

**UNIVERSITY OF EDUCATION, WINNEBA**

**RELIGION AND THE FIGHT AGAINST ILLEGAL SMALL-SCALE  
MINING IN GHANA: A CASE OF ABUAKWA NORTH DISTRICT**



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## DEDICATION

I dedicate this work to my beloved mother, Madam Hannah Akua Ampomah Nkrumah Adasa, as well as Kelvin Osei Kwaku Boateng and Nana Yaa Frimpomah Ntim Osei, my lovely children.



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## ABSTRACT

Successive governments in Ghana since independence have adopted various measures to end illegal small-scale mining in the country. Yet all these measures over the years have proved futile. This study sought to examine various ways by which religious beliefs can be used to assist the fight against small-scale mining. To achieve the set objective, the study adopted qualitative approach to research for the gathering and analysis of the data. In all, fifteen participants were interviewed for the study. It was discovered that religious beliefs can be an effective tool if religious leaders use their pulpit to educate their members regularly, suspend members who do galamsey, and also name and shame those of their members who engage in illegal small-scale mining in their meeting places. It was therefore recommended that, the use of religious beliefs to assist the fight against illegal small-scale mining can only be effective if it is used together with other political measures that have been used over the years for the fight.



## CHAPTER ONE

### INTRODUCTION

#### 1.1. Background of the Study

It has been observed that the success of public administration depends on the effective implementation of public policy. Anderson (2017) defines public policy as the purposive course of action followed by an actor or a set of actors in dealing with a problem or matter of concern. Berger (2018) defines policy implementation as a stage of policymaking between the establishment of a policy (such as the passage of a legislative act, the issuing of an executive order, or the promulgation of a regulatory rule) and the consequences of the policy for the people whom it affects. Asamoah (2018) views implementation as the ability to forge subsequent links in the causal chain so as to obtain the desired results. These definitions imply that implementation means following a series of logical steps which include a progression from intention through decision to action. Implementation as a framework forms the cornerstone of this study, as without effective implementation of small-scale mining laws, achieving the intended purpose of effective regulation of the small-scale mining industry will be a mirage.

Implementation primarily means to carry out, to accomplish, to fulfill, or to actualize a plan (Asamoah, 2018). Policy implementation is regarded as the accomplishment of policy objectives through the planning and programming of operations and projects, so that agreed-upon outcomes and desired impacts are achieved to enhance socioeconomic development (Snapir & Waine 2017). Policies are formulated, implemented, and evaluated by actors in a political system, for example, judges, legislators, executives, and administrators (Asamoah, 2018).

Given the relevance of implementation to the success of public policy, small-scale mining laws such as the Mineral and mining Act 2006 (Act 703); the Minerals Commission Act 1993 (Act 450); Small-scale Gold mining and Law 1989 (PNDC 218); Minerals and Mining (General) Regulations 2012 (L.I. 2173) have been enacted to regulate the small-scale mining industry in Ghana. The objective of regulating small-scale mining can only be accomplished with robust implementation of such laws by all key stakeholders, as without effective implementation policies tend to lose their significance (Aryee & Atorkui, 2018). Implementation of small-scale mining laws has been observed to be associated with some fundamental challenges in Abuakwa, probably, may not be an exception to this observation.

According to Barning (2016), small-scale mining refers to operations of individuals organized in groups (four to eight individuals) or co-operatives of ten or more individuals, which are entirely financed by existing resources at a certain limit, and carried out on a full-time basis using simple traditional techniques or tools of low mechanization levels. Barning (2016) assertion is true to the extent that most of the small-scale miners use traditional tools such as pick axe and chisel, but the trend is gradually changing whereby sophisticated tools such as excavator and stone crusher are being used for the practice. Furthermore, while majority of small-scale miners engage in it on a full-time basis, others, such as women and students, do it on a part-time basis to support their family and pay for tuition. Aryee and Atorkui (2018) define small-scale mining as any single unit mining operation having an annual production of unprocessed materials. Hilson (2018) classifies small-scale mining into three categories according to size, namely, micro scale miners, mechanized small-scale miners, and the most advanced category of small-scale miners represented by mining enterprises.

The government of Ghana legalized small scale mining in Ghana in 1989 by passing the Precious Minerals and Marketing Law, Mercury Law, and Small-Scale Gold Mining Law (Hilson, 2018). Consequently, small scale mining firms were required by law to obtain prospecting and small- scale mining licenses from the Ghana Minerals Commission. These followed the approval by the Environmental Protection Agency which supervises prospecting and environmental integrity policy of mining companies. These processes were to compel registered small scale mining firms to operate within regulations and related codes of ethics. None compliance attracted appropriate sanctions (Hilson, 2018).

Mining on the other hand is the extraction of precious metals and minerals from rocks (Adu-Gyamfi, 2014). Minerals mined in Ghana include: gold, diamond, bauxite and manganese. These minerals have attracted large foreign investments into Ghana in the past three decades. Currently, Ghana is the second largest producer of gold in Africa and the ninth in the world. Expansion in mining has improved local economies and improved foreign exchange of the country (Hilson & Adu-Darko, 2017).

Hilson (2018) suggests that despite the significance of small-scale mining to economic development in Ghana, mining posed serious environmental challenges, the most widespread being land degradation, and water pollution leading to ill health of people. Gold mining has, however, played a significant role in the socioeconomic life of Ghana for the past 100 years (2012Hilson & Clifford, 2017). Although small-scale mining plays a critical role in the economic development of Ghana, the practice is associated with environmental degradation, and loss of human life. The general perception is that implementation of small-scale mining laws to regulate the industry is confronted with a lot of challenges making the fight against the illegal small-scale

mining difficult. But our ethics and moral standards are deep rooted in our religion, customs and culture. Religion has a strong impact on an individual than any other influencing factor (Yinger, 2019). The cradle of human civilization and diverse culture has vastly been influenced by religion and its associated activities. Yinger (2019) broadly defines religion as a system of beliefs and practice by means of which a group of people struggle with the ultimate problems of human life. Practices and ethics of religion play a vital role in forming values and influencing behaviour of humans. This study assesses the role of religion in the fight against the illegal small-scale mining in Abuakwa North District.

## **1.2. Statement of the Problem**

Illegal small-scale mining, also known as artisanal mining, refers to mining activities that are conducted without proper permits, licenses, or adherence to environmental and safety regulations. It is often associated with informal and unregulated mining practices, which can have significant negative impacts on the environment, local communities, and the economy. Some common issues related to illegal small-scale mining include deforestation, water pollution, land degradation, child labor, and conflict with indigenous communities. Efforts to address this issue involve strengthening regulatory frameworks, promoting sustainable mining practices, providing alternative livelihoods for affected communities, and raising awareness about the negative consequences of illegal mining.

Greater concerns have been raised on the fight against illegal small-scale mining especially by the Environmental Protection Agency and other agencies thus ‘‘Stop Galamsey Now’’ to ban all illegal small-scale mining activities (Seidu,2017). Besides, the government formed a task force called ‘‘Operation Vanguard’’ consisted of

officials from the security agencies thus Military, Police, and the Immigration Service to see to it, that illegal small-scale mining activities are put to a halt (Hilson & Maconachie, 2020). Also, studies have been Artisanal and illegal small-scale mining on Re-conceptualizing formalization of illegal mining activities (Hilson,2017). Again, research was conducted on illicit Chinese small-scale mining in Ghana; beyond institutional weakness. (Boafo et al., 2019)

Illegal small –scale mining is a national security threat to Ghana (Hilson, 2018). The illegal small –scale mining is threatening Ghana’s economic, environmental, food, water, and physical security. Economically, the country is losing revenue from the gold mining sector due to gold smuggling by illegal miners (Agyemang & Okoto.2014). Environmentally, the country’s forest reserves and farmlands are being destroyed. Rivers which serve as sources of potable water are also being polluted (Addei & Amankwah, 2018). The physical security of Ghana is also at risk due to the intervention of armed foreign nationals in illegal small scale mining activities (Kesse, 2016).

The illegal small–scale mining activities are age-old issue in Ghana. Our great grandfathers have been engaging in the illegal small –scale mining’ operations; however, it was on a smaller scale, with primitive tools such as shovels, washing bows among others (Appiah, 2018). Even though their activities did not significantly harm the environment and water bodies, they were furiously chased out by the police officers from the mining sites. Today, the effect of illegal small –scale mining operations have assumed large-scale dimension, leading to the destruction of the environment and water bodies in Ghana. To Appiah (2018), illegal mining strips some 28 billion tons of material from the earth. Illegal small – scale mining activities can be

explained against the backdrop of chronic poverty and mass unemployment facing young adults in Ghana. The Government of Ghana responded to the difficulties facing the youth with job creation initiatives, including ‘Planting for food and jobs’; ‘Planting for export and rural development’. However, some young adults and their foreign partners continue to indulge in ‘illegal small –scale mining activities. Ignorance, illiteracy or the deliberate intentions of the young adults could serve as the reasons for their involvement in illegal small –scale mining activities.

