community members showed that illegal mining persists in the Upper Denkyira West District since the ban was imposed and Operation Vanguard launched. However, Upper Denkyira West District is a nerve centre of Operation Vanguard as it hosts many soldiers and police officers who are camped in the District as part of the Joint Task Force involved in the operation. Therefore, the persistence of illegal mining in the District calls to question, the prospects of Operation Vanguard. Alleged cases of illegal gold mining in the Upper Denkyira West District indicate that Operation Vanguard does not appear to have been stopping illegal mining as operatives are camped in the District.

Also, Upper Denkyira West District is one of the communities where illegal mining is prevalent, but no known studies have been conducted to determine the impact of Operation Vanguard on the lives of people in the mining communities in the District.

Therefore, this research sought to explore the nature of the activities of the Operation Vanguard, the challenges and the prospects of the operation in the area.

1.3 Purpose of the Research

The purpose of this research was to examine the perceptions of the people on operation vanguard in the nature in the Upper Denkyira West District.

1.4 Research Objectives

The objectives of the research were to:

- (i) describe the work of Operation Vanguard in the Upper Denkyira West District.
- (ii) explore the challenges of Operation Vanguard in the Upper Denkyira West District.
- (iii) examine the prospects of Operation Vanguard in the Upper Denkyira West District.

1.5 Research Questions

The study was guided by the following research questions:

- (i) How does Operation Vanguard work in the Upper Denkyira West District?
- (ii) What challenges do Operation Vanguard face in the discharge of its duties in the Upper Denkyira West District?
- (iii) What are the prospects of Operation Vanguard in the Upper Denkyira West District?

1.6 Significance of the Study

This study is significant for several reasons. First of all, this research would generate knowledge about the nature of Operation Vanguard. It will thus highlight the challenges faced by Operation Vanguard and the prospects it portends. This research

will be a useful addition to the literature on efforts to stop illegal mining in Ghana and elsewhere. The results will also provide useful insights to policy makers who are interested in understanding the ways in which Operation Vanguard can be improved to achieve its mission.

The study will also provide insights to the Minerals' Commission about the ways they can review the bureaucracies that affect registration as well as how lands can be leased to promote legal mining. The findings will be useful for academics that are interested in understating the challenges and prospects of using military operations to end illegal mining. Further research can be conducted to fully understand the issues related to ending illegal mining in Ghana. Overall, the results of the study will be useful in the development of policies and their implementation in ways that can address issues related to illegal mining in Ghana.

1.7 Limitations of the Study

There are many challenges which may have impacted on the quality of the study. Several attempts made by the researcher to contact the lead commander of Operation Vanguard team to interview him about the nature and challenges of their operations proved futile because their strict military rules did not permit him to do so. In addition, many studies have been conducted on illegal mining, but not on Operation Vanguard. All the researches conducted earlier were also focused on Mali and Tanzania, among others. Very few of the studies have been focused on Operation Vanguard in Ghana and none of the literature reviewed was about Operation Vanguard in the Upper Denkyira West District. This made the study to be constrained by relevant literature for comparative purposes.

About sixty per cent of the Upper Denkyira West population are farmers and illegal miners. It was therefore, very difficult getting community members to provide the needed information for the study since they were usually busy on their farms and mining.

1.8 Organisation of the Study

The study is organised in five chapters. Chapter One focuses on the introduction which discusses the background to the study, statement of the problem, the objectives of the study, research questions and significance of the study. Chapter Two presents the theoretical framework. It also reviews the literature on small-scale mining activities and the issues related to past efforts as well the issues relating to Operation Vanguard. Chapter Three addresses the research methodology. It discusses the research design and the rationale behind the choice. The target population, the study population, sample and sampling techniques are also discussed in this chapter. Also, the methods of data collection, analysis and ethical considerations are addressed. Chapter Four concentrates on the findings and the discussion of the data. Chapter Five presents the summary of the study and this concentrates on the findings from the research, the conclusions and the recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the theoretical framework that guided the research. It also reviews the literature on small-scale mining activities. Past efforts made to end illegal mining in Ghana as well as the issues related to Operation Vanguard are also discussed in this chapter.

2.1 Theoretical Perspectives on Illegal Mining

There are several economic and social theories explaining mining and difficulties societies have in preventing illegal mining and its challenges in developing countries. The four focal theories that informed and guided this research are the Symbolic Interaction Theory, Economic Theory of Illegal goods, Game Theory and the Political Ecology Theory.

2.1.1 Symbolic Interactionism

Some studies in developed and developing countries, including Ghana have looked at Symbolic Interactionism as a theoretical resource. This theorisation holds first that human beings behave toward things based on the meaning those things carry for them (Vilar & Inglesa, 2001). “Things” or situations encompass anything from physical objects such as tables and chairs, to other humans, institutions, guiding ideals, activities of others, and situations that arise as part of daily life (Anderson & Taylor, 2009).

The second premise is the idea that the meanings of these things are derived from the social interaction people have with one another. The third premise is that these

meanings are modified through an interpretative process employed by the person dealing with the things he or she might encounter. When applied to efforts to end illegal mining, Blumer (1969) argued that illegal miners have interpretations of registration and legality different from the views of authorities. One way to read the proposition of Blumer is that when illegal miners misinterpret the registration process as tedious and flout with time wasting, they will be reluctant to register. This point was made in the work of Parry (2014), who explained that the illegal miners' decision or reluctance not to register their activities might be due to what they have heard about the authorities, what they have seen and what they feel, among others.

Similarly, Weber (1978) explained that individuals act according to their interpretation of the meaning of their world. According to Anderson and Taylor (2009), the Symbolic Interaction Theory analyses society by addressing the subjective meanings that people impose on objects, events and behaviours. Subjective meanings are given primacy because it is believed that people behave based on what they believe and not just on what is objectively true. As Parry (2014) argued, illegal miners might have a totally different understanding of the import of registration, legality and the effects of their illegal activities. Therefore, they might have interpreted and misunderstood the message of ending illegal mining to mean an attempt to deny them their source of livelihood. For example, their understanding of registration might mean surveying the land, drawing an artist's plan to know the areas of land they can operate, and presenting it to the District Assembly for days. On the contrary, Parry (2014) and other writers, including Hilson and Potter (2005), noted that there is often a lengthy waiting period for application decisions. The need to travel to the capital city to complete the paperwork, and the requirement to make several payments, have further discouraged individuals from obtaining a license for small-scale mining. It is

safe to say that the government has done little to encourage legal small mining through the application of its legislation.

2.1.2 The Economic Theory of Illegal Goods

The second theoretical resource employed for the analysis of illegal mining is the Economic Theory of Illegal Goods which coalesces three main ideas (Becker, Murphy & Grossman, 2004). This theory broadly views illegal mining as motivated by poverty, market demands for illegally mined minerals and the profitability of illegal mining. The first part of the theory explains that poverty largely accounts for the supply and demand of illegal goods (Pegg, 2006). This view sees illegal mining as a source of livelihood for those engaged in the activity. Illegal miners are usually recruited from poor rural households and do offer their services so cheaply that they have access to instant money. Hence, they mine gold as an illicit good that has willing buyers who pay instant cash. Since the poor get instant money from illegal gold mining, they will find it very difficult to stop the activity. Therefore, the difficulty in ending illegal mining resides in the fact that people will continue to do it because it is their source of livelihood.

The second part of the theory explains that illegal mining is difficult to address because there is demand for illegally-mined minerals. The theory holds that apprehension and conviction of illegal suppliers obviously depend on the extent of the difference between the social and private value of consumption of illegal goods, but they also depend crucially on the elasticity of demand for these goods. In particular, when demand is inelastic, it does not pay to enforce any prohibition unless the social value is negative and not merely less than the private value.

Within this theorisation, illegal mining is profitable for illicit labour brokers and traffickers to incur the risk of transporting and recruiting people illegally. The third points out that the profitability of illegal mining points to inefficiencies within the formal industry (Berker et al., 2006). A growing industry with functional labour relations would absorb more employees, crowding out opportunities for illicit labour broking and illegal mining. Clear, uncomplicated and coherent minerals and labour legislation is a necessary condition for growing the industry. Where efforts to obtain licence are difficult and complicated, people will resort to illegal options, thereby promoting illegal mining.

2.1.3 The Game Theory

The third theoretical resource is the Game Theory which is also known as the Theory of Social Situations (Leonard, 2010). The Game Theory was developed extensively in the 1950s by many scholars. It was later explicitly applied to biology in the 1970s, although similar developments date back, at least as far as the 1930s. The Game Theory has been widely recognised as an important tool in many fields (Osborne, 2004). The Theory deals with strategic interactions among multiple decision makers, called players (and in some context agents), with each player's preference ordering among multiple alternatives captured in an objective function for that player (Basar, 2010).

In practice, the players try to maximise (in which case the objective function is a utility function or benefit function) or minimise (in which case we refer to the objective function as a cost function or a loss function). In that sense, the objective function of a player depends on the choices (actions, or equivalently decision variable) of, at least, one other player, and generally of all the players, and hence a

player cannot simply optimise his or her own objective function independent of the choices of the other players (Basar, 2010; Leonard, 2010).

There are two main branches of the Game Theory, namely Cooperative and Non-Cooperative Game Theory (Owen, 1995; Colin, 2003). If the players were able to enter into a cooperative agreement so that the selection of actions or decisions is done collectively and with full trust so that all the players would benefit to the extent possible, and no inefficiency would arise, then we would be in the realm of Cooperative Game Theory, with issues of bargaining, coalition formation, excess utility distribution, among others. If no cooperation is allowed among the players, then we are in the realm of Non-Cooperative Game Theory, where first one has to introduce a satisfactory solution concept.

Non-Cooperative Game Theory largely deals with how intelligent individuals interact with one another in an effort to achieve their own goals (Myerson, 1991). A non-cooperative game is non-zero-sum if the sum of the players' objective functions cannot be made zero after appropriate positive scaling and/or translation that do not depend on the players' decision variables (Leonard, 2010). The Game Theory is the process of modelling the strategic interaction between two or more players in a situation containing set rules and outcomes (Gintis, 2000). Having been used in a number of disciplines, the Game Theory is most notably used as a tool within the study of economics (Weintraub, 1992). The Game Theory is the study of strategic interaction between rational decision-makers (Smith, 1982; Basar, 2010). It has applications in all fields of social science, as well as in logic and computer science. Originally, it addressed zero-sum games, in which one person's gains results in losses for other participants.

Miller (2003) contended that there are several applications of the Game Theory. A game is a finite game if each player has only a finite number of alternatives, that is, the players pick their actions out of finite sets (action sets); otherwise the game is an infinite game; finite games are also known as matrix games (Basar, 2010). An infinite game is said to be a continuous-kernel game if the action sets of the players are continua, and the players' objective functions are continuous with respect to action variables of all players (Basar, 2010; Leonard, 2010). Some games are deterministic and these are games in which the players' actions uniquely determine the outcome, as captured in the objective functions, whereas if the objective function of, at least, one player depends on an additional variable (state of nature) with a known probability distribution, then we have a stochastic game (Basar, 2010).

A game is a complete information game if the description of the game (that is, the players, the objective functions and the underlying probability distributions (if stochastic) is common information to all players; otherwise we have an incomplete information game (Colin, 2003). A game is static if players have access to only *a priori* information (shared by all), and none of the players has access to information on the actions of any of the other players; otherwise what we have is a dynamic game. A game is a single-act game if every player acts only once; otherwise the game is multi-act. In that sense, it is possible for a single-act game to be dynamic and for a multi-act game to be static (Basar, 2010). A dynamic game is said to be a differential game if the evolution of the decision process (controlled by the players over time) takes place in continuous time, and generally involves a differential equation; it takes place over a discrete-time horizon, a dynamic game is sometimes called a discrete-time game (Colin, 2003; Miller, 2003; Basar, 2010).

In the study of human tensions, Basar (2010) argued that the Game Theory applies with specific indicators which must be identified. These include (i) the players; (ii) the possible actions available to each player, and any constraints that may be imposed on them; (iii) the objective function of each player which she attempts to optimise (minimise or maximise, as the case may be); (iv) any time ordering of the execution of the actions if the players are allowed to act more than once; (v) any information acquisition that takes place and how the information available to a player at each point in time depends on the past actions of other players; and (vi) whether there is a player (nature) whose action is the outcome of a probabilistic event with a fixed (known) distribution. These criteria will be employed as the measuring index in this research.

In applying the Game Theory in this research, a number of factors come to play. The government with its coercive apparatus and galamsey operators with their collaborators are conceptualised as the players. There are several possible actions available to each player as this is a non-cooperative game. For example, the government has several options to adopt, including arrest, destruction of equipment and prosecution of galamsey operators. There are several options that galamsey operators can also deploy. They may simply stop operations temporarily and resume once the Operation Vanguard team departs from their areas of operation.

The miners may take public actions or political actions to protest the nature of the operation. It is assumed that the government has an objective function of ending the galamsey through Operation Vanguard, while the galamsey operators have an objective function of continuing the mining activities. There is the possibility of Operation Vanguard lingering because illegal miners do not appear to be willing to end the practice for all kinds of reasons. Therefore, the assumption is that all players

will continue to act differently for a long time. The players will draw on different kinds of information about each other at each point in time. They will process that information based on the past actions of other players. However, it is not assumed that nature plays a role in the operation vanguard process. This is because the soldiers could operate anywhere at any time while the galamsey operators can also operate anywhere at any time. In this theory, nature is taken for granted.

2.1.4 The Political Ecological Approach

In explaining illegal mining in Ghana, Kervankiran, Dziwornu and Termurcin (2016) employed the Political Ecological Approach. They explained that there are different explanations of illegal mining in Ghana. One explanation holds that the major causes of illegal mining are, in most cases, economic factors. The proposition is that not all artisanal miners are illiterates or poor (Nyame & Grant, 2014).

Poverty is identified as one of the main causes of illegal mining (Hilson & Garforth, 2012; Hilson & Potter 2005; Banchirigah, 2008). Financial difficulties distress people and compel them to engage in illegal mining. Most people, especially from mining communities see artisanal mining as the only viable livelihood option available (Hilson & Garforth, 2012). However, there are some barriers to entering illegal mining through the local community arrangement governed by Customary Law. This arrangement is opposed to government lease from the Minerals Commission which is governed by a Statutory Law characterising large-scale mining, and legal artisanal mining (Nyame & Blocher, 2009; Hilson & Garforth, 2012).

Another major cause of illegal mining identified within the political ecological approach is unemployment, especially emanating as a consequence of the Structural Adjustment Programme (Hilson & Potter, 2005; Nyame & Blocher, 2009).

Unemployment is in two forms (Hilson & Garforth, 2012), namely the urban unemployed who move to rural areas and engage in illegal mining and the rural population who were disinterested in farming due to loss of comparatively viable land to large-scale miners and artisanal miners (Hilson & Garforth, 2012; Nyame & Blocher, 2009). Lack of formal employment opportunities compelled both the rural and urban unemployed to consider illegal mining as an option for securing livelihood. The argument holds that the problem in actual sense is that the lack of alternative employment avenue forces people to engage in illegal mining (Teschner 2011, Bush 2008). Where even arable lands originally used or leased out for farming are now increasingly being used for illegal mining without reclamation (Nyame & Blocher, 2009).

The quest to restructure the economy in the past few decades is a major cause of illegal mining in Ghana. The increased integration of third-world land users into global markets under unequal relations of power undermines the local land users' localised environmental knowledge and long histories of successful adaptation to, sometimes harsh and unpredictable environments (Walker, 2006). The implication is that people in mining communities as rational beings, also tend to realise maximum economic gain from available resources in response to the notion of economic diversification. The extraction of gold as a valuable resource to mining communities on small-scale has been a historical traditional source of livelihood to the local people (Banchirigah, 2008).

The combination of farming and illegal mining was a common practice in mining communities and the declining incomes that faced farmers in the process of market liberalisation (Hilson & Garforth, 2012) compelled many to venture into illegal

mining. The inadequacy of reliable alternative source of livelihood makes people to engage in illegal mining without conforming to environmental regulations to ensure sustainable resource exploitation for ensuring sustainable development.

Kervankiran, Dziwornu and Termurcin (2016) explained that the major causes of illegal mining identified are not mutually exclusive. In their view, the minor causes are the economic forces which are not attributed to the individual's economic failures but the social and political processes that shape the economic landscape within which the people make decisions and are compelled to engage in illegal mining. One such factor is bureaucracy, referring to the administrative processes that one has to follow to legalise his or her mining activities. The assumption is that the processes for securing legal mining permits and concessions for artisanal mining are cumbersome and characterised with delays and high cost. According to Nyame and Blocher (2009), government leases lands to large-scale companies and this contract is formal and predictable, but artisanal miners prefer local community arrangements because both parties like the informality and flexibility of such a contract. The bureaucratic requirement is the main obstacle to securing license for artisanal mining hence, the unregulated illegal mining (Nyame & Grant 2014; Hilson & Potter, 2005).

Finally, in deploying the political ecological approach, Kervankiran, Dziwornu and Termurcin (2016) argued that weak regulatory regimes are a minor cause of illegal mining in Ghana. The duality of the land tenure system in Ghana where the government has legal right to land resources and traditional authorities are acting as custodians of the land make access to land complicated (Hilson & Yakovleva, 2007). Majority of lands are vested in traditional authorities who allocate to people at will (Nyame & Blocher, 2009). One common way for people to gain access to

land is by seeking approval from the custodians. The relatively easier means of securing lands from traditional authorities in comparison with the difficulty associated with going through formal institutions makes it more attractive to access land through traditional authorities, the process which lack the formal land tenure requirements (Nyame & Blocher, 2009). Law enforcement also appears inefficient and/or lacking (Teschner, 2011), and this facilitates the widespread of illegal mining.

2.2.5 Application of the Theories to the Study

In this research, illegal mining is viewed from multiple perspectives given the divergence of theories. First, illegal mining is viewed from the perspective of the Economic Theory of Illegal Goods as an economic activity that is difficult to curb because it is sustained by various interests. There are those who invest in it because gold has elastic demand as there are always willing buyers who are happy to purchase the commodity at anytime and anywhere. Second, poverty and unemployment mean that illegal mining is sustained and difficult to end because it is the source of livelihoods for many poor communities and individuals. Within the context of the Symbolic Interactionist Theory, illegal mining is difficult to curb because of politics. The illegal miners and illegal mining communities have strong bargaining power in two directions. One is that they are able to influence politicians by sponsoring their campaigns financially. Once in power, the politicians find it difficult to stop the businesses of illegal miners. Another is that illegal miners are able to threaten politicians in government that they will marshal their families, friends and dependants to vote against any political party that attempts to destroy their business. Thus, in the context of the Game Theory, it seems obvious that illegal miners and politicians become engaged in many different ways. The persistence of illegal mining may either be that state actors who have failed to provide livelihood opportunities for

illegal mining communities may not have the moral rights to attack the source of livelihoods of those communities.

In the same way, illegal miners may draw public sympathy by showcasing brutal attacks by military operatives, human lives that are being lost and injuries being sustained from those attacks. This may bring public pressure to bear on government. At the same time, government may showcase negative consequences of illegal mining activities to secure public support. For example, state actors may showcase the degradation of land and the pollution of water bodies to enlist the public in their fight against illegal mining. The fact that there are several possible actions available to each player makes it difficult to end illegal mining because the illegal miners and state actors become locked up in both a non-cooperative game and deterministic game. For example, as the government arrests and prosecutes illegal miners as well as destroy their equipment, the mines may simply stop operations temporarily and resume once the Operation Vanguard team departs from their areas of operation.

Also, communities may simply become unco-operative by refusing to divulge information that could lead to the identification of illegal mining sites and the arrest of illegal miners. This will make Operation Vanguard a difficult and expensive as well as risky operation. As such, it may fail to achieve its stated objectives.

2.2 The Concept of Illegal Mining

There are definitional issues with illegal mining. Some argue that registration is the only factor that distinguishes illegal (unlawful) mining from the legal small-scale mining operations (Duodu, 2013; Adda, 2014; Bansah, 2017). According to Bansah (2017), illegal miners adopt the same artisanal operations as the registered small-scale miners do. Some authors, including Hentschel, Hruschka and Michael (2002)

explained illegal mining as an economic activity which usually takes the form of small-scale mining activities by individuals and groups who operate using basic tools with little or no mechanisation.

The World Bank Group describes illegal gold mining as "a poverty-driven activity, typically practised in the poorest and most remote rural areas of a country by a largely itinerant, poorly educated populace with few employment alternatives" (Gilbert & Albert, 2016, p.114). This explanation is challenged as recent evidence shows that small-scale mining operations evolved from the use of basic equipment to include the use of sophisticated machines (Mineral Commission, 2015).

As a poverty-driven activity, Ghanaians engagement with small-scale gold mining existed as informal activity for about 32 years after Ghana's independence (Ministry of Lands and Natural Resources, 2017). However, this conception is also challenged by recent evidence that rich local and foreign nationals have entered into the business with sophisticated machines and funding needed to expand illegal mining activities. One estimate noted that as at 2017, Ghana attracted about 50,000 foreign nationals into illegal mining business (Burrows & Bird, 2017). Aside indigenous illegal miners, the entrance of foreign nationals led to the expansion of illegal mining operations in the country.

Some argue that the prevalence of illegal small-scale mining in Ghana makes it difficult to differentiate between legal and illegal mining activities (Laari, 2018). A recent explanation of illegal mining in Ghana covered four major categories: (i) those operating without a license; (ii) miners with a permit but using unapproved tools and methods to mine; (iii) licensed miners who do not reclaim the degraded lands; and (iv)

people who have sub-leased their acquired mining license to foreigners to mine (Samuel, Oladejo, & Adetunde, 2012).

Adu-Gyamfi (2014) explained that illegal small-scale mining is a form of mining that is done at small-scale levels and mostly employs relatively a small number of people (Appiah, 1998). About half of those directly engaged in Small-Scale mining are said to be illegal operators (Amankwah & Anim-Sackey, 2003) commonly known as “galamsey operators”.

According to Adu-Gyamfi (2014), there are two main forms of illegal small-scale mining, namely land dredging and river dredging. In the former, miners use generators to dig largely holes in the ground to expose the gold bearing layer of sand and clay. The slurry is then pumped into a sluice box which collects the gold particles. The tailings flow into an adjacent tailings dam or a mining pit in adjacent area, usually a forestland. With the river dredging, miners move along the river on a platform or in a boat. A hydraulic suction hose then suctions the gravel and mud along the river. These go through a tailing, and gold fragments are then collected on felt mats. The remaining wastes may be released into the river, thereby causing enormous environmental damage to the water body. Illegal mining is generally engaged in by the local people within the area where these activities occur and comes along with it the influx of people from other areas to engage in.

Small-scale mining companies use a considerable number of the labour force in the country. While there is no accurate small-scale mining employment number for Ghana (Appiah, 1998), it is estimated that some 500,000 people are openly employed in the sector while additional 500,000 may indirectly be benefiting from the activity.

The actions of small-scale miners also generate economic linkages with other sectors of the economy such as providing raw resources for goldsmiths and jewellers.

From the literature, Small-Scale mining may be legal (registered) or illegal (not registered) and dangerous (Iddirisu & Tsikata, 1998; Adu-Gyamfi, 2014). This research is interested in the illegal aspect because where they are registered there is some level of supervision, hence the mining has moderate consideration for environmental concerns. Although both forms lead to much destruction of the environment, in situations where small-scale activities are not registered, there is no monitoring, hence these miners are left unchecked, and the degraded environment receives no remediation.

In Ghana, illegal mining is known as “galamsey” - the practice where any group of people engage in unregistered mining activities (Parry, 2014). To be illegal, the mining activities must flout certain laws and regulations. These regulations have history behind them as mining in Ghana antedates colonisation to as far as the fifth and the sixth centuries BC (Ministry of Lands and Natural Resources, 2017).

2.3 The Development of Illegal Mining in Ghana

The major causes of illegal mining are in most cases economic factors. Although, it has been pointed out that not all artisanal miners are illiterate or poor (Nyame & Grant, 2014), poverty is identified as one of the main causes of illegal mining (Hilson & Garforth, 2012; Hilson & Potter 2005; Banchirigah, 2008). Financial difficulties distress people and compel them to engage in illegal mining. Most people, especially from mining communities see artisanal mining as the only viable livelihood option available (Hilson & Garforth, 2012). Few barriers to entering illegal mining as it is a local community arrangement governed by Customary Law as opposed to

government partnerships governed by Statutory Law characterising large-scale mining and, legal artisanal mining makes it appealing to individuals that lack financial capital (Nyame & Blocher, 2009; Hilson & Garforth, 2012).

Another major cause of illegal mining is unemployment, especially emanating as a consequence of SAP (Hilson & Potter, 2005; Nyame & Blocher, 2009). Unemployment is divided into two (Hilson & Garforth, 2012), namely the urban unemployed who move to rural areas and engage in illegal mining and rural population who are disinterested in farming due to loss of comparatively viable land to large-scale miners and artisanal miners (Hilson & Garforth 2012; Nyame & Blocher, 2009). Lack of formal employment opportunities compels both the rural and urban unemployed to consider illegal mining as an option for securing livelihood.

Ghana is a country endowed with many minerals, including bauxite, diamonds, gold and manganese. The country's mineral endowment is well known internationally and documented (Keatley, 1992, Strongman, 1994). However, gold mining predominates as the mineral most commonly associated with Ghana as far back as the colonial days when the country was known as the Gold Coast. Generally, gold mining in Ghana dates back to pre-colonial days.

From its historical roots, gold mining took the form of Small-Scale mining involving the use of basic tools. Pre-colonial gold mining operations were extremely simple. According to Parry (2014), alluvial mining was most widespread and practised along rivers. Sediments were scooped from the shores, stored in canoes or bowls and washed repeatedly to separate gold particles from the sand or other materials collected from the river bed. Shallow-pit, surface mining and deep-shaft mining also occurred along the line. At the beginning of the Trans-Saharan-Trade, gold was collected as

dust or nuggets by rural inhabitants, but increasing demand from Arabic traders intensified gold production (Hilson, 2002). This was exacerbated by the arrival of the Portuguese in 1471.

According to Hilson (2002) and Parry (2014), European interest in Ghana was mainly due to acute gold shortage in Europe during the 15th and 16th centuries. With the advent of colonisation, the colonising authorities and their assigns and businesses introduced large-scale mining. This reduced the traditional unregistered small-scale mining activities to illegal mining. This began with the introduction of large-scale European mining and registration as a pre-requisite to mine gold. The earliest European attempts to extract gold on a large-scale were concentrated in Tarkwa and Prestea in the late 19th century. The African Gold Coast Company was registered in February 18th, 1878, as the first official European gold mining company. These and other mining companies opened several mines in Tarkwa and Obuasi by 1895.

These were followed by the setting up of the Mines Department by the British colonial government to regulate the activities of mining activities in the then Gold Coast. This event in 1902 led to a declaration of local artisanal mining as illegal for several reasons. First, the Mines Department was charged with the responsibility to grant concessions and also monitor the technical, administrative and social aspects of mining. Second, all mining activities were restricted to underground mining. Third, due to transportation reasons, most of the miners in communities found it difficult to access the Mining Department Offices to register and to obtain permit.

Also, the passage of the Mining Rights Regulations Ordinance was introduced in 1925. This was followed by the Diamond Mining Industry Protection Regulations 1927 (No 9/1927). These Ordinances effectively outlawed mining without permit or

registration. However, the local people continued to mine secretly under the ban through the colonial days to post-colonial era and this became a major economic activity in rural communities' in the 1980s (Parry, 2014). There are several reasons for this. First, illegal mining activities in the colonial days were fuelled mainly by the gold rush in early 20th century which promoted mass increase in the quest for gold production. Second, gold rush after the First World War increased the need for production to meet demands which the regular companies were unable to fulfil. Also, from the 19th century, Ghana witnessed three jungle gold booms. The first jungle boom targeted gold from Wassa and Asante with local and foreign investors establishing mines in these areas from 1874. The second jungle boom, which began in the late 1930s, saw an increase in gold export from six million pounds to nine million pounds from 1946 to 1950. This period marked the beginning of large-scale mining by British colonial interest and other foreign investors. The colonial government attempted to totally ban private local gold miners and indigenous mining in 1933. According to the World Bank (2004), the colonial masters consolidated the takeover of indigenous properties with laws.

Following Ghana's independence in 1957, the Nkrumah government nationalised all the mining companies. The main legal instrument used was the Mineral (Offshore) Regulations 1963, (L.I. 257). This also promoted illegal mining because the emphasis shifted from privatisation to state-owned mining. Several ordinances were passed during this era to regulate the activities of the mining companies which were then state-owned and this was promoted by the mining boom in the 1960s.