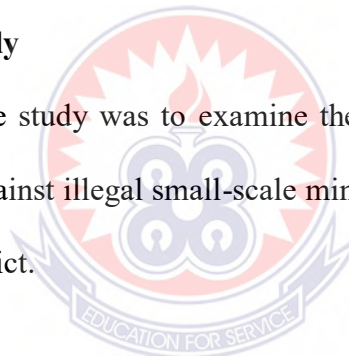
According to Appiah (2018), most of the young people engaged in illegal small–scale mining activities are unskilled, with low levels of education; who choose illegal small–scale mining operations over education. The illegal small – scale mining activities still persist despite admonitions from law enforcement agencies. According to Hilson (2018), the media can be educational in its own right and, in a broader sense, as it can inform perceptions of attitudes towards education, educators and socio-economic inequality. The major roles of media, especially radio include informing, educating and entertaining. The media can highlight the ills in the society, although some media platforms promote certain political agendas, and are used as propaganda tools. The media in Ghana recently placed a spotlight on illegal small-scale mining activities in Ghana. Together with the Government of Ghana, they waged a war against the activities of illegal small –scale mining activities operators in Ghana.

Recalcitrant illegal small –scale mining activities operators, and their foreign partners, are under surveillance, and regular arrests are made by the security operatives in the illegal small -scale mining activities sites and communities due to the environmental problems illegal small -scale mining activities are causing (Afrenya, 2016). Whilst

significant studies have been done on the impact, causes and effects of the Artisanal and illegal small-scale mining, little or no work has been done on how Religion can be used as a tool to support the fight against illegal small-scale mining. This is because religion does not forgive anyone or group of persons who cause destruction to the land will face punishment before and after death in the sense that, there is an unseen supreme being who watches over everything that man does by rewarding for obedience and punishing disobedience. No rational human being would want to face or receive punishment twice of the same offence. Besides people have the greatest respect for their religious leaders by listening and obeying them and it is against this background that this study seeks to fill this important gap in the literature.

### **1.3. Purpose of the Study**

The main purpose of the study was to examine the extent to which religion can be used as a tool to fight against illegal small-scale mining in Ghana with a special focus on Abuakwa North District.



### **1.4. Objectives of the Study**

The study seeks to examine why and how already existing political policies aimed at fighting illegal mining have not yielded the desired results and how religion can be used as an effective tool to support the fight against illegal small-scale mining.

- i. To identify the ways in which the traditional beliefs can be useful in the fight against illegal small-scale mining in the district
- ii. To investigate the extent to which Christian beliefs can be used as a tool to aid the fight against illegal small-scale mining.
- iii. To examine the ways by which Islamic beliefs can assist in the fight against the illegal small-scale mining in the district.



- iv. To identify the challenges that will be associated with the use of religious beliefs in the fight against illegal small-scale mining in the district.

### **1.5. Research Questions**

The study is guided by the following questions:

- i. In what ways can the traditional beliefs be useful in the fighting against illegal small-scale mining in the district?
- ii. To what extent can the Christian beliefs be used as a tool to aid the fight against illegal small-scale mining?
- iii. What are the ways by which Islamic beliefs can assist in the fight against illegal small-scale mining in the district.
- iv. What are the challenges that will be associated with the use of religious beliefs in the fight against illegal small-scale mining in the district?

### **1.6. Significance of the Study**

The study is important for a number of reasons:

- i. First, this study adds to the debate regarding the fight against the illegal mining activities in Ghana. This study seeks to provide information to government on how the involvement of religion could help eradicate the menace of illegal small-scale mining in the country, Ghana.
- ii. Moreover, this study contributes useful insight towards the existing policies, strategies, measures put in place to fight against illegal small-scale mining by government.
- iii. The study also serves as a reference document to prospective researchers who might want to expand on this study.

### **1.7. Delimitation of the Study**

Illegal small – scale mining takes place in most parts of Ghana; however, this study is confined to illegal small – scale mining activities within the Abuakwa district because, it is noted that the area is among the worst affected districts by illegal small – scale mining activities is at Abuakwa district in the Eastern region of Ghana. Some illegal miners repeatedly opened fire on Abuakwa North Municipal Security Council during anti-galamsey operation, on that same day, a farmer was arrested for selling cocoa farm to illegal miners; Starrfmonline.com, assessed from <https://starrfm.com.gh>, 2022/10. The overlord of the Akyem Abuakwa State, Okyenhene wants galamseyers arrested as Ghana Water Company Limited shut down Kyebi treatment plant; Citinewsroom.com, assessed from <https://citinewsroom.com>, 2022/11. Moreover, traditional beliefs, Christian belief and Islamic beliefs were explored in the fight against illegal small-scale mining. In addition, the challenges associated with the use of religious beliefs in the fight against illegal small- scale mining were also considered.

### **1.8. Organization of the Study**

The study was organized into five chapters. Chapter one deals with the background to the study, statement of problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitation of the study and organization of the study. The second chapter focuses on the review of related literature while the methodology is the subject of chapter three. The methodology describes the research approach for the study research design, the population, sample and sampling procedures, data gathering instrument, data collection procedures of the study and the methods of data analysis. In chapter four, the results and discussions of the findings were presented. Finally, the fifth and concluding chapter contains the

summary of the findings, conclusions, recommendations and suggestions for further research.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

This chapter reviews of the existing literature relevant to the topic of ‘*Religion and the Fight against Illegal Small-Scale Mining*’. More specifically, this chapter is a review of sub-headings including:

- Theoretical Framework
- Illegal Mining Activities in Ghana
- Causes of Illegal Mining in Ghana
- How illegal mining is done in Ghana
- Illegal small scale-mining activities and challenges combating it in Ghana
- Negative effects of illegal small-scale mining
- Understanding of religion
- Types of religion
- Essential characteristics of traditional religion
- Essential characteristics of Christian Religion
- Islamic Religion and Environment Protection
- Conceptual framework

#### 2.2. Theoretical Framework

This study is premised on the Rational Choice Theory of research.

Rational Choice Theory involves looking at all social relations in the form of costs and rewards, both tangible and non-tangible and it is guided by Gary (1997)

According to Gary (1997) Rational Choice Theory is “understanding individual actors... as acting, or more likely interacting, in a manner such that they can be

deemed to be doing the best they can for themselves, given their objectives, resources, circumstances, as they see them” (Coleman & Samuel, 1990) Rational Choice Theory has been used to comprehend the complex social phenomena, of which derives from the actions and motivations of an individual. Individuals are often highly motivated by their wants and needs. The rational choice theory makes certain assumptions with regard to the decision or action a person takes. The first assumption is that the action itself is rational and self-serving. The second is that it is based on the concept of risk vs reward. This theory states that individuals use their self-interests to make choices that will provide them with the greatest benefit. People weigh their options and make the choice they think will serve them best.

The assumptions of rational choice theory include the belief that individuals are rational and make decisions based on their own self-interest that individuals have complete and consistent preferences, and that individuals have perfect information and are able to accurately assess the costs and benefits of different choices.

Rational choice theory can be used to explain illegal small-scale mining data in research by examining individuals' decision-making processes and the incentives they consider when choosing to engage in this activity. According to rational choice theory, individuals weigh the costs and benefits of different options and make rational decisions based on their self-interest.

In the context of illegal small-scale mining, researchers can analyze how individuals assess the potential gains, such as financial rewards, from engaging in this activity. They can also investigate the perceived risks, such as legal consequences or environmental damage, and how individuals evaluate and prioritize these risks in their decision-making process.

Rational choice theory also considers the influence of external factors, such as the availability of alternative livelihood options or the level of enforcement of mining regulations. Researchers can examine how these factors affect individuals' choices and whether they alter the perceived costs and benefits of illegal small-scale mining.

This theory posits that individuals always act in their own self-interest, which may not always be the case in reality.

It may not fully capture the complexity of human behaviour, as it tends to overlook social and cultural factors that influence decision-making. Some critics argue that the theory lacks sufficient empirical evidence to support its claims.

On the other hand, theory allows researchers to make predictions about individual behavior in various situations by emphasizing the importance of individual decision-making and how it can shape social outcomes. The theory provides a simple framework for understanding decision-making processes and often relies on quantifiable variables, making it easier to measure and analyze.

This theory can be applied to various contexts and settings, making it applicable in different research areas. The theory can inform policy decisions by providing insights into how individuals make choices and respond to incentives.

The theory allows for comparative analysis, enabling researchers to compare decision-making processes across different groups or societies.

By applying rational choice theory, researchers can gain insights into the economic and situational factors that contribute to individuals' decisions to engage in illegal small-scale mining. This understanding can inform interventions and policies aimed at reducing illegal mining activities by addressing the underlying incentives and providing alternative opportunities for individuals to meet their economic needs.

### **2.3. Illegal Mining Activities in Ghana**

Over the years, while the small-scale mining sector has proven to be a good source of revenue for the government, it has also been associated with negative effects on the environment and society which threaten national security (Agyemang & Okoto 2019). The relatively high rate of unemployment in the country coupled with favorable gold prices on the international market attracted numerous people in the rural areas to small scale mining (Andrew, 2018). According to Andrew (2018), as at 1998, there were approximately 400 registered small scale mining companies and thousands of illegal miners locally referred to as *galamsey* operators in Ghana (Hilson 2017). As it continues to make significant contributions to the country's foreign exchange earnings, currently there are over 3000 registered of them. Andrew (2018) added that in the mid-1990s, the small-scale mining sector generated a large number of unregistered (illegal) miners which drew the public's attention to the government's inability to regulate the sector. The general public became conscious of the environmental degradation and various social vices associated with illegal small scale mining activities (Hilson 2017). Eshun (2017) asserts that in Tarkwa alone, there were over 6,000 illegal miners and 117 registered small-scale mining as of 1998. As at the later parts of the 1990s, it was estimated that illegal mining alone caused the deforestation of approximately 15,000 hectares of land in Ghana and also destroyed the topsoil of deforested lands with abandoned mining pits (Hilson & Potter, 2019). According to Biney (2018), there were about 300,000 to 500,000 illegal miners operating in the Ashanti, Eastern and Western Regions of Ghana as of 2016.