However, following the overthrow of Dr. Kwame Nkrumah, mining output declined due to inefficiencies of management, and the dangling between privatisation and

direct state control (World Bank, 2001). The main regulations on illegal mining were the State Gold Mining Corporation [Acquisition of Assets Amendment] Decree, 1968 (NLCD 218) and the Mining Regulations 1970 (L.I. 665).

Up to the 1980s, no new mine was opened in Ghana due to a myriad of problems faced by the mining industry. Investors and potential investors alike were unwilling to invest in the sector as a result of the uncertainties, disabling economic, financial, institutional and legal frameworks within which the sector operated. Also, many registered companies withdrew or reduced their operations as Ghana became economically bankrupt by 1980 (World Bank, 2001). According to Parry (2014), there were just four gold mines producing 236,000 ounces by 1983. Ghana relaxed its mining regulations, nurtured investment by the mining industry through generous incentives and tariff reduction during the mid-1980s and 1990s (World Bank, 2001). The main legal instruments was the Mining and Minerals Law of Ghana (PNDC Law 153 of 1986) and the Mineral (Royalties) Regulations 1987 (L.I. 1349). The enactment of these bills led to a third jungle boom beginning from mid-1980s, after Ghana's mineral sector underwent massive changes based on the advice from the World Bank and other development partners of Ghana.

In March 1988, the government of Ghana initiated a major effort, culminating in the drafting of the Environmental Action Plan (1991) to put environmental issues on the priority agenda. The Plan set out an environmental policy for Ghana and made the attainment of a high quality environment, a key element in the country's socio-economic development. It also provided guidance and sets out an action-oriented strategy that specified the role of sector Ministries, Agencies, Non-Governmental Organisations (NGOs), and indeed, every Ghanaian in its implementation. It is

recognised that the realisations of the objectives in the EAP and the national environmental policy could be attained only through collaboration and cooperation among institutions with responsibility for various aspects of resource management and environmental protection (Environmental Protection Council, 1991).

At the institutional level, the Ghana Chamber of Mines (GCM) helped to formulate proposals for legislation, regulations, bye-laws and other measures, which would impact positively on the mining sector (Ghana Chamber of Mines, 1996). The Small-Scale Gold Mining Law (PNDCL 218) and Precious Minerals Marketing Corporation Law, 1989 (PNDCL 219) were introduced in 1989 with the objective of regularising (registering) all forms of mining activity.

Since the advent of the 1992 Constitution, numerous laws have been passed at the behest of the Ghana Chamber of Mines to outlaw traditional mining activities in the communities. Within this legal framework, the state is the owner of all minerals in Ghana. Article 257 (6) of the Constitution provides that every mineral in its natural state in under or upon any land in Ghana, rivers, streams, water courses throughout Ghana, the exclusive economic zone and any area covered by the territorial sea or continental shelf is the property of the Republic of Ghana and shall be vested in the President on behalf of, and in trust for the people of Ghana. Thus, regardless of who owns the land upon or under which minerals are situated, the exercise of any mineral right requires, by the law, a license to be granted by the Minister for Mines and Natural resources who acts as an agent of the state for the exercise of powers relating to minerals. Mineral rights are legally defined to include the right to do a preliminary inspection, prospect for, and mine minerals.

Also, the 1992 Constitution mandated Parliament to establish a Minerals Commission six months after the coming into force of the Constitution as the body that regulates and manages the utilisation of mineral resources in Ghana. This was achieved through the passage of the Minerals Commission Act, 1993 (Act 450). The Act repealed many of the existing mining laws, and is credited with reflecting new thinking, new developments and international best practices in the mining industry and to consolidate it with the enactment of the Small-Scale Gold Mining Law (Parry, 2014). The various laws affecting the mining sector in Ghana are supported by the Kimberly Process Certification Act, 2003 (Act 652) and the Minerals and the Mining Act, 2006 (Act 703).

Some contended that the proliferation of illegal and informal Small-Scale Mining activities either on mining concessions or along alluvial deposits necessitated the promulgation of the Small-Scale Mining Law. The Small-Scale Mining Law (2004) defines Small-Scale Mining as the mining of minerals by any method involving substantial expenditure by an individual or group of persons not exceeding nine in number or by a co-operative made up of ten or more persons. The objectives of the regularisation of Small-Scale Mining are as follows:

- (i) To provide employment in rural areas for those who could make a living out of the activity, and reduce rural-urban migration;
- (ii) To absorb some of the workers who were being retrenched as a result of the Structural Adjustment Programme, being implemented at the time, particularly those affected by the downsizing of the state-owned mining companies;
- (iii) To regulate activities of Small-Scale miners to ensure that acceptable mining practices are employed with minimum damages to the environment;

- (iv) To provide ready market for the minerals produced by Small-Scale miners to ensure that receipts from the sub-sector is channeled into the mainstream economy thereby reducing the incidence of smuggling of precious minerals; and
- (v) To stimulate rural capital formation.

The legalisation of small-scale mining also provided for the rationalisation of the licensing arrangement that would provide small-scale miners direct legal access to the resource, technical and financial support and an official purchasing and marketing mechanism. The latter was achieved through the establishment of the Precious Minerals Marketing Corporation (PMMC) in 1989, which replaced the Diamond Marketing Corporation, then responsible for the purchase and sale of diamonds only (Minerals Commission, 2004).

What is of concern to this study is that the incidence of illegal mining, popularly called ‘galamsey’ persists despite the myriad of legal and other efforts to stop it. This necessitates the exploration of the prospects and challenges of Operation Vanguard in the Upper Denkyira West District to provide some knowledge that may be helpful in explaining the present illegal mining dynamics.

2.4 Illegal Mining in the Upper Denkyira West District

The Upper Denkyira West District is one of the districts where illegal mining is prevalent, and where the Operation Vanguard team is stationed. The situation is more complicated because mining activities in the District contribute significantly to the socio-economic development of the people (Adu-Gyamfi, 2014). According to the Upper Denkyira West District Medium Term Expenditure Framework (2013), the upsurge of mining activity which has the tendency to attract larger population calls for

urgent land use plans to protect the area from the rapid pressure of uncontrolled urbanisation in the area. The framework states further that the mining industry exists across the District and lacks the needed infrastructure and logistics.

The Upper Denkyira West District (UDWD) Strategic Medium Term Agricultural Development plan (n.d.) describes the District as one that has illegal mining activities (galamsey) which are really difficult to deal with. The Ghana Statistical Service (2014) reported that the Upper Denkyira West District is endowed with mineral resources, predominantly gold, and this has attracted more than ten mining companies which are currently operating in the District. There are also myriads of small-scale mining companies which have employed a considerable number of the populace, about 7.9 percent, which comes next to agriculture.

According to the Upper Denkyira West District Medium Term Expenditure Framework (2013), some communities are fast urbanising due to the sprawling mining activities which are fast attracting a lot of people to the area. According to the framework, one phenomenon that is “gaining notoriety in the area of massive degradation of the lands and the pollution of water bodies across the District is the indiscriminate mining activities” (p.81).

The framework further identifies several challenges of illegal mining, including the influx of people, particularly the youth into the District. The proliferation of illegal mining exposes the teenagers, especially the young females to teenage pregnancy which adds up to their vulnerability. Gold mining and quarrying activities in the District are also contributing seriously to environmental problems, including major cracks in houses and buildings in some of the communities. The industrial activities also include mining and over exploitation of natural resources, especially sand

winning. The other mining activities that occur in the District are quarrying and extensive and unregulated sand winning. High rate of land degradation and environmental pollution resulting from mining have also been identified as the reasons for stopping illegal mining in the District (Upper Denkyira West District Medium Term Expenditure Framework, 2013). Pollution of water bodies as a result of indiscriminate mining, non-adherence to mining regulations coupled with laxity in enforcing the mining regulations have also been identified as some of the challenges associated with illegal mining in the District. The abandon mining sites pose a challenge to land reclamation and restoration in the District. What is more worrying is that the District has been unable to reclaim a single abandoned mining site.

A study that assessed the effects of illegal mining on school attendance and academic performance of junior high school students in the Upper Denkyira West District revealed that indeed, students' participation in illegal mining activities do have negative effects on their school attendance and their academic performance and it was established that students who came to school regularly performed tremendously while the absentee students performed poorly (Adu-Gyamfi, 2014). Additionally, Adu-Gyamfi (2014) stated that illegal miners in the District are mostly either illiterates or semi-literates, and attract the youth who are usually students at various levels of education into mining by offering them financial assistance. When these students see how lucrative the mining activities are, some abandon their education and finally end up in illegal mining activities.

2.5 Challenges Associated with Illegal Mining

Several authors have looked at various issues related to the challenges of mining, particularly illegal mining or galamsey (Kitula, 2006; Fisher, 2007; Kervankiran,

Dziwornu and Termurcin, 2016). A universal definition of artisanal small-scale mining (ASM) is yet to be established (Bugnosen, 2003; Buxton, 2013; Human Rights Watch, 2014). The criteria for defining small-scale mining differ from country to country and with reference to Ghana, small-scale mining refers to the operations of individual Ghanaians or organised groups of Ghanaians (4-8 individuals), or a co-operative often of more individuals, entirely financed by Ghanaian resources at a certain limit, and carried out on a full time basis using simple equipment and tools (Fatawu & Allan, 2014). Small-scale mining also refers to prospecting and mining in an area designated, and which uses specialised technologies and methods not involving substantial expenditure (Bugnosen, 2005).

The actors in the artisanal mining sector at the local level constitute residents in the mining communities, migrants, nomadic peoples, seasonal subsistence farmers and retrenched large-scale mine workers (Hilson, 2005). The power dynamics in the ASM encompasses sponsors, gold buyers and land owners who collaborate with local traditional authorities and more recently, Chinese migrants who according to Hilson et al. (2014) and Hirons (2015), are benefiting significantly from the activities of the ASM sector. The artisanal mining sector is characterised by non-compliance to environmental regulations, low level of productivity due to insufficient skills and qualifications of miners evident at all levels of their operations, culminating in low income and salaries (Buxton, 2013; Human Rights Watch, 2015). The application of rudimentary tools is also highly prevalent in the artisanal mining sector (Hilson, 2001; Kambani, 2003; Buxton, 2013).

This situation deprives the locals of vast fertile lands for agriculture which was and is still their main source of livelihood (Parry, 2014). It must be noted that most of these

concession lands are to be found in the densely forested and highly fertile areas of the communities. This means that upon purchase of these lands from the people, they are rendered virtually redundant because their only source of agriculture in most cases is taken away from them. There have been recorded cases where the grievances of these host communities have resulted in bloody confrontations between themselves and the companies. For instance, in June 2005, according to Agbesinyale (2003), more than 500 people from Prestea, Himan, Bondaye and other communities surrounding Bogoso poured on to the streets of Prestea to demonstrate against surface mining by the Bogoso Gold Limited (BGL). Some of the demonstrators attempted to enter a nearby pit that security officers were guarding. The security men fired warning shots and tear gas into the crowd and wounded seven of them (Agbesinyale, 2003).

The Ghana Business News (2019) reported that despite many policies that have been instituted to address issues of child labour and the need for enhanced protection regimes, many children in the country still remain vulnerable to various forms of exploitation emerging from illegal mining activities. Using the case of Diaso, the capital of the Upper Denkyira West District, the argument is presented that illegal mining is gradually turning to be a curse to the people.

According to the Ghana Business News (2019), many children have also been lured to participate in the business of illegal mining or 'galamsey' as the lifestyles of those associated with the business are attractive and appealing. The children are compelled to join the illegal business because the rewards are more apparent compared to going to school to study. But they also forget that the dangers they are exposed to would have a negative impact on their development in the long-run.

In terms of education, the Ghana Business News (2019) argued that many children in

Diaso are often engaged in mining activities and this does not conform to the provisions in the national legislations, especially the Children's Act, 1998 (560), which defines the extent of activities to be undertaken by children. According to the report, "galamsey" or illegal mining has disrupted the education of a lot children to the extent that many children are not enthused about going to school as they prefer going to these 'galamsey' sites to make some money.

Another effect of illegal mining is the increase in teenage pregnancies in Diaso and its surrounding communities, and this has become a worrying concern to many people, especially parents in the area as this greatly affects the health, education and the general development of the affected girls . A report by the Health Directorate of the Upper West Denkyira District revealed that, 191 cases of teenage pregnancies were recorded between January and September 2019, and statistics for the 2017 and 2018 revealed a total of 948 cases of teenage pregnancies.

The 'galamseers' often take advantage of our young ladies in financial difficulties and lure them into unprotected sex and this leads to unplanned pregnancies. Prostitution is prevalent in many communities, especially with the influx of foreigners. Young girls are sexually exploited by the 'galamseers' and the vice has become a booming trade for many girls.

In spite of efforts made by stakeholders in the District to reduce the exposure of children to the prevailing vices and dangers, the situation still persists. A Ghana News Agency Report noted that despite that efforts being made by the District Assembly to halt the practices of illegal mining, especially with the involvement of children, the issue of 'galamsey' is still a major problem in the District despite the presence of Operation Vanguard to arrest the situation.

Illegal mining is not only dangerous to human life, but other living organisms which support human existence, thus destroying the ecosystem. Galamsey activities are responsible for deforestation and soil erosion in most of the mining communities and the Upper Denkyira West District corridor is no exception.

2.6 Past Efforts to Address Illegal Mining

Illegal mining is known to be dangerous across spheres, and recognising the potential of the sector in poverty alleviation, the government of Ghana passed the Small-Scale Gold Mining Law (PNDC Law 2018) in 1989, to legalise and control the operations of small-scale gold miners and create proper marketing channels for gold (Mineral Commission, 2015). Before legalising small-scale mining, security task forces were employed to stop all identified illegal sites from engaging in the practice. However, the Mining Law has not been able to achieve its full aim as illegal mining activities are still prevalent in the country's mining communities, including the Upper Denkyira West District. Most small-scale gold miners continue to operate without any authorisation because they view the registration process as long and frustrating (Ghana News Agency, 2015).

Several past measures have been implemented to curb galamsey. The first was the passing of the Small-Scale Mining Law in 1989 (Ministry of Lands and Natural Resources, 2017). The principal effort has been the deployment of security task forces to flush out illegal miners. According to Ellimah (2019), mining companies have relied on the security agencies for security for a long time. Later, the state felt obligated to provide the security covering. The first recorded nationwide operation against illegal mining was undertaken in the late 1980s. Military camps were established in most mining communities, including Prestea, Tarkwa and Obuasi.

According to Ellimah, Ghana operated a “Military On-Call” system which allowed the state security apparatus to work with the mining companies’ private security establishments.

The second major operation against illegal mining was introduced in November 2006 (Ellimah, 2006). The military and police conducted this country-wide operation, named ‘Operation Flush Out’, during which hundreds of 'galamsey' operators were forcefully removed from the lands they were working on. The “Operation Flush Out” was a massive operation across the country. It was criticised for widespread human rights violations in mining communities across the country. Some “illegal” miners lost their lives, others were permanently maimed while others had to flee their own communities, and never returned. When Operation Flush Out was mentioned in one of the reports of the UN General Assembly, it was described as an operation where security contractors of mining companies assisted by armed police and soldiers often conduct “operations” ostensibly to arrest alleged illegal small-scale mining operators (galamsey) in the concessions of large-scale mining companies. These operations tended to be violent and bloody invasions of communities resulting in gross human rights violations. An unknown number of galamseers have been shot, beaten and maimed by members of the private and state security forces” (Report of Human Rights Council to the UN General Assembly, April 2008).

According to Ellimah (2019), the third military operation against illegal mining occurred in 2013. Known as the Inter Ministerial Taskforce, its key objective was to deal with foreign invasion in small-scale mining. However, Ghanaian-owned Small-Scale mining companies were affected; their mining equipment were seized and burnt in some instances. What was common to all these operations was that they failed to

stop illegal mining in Ghana (Ellimah, 2019). As Ellimah explained, the use of security to fight illegal mining is unsustainable, expensive, and eventually government will not have the funds to keep up. According to Ellimah, security personnel were not well suited for the task of stopping illegal miners from operating and the state did not have sufficient security personnel to patrol every corner of the country where illegal mining is happening. As such it is important to explore how another military operation, Operation Vanguard was going to succeed.

In addition to military interventions, alternative livelihood projects have also been implemented over the years with the view to addressing illegal small-scale mining in Ghana. There have also been efforts by numerous non-governmental organisations to address the issue of child protection in many of these areas and their efforts have provided a sense of renewed hope to children living in these areas (Ghana Business News, 2019). Non-Governmental Organisations' (NGOs) efforts include building the resilience and life skills of children living in such areas as the key factors in discouraging the involvement of children in the mining activity. Notwithstanding all the previous efforts, illegal small-scale mining still surged. There have also been proposals for direct stakeholder discussions that may result in a collective action to curb the menace. But such proposals are yet to be implemented.

Some suggestions to improve past efforts to end illegal mining did not receive the necessary political, social and economic support required to achieve their objectives. Therefore, the launching of Operation Vanguard was seen as a major effort with the necessary political will to end illegal small-scale mining and address its effects on the environment, rural livelihoods and the national economy. However, there has since not been any major study into the ways in which Operation Vanguard was launched,

how it has been resourced and carried out and the challenges that may impair its prospects. It is in this area that this research seeks to add significantly to the knowledge that has been generated about efforts aimed at addressing the problem of illegal small-scale mining and its consequences on the national economy. The main areas of concerns are the nature of the operations, the challenges of the operation and the prospects for the nation.

2.7 Challenges to Addressing Illegal Mining

There are several explanations to why illegal mining has not stopped in Ghana. One is that while the legal mining sector employs only 30,000 people, an estimated number of 170,000 people engage in galamsey operation in Ghana (Samuel, Oladejo & Adetunde, 2012). It is, therefore, a source of livelihood for many who depend on it for employment and sustenance. The second reason is that some consider illegal mining as a livelihood diversification strategy (World Bank, 2013). The sector supplements agriculture as the source of living for the rural population in Senegal (Persaud, Telmer, Costa & Moore, 2017). In Sierra Leone, lack of a viable sources of living leaves the rural population with no choice but to resort to illegal mining in the search for revenue and food security (Carier & Burge, 2011). Third, poverty is one of the factors that push individuals into illegal mining in Ghana (Aidoo, 2016). The assertion that poverty pushes people into illegal mining supports the argument that illegal small-scale mining cannot be eradicated without providing an alternative source of livelihood for the illegal miners (GhanaWeb, 2017).

Other explanations for illegal mining have been for its immediate benefits to participants, traditional authorities and politicians. While some people engage in illegal mining because they do not have any other means to provide their basic needs,

others are motivated by greed and the ‘get-rich-quick’ mentality (Ministry of Lands and Natural Resources, 2017). The complexity of traditional authority is identified as a major factor sustaining illegal mining activities. It is alleged that traditional leaders, including chiefs in the mining communities secretly promote illegal mining due to the benefits that accrue to them (Abdulai, 2017). In addition, land owners and opinion leaders also take money to condone illegal mining activities in their communities (The Ministry of Lands and Natural Resources, 2017). Political patronage has been identified as a crucial factor. It is a trite knowledge that some politicians have also been reluctant to condemn illegal mining activities over the years because of political expediency (Aidoo, 2016).

Another factor that encourages illegal mining is the perceived complexity of the licensing process (Ministry of Lands and Natural Resources, 2017; Hilson, 2012; Hilson & Potter, 2005). While illegal mining is known to be driven by poverty, the process of acquiring a license for small-scale mining in Ghana is perceived to be expensive and reserved for prospective rich miners. Thus, the poor in the mining communities who need the permit the most find it difficult to afford the costly process of acquiring the license because of poverty. Coupled with the bureaucracies, the cost involved in acquiring a license and other setbacks compel many small-scale gold miners to operate illegally (Bansah, 2017).

A major administrative factor is centralisation. McQuilken and Hilson (2016) argued that centralised authority is a barrier to formalising small-scale mining in Ghana. According to McQuilken and Hilson, the local authorities do not have the real power although it is their mandate to support the prospective miners through the regulation

process. The power is still vested in higher authorities, which further lengthens the process.

Regulators and law enforcement authorities also appear weak when the political class interferes in their regulatory activities. This weakens law enforcement and regulations by the relevant institutions (The Ministry of Lands and Natural Resources, 2017). Therefore, the relaxed and improper enforcement mining laws embolden many Ghanaians to connive with their Chinese accompaniments to expand their illegal mining activities (AgricInGhana Media, 2017; Fick, 2017).

Bureaucratic licensing process was one of the issues identified as a challenge to addressing illegal mining (Aryee 2003; Aryee, Ntibery & Atorkui, 2003). Aryee et. al (2003) provided a detailed overview of this licensing procedure, which begins with prospective licensees, who must be Ghanaian nationals aged eighteen years or older, submitting ten copies of a completed small- scale mining application form along with accompanying site plans of the proposed mining area, to a local small-scale mining district centre. An inspection report is then forwarded to the District Chief Executive of the relevant political district. Following the issuance of an environmental permit from the Environmental Protection Agency (EPA) and payment of the required fees, the application is forwarded to the Minister of Mines for assessment. If approved, an agreement is forged between the applicant and the government of Ghana, after which the signed documentation is taken to the Chief Inspectorate of Mines, who then issues the official license to work on the allocated parcel of land. Licenses are subject to renewal after three to five years, depending on the concession size. The insertion of what many feel is an unnecessary Environmental Impact Assessment stage by the EPA significantly delays the process of issuing licenses.

2.8 The Nature of Operation Vanguard

Operation Vanguard was necessitated by the formation of the Media Coalition Against Galamsey on 4 April 2017. The coalition consisted of concerned journalists in Ghana led by the staff of the Graphic Communications Group Limited. Using all media platforms available to the coalition, pressure was mounted on the government of Ghana to respond to the environmental degradation caused by galamsey (GhanaWeb, 2017). Galamsey had resulted in some cocoa and cashew farms being sold by owners so that the fertile soil could be excavated for illegal mining activities (Citi FM online, 2017). The level of the pollution of water bodies had caused an increase in production costs for the Ghana Water Company. The increase in cost was due to the extra cost of aluminium sulphate the company needed to treat water from the polluted water bodies. The activities of the media coalition gained support from many Ghanaians who knew the environmental damage galamsey was causing (Afful, 2018).

Reports indicate that President Nana Addo Dankwa Akufo-Addo responded to the concerns of the Media Coalition against Galamsey by promising to end the galamsey menace even if it would cause disaffection from those who benefited from it (Awiah, 2017). Communities where the activities of galamseers are high include Tarkwa in the Western Region, Obuasi in the Ashanti Region and Osino in the Eastern Region. The Operation Vanguard Joint Task Force (JTF) is made up of members from the Ghana Armed Forces and the Ghana Police Service. At the start of the operation, the government placed a six-month ban on all forms of small-scale mining in the country. Operation Vanguard's mandate was extended from January 2018 to June 2018 because its intended objectives had not yet been achieved (Gyeke, 2018).

Responding to the public outcry over the massive destruction by illegal mining activities, the government of Ghana banned all forms of small-scale mining on the 1st of April 2017 (The Ministry of Lands and Natural Resources, 2017). Operation Vanguard is a Military-Police Joint Task Force (JTF) set up by the President of Ghana in 2017 to combat illegal mining in the country. Galamseers are illegal miners and have over the years depleted Ghana's forest cover. Their activities also pollute water bodies due to the crude and unregulated nature of their mining process (Awiah, 2017; Gyekye, 2018).

When Operation Vanguard was launched, it was under the command of Colonel William Agyapong and comprised 400 Military-Police Joint Task Force (Afful, 2018; Gyekye, 2018). Governmental supervision was done through an Inter-Ministerial Committee comprising the heads of the Ministries of Defence and Interior, the Chief of Defence Staff and the Inspector General of Police. This meant that the operation is supposed to have the highest level of political support. Some writers argued that the task force would remain in the affected areas until the degraded lands and rivers had been restored and a reforestation programme undertaken (Afful, 2017). The personnel of the Ghana Navy and Marine Police were charged with monitoring of the major rivers and water bodies within the operations area and were tasked with ensuring total eradication of galamsey activities in the waters (Awiah, 2017).

From the literature, it seems that the operation involves arrests, seizure of equipment and weapons. One report revealed that 58 different types of 'assaulted weapons' had been retrieved from the galamseers (GhanaWeb, 2017). The weapons include pistols, single and double-barrelled guns and pump action guns. The guns are either locally-manufactured or imported.

2.9 Controversies Surrounding Operation Vanguard

There are several controversies surrounding the work of Operation Vanguard. According to Awlesu (2018a), the NASARA Coordinator for Manso Nkwanta District of the Ashanti Region, Mr Abdul Malik Anokye called on the government to dissolve Operation Vanguard. His reason was that members of Operation Vanguard had proven that they could not be relied upon to fight galamsey, insisting that illegal mining activities were still pervasive in mining communities, and more especially in the Manso Nkwanta District. Mr. Anokye further argued that the government was wasting tax payers' money on the Operation Vanguard team. Further, the publication argued that the government had lost the fight against illegal mining, noting that the continued activities of galamseers in the area were still going on and these had led to the pollution of various water bodies and destruction of forest reserves and fertile lands.

Additionally, Awlesu (2018b) reported that the Ashanti Regional Youth Organiser of the opposition National Democratic Congress (NDC), Yaw Brogya Gyamfi, alleged that Operation Vanguard was only protecting foreign nationals who were still engaging in illegal mining, contrary to claims that it had chalked some successes to stop the menace. While officials of Operation Vanguard claimed that their activities were yielding good results, the Chinese were all over in Ghana's forest reserves engaging in illegal mining. The concern was that the Chinese were mining in our forest with the protection of Operation Vanguard while Ghanaians were being arrested or killed. According to Awlesu, before these allegation against Operation Vanguard, it was reported that the group had arrested 1,129 illegal miners who were being prosecuted in various law courts in the country. In addition, it emerged that the

team had also shot two and killed two illegal miners at Prestea, in the Western Region of Ghana (Awlesi, 2018a).

It was that, the presence of Operation Vanguard could not end illegal mining (Awlesu, 2018a). It was also reported that the NASARA Coordinator for Manso Nkwanta District of the Ashanti Region, Mr Abdul Malik Anokye, called on the government to dissolve Operation Vanguard. Some have argued that the ban on small-scale mining has undoubtedly halted most economic activities in the country (Gyeke 2018). This created a tension between government and practical economic conditions that affect the livelihoods of many citizens whose subsistence depends on illegal mining activities and Small-Scale mining in general.

Another controversy relates to the punishments meted out to Ghanaian offenders and their non-Ghanaian counterparts. For Ghanaians, jail terms ranged from four to eighteen months (Awiah, 2017). Most Ghanaian offenders were, thus either fined or were imprisoned while foreign nationals were deported. The fines ranged between 1000 and 6000 cedis (Gyeke, 2018). However, it was alleged that the Chinese were mining under the guise of reclaiming destroyed lands. This was seen as discrimination in the operation (Awiah, 2017; Gyeke, 2018) that could threaten the success of Operation Vanguard.

Also, it was reported by the commander in charge of Operation Vanguard that the punishments meted out to galamseers were not deterrent enough (Afful, 2018). In May 2018, a spokesperson for Operation Vanguard expressed satisfaction with the types of punishments that were being meted out to offenders (Afful, 2018). However, many Ghanaians complained about the slow pace of prosecution of foreign culprits

caught in the act. The implication is that foreign galamsey operators were being given preferential treatment over their local counterparts.

Further issues with these discriminations related to the proportion of Ghanaian illegal miners that were jailed as against that of the non-Ghanaian counterparts. For example, Citi FM (2017) reported that commanders of Operation Vanguard expressed their frustration that only 22 out of 172 Chinese nationals arrested were jailed since the Operation Vanguard started its work. Sections of the Ghanaian public also protested against the destruction of mining equipment seized from galamseers by Operation Vanguard (Citi FM, 2017). Again, this represented a big threat to the success of the operation. Those against the practice believed the equipment could be auctioned or put to good use by the government in road construction or other beneficial activities, rather than burning it. Some people have claimed that members of Operation Vanguard were involved in selective punishment to the galamseers. Unproven allegations of bribe-taking were levelled against some service members of Operation Vanguard (Afful, 2018).

The Eastern Regional Minister, Eric Kwakye Darfour, made similar allegations against the team in December 2017 (GhanaWeb, 2017). However, allegations of bribery and selective justice levelled against the operation were refuted by a management member of the team. The management contented that some people had used impersonation to trick galamseers into paying bribes (Afful, 2018). According to Operation Vanguard, such impersonators had been arrested and prosecuted in certain cases (Gyeke, 2018). This would suggest that Operation Vanguard has some challenges that need to be explored.