### **2.4. Causes of Illegal Mining in Ghana**

The large number of illegal miners in Ghana could be attributed to diverse political and socio-economic factors. In almost all the regions where illegal mining activities

are conducted, a combination of the socio-economic causal factors exists (Biney, 2018). The political cause of illegal small-scale mining is the politicization of the activity by politicians (Hilson, 2017). On the socio-economic front, Kumi-Boateng and Stem (2020) identified corruption as a proximate cause of illegal small-scale mining in Ghana. In addition to corruption, Eshun (2017) and Aryee and Atorkui (2018) avow that poverty and unemployment are remote causes of illegal small-scale mining in the country.

#### **2.4.1. Politicization of Illegal Small-Scale Mining**

Politically, Eshun (2017) avers that the politicization of illegal small-scale mining by the two major political parties in Ghana, the NDC and the NPP is a proximate cause of illegal mining in the country. Both the NDC and NPP are guilty of sympathizing with illegal miners for their votes when they are in opposition (Eshun, 2017). As a result of the sympathy from the political parties, the illegal small scale-mining operators exploit the parties with their votes during election years. According to Eshun (2017), some corrupt members of parliament, ministers of state, chiefs, and assemblymen have been compromised by illegal small scale mining activities and that has made the illegal activity an impediment to deal with.

#### **2.4.2. Corruption**

Corruption within Ghana's public sector is a proximate cause of illegal mining activities in the country (Kwai & Hilson, 2016). Some government officials who are elected or hired to enforce the laws and regulations prohibiting illegal mining activities have become corrupt, and are involved in the same menace they are to fight against (Eshun, 2017). As a result of corruption, artisanal and small-scale miners find



it difficult to obtain mining licenses due to high cost and cumbersome procedures (Hilson & Potter 2018).

### **2.4.3. Poverty**

Poverty is one of the remote factors that pushes people into illegal small scale mining activities (Hilson & Potter 2018). Nyame and Yakovleva (2018) reports that small scale mining is a poverty-driven activity. In Ghana, mining communities are generally located in remote areas where some of the people are either illiterate peasant farmers or traders with low incomes. About 38.2 per cent of the rural population in the country are poor as compared to 10.4 per cent of the people in the urban centers (Nyame & Yakovleva 2018). This makes illegal mining an attractive venture for most people in the rural communities to escape from poverty (Obeng & Appiah, 2019). In the Abuakwa in the Easter Region for example, illegal mining is generally more lucrative than farming, and the poor and unemployed youth engage in it for income to pay school fees and improve their social status (Antwi-Boateng & Akudugu 2020).

Many youths of today decide to be in illegal mining as a result of the financial hardship they find themselves in, therefore as a means of making ends meet, they venture into the illegal small-scale mining. According to Owusu and Mensah (2019), poverty is defined as a condition of human branded by sustained or chronic deprivation of choices, abilities, resources, safety, and power needed for advancement and enjoying in a standard of living that is good in addition to other associated rights. Owusu and Mensah (2019) further added that the most widely accepted reason for the upsurge of illegal mining is nationwide poverty.

### **2.4.4. Unemployment**

Aside from poverty, unemployment especially among the youth is another remote cause of illegal mining in Ghana (Owusu & Mensah, 2019). Youth unemployment

rates in Ghana have been on the ascendency for the past ten years. According to Antwi-Boateng and Akudugu (2020), youth unemployment in the country increased from 11.2 per cent in 2010 to 13.7 per cent in 2018 representing a 2.5 per cent increment within the period. The high level of unemployment in the country makes the youth susceptible to illegal activities including illegal small-scale mining in order to earn a living. Considering the fact that illegal small scale mining activities are labor intensive, the youth are generally the major workforce in the menace.

Youth unemployment has been of great concern to governments (Airo, 2018). Labour market dynamics and youth unemployment indicated that at any given moment almost 2 million teenagers aged 16-19 are unemployed and as indicated by Owusu and Mensah (2019). Que and Yang (2019) also added that a high rate of unemployment brings about lots of criminal activities and illegal mining is one such activities. Significant unemployment has fueled the rapid and often chaotic expansion of illegal small scale mining operations in many parts of the country. People who are unemployed end up at the mining sites in their quest to find jobs and when this does not materialize sometimes due to the lack of technical know-how, the job-seeker resorts to illegal mining at the corridors of the mining companies (Que & Yang, 2019)

#### **2.4.5. Lack of clear-cut Legislation and Bureaucracies**

The government has not been able to regulate and reduce illegal artisanal mining activity largely due to the absence and proper implementation of defined and clear-cut policies to guide operations. However, these policies and laws have been ineffective and insufficient even for registration of prospective miners, the application processes have rather become too bureaucratic (Hilson & Potter, 2018). These discourage individuals from tendering-in for the necessary documentation (Que & Yang, 2019).

Small-scale gold mining laws enabled any individuals above 18 to acquire a mining license (Aryee & Atorkui, 2018). The mining laws indirectly permits both illegal and legal miners to transact business in the sector without any obstacle (Hilson & Potter, 2018).

#### **2.4.6. Economic Viability of Illegal Mining**

The output and the soaring prices of gold since 2014, has always been lucratively appealing hence the mass patronage by many Ghanaians including the youth (Hilson & Potter, 2018). Illegal mining provides financial assistance to farmers, traders, businessmen, and even some politicians for survival. The precious mineral marketing company employs over 700 procurement agents (Hilson & Potter, 2018). The rapidly growing illegal small-scale mining segment has generated significant returns, to the point that between 1989 and 2003 the output from illegal mining contributed between 2.2% and 34% of the country's gold total yield (Hilson, 2017).

#### **2.4.7. Push and pull Factors of Engagement**

Besides the pull-factors serving as baits, there are other non-friendly features inside or outside the school setting that becomes points of disengagement or engagement to the student- youth as they find their way out of the classrooms to the mining fields. According to Ofosu-Mensah (2018), the absence of certain (behavioral, Emotional and, cognitive) factors of engagement which ranges from co-curricular activities to good teacher and classrooms to intelligence can all pull or push the child out of the classroom. (Ofosu-Mensah, 2018) to the mining sites.

The inability of the youth to robotically respect and comply with the behavioral and academic expectations in the school (Mkodzongi & Spiegel 2018), neighborhood and school environment variables (e.g., neighborhood youth behavior, neighborhood

safety, and school safety) and social support variables (e.g., teacher support, friend support, parent support, and neighbor support) (Mkodzongi & Spiegel, 2018) are all factors that can push or pull the student to the illegal mining sites.

Exposure to community and school violence has been reported to have an emotional, psychological effects on the children in school (Berger, 2018). According to Berger, (2018), the proximity of mining sites to the home of school children especially the disadvantage house hoods may influence them to go and work there. Berger (2018) further suggests that illegal miners appear to lure their young ones of school-going age into the mining activities as a means of offering a helping hand. They train them so they can benefit from them when they are older. To aggravate the problem, it appears these students themselves are not certain whether they will attend school or not and finally end up in illegal mining activities (Berger, 2018).

## **2.5. How Illegal Mining is done in Ghana**

Since small scale mining is highly illegal, it normally takes place under cover of darkness (at night) or at a hidden place such as forests, existing farms, river beds, valleys and remote locations (Aryee & Atorkui, 2018). This is a job that needs no education, qualification or experience. It is patronized by all categories of persons who are physically strong; men, women, children, teenagers and even the aged engage in the winning of diamonds (Aryee & Atorkui, 2018).

Manual and traditional methods are practiced by the illegal miners (Eshun, 2017). Simple tools or materials like pick-axes, shovels, barrels, head pans, sticks, sacks and nets are used. The miners in groups of three to five dig holes along the banks of rivers and streams, collect diamondiferous gravels (soil) with sacks, pour them into barrels and then use sticks and water to wash away the smooth sand from the stones.

Perforated metal containers (normally referred to as ‘Top’) are used for the separation and the sands are collected for further treatment. Jigs (a wooden rectangular tray with net below) are used to pick the diamonds from concentrates in the jig (Eshun, 2017).

## **2.6. Illegal Small Scale-Mining Activities and Challenges combating it in Ghana**

Illegal small scale-mining operations have resulted in the destruction and degradation of vegetation cover, arable lands, and the environment in Ghana and has polluted major water bodies in Ghana (Eshun, 2017). The pollution of water bodies in Ghana is so alarming that it is affecting the availability of potable drinking water for community members in the catchment communities around mining sites (Hilson & Pardie, 2018). This destructive illegal mining activity is carried out by both local and foreign illegal miners (Hilson & Pardie 2018). The loss of forests has changed the atmospheric conditions and rain patterns of the affected areas around the country and has negatively affected our water bodies that are now polluted with harmful chemicals, which has resulted in a paucity of raw filtered water (Hilson & Pardie 2018).