2.10 Successes of Operation Vanguard

The news about the success of Operation Vanguard motivated some leaders of other areas where Operation Vanguard was absent to appeal to the President to extend the operation there. A new operating base was established in the Central Region. In the first few days of the establishment of the base, four offenders were arrested, including one Chinese national and three Ghanaians at Nkutumso, in the Upper Denkyira East District of the Central Region. In addition to the arrests, equipment for ground excavation was also seized (Gyeke, 2018).

In December 2017, President Akufo-Addo described the activities of Operation Vanguard as a success (Afful, 2018). According to Afful, the nation's resources had been put to the right use and the harmful practices of the illegal miners were being brought under control. In February 2018, a spokesperson for Operation Vanguard declared that over 1,000 illegal miners had been arrested and their equipment seized and several hundred makeshift accommodation facilities had also been destroyed. Successful operations had stopped the pollution of bodies of water, especially at Dokokyina near the Bui Dam, as well as the rivers Birim, Ankobra and Offin rivers (Awiah, 2017).

On 24 May 2018, John Peter Amewu, the sector Minister for Lands and Natural Resources of Ghana, said that, total of 1,500 “floating platforms” had been destroyed. He, therefore, hinted about the possible removal of the ban placed on small-scale mining companies licenced by the Minerals Commission would be the only ones that would be allowed to undertake small-scale mining (Knott, 2017; Awiah, 2018). Some members of the Ghanaian public believed that the activities of Operation Vanguard could not be described as a success (Owusu-Nimo, Mantey, Nyarko, Appiah-Effah &

Aubynn, 2017) because of the offenders arrested, the galamsey kingpins were still free and would return to the act if the operations ended (Awiah, 2017).

2.11 Summary

In this chapter, I reviewed the theoretical perspectives of illegal mining. The concept of illegal mining as well as its historical development in Ghana have been explained. It is argued that illegal mining emerged as a direct result of colonial policies of regulating mining in ways that made registration difficult for local and traditional miners operating in the hinterlands. The registration became more complicated when activities nationalised under Kwame Nkrumah and mining concessions became vested in the state. The review also highlighted the nature and complications of illegal mining such that past efforts aimed at stopping illegal mining operation in Ghana have been unsuccessful. Primarily, efforts failed because mining is a source of livelihood for many rural folks in mining areas. The review also explored the media reports on the nature of the Operation Vanguard and its antecedents. It reviewed the controversies surrounding Operation Vanguard and its successes.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, the methodology adopted for the study is outlined. The chapter covers the research approach, research design, study area, population, sample and sampling techniques, instruments for data collection, data collection procedure and trustworthiness of the data collected. The final aspects of the chapter are methods of data analysis and ethical issues.

3.2 Research Approach

The research approach adopted for this study was qualitative. Qualitative research involves “critical case studies” (Fielding & Moss, 2011:16). In this case, the researcher focused on the prospects and challenges of Operation Vanguard. The qualitative approach resides in the interpretivist paradigm that seeks to understand multiple realities as enacted within peculiar contexts (Yin, 2009). In qualitative designs, induction is used to derive possible explanations based on the observed phenomenon. The qualitative design also has the advantage of getting in-depth information from a small group of people.

This research focused on exploring the views of community members on the prospects and challenges of Operation Vanguard. In keeping with the principles of the qualitative research approach, the focus was more on an in-depth understanding of the challenges and how those challenges affect the prospects of achieving the objectives of stopping illegal mining.

3.3 Research Design

This researcher employed exploratory multiple case study research in the Upper Denkyira West District, where five communities were selected so that multiple cases can be explored. According to Lewis-Beck, Bryman and Liao (2004), multiple case study is a variant that includes two or more observations of the same phenomenon. The advantage is that it allows for replication that is, using multiple cases to independently confirm emerging constructs and propositions. It thus enables extension, that is, using the cases to reveal complementary aspects of the phenomenon such that the result is more robust and can be used to develop a theory (Cohen, Morison & Manion, 2011).

Multiple case research begins with data and ends with theory. Instead of random sampling, theoretical sampling, where cases are selected to fill conceptual categories was used. Instead of quantitative data, the focus is on qualitative data (Flick, 2006). In terms of data collection, the focus is on using observations, archival stories, and interviews to achieve an in-depth understanding that the cases provide to create the underlying theoretical logic that connects and constructs together into propositions (Yin, 2009). In terms of analysis, cases are treated as separate instances of the focal phenomenon, allowing replication. Constructs are refined, patterns emerge and relations between constructs are established (Cohen et al., 2011).

The widespread nature of illegal mining in Ghana and given that it is difficult to research all sites makes the adoption and the sensitive nature of the Operation Vanguard of a case study necessary.

3.4 The Study Area

This study was conducted in the Upper Denkyira West District. The District is one of the 22 administrative districts in the Central Region. It was carved out of the erstwhile Upper Denkyira District and established by a Legislative Instrument (L.I. 1848, 2007), and was inaugurated in February, 2008, with Diaso as its capital.

According to the Ghana Statistical Service (2014), the population of Upper Denkyira West District, according to the 2010 Population and Housing Census, is 60,054 with relatively more males (50.3%) than females (49.7%). The proportion of Ghanaians by birth in the District is 96.3 percent. Those who have dual nationality constitute 1.6 percent and the non-Ghanaian population in the District is 1.6 percent. The population of the District is youthful, with more than two-fifth (41.8%) aged below 15 years and the elderly persons (aged 60 years and older) in smaller proportion (6.5%). Thus, the District's population pyramid has a broad base and tapers off with a small number of elderly persons. The total age dependency ratio for the District is 86.8 with the females ratio (87.1) being slightly higher than that of males (86.4).

The District has a household population of 58,750, with a total number of 10,099 households. The average household size in the District is 4.4 persons per household. Children constitute the largest proportion of the household composition accounting for 45.4 percent of the total household population. About four in ten (46.1%) of the population aged 12 years and older are married, 37.5 percent have never married and 5.5 percent are in consensual unions. Among the married population, about one-third (34.7%) have no education and 57.8 percent have basic education. For those who have never been married, 10.2 percent have never been to school and 73.6 percent has basic education. About nine in ten (87.5%) of the married population are employed, 2.0

percent are unemployed and 10.4 percent are economically not active. For those who have never been married, 41.0 percent are employed, 3.5 percent are unemployed and 55.5 percent are economically not active.

The District is entirely rural. Of the total population of the District, 11 years and above, 73.7 percent are literate and 26.3 percent are nonliterate. Of the literate population, 82.0 percent are able to read and write in English language while 63.8 percent indicated they could read and write in both English and a Ghanaian language. Of the population aged 3 years and older in the District, more than one-fifth (21.8%) has never attended school, 36.4 percent have attended school in the past and 41.8 percent are currently attending. Of those currently attending, 19.8 percent are in Kindergarten, 49.8 percent are at primary level and 18.4 percent are in junior high schools. Thus, 87.6 percent of the pupils in the District are in basic schools.

More than three-quarters (77.5%) of the population aged 15 years and older are economically active while 22.5 percent are economically inactive. Of the economically active population, 96.0 percent are employed while 4.0 percent are unemployed. Of the unemployed population, 69.8 percent are seeking work for the first time. For those who are economically not active, a larger percentage of them are students (45.8%), 23.0 percent perform household duties and 14.1 percent are either too old or too young to work. Of the total workforce in the district, 72.1 percent are engaged in skilled agricultural, forestry and fishery workers, 9.9 percent are engaged as plant and machine operators and assemblers and 7.6 percent are in the service sector. Females are more likely than males to be engaged as skilled agricultural, forestry and fishery workers and service and sales work. In contrast, males (15.6%)

are more likely than females (3.9%) to be engaged as plant and machine operators and assemblers.

In terms of sector of employment, more than 71.1 percent of the workforce are engaged in agriculture. Eight (82.9%) in ten of households in the District are engaged in agricultural activities. An overwhelming majority (98.6%) of the households are also involved in crop farming. About two-fifth (39.4%) of households are engaged in livestock rearing. Poultry (65.1%) is the dominant animal reared in the district. Other employment statistics from the Ghana Statistical Service (2014) indicate that 16.3 percent are employed by the Service sector and 12.6 percent by the Industry sector. Whereas more males (17.1%) than females (7.7%) are employed by the Industry sector, more females than males are employed by the Agricultural and Services sectors. Of the population 15 years and older about 60 percent are self-employed without employees, 26.5 percent are contributing family workers and 5.6 percent are employees. The proportion of female contributing family workers (22.1%) is twice the proportion of their male counterparts (11.4%). The private informal sector is the largest employer in the district, employing 93.3 percent of the population followed by the public sector with 2.9 percent.

3.5 Population

Population, according to Seidu (2006), is the sum aggregate in totality of the phenomenon which is of interest to the researcher. All small-scale mining operators located within the Upper Denkyira West District who have not registered with the Minerals Commission constituted the target population for the study. The accessible population constituted all illegal miners in five towns within the District. The population also included Assembly members, traditional authorities and members of

the Upper Denkyira West Security Committee. This is one District that Small-Scale mining is most pervasive in Ghana, and the presence of Operation Vanguard makes the choice of the location most appropriate for the study.

3.6 Sample and Sampling Techniques

The study was conducted in five communities in the District listed by Ghana Statistical Service (2014) as the significant illegal mining areas in the Upper Denkyira West District. They included Breman, Dominase, Subin, Akwaboso and Nkotumso. Purposive and convenient sampling techniques were adopted to select the five rural communities for the study was undertaken. All the five communities were areas where the Operation Vanguard team operates. The five communities were selected to improve the analysis because in as much as all the towns in the District are homogenous with respect to illegal mining, the intensity of illegal mining activities in all the towns are definitely in various degrees.

In each community, four key informants were purposively selected. These included the Assemblyman, the Chief and two galamsey operators. Additionally, two members of the District Security Committee were interviewed. Therefore, a total of 22 participants were involved in the study. The small number of participants gave the researcher the opportunity to undertake an in-depth exploration of the research problem (Crouch & McKenzie, 2006). The researcher used non-representative sampling design (Daniel, 2012).

The participants involved in the research were eight females, and fourteen males. This disproportionate gender representation was not intentional. This means that 36 percent of participants were females while 64 percent were males. This did not matter much as this research was not necessarily concerned with gender analysis of issues. Rather

it sought to examine the activities of Operation Vanguard and the prospects it holds for ending illegal mining.

3.7 Instruments for Data Collection

The main instrument used for data collection was a structured interview guide which was supported with an observation checklist. These two instruments were used for data collected because of the nature of the problem studied and the exploratory design adopted. The rural nature of the area, the nature of the issue studied and the low literacy level of the participants sampled for the study made the choice of an interview-based approach for data collection most appropriate. The use of interviews allowed direct interaction between the researcher and most of the participants who could not read and write. Consequently, interviewing was preferred over the use of a questionnaire.

Also, given that the study was more exploratory, the use of interviews and observations were more appropriate to ensure deeper understanding and to collect data from participants at a more personal level. As pointed out by Meadows (2013), interview-based data collection is appropriate when the educational level of the target population is insufficient to understand and answer questions in a questionnaire by themselves. McKechnie, Serantes and Hoffman (2012) saw interview approaches in information behaviour research such as in the case of understanding experiences. Mentis, Reddy and Rosson (2013) also saw interviews as useful in understanding the concealment of emotion and emotion awareness. Legard, Keegan and Ward (2003) emphasised the importance of participants being “left feeling well” (p.146). The authors presented various strategies for questioning, including the use of broad and narrow questions, avoiding leading questions, and making sure all questions are clear

and succinct. Within the core phase of interviewing, one technique to help with recall is the use of examples, and asking people to focus on the details of specific incidents rather than generalisations.

3.8 Data Collection Procedure

The data were collected from different groups of participants and sites, using observation checklist and interview guide to allow for triangulation. Structured interviews were used to explore each participant's view on the same questions so that any difference in responses could be triangulated and interpreted as reflecting individual differences and not the process that produced the answer. That is, structured interviews involve administering standardised questions to all the research participants (Firmin, 2012).

Data were collected within five weeks as the researcher spent one week in each community. Observations were conducted in each community to understand the dynamics of Operation Vanguard's activities. This involved visits to the operational headquarters of the Operation Vanguard Team in the District.

The interviews focused on getting a deeper understanding of the galamsey activities and how they interfaced with Operation Vanguard's mandate. The essential focus was on the participants' views about the mandate of Operation Vanguard, their perceptions of the nature of the operations and what they thought the operation might achieve.

Each interview began with a process where the participants were engaged in a brief conversation about the research, their consent and the decision to withdraw or partake in the research. The interviews were conducted on one-on-one basis. The responses were not tape-recorded. Legard, Keegan and Ward (2003, p.143) emphasised the

importance of building a relationship, noting that the interviewer is a “research instrument”, but also that researchers need “a degree of humility, the ability to be recipients of the participant’s wisdom without needing to compete by demonstrating their own.” The researcher followed the following six stages prescribed by Legard et al, (2003) and they are explained below:

- (i) Arrival: The first meeting between interviewee and interviewer has a crucial effect on the success of the interview; it is important to put participants at ease.
- (ii) Introducing the research: Introducing the research involves ensuring that the participant is aware of the purpose of the research, and has given informed consent, that he or she is happy to have the interview recorded, and understand that he or she has the right to withdraw.
- (iii) Beginning the interview: The early stages are usually about giving the participant confidence and gathering background facts to contextualise the rest of the interview. I ensured the interview process began with informal conversations and assurances that participation in the research would constituted no harm to the participants.
- (iv) During the interview: The body of the interview will be shaped by the themes of interest for the research. Participants were thinking in a more focused way because of the way I adapted the structured interview questions to their particular lived-experiences.
- (v) Ending the interview: Legard et al (2009), emphasised the need to signal the end so that the participant can prepare for it and ensure there are no loose ends.

- (vi) After the interview: Participants should be thanked and told what would happen next with their data. Many participants had additional things to say once you are not taking notes and these were noted.