Surface mining has also had a devastating effect on the soil in Ghana largely due to the use of heavy machinery (Hilson & Pardie, 2018). Also blasting during mineral extraction destroys soil organisms, and disrupts stable soil aggregates, eventually depriving the soil of organic matter. These soils, or newly created substrates/growth are often inhospitable to vegetation due to combination of physical, chemical and microbiological factors (Eshun, 2017). There is also a loss of arable farmlands, leading to reduction of crop production in the country.

The illegal small scale mining activities contribute in no small measure to hunger being experienced in some farming communities engaged in producing cash crops

such as cocoa, oil palm, coconut, and oranges in Ghana (Hilson & Pardie 2018). The top fertile soils are removed and destroyed indiscriminately by the illegal small scale mining operators. Meanwhile, the rich top soils are the main sources of nutrients to plants and food crops and even vegetables. It may take several years to regain fertile soil removed. These illegal mining activities are making the arable land infertile or less fertile for production of food and cash crops (Hilson & Pardie, 2018).

Deforestation is another illegal small scale mining activity that is damaging the environment. It involves the clearing of the forest vegetation and the cutting down of trees to enable miners to extract minerals. Eshun (2017) assessed the impact of small-scale mining on land in the Western part of Ghana, and revealed that mining removes vegetation and top-soil, and often results in loss of farmland permanently. He adds that surface mining accounts for approximately 58% of the region's deforestation, 45% loss of farmland, as well as the spillover effects from expanding mining activities in reserved forests. Illegal small scale mining activities is also a death trap for miners and unsuspecting farmers within the mining communities, as they sometimes find themselves drawn to huge pits which are often left uncovered, or reclaimed for farming activities (Eshun, 2017).

### **2.7. Negative Effects of Illegal Small-Scale Mining**

The adverse environmental impact of mining activities on the environment is well documented. According to Hilson and Maconachie (2019), particular attention has been directed towards the impacts of large scale and small-scale gold mining activities on environmental contamination. While the land degradation caused by the gold mining is pronounced, chemical contamination from the gold extraction process imposes a double burden on the environment, with harmful health implications for

mining communities and people residing in close proximity to such activities. Mining, irrespective of the scale of operation, has some degree of impact on the environment. The extent of damage depends largely on the mining and processing methods being used. Although legalized small-scale mining activities have some negative impacts on the environment, in most cases, they can be minimized through environmental permitting and regular monitoring by field officers (Hilson & Maconachie, 2019).

In Ghana, environmental problems associated with the small-scale mining of precious mineral can be broadly grouped into three categories (Eshun, 2017). The first category includes all impacts on the lithosphere (the earth crust and the upper mantle). The primary impact, land degradation, is a common phenomenon at many uncontrolled, unmonitored small-scale mining sites. Miners leave behind moonlike landscapes consisting of unstable piles of waste, abandoned excavations and vast stretches of barren land. Excavated pits are typically left unfilled and abandoned to become receptacles for water. Such areas become breeding grounds for mosquitoes and potential dangers for both humans and animals. Large tracts of agricultural lands are also destroyed as a result of excessive vegetation removal and disturbance of soil structure. Growth supporting topsoil is usually removed during mining and the land is rendered virtually incapable of supporting plant growth, in addition to being left exposed to erosion (Eshun, 2017).

Illegal small-scale mining, which has become lucrative in Ghana however, it devastates the environment, causes deforestation, and pollutes the water bodies, air, and soil through the release of toxic chemicals. Hilson (2019) indicates that chemicals such as mercury and cyanide pollute water, air, and soil through natural processes and industrial activities, thereby posing potentially deadly threat to humans. Pollution of water bodies caused by illegal mining puts the people in the various communities

health at risk. When water is contaminated with toxic chemicals, people are driven to find alternative water sources. Many of these sources are often contaminated with bacterial pathogens such as typhoid (Hilson, 2019).

Similarly, heavy metal contamination in some water sources has caused water treatment plants to shut down. When these treatment plants shut down, a community can suddenly be without an improved source of safe water. This can force people to turn to unimproved water sources that increase the risk of typhoid and other waterborne pathogens. Hilson (2019) further indicate high prevalence of typhoid, among other diseases, in mining communities.

Another area of negative effect is that some communities can only access contaminated water and this has caused an increase in skin infections and waterborne diseases. In the Shama District, located in the Western region of Ghana and made up of six communities where there is increased illegal mining, diarrheal cases increased from 5,000 to 10,000 in three years (Hilson, 2019). It is likely that typhoid bacteria are similarly found in the unsafe water and that typhoid burden may also be increasing. The difficulties with typhoid diagnosis mean that people may fall ill but not receive an accurate diagnosis or treatment. The communities with increased mining often lack a health center that can appropriately diagnose and treat individuals when they get sick. This is especially dangerous for a disease such as typhoid that can quickly escalate and require primary healthcare services (Hilson, 2019).

## **2.8. Understanding of Religion**

Religion is belief in a God or gods and the activities that are connected with this belief, such as praying or worshipping in a building such as a church or temple, mosque or a shrine. The word 'religion' is derived from the Latin word "religio",



which means to ‘bind together’. According to Tremmel (2018), it is difficult to define what exactly constitutes religion. Tremmel (2018), in trying to find a good working definition of Religion states at the outset that a good definition of religion is hard to come by, mostly because it must incorporate an enormous array of beliefs and activities all the way from magic to mysticism, from private prayer to sacred community.

To remedy the situation, scholars of differing interests have come up with their own varying definitions of religion (Taylor, 2018). Trammel (2018) identifies two aspects that constitute religion, namely: the “functional” which deals with the purpose, content and benefits of religion, and the “sacred” which deals with “the experience of something mysterious and magnificent” that happens to religious practitioners. In other words, “religion is both something that people do to deal with certain elements of their own finitude and something that happens to them that is mysterious, tremendous, and wonderfully renovating...a definition of religion must include both the functional and the sacred experience aspects of religion (Tremmel, 2018)

## **2.9. Types of Religion**

Religion according to Freire (2017) is the opium of the masses. Religion gives answers to a lot of things and problems people face in the world; at the same time religion has also ruined a lot of people because of the way people understand it. Traditional religion is one of the religions of the world. This religion has contributed a lot to humanity because it is the bedrock and pace setter to all other religions of the world like Christianity, Islam, etc. This same religion that was and still is the bedrock of all other religions in the world has suffered tremendously at the hands of other

religions (Dickson, 2018). Dickson (2018) indicated that religion mainly consist of Traditional, Christian and Islamic.

### **2.9.1. Traditional Religion**

Asamoah-Gyadu (2017) defines traditional religion as that traditional religion comprises the religious beliefs and practices of traditional peoples which have been in existence from time immemorial, and are still adhered to today by many indigenous which have been handed down by their forebears. According to Opoku (2018), traditional religion has been researched by those who are not its adherents, and has also been some distortions in the explanations of many concepts. Indigenous religion is the way indigenous understand and worship their god. Traditional religion is found in almost all the activities of the traditional man (Opoku, 2018).

#### **2.9.1.1. Essential Characteristics of Traditional Religion**

The main feature of traditional religion is the whole of the traditional worldview, which forms the essential characteristics. One of the best ways of starting authentic dialogue with traditional religion is to have a sound knowledge of the central themes of the traditionalists' worldview, together with the people's problems, needs and aspirations (Dickson, 2018). According to Dickson (2018), people have the Supreme Being as the head of all things, the creator and the controller, the everlasting, the omnipresent, omniscient, omnipotent and ever-acting God, even on all divinities and the ancestors.

#### **2.9.1.2. The supreme God and Human Beings**

The first and central amongst the themes in **traditional** religion is God and human beings. The basic structure of **traditional religion** amongst the Akans became silent (Hiltson, 2019). Like in the Old Testament, the basic belief in the Supreme Being,

God, is not disputed all over Africa. He is the unique and the incomparable one. Appiah-Opoku (2017) has the Supreme Being as the head and the rest of the spirit world and human community follow him.

The concept of human beings in traditional religion is also important, because it is generally acknowledged that God is the originator of humanity, despite the fact that the exact method of that creation may be different from place to place (Appiah-Opoku, 2017).. To be a human being is to share a sense of a community. What makes a human being is incorporated in the 'complex unity of the tribe, outside of which all others are strangers and inferiors, if not enemies (Appiah-Opoku, 2015). This relationship can be extended to the invisible world, the spirit world in all the hierarchical order, namely God, Deity and Ancestors (Addei & Amankwah, 2018). When there is estrangement between God and the spirit beings, there is a need to pacify and recapture the lost relationship between God and humankind by sacrifice, performing rituals and medicine (Hiltson, 2017).

### **2.9.1.3. The Divinities**

The next in rank to the Supreme Being, God, are the divinities. The divinities are brought to life by the Supreme Being (Appiah-Opoku, 2017). All the divinities are functionaries and act as intermediaries between the Supreme Being and the rest of the universe, including human beings. They have no power of their own, except what the Supreme Being permits them to do. Yet they are very important as far as the orderly function of the universe is concerned (Appiah-Opoku, 2017).

### **2.9.1.4. Ancestor Veneration**

The final end and the aspiration of each and every person is to reach the spirit world of one's ancestors, to be venerated by one's descendants as an ancestor and eventually

be reincarnated (Appiah-Opoku, 2015), therefore, ancestors are people who have made it to the spirit land and are venerated by their descendants. They are regarded as part of the elders of the families with enhanced powers to bless, protect or punish the families. They are invoked to share at gatherings, ceremonies and ritual communion and are seen as symbol of peace, unity and prosperity in the family. The ancestors are not worshipped, but highly respected as members of the families. They are next to the divinities in the hierarchy (Appiah-Opoku, 2015). Ancestors act as intermediaries between God and the members of their families.

#### **2.9.1.5. Spirits**

Spirits are the next in hierarchy. Spirits, according to traditional belief are ‘apparitional entities’, which belong to different categories of beings than the divinities. Spirits are anthropomorphically conceived as if they are abstract beings. It is believed that they are capable of becoming anything, such as objects or human beings and can also melt into vapour at any time (Appiah-Opoku, 2017). In traditional religion, it is generally believed that everything has spirits and that these spirits also have categories. There are ghost-spirits, born-to-die spirits, amongst the Akans people of Ghana, spirits of witches, the guardian spirits and diviner spirits. Belief in these spirits permeates the life of local people and should be taken seriously (Appiah-Opoku, 2017).

#### **2.9.1.6. Sacrifices**

As discussed previously, adherents of traditional religion are concerned not only with the causes of evil, but also have to deal with evil (Nasr, 2016). Propitiatory sacrifices become one of the major ways by which Africans deliver themselves from the effects of evil in the world. Whilst sacrifices involve the offering of blood, whether that of a

human being, animals or birds, offerings do not involve blood, but the giving of other gifts such as food, oil, water, yam, milk, honey, money and others. When blood is involved in making a sacrifice, it means that the purpose must be serious. Sacrifices may be a means of restoring fellowship with God, gods, ancestors and the environment. According to Appiah-Opoku (2017), there are only two classifications of the aim of sacrifices in traditional religion. Firstly, there are sacrifices with positive aim of actualizing in nature and amongst men, the abiding and self-subsistent divine life. Secondly, sacrifices with negative aim, atoning sacrifices or peace offering in order to ward off danger of false piety, so as to cause sicknesses to cease (Appiah-Opoku, 2017).

#### **2.10. God of Life in Traditional Religion (Akan)**

The Akan's traditional worldview expresses belief in a supreme being referred to as *Onyame* or *Onyankronpon*. *Onyame* stands as a rational, eternal, and absolute being (Harrison, 2018). There has never been a need to debate the existence of *Onyame*; the challenge has been how to discern God at work. The Akan people do not regard, and never have regarded, *Onyame* as their tribal god. Rather, *Onyame* is seen as the Supreme Being whose benevolence extends to all people. The creation of the universe is attributed to *Onyame* and he is regarded as the governing principle of the universe. According to the Akan belief, *Onyame* as *sunsum* and so do all forms of life, including human beings; the latter's *sunsum* (spirit or personality) emanates from the formers as sparks emanate from a fire. The concept of God is directly connected with the Akan concept of life, for the Akan recognize God as the source of all life (as is the case in African traditional religion in general).

The Akan regard human and non-human forms of life as constituting a single, undifferentiating whole. It is believed that God sustains every living thing: human beings and non-human forms of life. All relationships – between persons, the living and the dead, and between person and nature – are rooted in God and point towards God and towards the end of all things in God. The Akan have a sacramental notion of nature, proclaiming that all forms of life, including every person's future, lie with God. It must be added that for the Akan *Onyame* cannot be imagined without his/her creation, nor without his saving will for humankind (Harrison, 2018).

*Onyame* is acknowledged especially on the individual level in contrast to the other spirit beings that are recognized in family and tribal worship respectively (Harrison, 2018). In addition to *Onyame*, the Akan also express their belief in mother earth, rivers, lesser divinities, ancestral and other spirits, and material things. It is firmly maintained that all these spirits, as well as other material things, were created and sustained by *Onyame*, which these gods live in rivers, stones, trees and in earth particularly (Harrison, 2018). According to Addei and Amankwah (2018), there are a number of resources and concepts in Akan indigenous knowledge systems that help to conserve the natural environment. It is believed that the sacredness of these conservational resources can contribute to the pursuit for effective ways of curbing the crisis, which is the ultimate objective of policy-makers.

### **2.9.2. Christian Religion**

Christian religion is based on the life and teachings of Jesus Christ (Ross, 2019). Christianity is a missionary religion holding Christ's message, as intended for the whole world, is not just for a particular area or people, instead it is for everyone (Ross, 2019). Christianity is focused on the life and ministry (work) of Jesus Christ.

The life and teaching of Jesus Christ are told in the sacred book called the Bible. Christians believe that the story and message of the Hebrew scriptures (the Old Testament) foretell and lead up to the incarnation of Jesus in the world (Pizarro & Salovey, 2018).

Christians believe in One God. This God has three persons (The Trinity) named the Father, Son and Holy Spirit. Christianity is focused on the life and ministry (work) of Jesus Christ. The life and teaching of Jesus Christ are told in the sacred book called the Bible. Christians believe that the story and message of the Hebrew scriptures (the Old Testament) foretell and lead up to the incarnation of Jesus in the world (Emmons, 2017).

Christians believe that God created the world so that we might live in relationship with God and with all creation. Over time humanity lost sight of this through our human frailty and sinfulness. God gifted humanity with Jesus, God the Son, to restore us to a right relationship with God the Father (Argyle, 2016).

Through his life and teaching Jesus showed people how they ought to live. He summed this up as 'Loving God with all your heart, mind, soul and strength' and 'Loving your neighbour as yourself'. Jesus did this perfectly and demonstrated the extent of his love and conviction about his message so strongly that it led to his crucifixion. Christians believe that God raised Jesus from the dead and that those who live in unity with Christ's message will share this same reward: eternal life with God. After his ascent in to heaven humanity received the gift of the Spirit of God which enables them to live as God desires and to follow Jesus Christ (Ross, 2019).

### 2.9.2.1. Essential Characteristics of Christian Religion

**Happiness:** I start with the notion of happiness, not because it is the most important characteristic, but because, Weber (2017) reflected on it from a very early stage as a young theologian. Weber (2017) refers happiness to it as a central problem of mankind. Myers (2018) mentioned that many times that all persons strive to be happy. Weber (2017) added that morality has to do with the way people want to live a happy life. A happy life is a life of close fellowship with God and the neighbor (Myers, 2018).

**Humility:** Another very important feature of Christianity is humility (Myers, 2018). Humility is a fundamental virtue, the virtue of all virtues (Myers, 2018). It is correctly observed that Christians great discovery was the significance of humility, as opposed to the sin of pride, and that happiness can only be experienced where reason submits itself to faith and the will to grace (Gilson, 2017). Happiness starts with humility (Ipgrave, 2018). According to Myers (2018), pride is the beginning of all sin and the beginning of pride is infidelity towards. Pride is the origin and highest expression of sin (Hay & Nye, 2018). Pride, as the perverted imitation of God, is the beginning of all sin and it ends up in abuse of power (Casson & Francis, 2018). Perverted self-love, based on pride, is the fundamental disorder of the individual and society (Ipgrave, 2018).

Casson and Francis (2018) postulate that pride is the root form of evil, separating the self from God and playing itself out in claims to moral self-sufficiency, to religious superiority, and to political domination. It is intriguing that a man who was so well-known and famous in his own time put so much emphasis on the notion of humility (Casson & Francis, 2018).



**Truth:** Another moral value that was held in high esteem by the church father was truth (Herbert, 2017). A life of beatitude (to him) implies a life of joy in truth, which means a life of joy in God (Herbert, 2017). Truth and happiness form an inseparable unity: add truth to your life and you will find happiness; only the truth can make one happy (Casson & Francis, 2018). Without faith nobody will discover truth.

**Love:** A last, and most important, aspect that Gnanakan (2019) mentioned was the notion of love.

This notion appears in almost all scriptures. To Gnanakan (2019), love is the highest value and the biggest gift. The Bible teaches nothing else than love and condemns desire and pride which results in the lust for power

### **2.9.3. Islam Religion**

This is one of the world's greatest religions founded in the seventh century AD by Mohammed (Berger, 2019). According to Bakar (2019), the word "Islam" means submission to the will of God. Followers of this are called "Muslims", meaning those who submit (to the will of God). Islamic religion has also its beliefs and doctrines like God, apostles, Koran, angels, last judgment, etc. They equally have five obligations: profession of faith, ritual prayer, almsgiving (*Zakat*) Ramadan fast, and pilgrimage (Bakar, 2019).

#### **2.9.3.1. Islamic Religion and Environment Protection**

The concern for protecting environment should start from an individual by imbibing ethics in one's self which can go a long way in reducing carbon footprint and for a responsible consumerism.