3.9 Trustworthiness of the Data collected

One essential issue in qualitative data collection is trustworthiness. In order to guarantee the trustworthiness of the data collected, the following measures were taken:

3.9.1 Credibility

When evaluating qualitative research, credibility stems from the intended research purposes, and credible research decisions are those that are consistent with the researchers' purpose (Patton 2002; Aney, 2015). This requires the researcher to think critically and contextually when judging methodological decision-making (Moon, Brewer, Januchowski-Hartley, Adams & Blackman 2016). Therefore, the concern about credibility relates to how the research findings and recommendations can be accepted as trustworthy. This was achieved through peer debriefing (sharing questions about the research process and/or findings with peers who provided an additional perspective on analysis and interpretation). The second effort was member checking (returning findings to participants to determine if the findings reflect their experiences). Also, data were collected from significant others during informal interviews. The analysis of the findings was organised based on the main research questions. In doing so, the context of the research were clarified, the characteristics of the participants and the processes by which they were selected, the methods of data collection, and how all of that influenced the analysis leading to answering the research questions (Graneheim & Lundman, 2004).

3.9.2 Dependability

Dependability refers to the consistency and reliability of the research findings and the degree to which research procedures are documented, allowing someone outside the research to follow, audit and critique the research process (Streubert, 2007; Moon et al., 2016). As a quality measure, dependability is particularly relevant to testing findings in multiple contexts to increase the confidence in the evidence (Adams et al., 2014). Dependability was done through detailing the methodology and methods employed in this research to allow readers to assess the extent to which appropriate research practices have been followed (Shenton, 2004; Aney, 2014). The researcher detailed every aspect of the research design and its implementation, including the methodology and methods, the details of data collection (e.g., field notes, memos, the researcher's reflexivity journal). The researcher clarified my researcher positionality as an outsider into gamamsey activities, but a resident from the Upper Denkyira West District.

3.9.3 Confirmability

To achieve confirmability, the researcher is required to clarify the steps taken both to manage and reflect on the effects of my philosophical or experiential preferences. In this research, I have explained the reasons for the choice of the methodology and methods, the reasons why I chose particular communities and the category of people selected for the study. These will allow future researchers to crosscheck the data obtained. In the analysis, I used verbatim quotes from some comments to rather than merely presenting descriptions under themes.

3.9.4 Transferability

Although qualitative research studies are not typically generalisable, according to quantitative standards, transferability is required because policy makers can rely on the results of several case studies to make decisions. To achieve transferability, I followed the ideas of Li (2004) to present a thick description of the Upper Denkyira West District as can be observed in the study area. According to Li, transferability “enables judgments about how well the research context fits other contexts, thick descriptive data, that is a rich and extensive set of details concerning methodology and context, should be included in the research report” (p. 305). Therefore, a thick description entails the researcher elucidating all the research processes, from data collection, context of the study to production of the final report (Aney, 2014). Thick description helps other researchers to replicate the study with similar conditions in other settings.

3.10 Methods of Data Analysis

The data were analysed qualitatively. First of all, the data from the interview scripts were categorised into conceptual categories to identify the consistent patterns and the relationship between the themes. The data analysis involved asking analytic questions to remain faithful to the original meaning participants construct about the issue (Creswell, 2003). A thematic approach was used to search for themes that emerged important to the description of the phenomenon (Cohen et al., 2011). The process of thematic data analysis involved identifying themes through careful reading of data to make meaning of accounts and experiences of participants. In the process of generating themed findings, the interview data were reviewed repeatedly and categorised based on exmanent and immanent themes (Bauer, 1996). The exmanent themes were based on the research questions while the immanent themes were based

on emergent issues from the data collected. In reporting the results, the discussions focused on three principal questions: (i) How is Operation Vanguard being conducted in the Upper Denkyira West District? (ii) What are the challenges of Operation Vanguard in the Upper Denkyira West District? And (iii) What are the prospects of Operation Vanguard in the Upper Denkyira West District? These questions allowed organised thoughts to be developed and to frame arguments that this thesis has built.

3.11 Ethical Issues

The researcher observed ethical principles governing social research, including informed consent, confidentiality and rapport building. The study also ensured voluntary participation. Participation was purely voluntary as the participants had the free will to decide whether to participate in the research activities or not. There was also complete anonymity of the respondents so those outside the survey organisation could not identify the survey participants (Kennedy, 2011). As a result, pseudonyms were used where a response was quoted in the final write-up of the findings to maintain anonymity. The interview questions were asked in Twi, the language spoken by participants and transcribed into English language afterwards.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

In this chapter, the results from the data collected for the study are discussed. The discussions are organised according to the research questions.

4.1 Research Question One: How has Operation Vanguard worked in the Upper Denkyira West District? (UDWD)

This section explores the ways in which Operation Vanguard works in the Upper Denkyira West District. From the study, Operation Vanguard is not working alone in the UDWD. There is another group called GalamSTOP that also works side by side with Operation Vanguard. The respondents had the following to say when they were asked to describe the work of Operation Vanguard.

Operation Vanguard operates together with GalamSTOP (Stop Galamsey Task Force). GalamSTOP members are party boys who have been trained to work to stop galamsey. We don't know how different they are from Operation Vanguard. What I can say is that they also seem to be doing the same things that Operation Vanguard is mandated to do (Kumi, an excavator operator)

I am not sure what the work of Operation Vanguard really is. The way they work here is not understood by anyone. They work with GalamSTOP. They use different cars branded differently. The GalamSTOP has its insignia and Operation Vanguard had its own vehicles (Fiifi, a site security man)

Other comments focused on the form that Operation Vanguard takes within the Upper Denkyira West District. Some typical comments were:

The operation has no form. It is only about shooting and the killing of people. They also destroy equipment and lives. Operation Vanguard has taken a form that no one understands. You can listen to the people

in my community on how they view the work of Operation Vanguard (Kwesi, an Opinion Leader)

The soldiers are doing nothing. They only attack us (miners) in the bush and destroy our equipments. Aside from that they only eat and drink (Adams, a Galamsey Operator)

The soldiers are just here. They are not doing anything. They shoot and kill people and sleep with our young girls in the Mahama Day School (Kunah, a Galamsey Operator)

These comments suggest that Operation Vanguard is a militarised operation. It involves four main things. The first is the use of weapons against the miners. The second is that the members destroy lives. This involves soldiers shooting at the galamsey operators. The third is that they make arrest. The fourth is that they destroy property, including the equipment belonging to galamsey operators. This is described by one participant as follows:

When they come to any mining site, they just set your machines ablaze. If they see you, they arrest you. They destroy equipment, including everything they find at the mining site (PD, an Assembly Member)

The other problem that is worrying was commented on by some participants. In the words of two participants,

Now the soldiers are becoming corrupt. They ask people to pay so that they will not destroy their equipment. Payments are made using polythelene bags and mobile money (PC, Assembly Member)

Master people pay, they pay a lot so that their equipment will not be destroyed. Some people pay 1,000.00 cedis per week with those using 'chanfa' machines. Others also pay 5,000.00 cedis or more per week with those using excavator machines (Ena, a Galamsey Operator)

The above indicates that Operation Vanguard has failed. It is now a corrupt system where both the soldiers and police are corrupted. This implied that there is a system that has corrupted the operation to the extent that its original mandate has changed significantly.

I am afraid they are corrupting our soldiers. The soldiers now collect money. They make you pay to the soldiers. I am afraid it is taking a form of corruption (PJ, Assembly Member)

Now they work with the Association of Small-Scale Miners. Those they arrest are those who refuse to pay their dues as members of the Small-Scale Miners' Association. Once you join and pay your dues you are gone. They will not visit your site again (PC, Assembly Member)

This transformation of the nature of the operation brings up many issues. It shows that there is a change in the operation and this seeks to derail the achievement of its objectives. This suggests that the galamsey operations have been criminalised. Criminalisation this affects the ways in which the operations are viewed and approached by the Operation Vanguard task force.

The economic arguments about livelihoods being destroyed support the view that galamsey supports economic life (Gyeke 2018). The idea that people are arrested support the literature that the operation involves arrest and jailing of people (Awiah, 2017; Gyeke, 2018). However, the results did not support the literature that punishments meted out to galamseers were not deterrent enough (Afful, 2018). As such the next section examines the challenges to the operation and how those can affect its success.

4.2. Research Question Two: What are the Challenges of Operation Vanguard in the Upper Denkyira West District?

This section discusses the challenges facing Operation Vanguard in the Upper Denkyira West District. The results are discussed under various sub-themes that were developed from the data analysis.

Parallel Operations

The discussions with participants indicated that there is a parallel operation that threatens the effectiveness of Operation Vanguard. The comments that support the above statement include the following:

We don't know how different GalamSTOP is from Operation Vanguard. It seems that the former is more resourced and they appear to have more political support than Operation Vanguard. They have many things and I think they are a problem to the success of Operation Vanguard (Elorm, Opinion Leader)

This comment suggests that GalamSTOP has been an obstruction to the Operation Vanguard. The GalamSTOP seems to be operating in ways that affect the work Operation Vanguard. Further comments highlighted the same point.

I am sure that the major challenge that Operation Vanguard has is GalamSTOP. GalamSTOP has been obstructing the activities of Operation Vanguard. They go to arrest suspected illegal miners and take money from them. GalamSTOP boys are party boys that are terrorising people than working to support Operation Vanguard (PJ, Assembly Member)

GalamSTOP is the major problem facing Operation Vanguard. I think they are undermining Operation Vanguard. They need to stop the GalamSTOP from working. It is one problem that must be checked. The government supports them. They are protecting party members instead of stopping galamsey (PC, Assembly Member)

We don't know what this GalamSTOP is all about. If there is any problem that Operation Vanguard should deal with, it is GalamSTOP. We don't know what they are doing. They seize machines and ask the owners to pay before they are given back to them. They are not doing any work. They are just driving around and people think they are soldiers. They are unprofessional, so they do things anyhow. (Kunah, galamsey operator)

One thing that is not in the literature is the effect of parallel operations in dealing with galamsey. In the case of Operation Vanguard, it seems there is a conflicting operation that undermines it. This suggests that Operation Vanguard has an internal challenge.

This could, however, be explained by the Political Ecological Theory (Kervankiran et al., 2016). Within that thinking, it can be argued that there are ecological factors such as GalamSTOP that promote illegal mining. It can be argued that one of the major causes of illegal mining is the parallel operation that has political support. Thus, the perpetration of illegal mining could be explained by the fact that there are internal interests that seek to protect some illegal miners. GalamSTOP seems to be an obstruction to the Operation Vanguard team. Their practices and ways of operating are inimical to the goals of Operation Vanguard.

There were other comments suggesting that the Small-Scale Miners Association also had a task force. Typical comments included the following:

I hope you are aware of the Small-Scale Miners' Task Force. They also operate separately from Operation Vanguard. Where they go, the Operation Vanguard people don't go to check those involved in illegal mining sites again. So everyone is doing something parallel to the other (PG, Assembly Member)

One problem with Operation Vanguard is that the Small-Scale Miners' Task Force is also doing their own operations. Operation Vanguard team does not go to the sites where the Small-Scale Mining Task Force visits. So those areas are not covered by Operation Vanguard activities. So you see, that there are areas Operation Vanguard is not operating or reaching out to (PL, Assembly Member)

Operation Vanguard has many problems. The main challenge is all these splinter groups. Apart from GalamSTOP, you also have Small-Scale Miners' Association Task Force. The three groups operate separately so Operation Vanguard is not at everywhere as many Ghanaians believe (Say, Galamsey operator)

These comments add further evidence that Operation Vanguard is engaged in parallel operations with other groups that do not allow it to fully operate. Consequently, it seems that there are some aspects of Operation Vanguard's mandate that have been taken over by other groups. That is, the responsibilities of Operation Vanguard appear to have been shared with other groups.

Military Limitations

Operation Vanguard has an excessive focus on the military side to the neglect of the social and economic drivers of illegal mining. The first theme that was developed from the analysis of the data concerning challenges of operation vanguard was the limitations of military operations. The following were some of the common comments:

This operation will fail because several others have failed. The military is not the best instrument to use in solving this problem. Using the military means that people don't understand the issues behind galamsey activities. The military does not have the time to be here forever (Bato, galamsey operator)

They say Operations Vanguard will succeed. I will say that it will not. Shooting people and destroying equipment do not solve problems. It rather creates more problems (SP, Small-Scale miner)

They say that they will finish this work in some few years. We are in the third year and nothing has changed. The military are not at war. Using the military for this operation means we have failed from day one (SJ, Small-Scale Miner)

I think we are joking. The nation does not have sufficient military and police officers to be here for years. The operation will fail. Using soldiers is a lazy man's approach at addressing the galamsey menace (SC, Small-Scale miner).

The above comments show that Operation Vanguard is being viewed as something trans-mutating from a temporary solution to a protracted operation. Using soldiers is seen as an approach that did not take the livelihoods of the people in community into

account. This is the reason why someone said it a lazy man's approach. The participants' comments indicate that security personnel are not well suited for the task of stopping illegal miners from operating. In their view, past security operations failed. Hence, the participants were expectant that the modus operandi of Operation Vanguard makes it something that is destined to fail. They argued that if military operations were to be successful, past operations could have solved the problems of galamsey. The state does not have sufficient security personnel to patrol every corner of the country. Another concern was the view that the use of security has prevented Ghanaians from understanding the fundamental problems of illegal mining.

Political Challenges

Much of the data collected indicate that there are political challenges to the success of Operation Vanguard. These were found in several comments. Some of which are stated below:

The vast majority of public policy aims to shape and facilitate our approach to galamsey. As citizens, communities and policymakers, we want to stop galamsey, but we rather encourage it. We may not agree, but politicians have made the work of Operation Vanguard difficult. They arrest people and politicians call for their release. They should change the policy and change their behaviour. If there is no political will, as some of us can observe, the operation is not going to succeed (PC, Assembly Member)

It seems that members of Operation Vanguard are not fair. They are arresting some people and encouraging others to engage in galamsey. The Chinese that is, the foreigners are allowed to mine, and we are being asked to stop. It's not going to work (Kumi, excavator operator).

The politicians are directing Operation Vanguard in ways that do not support its operation. Whether we like it or not, the actions of policymakers, public service professionals and some citizens around us have big, and often unintended, impacts on our behavior (Kwesi, opinion leader)

Politicians have hijacked the entire Operation Vanguard. They do not involve many local stakeholders (people from the local communities). The focus on military approach has taken away stakeholder participation (Fiifi, site security)

The comments indicate that there are several political-related challenges to Operation Vanguard. They include political interference in the activities of Operation Vanguard, and perceived discrimination where some people are encouraged to engage in the mining activity while others are prevented from it. These issues question the level of political will that is driving Operation Vanguard. In addition to those issues is a concern about neglect of local community members and structures. This has led to little community support for Operation Vanguard.