Muslims believe that humans should act as guardians of the planet, and that they will be held accountable by God for their actions (Armstrong, 2020). This concept of

stewardship is a powerful one, and was used in the Islamic Declaration on Climate Change to propel change in environmental policy in Muslim countries. According to Armstrong (2020), the Islamic attitude towards environment and natural resource conservation is not only based on prohibition of over-exploitation but also on sustainable development. Armstrong (2020) added that Prophet Muhammad encouraged the planting of trees and the cultivation of agriculture which are considered as good acts.

Environment protection is an important aspect of Islam (Bakar, 2019). Baker (2019) added that being stewards of the Earth, it is the responsibility of Muslims to care for the environment in a proactive manner. There is a definite purpose behind the creation of different species, be it plants or animals. Muslims are encouraged to reflect on the relationship between living organisms and their environment and to maintain the ecological balance created by Allah. Protection of the environment is essential to Islamic beliefs and mankind has the responsibility to ensure safe custody of the environment (Bakar, 2019). According to Bakar (2019), the Islamic perspective on environment protection reflects a positive image about Islam and how it embraces every single matter the humans face on earth. Faruqi (2019) added that Islam is against the cutting or destruction of plants and trees. According to Faruqi (2019). Prophet Muhammad said that he who cuts tree without justification, Allah will send him to Hell fire. The trees very much needed for human existence and to improve prove vegetation. The devastation caused by deforestation in many countries causes soil erosion and kills many of the biodiversity of the earth (Faruqi, 2019).

Environmental awareness and protection of natural resources is an integral part of Islamic beliefs (Golshani, 2018). According to Golshani (2019), as Muslims are

viceroy of Allah on this earth, the Muslims have to utilize natural resources in a sustainable manner in order to ensure that Allah's creation continues. Golshani (2019) added that the principle of conservation is beautifully illustrated by the rule of Islam which says that while making ablutions, Muslims should be abstemious in the use of water even if Muslims have a river at our disposal. According to Golshani (2018), Muslims are the keepers of all creation, including soil, air, water, animals and trees. A major objective of the Quran, Islamic teachings and Prophet (Peace Be Upon Him) traditions is to build and maintain a healthy and clean environment which is devoid of any source of pollution and misuse (Golshani, 2019).

According to Iqbal (2018), Prophet had a liking for trees and it has been referred in a number of Hadith (documented life of Prophet Muhammad ((Peace Be Upon Him)) that not only existing trees need protection but also encouraged planting of new trees for charitable cause. Because, trees provide sanctuary and protection for birds, insects and are a source of shade for humans and animals. The following hadith proves the importance of trees in Islam where, the Prophet strictly forbade against the destroying and killing of animals except for provisions or in self- defense. The Prophet also gave special instructions to avoid endangering ants and not destroying ant nests by fire (Iqbal, 2018).

According to Mazrui (2017), Allah has declared in the Quran that the Allah established the earth for living creatures. Moreover, the Allah has made humans to grow, as a plant from the earth; then to it human beings return, and bring human beings forth. These statements emphasize the importance of land for all living species as it provides every kind of sustenance to living beings. Allah has made the land for humans' home and the home of all terrestrial beings. Soil is fertile and productive

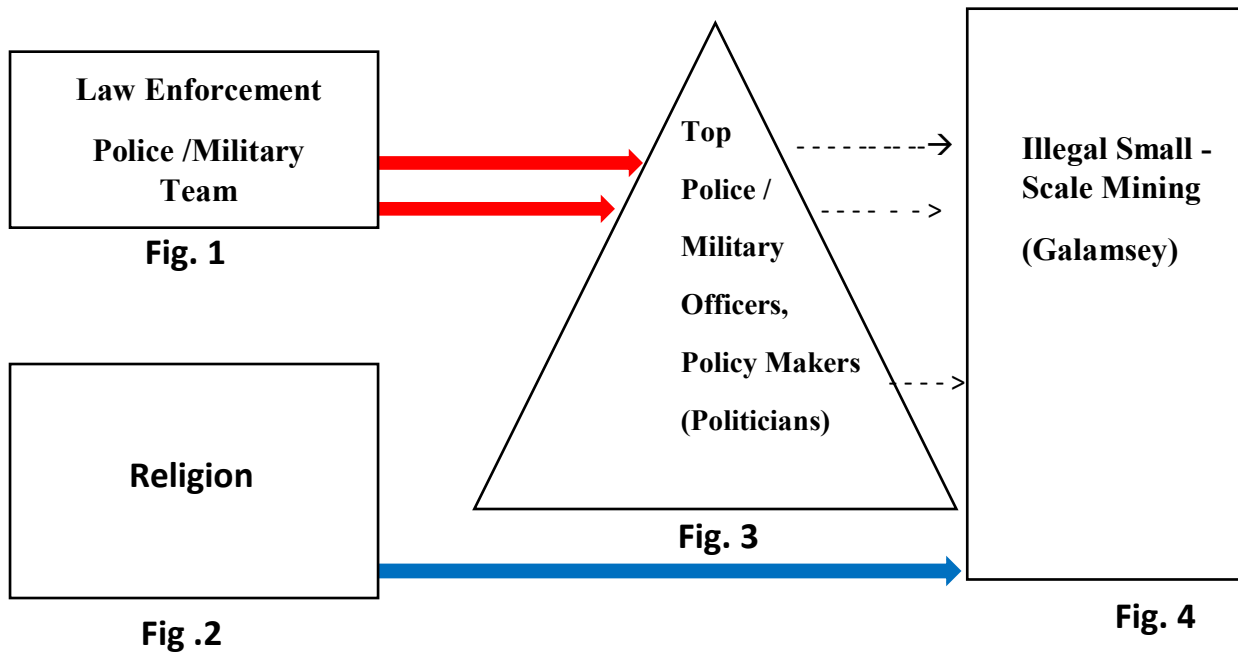
which causes vegetation to thrive and supports other life forms directly as well as indirectly. Thus, it is imperative for human beings to preserve the productivity of the soil, and not expose it to erosion by wind and flood; and by other human activities such as by construction, agriculture, grazing, forestry, and industry (Mazrui, 2017).

The review of the relevant literature revealed that though many studies have been done on illegal small mining, all the studies have overlooked how religion can be used to promote the fight against illegal small-scale mining and it is this gap that the study seeks to fill.

### **2.10 Conceptual Framework**

The conceptual framework explains the role of religion towards fighting of illegal small – scale mining in Ghana, particularly Abuakwa North District. A conceptual framework is a structure which explains the phenomenon under study (Hall & Hord, 2011). Crotty (2016) defines conceptual framework as a model of representation where a researcher conceptualizes or represents relationship between variables in the study and shows the relationship graphically or diagrammatically. The purpose of the study was to determine the role of religion towards the fighting of illegal small – scale mining in Ghana, particularly Abuakwa North District. Specifically, the study looked into traditional, Christian and Islamic religions how these religions help in the fight against illegal small-scale mining.

### Conceptual framework



The conceptual framework explains that;

**Figure 1.** It is the law enforcement body of polices and military joint operation team to fight against galamsey. They move in full force with power and vigor but their powers to pounce on the miners are blocked and reduced by the politicians and sue top police and military officers who sometimes even give tip off to the illegal miners to run away before they are arrested. The thick two black arrows indicate the full power and authority from the joint force and the broken arrow lines in how their powers and strength to fight are broken, limited or reduced by the politicians.

**Figure.2** Stands for the religion in country and how religion can help the fight against illegal small-scale mining activities.

The long black thick big arrow from the religion passing beneath Fig 3 hitting Fig 4 means that, there is hope and still another way whereby religion can get direct in contact with these illegal miners to educated them, talk to them to understand how religion also frowns on illegal mining activities and why they should desist from that.

This can be done in the churches by Christians, mosque by the Muslims and the palace or town square by the traditional authorities.

No politician will have the chance to interfere and this will surely have a greater impact on the miners and they may not want to incur the wrath of the gods, Allah or God one day, using Bible, Quran and the Schnapps or eggs to deter people from this illegal mining activities.

**Figure 3.** comprises the politicians and some top officials of the military and the police who have become a blockade and resistance to the fight against illegal small-scale mining.

**Figure 4.** Shows the illegal small-scale miners and their destructive activities that all means and strategies is devising to stop their activities.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1. Introduction**

This chapter describes the research methods used in the study including the research approach, research design, sampling techniques and procedures, population definition, instrumentation. It also describes the data sources including the methods of data collection and ethical concerns.

#### **3.2. Research Approach**

Babbie (2013) defines a research approach as a whole system of thinking which includes basic assumptions, the important questions to be answered or puzzles to be solved, the research techniques to be used. This definition shows that a research approach tells the researcher how to go about conducting research, based on the assumptions and questions to be answered. Three distinctly different paradigms that guide research are quantitative, qualitative and mixed method (Creswell, 2014). Constructivist or interpretivist research paradigm was adopted for this research because, it is not objective but rather subjective and believe in reality that knowledge is created and constructed and interpreted without facts or figures and the researcher cannot be separated from the people of the research area.

#### **3.3. Research Approach Stance Related to the Study**

Based on my ontological and epistemological stance of subjectivism, the researcher approached this study qualitatively. This implied that meanings were constructed from participant revelations. This qualitative research approach was chosen primarily for the purpose of enabling the researcher to describe and analyze the respondents' views on the religion and the fight of illegal small scale- mining. Therefore, this

approach was relevant for collecting data about the phenomenon as well as answers the research questions. Qualitative interviews used to collect data utilized interviews for one-on-one interaction with research participants in their natural setting (Creswell, 2014).