The implication is that much of the community knowledge and networks that exist to support Operation Vanguard are lost. In this way, Operation Vanguard seems to see the people in the communities where the operation is launched as part of the problem. In that case, Operation Vanguard team seems to be in conflict with communities in which they operate. This concern presupposes that community members have a vested interest in keeping their neighbourhoods safe and are critical to support law enforcement's duty to prevent and investigate any negativity in their communities. Also, many law enforcement agencies within the communities are already implementing local programmes to enhance their community's awareness of reporting suspicious mining activity, yet there is little guidance or research regarding the best practices to improve citizen reporting.

When community members were questioned about the alternatives to illegal mining that they had, they raised comments suggesting the lack of education prior to the launch of Operation Vanguard. Some typical comments included the following:

There was no education. Some of us just heard that some soldiers were coming to stop us from working. We were aware of the political undertones in Operation Vanguard's activities. Though some few of our members said they heard something, majority of us knew nothing about Operation Vanguard's presence here. You know we are in this underdeveloped part of Ghana (PD, Assembly Member)

The Operation is good. However, we didn't know anything about it until the soldiers came here. Then they came to us to announce their presence in various surrounding communities. How do you do that? Saying something on TV or radio is not sufficient. This is about the lives of people. It is bread and butter issue. You do not destroy it by giving an order to the military and police. You change it through consultation and education, supported with alternative livelihood programmes. The current proposals are like a joke (Andaman, Opinion Leader)

The above two responses point to the fact that there was not much sensitisation of the people about Operation Vanguard. It seems that most of the miners would have cooperated with Operation Vanguard teams differently if the operation was preceded by some education. The fact is that the operation was rushed and not properly coordinated.

Other important comment referred to lack of knowledge about registration procedures. Two typical comments were

We are aware they say we need to register before we can take part in the mining activity. We do not have any knowledge about the procedure for registering. Those who tried were frustrated. I learnt it is a difficult process. We heard they mentioned something about Minerals Commission, but we don't know how to get there and what to do when we get there (Adams, a Galamsey Operator)

Our people are not so educated. Look at the distance from here to Accra. Even from here to the District Capital, Diaso is not a joke. We are in a very rural District where many things including communication is not very developed. There are some laws you need to support the people to comply with. You don't just impose on them. It won't work. We need to empower the illegal miners and support them in the registration process (PJ, an Assembly Member)

The above comments mean that illegal miners are aware there are laws regarding mining. However, they consider the procedures for registration as cumbersome. However, there is not much education on the registration processes to support those who want to legalise their operations to do so. The issues raised concerns about the bureaucratic administrative procedures for the registration of mining activities. In fact, all participants raised concerns about the registration procedure and noted that there seem to be little commitment to address issues such as political interference in registering and licensing of individuals and groups who want to engage in mining activities. Whereas the process of securing a licence could be highlighted separately, it appears that it is intricately linked to the issues around political interference and lack of education on the matter.

Economic Factors and Financial Limitations

One theme that emerged in the data analysis was economic challenge. The first strand of views that emerged under economic factors was that the operation was a threat to survival and livelihoods of many residents in the area. The following comments support the argument:

Galamsey will never stop. Operation Vanguard will come and go and we will still engage in galamsey. What will the people eat if they stop?
(Ena, galamsey operator)

Our people cannot stop galamsey because of the presence of Operation Vanguard. Then they have to be here for the rest of their lives. This is what people eat and drink. We cannot stop engaging in it. We cannot just abandon it (CJ, opinion leader)

If you stop galamsey, you are stopping people from eating. You are destroying their businesses. It cannot stop. Let's forget it (PG, Assembly Member)

In the District, revenue from tolls collected from miners is the second highest IGF contributor. So, something that gives you much of your Internally-Generated Funds and employs many people, it's not easy to just take it away. It's not going to be easy like that (PS, District Assembly staff).

We shall die than stop engaging in galamsey. If you stop you will not have anything to depend on. If you continue, at least you will live for sometime before they kill you. It's better than killing yourself because you are afraid of the military (Say, galamsey operator)

As the Fund For Peace (2018) indicated, the results showed that galamsey employs many people in the Upper Denkyira West District. Consequently, galamsey becomes a matter of livelihood where the desire to live is stronger than the fear of military.

Other economic factors identified as constraints to Operation Vanguard are captured in the following comments:

The use of security services for galamsey operation is not sustainable. How do you use soldiers to attack your own people. It doesn't make sense. You cannot keep them forever (CK, District Assembly staff)

I think it's expensive to use security people for this exercise. Everyone knows it won't work. It is expensive and government will not have the funds to continue keeping the soldiers (Sela, Small-Scale miner)

Gold has elastic demand. People will engage in galamsey for as long as there is market for it (JC, Opinion Leader)

We have been blinded by the use of military. You see we are not exploring other options. But, the military option is very expensive (PS, District Assembly staff)

From the comments, there seem to be problems in various areas. The issues include concerns that the use of security to fight illegal mining is unsustainable due to the cost

involved. The use of security is expensive, and government will not have the funds to keep up the fight. In addition, high gold price and its elastic demand seem to be a major challenge. Thus, there is a correlation between high commodity prices and violence in communities. In this case, it seems that the economic Theory of Illegal Goods (Becker, Murphy & Grossman, 2004) offers major theoretical explanation for the challenges facing Operation Vanguard. The prevalence of poverty coupled with an insatiable desire for gold is a major challenge to Operation Vanguard. Therefore, it seems that as Pegg (2006) noted, the major challenge to Operation Vanguard is the idea of illegal mining as a source of livelihood for those engaged in it. Therefore, the difficulty in ending illegal mining is that people will continue to do it because it is their source of livelihood.

Socio-Cultural Factors

The last theme that emerged from the study was the socio-cultural factors that affect Operation Vanguard. Some participants have concern and the following comments present their concerns:

Operation Vanguard started with killings and arrests. So, we all knew it was meant to instil fear among the illegal miners. It doesn't work like that. What it has achieved is rather the creation of an enmity between the communities and Operation Vanguard (PC, Assembly Member)

Operation Vanguard will not succeed. It is disrespectful to the local people and their culture. They do not involve us, hence it lacks our support. We know the places where the people are. The military people are new here. We know where the people hide. We know how they operate, but we will not expose them (Kwesi, Opinion Leader)

If you want to stop galamsey, you must work with the people who understand the terrain. It should be the people who know the ground; the traditional leaders and the local people. You need to include them. They just come and kill people here and some of us will protect the miners because of that. We shall support them and give them hints

about the military and their movements. They will not succeed. We shall teach them that we know the areas more than them. We know the bush, it is our home (Kunah, a Galamsey Operator)

From the comments, it is observed that there is deep anger among the participants of how Operation Vanguard was launched and directed. A research conducted by Hilson (2001) showed that traditional leaders have various roles they play in communities in the order to get community members to support. Besides lack of education, sensitisation and community mobilisation to support Operation Vanguard, it appears there was no organised consultation with the traditional leaders in the various communities. Thus, there are two parts of the socio-cultural factors. One side is the social factors that place emphasis on environmental education. There is no environmental education within the communities. This meant that the operation surprised the people and so the soldiers made enemies within the communities. The second aspect is lack of consultation with the Traditional leaders, and this has made them and other community leaders to feel marginalised. Consequently, they have refused to support Operation Vanguard.

Overall, the argument of this section is that the use of security personnel to fight illegal mining is unsustainable, expensive and eventually, government will not have the funds to keep up the operation. Also, it is suggested that galamsey is a livelihood issue and people prefer to live on it to the extent that the desire to engage in it stronger than the fear of military operation.

In addition, the failure of previous operations seems to cast a slur on operations that have also been implemented in a rush and lacked community support. Thus, it seems that Operation Vanguard is self-defeating in terms of its implementation and the lack of political will to allow it to work independently. Ultimately, the use of the security

has prevented the nation from understanding the fundamental problems of the needs of illegal miners. It could be argued that the use of militarised approaches such as Operation Vanguard to fight illegal miners is not the most appropriate approach to addressing a genuine challenge. As may be argued, the operation is at the verge of collapse. Although it was designed to be a temporary intervention, it continued for three years. The fear is that Operation Vanguard, like its predecessor security operations that have failed, has little chance of success.

These challenges suggest evidence from the literature calling on the government to dissolve Operation Vanguard are valid (Awlesi, 2008). The socio-cultural challenges reflect the validity of symbolic interactionism as a theoretical resource in studying ‘galamsey’ operations (Vilar and Inglesa, 2001). The ways in which galamsey operators have corrupted the Operation Vanguard task force supports symbolic interactionist arguments by Anderson and Taylor (2009). The ways in which ‘galamsey’ operators are determined to continue their activities support the propositions in the Economic Theory of illegal Goods (Becker, Murphy and Grossman, 2004). Also, the evidence about how political factors play out and how these interrelated to militarised efforts highlight several aspects of the Game Theory as delineated by the Theory of Social Situations (Leonard, 2010; Basar, 2010).

The overall complexity of issues involved in the relations between ‘galamsey’ operators and Operation Vanguard members bespeak the ideas espoused by Kervankiran, Dziwornu and Termurcin (2016) and Nyame and Grant (2014) highlighting the Political Ecological Approach. As may be observed, ‘galamsey’ is difficult to address through operation Vanguard because of many factors, including poverty (Hilson & Garforth, 2012; Hilson & Potter 2005; Banchirigah, 2008) and

financial difficulties (Hilson & Garforth, 2012). As highlighted in the literature, unemployment (Hilson & Potter, 2005; Nyame & Blocher, 2009) and unpredictable environments (Walker, 2006) are part of the reasons why Operation Vanguard is not making any headway.

4.3 Research Question Three: What are the Prospects of Operation Vanguard in the Upper Denkyira West District?

This section explores the prospects of Operation Vanguard. Given the challenges discussed in the previous sections, there was the need to examine the future of Operation Vanguard. When the participants were asked about the future of Operation Vanguard, they made the following comments:

Operation Vanguard has no future. It will not succeed. Corruption has set in. The soldiers are doing their own things. Operation Vanguard is dead, it is dead. Let us forget about it (CK, District Assembly staff)

I don't think the government will be able to sustain the operation because of the cost involved. There is nothing good that will come from Operation Vanguard. It has failed. The soldiers are taking money instead of stopping galamsey. The Operation is messed up. The soldiers and police are demotivated. They are not interested in working again, especially with the way GalamSTOP is interfering in their activities, the Operation cannot succeed (PD, Assembly Member)

I am not sure the government has the finance and logistics to continue with the operation. This shows that, this operation will die. I am not sure the operation will succeed. It is sad that the politicians make rules, but they do not observe them. The political will is gone. Operation Vanguard cannot stop galamsey in any way (PG, Assembly Member)

The above comments reflect what the Game Theory and the Political Ecological Approach espouse. Fundamentally, it means that there are several ecological factors that have affected the operation to the extent that its future is bleak and unpredictable.

Failure is eminent. As one participant indicated, Operation Vanguard has no future.

These assertions were supported by the following other views:

I don't think the government is interested in continuing the operation the way it started. Operation Vanguard is not going to succeed. It will fail. It has failed already. I am not sure there is anyone who thinks that Operation Vanguard will succeed. It cannot achieve its objectives. It has no future (CJ, an Opinion Leader)

I am sure the operation has to be suspended. It has failed. There are political interests at stake. The government has lost the battle. They cannot give up too. They are confused. The Party boys have collapsed Operation Vanguard. It is only now a waste of resources (SJ, Small-Scale Miner)

The above comments showed that the operation has failed. Hence, the future of the operation is not guaranteed. It appears Operation Vanguard is following in the steps of earlier failed operations. The results show that arguments, including those of Hilson and Yakovleva (2007) and Nyame and Blocher (2009), regarding the difficulty of stopping illegal mining are valid propositions. As Teschner (2011) argued, law enforcement also appears inefficient and/or lacking and this facilitates the widespread of illegal mining.

There are other arguments by the participants that Operation Vanguard will not achieve the desired results. Typical comments include the following:

Operation Vanguard will not succeed for many reasons. The first reason is that those involved in illegal mining include the police, chiefs, political party leaders and Members of Parliament (CK, District Assembly staff)

How can Operation Vanguard succeed? No. Party executives are involved in galamsey. The members of the security services who are expected to check the illegality are involved (PS, District Assembly staff).

This problem is complicated. The mineral commissioners are involved. They are the people who give the people fake documents to come and

start mining. The Mineral Commission staff usually call people and ask them if they are interested in mining. Then they show them where to go (CJ, an Opinion Leader)

It is the officials of the Minerals Commission who direct prospective illegal miners to mining areas. I remember one Commissioner who came here and was just showing people lands that they could register as their own and start mining. So he was transferred at some point. It was very bad. It was not proper. How can our nation make progress if we do things this way? Operation Vanguard will fail (JC, opinion leader)

Some participants argued that Operation Vanguard will make the situation worse.

Sample comments suggesting this point of view are as follows:

Operation Vanguard will make the situation worse. My fear is that we are making it worse by making it attractive to the galamsayers. Now, the soldiers have been compromised, party boys have become involved and everything has become more complicated than it used to be. There are sites designated as no go area. Operation Vanguard and GhalamSTOP guys do not go there. They have an agent that collects money for them from the illegal miners. (Andaman, an Opinion Leader)

If we have corrupted the soldiers whom we are using to stop illegal mining, then it means we are making it worse. Some people who were initially not involved have now become involved. (PD, an Assembly Member)

Others presented arguments to the effect that Operation Vanguard may turn to legalise illegal mining activities. This was evident in several comments as follows:

The idea of community mining that they want to introduce will be a way of legalising illegality. For now, there seem to be no laws regulating illegal mining much. So now that they are asking people to register, telling the people to register in order to control how they engage in mining. But I want to tell you that it will only legalise the wrong things people have been doing for ages. (PS, a District Assembly staff).