Qualitative research enabled the researcher to analyze individual and collective social actions, beliefs, thoughts and perceptions (Flick, 2017). The strength of the qualitative research approach was in the rich and detailed descriptive data collected from the participants, such as expressed feelings, thought processes and emotions-which would have been difficult to obtain using other research approaches (Flick, 2017). This is in line with Creswell (2017) who states that some characteristics of the qualitative approach are that, humans actively construct their own meaning of situations and that meanings arise out of social situations and can be handled through an interpretive process.

Another reason for choosing the qualitative research approach was that the participants' natural setting provided a holistic understanding of the implementation of the re-entry policy (Creswell, 2014). For me to understand a phenomenon there was a need to understand the context because different situations affect behaviour and perspective and vice versa (Creswell, 2014). Moreover, the researcher opted for qualitative research approach for the following reasons:

### **3.3.1. The researcher Works in Natural Settings**

Qualitative research involves an interpretive, naturalistic approach to the world (Neuman, 2016). This means that qualitative researchers study things in their natural settings, attempting to make sense of or to interpret phenomena in terms of the meanings people bring to term (Pring, 2020). Mason (2017) maintains that for many



qualitative researchers the main object is to focus on naturally occurring ordinary events, in natural settings so that they have a strong handle on what real life is like. Thus, qualitative researchers are more interested in how humans arrange themselves and their settings and how inhabitants of these settings make sense of their surroundings through symbols, rituals, social structures, social roles and so forth (Berg, 2014). Thus, qualitative research is concerned with life as it is lived, things as they happen, situations as they are constructed in the day-to-day, moment-to-moment course of events (Neuman, 2016).

This was done because the researcher was concerned with context and felt that action can best be understood when it is observed in the setting in which it occurs (Bodgan & Biklen, 2015). This enables the researcher to develop a level of detail about the individual or place and to be highly involved in actual experiences of the participants (Creswell, 2014). As Bodgan and Biklen (2015) put it, when the data with which qualitative researchers are concerned are produced by participants as in the case of official records, it is necessary to know where, how and under what circumstances data produced by the participants came into being (Bodgan & Biklen, 2015). This approach was used in this research.

### **3.3.2. Small Samples are used**

Qualitative researchers view sampling processes *as dynamic, ad hoc* and *phasic* rather than static or a priori parameters of population Eriksson & Kovalainen (2018). Eriksson and Kovalainen (2018) therefore, contend that the logic of the sample size is related to the purpose of the study, the research problem, the major data collection technique and the availability of the information-rich cases. The researcher in this research used these as the basis for determining the sample size.

Pring (2020) argues that although qualitative research does not exclude the use of large samples, most qualitative research studies use small samples hence such research focuses on the details and quality of individuals or small group's experiences. Eriksson and Kovalainen (2018) concur and maintain that rather than sample a large number of people with the intent of making generalizations, qualitative researchers tend to select a few participants who can best shed light on the phenomena under investigation. This characteristic is applicable to this study when 14 interviewees were used. Pring (2020) maintains that by doing qualitative research, the outside world of the formalized education system is related to the inside world of the participants and the complexities of situations, processes and action and interactions that are not shown by large scale statistical or macro studies within teaching.

### **3.3.3. Data are Analyzed Inductively**

Berg (2014) states that data analysis and interpretation in a qualitative research design is a plan used to look, discover and describe the relations and underlying themes in the data. For this reason, the researcher aimed to attach significant meaning to what was found, "making sense of the findings, offering explanations and drawing conclusions".

All interviews were transcribed by the researcher and all field notes taken during data collection were recorded. The data analysis was conducted in steps, starting with the specific details and leading to the general conclusions. This supported that of Bodgan and Biklen (2015) who indicated that qualitative data analysis is the process of organizing the data and identifying patterns and relationships among the categories. By using an inductive approach, the researcher attempted to make sense of a situation without imposing pre-existing expectations on the phenomena under study.

### **3.3.4. Meanings of Essential Concern in the Qualitative Approach**

Qualitative research is concerned with meanings as they appear to, or are achieved by, persons in lived social situations (Glesne, 2015). The meaning people give to their experience and their process of interpretation are essential and constitutive, not accidental or secondary to what the experience is (Bogdan & Biklen, 2015). Participants' meaning include their feelings, beliefs, ideas, thoughts and actions (Bogdan & Biklen, 2015). The researcher requires information regarding the assumptions that people make about their lives and about what they take for granted. Bogdan and Biklen (2015) maintain that qualitative researchers are interested in how different people make sense of their lives. As a result, they are concerned with making sure that they capture perspectives accurately.

Qualitative researchers seek to grasp the process by which people construct meaning and to describe what those meanings are (Bogdan & Biklen, 2015). Likewise, Pring (2020) maintains that the researcher interprets phenomena in terms of the meanings people bring to them. Flick (2017) is of the opinion that qualitative researchers empathize and identify with the people they study in order to understand how these people see things. Meanings are constructed by human beings as they engage with the world they are interpreting. The researcher used open-ended questions so that participants can express their views.

### **3.4. Research Design**

A research design, according to Creswell (2014), outlines the specific procedures for collecting, analyzing and reporting in qualitative research. It may be thought of as a map of how the research will unfold and provide a logical plan as to how it will be conducted and the findings validated. Bryman (2015) formulates a research design as

an integrated statement of and justification for the more technical decisions involved in planning a research project and a process. Bryman (2015) offers a closely related definition of design by stating that a research design involves a set of decisions regarding what topic is to be studied among what population with what research methods for what purpose, research design is the process of focusing your perspective for the purposes of a particular study. For Bryman (2015), the research design serves to plan, structure and execute the research in order to maximize the validity of the findings.

The present study adopted a case study research design. According to Bryman (2015), a case is a unit of human activity embedded in the real world, which can only be studied or understood in the context, which exists in the here and now. The case study was employed to allow for in-depth exploration of respondents' views on the religion and the fight against illegal small-scale mining in Abuakwa district. The case study method helped me in the collection of very extensive data in order to produce an in-depth understanding of the entity being studied. Moreover, I used a case study approach to gather some rich information on the subject under investigation. The use of the case study method in this study was necessary as I needed to develop an in-depth understanding of the subject under investigation in its contextual conditions.

### **3.5. Study Area**

The study was conducted in the Abuakwa North District in the Eastern Region of Ghana, which has a population of 91,297 according to the 2021 Housing and Population Census (HPC) comprising 44,374 Males and 46,923 Females. It is located on the Accra-Kumasi highway of about 76km drive to the national capital Accra. The

data were collected from the 18 leaders of the 18 key stakeholders' heads of the departments as shown in table 3.1 of the Distribution of Population.

The Abuakwa North district is the area where the study was conducted. The choice of the Abuakwa North district was made based on the researcher's identification of the intensity of illegal small-scale mining of the locality and the severe problems the galamsey activities were creating the locality and having been captured in the media, news every now and then. This challenged the researcher to develop immediate rapport with the respondents hence making data collection less cumbersome. Creswell (2017) states that, the ideal setting is one that is relate to the researcher's interest, is easily accessible and allows the development of immediate rapport with respondents.

### **3.6. Population of the Study**

The target population is the group of interest to the researcher. It is the group from whom the researcher would like to generalize the results of the study (Pring, 2020). The target population consisted of all leaders of the key religious leaders and a member each from the Environmental Protection Agency, Forestry Commission and the Municipal Assembly of the study area of the fight against illegal scale mining in Table 3.1.

**Table 3.1: Distribution of Population**

<b>Number</b>	<b>Category</b>	<b>Number Interviewed</b>
1	Christians from three Communities	3
2	Moslems	3
3	Traditional Religion Believers	3
4	Illegal Small-Scale Mining Workers	3
5	Traditional Ruler	1
6	Office of the District Assembly	1
7	Environmental Protection Agency Office	1
<b>8</b>	<b>Total</b>	<b>15</b>

### 3.7. Sample Size and Sampling Techniques

The researcher due to factors of expense, time and accessibility, collected data from a smaller group he considered as the survey sample (sample size). According to Pring (2020), a sample denotes a group of elements or a single element, from which data are obtained. Flick (2017) defines a sample as a set of individuals who are chosen from a particular population as they represent the population in the research study.

In each of the department, one representative, preferably the head will be selected. This implies that 15 respondents were purposively selected for the face-to-face interview because of their in-depth knowledge on the subject under investigation. Purposive sampling ensured the selection of the information – rich participants who were also easily accessible and willing to be involved in the study (Bryman, 2015).

### 3.8. Data Collection Instruments

In line with the research design, the study employed interview guide to elicit data for the study. Creswell (2014) points out that, the purpose of interviewing is to find out what is in someone else's mind and since this cannot be directly observed or

measured, the researcher has to ask questions in such a way as to obtain meaningful information. According to Creswell (2015) the purpose of interviewing is to understand the experience of other people and the meaning they make of that experience. Religious institutions are best understood through the experiences of the individuals whose work and lives contribute to the formation of the institution. According to Bryman (2015), interview guides are similar to questionnaires in that, they are organized around a series of questions and rely on interviewees being able to answer and tell the “truth” as they see it. Individual interviews were conducted with 15 respondents.