They say we must go and register. Those who register do the same things that we are doing. The only difference is that we are not

registered. Do they want us to register and do the same thing? (Bato, a Galamsey Operator)

The officials who have been trained to register people for community mining are doing the same things as we are doing here. Go to Obuasi and see. They collected and collated some names and wanted to assign them some places here for mining. So in Obuasi, this is the situation. It is just a way of legalising the illegal activity by putting people in groups to do it on a larger scale. (Adams, a Galamsey Operator)

Some also expressed views that Operation Vanguard could stop illegal mining. This they suggested in several comments including:

I believe that there might be political backlash one day that can make Operation Vanguard successful. If the corruption in Operation Vanguard and GhalamSTOP becomes a public knowledge, things may change. That may be the best way out. I don't know what may happen but everything is possible. (Nana, an Opinion Leader)

Operation Vanguard can become successful. Everything is possible. I will not discount the possibility of success. Operation Vanguard may succeed. Who knows? (CK, a District Assembly staff)

I am sure that some people will be exposed one day. I am sure that Operation Vanguard will frustrate some people and many people will look for alternative livelihoods that can be supported by the government to succeed. Operation Vanguard can change the status of things and make things better. It may not stop it completely, but it will reduce it (SJ, a Small-Scale operator)

The above comments suggest that Operation Vanguard has four different prospects. The first is the possibility of failure, which was the most widely expressed views. The second prospect is that it has made things worse due to the introduction of new people into the illegal gold mining activities such that it has become more difficult to deal with the phenomenon. The third prospect is that it legalises the activity by ensuring that several people get enrolled unto the community mining programme. The fourth prospect is that it is possible Operation Vanguard could stop illegal mining altogether. This fourth prospect is presented with several reservations but it seems plausible on

the assumption that political involvement and misdeeds within Operation Vanguard will be exposed publicly.

4.4 Application of the Theories to the Research Findings

From the discussions, it can be realised that the findings are variously grounded in the theories that informed the study. It seems that the Economic Theory of Illegal Goods applies to the ways in which illegal mining is sustained. From the study, the major reason why people engage in illegal mining is economic as explained in both the Political Ecological Approach (Kervankiran et al., 2016) and the Economic Theory of Illegal Goods (Becker, Murphy & Grossman, 2004). Poverty and the need to secure economic livelihoods are the main drivers of illegal mining (Nyame & Grant, 2014). Poverty is identified as one of the main causes of illegal mining in the Upper Denkyira West District (Hilson & Garforth, 2012; Hilson & Potter, 2005; Banchirigah, 2008).

However, there seems to be a strong belief that the government's approach will not be able to stop illegal mining. This interpretation that the government's approach is deficient and, therefore, this allows the illegal miners to carry on with their activities despite the work of Operation Vanguard in the ways that is supported by the Theory of Symbolic Interactionism (Vilar & Inglesa, 2001). This is also evident in the interpretation of the registration process and legality of the activities. As the study showed, illegal miners misinterprets the registration process as tedious and time wasting. Therefore, they are reluctant to register as the work of Parry (2014) showed.

There are elements of the Game Theory (Basar, 2010; Leonard, 2010) as the miners are engaged in both cooperative and non-cooperative activities that make it difficult for Operation Vanguard to stop galamsey (Owen, 1995; Colin, 2003). The Game

Theory is visible in the interpretation of the meaning of galamsey where they think that the activity is their main source of livelihood (Anderson & Taylor, 2009).

Overall, however, the Political Ecological Approach seemed to be the more plausible proposition that showed up in the findings. It seems that ending illegal mining will lead to financial difficulties in the community as it is seen as the only available viable livelihood option (Hilson & Garforth, 2012). The nature of illegal mining activities makes it appealing to individuals that lack financial capital (Nyame & Blocher, 2009; Hilson & Garforth, 2012). Therefore stopping galamsey outright will lead to unemployment (Hilson & Potter, 2005; Nyame & Blocher, 2009). As the study showed, many are involved in illegal mining because of lack of formal employment opportunities. As the Political Ecological Approach argues, the study showed that people are forced to engage in illegal mining because of lack of alternative employment avenues (Teschner, 2011; Bush, 2008). In the case of the Upper Denkyira West, arable lands originally used or leased out for farming are now increasingly used for illegal mining (Nyame & Blocher, 2009) and this has rendered most farmers unemployed.

Also, as rational beings, the illegal miners tend to realise maximum economic gain from the extraction of gold, and have established it as a historical traditional source of livelihood by the local people (Banchirigah, 2008). Whereas the combination of farming and illegal mining seem to be a common practice in the Upper Denkyira West District, the revenue that the District Assembly and individuals make from illegal mining will significantly decline if the activity is stopped (Hilson & Garforth, 2012). Hence, there seemed to be a community unwillingness to stop galamsey despite the non-conformity to environmental regulations to ensure sustainable resource

exploitation. As Political Ecological theorists such as Kervankiran et al. (2016) explained, the major causes of illegal mining are the economic forces which are not attributed to the individual's economic failures but the social and political processes that shape the economic landscape within which the people make decisions and are compelled to engage in illegal mining. The results of the study showed that the cumbersome bureaucracy in the registration process, delays and high cost of registration and the manner in which Mineral Commission leases lands to miners makes local community and other illegal miners prefer informality and flexibility as explained in the Political Ecological Approach (Nyame & Blocher, 2009). The bureaucratic requirement appears to be the main obstacle to unregulated illegal mining (Nyame & Grant 2014; Hilson & Potter, 2005). However, other political factors such as the perceived corruption among the members of Operation Vanguard and the ways in which the operation is uncoordinated leading to the creation of parallel groups have severely compromised the mission of ending illegal mining.

Kervankiran et al. (2016) argued that, the duality of the land tenure system in Ghana where the government has legal right to land resources and traditional authorities are acting as custodians of the land make access to land complicated (Hilson & Yakovleva, 2007). Whereas lands are vested in traditional authorities who allocate to people at will (Nyame & Blocher, 2009), the Minerals Commission equally allocate lands to miners, and this makes it difficult to monitor how people acquire land for illegal mining activities. Additionally, traditional authorities are uncooperative in supporting the activities of Operation Vanguard; and this facilitates the widespread of illegal mining in the Upper Denkyira West District. Thus, the Political Ecological Approach seems to have manifested much in explaining the prospects and challenges to Operation Vanguard in the Upper Denkyira West District.

4.5 Summary

This section discussed the empirical results from the research. It discusses the nature, challenges and prospects of Operation Vanguard in the Upper Denkyira West District. From the discussions, operation appears militarised and involves the use of weapons and force against illegal miners; destruction of life involving soldiers shooting at the galamsey operators; arrest of operators; and the destruction of property (equipment) and machinery belonging to galamsey operators. The analysis indicates that the main challenge to Operation Vanguard is that it was designed to be a temporary intervention. However, it is becoming a protracted operation. Like its predecessor security operations that have failed, it seems that Operation Vanguard has little chance of success. The prospects of Operation Vanguard in the Upper Denkyira West District appear bleak and unpredictable. Arguably, Operation Vanguard is likely to fail like other militarised operations that predated it. However, others expressed contrary views that Operation Vanguard may exacerbate illegal mining activities due to the introduction of new people into the illegal gold mining activities; legalise the activity by ensuring that several people get enrolled unto the community mining programme; or could stop illegal mining altogether.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter sums up the main findings of the research. It covers the summary of the research and the major findings. It also presents the conclusions and the recommendations.

5.1 Summary

This section presents a summary of the research. It presents the objectives, the research procedure and the major findings.

5.1.1 Objectives of the Study

Three objectives were set for the study. They were to:

- (i) describe the work of Operation Vanguard in the Upper Denkyira West District
- (ii) explore the challenges of Operation Vanguard in the Upper Denkyira West District
- (iii) examine the prospects of Operation Vanguard in the Upper Denkyira West District.

5.1.2 Research procedure

The study aimed at examining the work of Operation Vanguard in the Upper Denkyira West District in the Central Region of Ghana. A total of twenty-two respondents, made up of eight females and fourteen males were sampled for the study using the purposive and convenient sampling techniques. Data were collected using structured interview guide and observation checklist. Data collected were analysed qualitatively.

5.1.3 Major findings

The major findings of the study include the following:

- (i) Operation Vanguard does not have its total freedom to carry out its activities because it has rival groups, including GalamSTOP, whose membership consists of political party members who have been recruited to stop illegal mining in the Upper Denkyira West District (UDWD). The presence of this rival groups does not give Operation Vanguard the needed independence to achieve its mandate of stopping illegal mining in UDWD.
- (ii) The study found that Operation Vanguard members engage in corrupt practices such as taking bribes from the illegal miners and allowing them to continue their illegal mining activities. However, those who refuse to pay bribes to them are stopped from mining and may also have their mining equipment destroyed.
- (iii) Operation Vanguard is faced with the challenge of political interference in their activities. In situations where illegal miners are arrested and their equipment are seized, high government officials intervene to get the said illegal miners freed and their seized equipment released to them.
- (iv) Economically, Operation Vanguard is a threat to the survival of many people in UDWD since illegal mining is one of the major sources of people's livelihood in the face of high level unemployment faced by the people, especially the youth in the District
- (v) The work of Operation Vanguard in UDWD was not preceded by education. That is, there was no sensitisation of the indigenes about Operation Vanguard and its activities in the District. The traditional, religious leaders, youth and women groups as well as the Assembly members and Unit

committee members know nothing about the activities of Operation Vanguard. This has affected the success of Operation Vanguard.

5.2 Conclusions

This research explored the challenges and prospects of Operation Vanguard in the Upper Denkyira West District.

- (i) Operation Vanguard was designed to be a temporary intervention. However, it is becoming a protracted operation. Like other security operations that have failed, it seems that operation vanguard has little chance of success. The argument is that if earlier military operations had succeeded in ending illegal mining, the state would not have sponsored Operation Vanguard since 2017. It seems that the use of security has prevented us from understanding the fundamental problems of illegal mining. Financially, it is very expensive to sustain Operation Vanguard in its fight against illegal mining in the District. Government will not have the needed funds to keep the operation going.
- (ii) Also, galamsey is a livelihood issue hence it appears the desire to live is stronger than fear of military. Therefore, many galamsey operators seem determined to face the consequences of military crackdown than face deprivation and death. These challenges make the chances of operation vanguard succeeding very slim.
- (iii) It seems that the Operation Vanguard was rushed, uncoordinated and mediated by political intervention and these have affected its success. There seems to be little community support, and the morale of the security services have been affected by the fact that many people they arrest are freed by the intervention of political actors, especially in government.

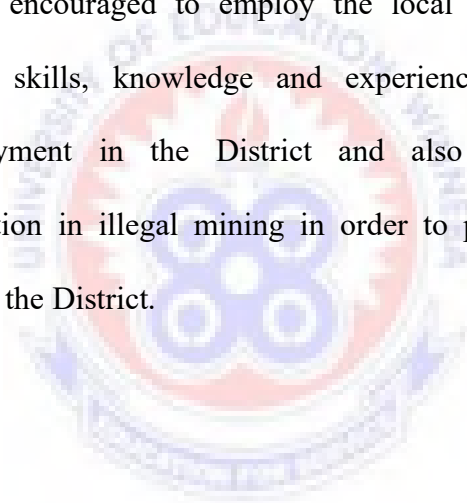
5.3 Recommendations

Based on the findings from the study, the following recommendations are made.

- (i) There is the need for Parliament to pass a law to regulate the activities of Operation Vanguard. This will give a legal backing to the work of Operation Vanguard and thereby eliminate or stop other parallel groups from their operations. This will give Operation Vanguard the needed independence to concentrate on achieving its mandate.
- (ii) To stop the destruction of the forest and water bodies, a military camp should be established in UDWD to provide a more sustainable approach of halting the activities of illegal miners in UDWD.
- (iii) Operation Vanguard should not work in isolation, but rather, it should team up with various groups in the District, including traditional and religious authorities, Assembly and Unit Committee members. This will offer it the necessary cooperation from the local people to contribute to their success.
- (iv) Reports of corrupt practices against members of Operation Vanguard should be investigated and those found culpable should be severely punished to serve as deterrent to others. This will help bring some sanity into the activities of Operation Vanguard.
- (v) Vocational and technical institutions should be opened in the District in order to equip the youth with employable skills to serve as alternative source of livelihood. This will reduce the over-dependence of the people, especially the youth on mining, especially illegal mining as their major source of livelihood. In addition, apprenticeship must be promoted in the District and those who complete their period of apprenticeship must be

assisted with start-up capital and the needed tools to enable them practise their trade.

- (vi) The local people must be introduced to other forms of alternative livelihood methods to reduce their over-dependence on mining for their survival. Such alternative livelihood methods include snail, mushroom and grass-cutter rearing, bee keeping, rabbit rearing, tie and dye making as well as soap and liquid soap making. Such a move will reduce the attention of the people from mining as their major source of livelihood.
- (vii) The registered mining companies involved in large-scale in the District must be encouraged to employ the local people, especially with the requisite skills, knowledge and experiences. This will help reduce unemployment in the District and also help reduce their active participation in illegal mining in order to protect the forest and water bodies in the District.



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APPENDIX A



4th February, 2020

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR. BISMARCK KWABENA BOATENG

I write to introduce Mr. Bismark Kwabena Boateng to your outfit. He is an M.Phil. Social Studies Education student, with index number 8180490005, from the Department of Social Studies Education, University of Education, Winneba.

As part of the requirements for the award of the Master of Philosophy degree, he is undertaking a research on the topic: *“Perceptions of the People on “Operation Vanguard” in the Upper Denkyira West District in the Central Region of Ghana”*.

I wish to assure you that any information provided would be treated confidential.

Thank you.

Yours faithfully,

Margaret G. Nyala (Mrs.)
For: Ag. Head of Department

APPENDIX B

INTERVIEW QUESTIONS

Introduction

I am student at the University who is finding out the challenges and prospects of operation vanguard in the Upper Denkyira West District. I need you to talk to me about your experiences and opinions about the Operation. The information you give me will help to better understand the best ways to protect communities. The rules of my University do not allow me to tell any other person about what we will be discussing. The information you give will be confidential and will only be used for my research purposes. I am not allowed to not mention your name in my final report; and so, it will not be possible to link information back to you in any way. If you need to contact me later, please you can call me on I will just ask you some few simple questions about the nature, challenges and prospects of Operation Vanguard.

The nature of the operation

What do people in this area know about Operation Vanguard?

What do they think about the objectives and the way it started?

What are your personal experiences with the ways Operation Vanguard is carried out in the Upper Denkyira West District?

Challenges

What are the concerns people in this area have about Operation Vanguard?

What gaps have you observed in the operation so far?

What do you think are the major challenges facing the operation?

How do the challenges affect the operation?

Prospects of Operation Vanguard

Some are worried that the Operation may not succeed. What are your views?

How can Operation Vanguard be better implemented?

What is needed to have a successful galamsey settlement that the people will support?

Do you think operation vanguard will achieve its objectives?

Any last comments?