According to Selltiz (2016), the interview guide is a flexible tool for data collection, enabling multisensory channels to be used; verbal, non-verbal, spoken and heard. Moreover, the interview may be controlled while still giving space for spontaneity, and the interviewer can ask for responses about deep and complex issues. Probing is used to get deeper information from the respondents and good rapport with participant being a prerequisite for obtaining maximum cooperation and accurate information (Selltiz, 2016).

Therefore, the interview guides were employed in soliciting information from the purposively sampled stakeholder. Unstructured and open-ended questions were administered to elicit views and opinions from the participants. Probing was used by the researcher to obtain potentially important information from the professionals and the religious leaders. The flexibility of the interview guide yielded high response rates, offering opportunity to collect in-depth information.

The interview guide had four sections that helped to obtain demographic information, the traditional religion, Christian religion, Islamic religion and challenges associated

with the use of religious beliefs in the fight against illegal small- scale mining. The personal in-depth interviews were carried out for duration of about thirty-five minutes for each respondent as a leader from each religion. Choosing from the numerous Christians, one leader was chosen from the Church of Pentecost, Church of Christ and Methodist Church, Ghana. Officers in charge of mining from the Assembly and the Environmental Protection Agency were also selected. These leaders from the churches and the offices were selected based on their experience and in-depth knowledge and expertise on the topic under research.

### **3.9. Trustworthiness of Qualitative Data**

According to Creswell (2014), the reliability of research instruments in qualitative data, focuses on the researcher since he or she is the primary instrument. Both validity and reliability of research instruments in qualitative studies are treated together in what is referred to as trustworthiness. Creswell (2015) asserted that, trustworthiness of qualitative research is done through developing standards of quality which involves four criteria. First, is the credibility (the true value) accuracy, established confidence in the truth of the findings from the informants, the context in which the study was undertaken and the authenticity of the information collected. This was ensured by use of member check in which the respondents were asked to corroborate findings and made segments of raw data available for other readers who analyzed it.

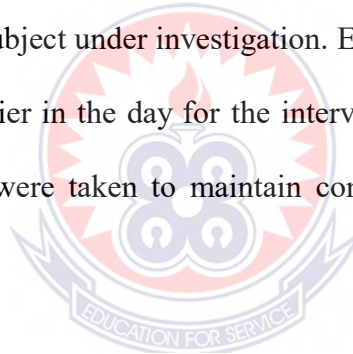
Transferability or applicability is a criterion of the fittingness, showing that findings could be applied to other contexts and settings depending on the degree of similarity between the original situations to which it was transferred (Creswell, 2014). This was ensured by researcher presentation of reports that provided sufficient details to other readers for assessment. Dependability (consistency) ensured that the findings were



steady if the study would be repeated (Creswell, 2014). This criterion was ensured through auditing the research process, documenting all the data generated and assessing the method of data analysis. Finally, Conformability ability (neutrality) is the objectivity of data, the degree of neutrality of data, and the extent to which the study findings were shaped by the respondents' motivations and perspective, with another researcher agreeing about the meanings emerging from the data (Creswell, 2017). The researcher ensured neutrality in the study by scrutinizing the data from respondents.

### **3.10. Data Collection Procedures**

The researcher used interview guide to measure the opinion of 15 interviewees on their perception on the subject under investigation. Each session lasted for about thirty - five (35) minutes. Earlier in the day for the interview, the researcher described the purpose and steps that were taken to maintain confidentiality and their anonymity made known to them.



### **3.11. Data Processing and Analysis**

According to Maxwell (2018), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. It is a messy, ambiguous, time-consuming creative and fascinating process. Bodgan and Biklen (2015) regard data analysis as the process of systematically searching and arranging the interview transcripts, field notes and other materials that the researcher has accumulated in order to enable him/her to come up with findings. Likewise, Creswell (2017) regards the process of data collection not as an end in itself. Thus, data collected should be analyzed, interpreted and findings presented.

In this research, the data consist of the transcripts and notes taken during and immediately after the interviews as well as notes taken during and after the interview periods. In analyzing the data, the researcher initially read the transcripts and the notes repeatedly in order to gain familiarity with them. This was in accordance with what Maxwell (2018) maintained that reading, reading and reading once more through the data force the researcher to become familiar with those data in intimate ways. The researcher also listened to all recordings of the interview, at the same time checking the accuracy of the transcriptions. Gray (2016) warns that qualitative researchers must listen carefully to what they have seen, heard and experienced to discover the meanings.

Data analysis is conducted to reduce, organize and give meaning to the data (Neuman, 2016). Data analysis is a dynamic and creative process. Throughout the analysis, researchers attempt to gain a deeper understanding of what they have studied and continually refine their interpretations (Neuman, 2016).). Blaikie (2013) maintains that there is no single right way to analyze data in a qualitative study. There are a variety of ways of handling and analyzing data (Bodgan & Biklen, 2015). Likewise, Neuman (2016) concurs, maintaining that the wide variety in possible approaches to qualitative research is noticed by the many approaches to data analysis. Best and Kahn (2013) agree and maintain that all researchers develop their own ways of analyzing data. Berg (2014) of the opinion that although the analysis of data is complicated, it is a process that can be broken down into stages which may include the following:

### **3.12. Organizing the Data**

The data generated by qualitative methods often result in voluminous notes from interviews (Wellington, 2018). Thus, for the researcher to be able to analyze these data effectively, the researcher needs to organize the collected data. As a result, the researcher will start organizing data immediately after data collected. The researcher spent long hours organizing the collected data.

### **3.13. Coding of Data**

The researcher followed the Gray (2016) procedure of coding that involves three major types of coding: open coding, axial coding, and selective coding. In the open coding phase of analysis, the researcher groups common ideas into categories. In the second phase, axial coding, relationships between categories and ideas are identified. Finally, in the selective coding phase, the researcher attempts to explain these relationships to the reader.

Thus, in this study, data were analyzed manually by using thematic analysis. The transcripts were checked several times to understand the overall idea of the content. Following this, codes were allocated to significant concepts. Then, the concepts were grouped into themes. This method ensured that the elements of the coding frame reflected the language of the participants (Wellman, 2015). After the categorization and coding of data into themes, the researcher analyzed and interpreted the themes to find answers to the research questions.

### **3.14. Ethical Considerations**

Research ethics need to be followed when conducting any type of research, be it quantitative or qualitative. These guidelines are intended to protect the research

participants' physical and mental integrity. The two main aspects to consider are consent and confidentiality (Creswell, 2014).

**Informed consent:** Informed consent involves obtaining the verbal and written approval of the participants to take part in the intended research. This ensures that they voluntarily participate in the study and that they make an informed choice following a clear explanation regarding the research process and requirements.

**Privacy, Confidentiality and Anonymity:** Creswell (2014) contends that researchers have a dual responsibility, firstly, the protection of the participant's confidence from other actors in the setting whose private information might enable them to identify them and secondly, the protection of informants from the general reading public. For Creswell (2014), both the researcher and participant must have a clear understanding regarding the confidentiality of the results and findings of a study. Flowing from this, all reasonable steps to maintain the confidentiality of the participants were taken care of. All the information and responses that were shared by the participants during this study were kept private, and the results were presented in an anonymous manner in order to protect the participants' identities. All audio recordings that were used during the study are kept in a safe place.

## CHAPTER FOUR

### RESULT AND DISCUSSION

#### 4.1 Introduction

The chapter begins by presenting the demographic characteristics of the participants of the study. This is followed by the presentation and discussions of the collected data from the field.

#### 4.2. Analysis of Demographic Characteristics of Participants.

The first activity of this section of the study is to analyze the background characteristics of the various interviewees of the study. This is so because it highlights the caliber of persons who participated in the study. In all fifteen (15) people were purposively selected to be interviewed in the study. They were made up of 3 illegal small-scale mining workers (galamseyers), 3 members from three communities in the district who are Christians, 3 Moslems, 3 traditional religion believers, 1 officer from the Environmental Protection Agency, 1 traditional ruler and 1 official from the District Assembly.

Generally, in this study the age of all the participants ranges between 22 to 45 years. In terms of their educational levels, it was observed that the least of them has had Senior Secondary education. With regard to their working experiences, while the one with the most working experience has been in the district as an employee for the past fifteen years, the one with the least experience for example has been in the galamsey business for the past five years. Concerning their gender, while 7 of them were males, the remaining 5 were females. In order to achieve the research objectives, the following research questions were asked during the study:

- i. In what ways can the traditional beliefs be useful in the fight against illegal small-scale mining in the district?

- ii. To what extent can the Christian beliefs be used as tools to aid the fight against illegal small-scale mining?
- iii. What are the ways by which Islamic beliefs can assist in the fight against the illegal small-scale mining in the district?
- iv. What are the challenges that will be associated with the use of religious beliefs in the fight against illegal small-scale mining in the district?

### **4.3. Presentation of the Main Results**

#### **4.3.1. In what ways can traditional beliefs be useful in the fight against illegal small-scale mining in the district?**

When the participants of the study were asked to express their views on the ways by which the traditional beliefs can be useful in the fight against illegal small-scale mining, the responses from the participants were interesting and revealing. This question was asked against the background that traditional beliefs were used historically by our grandfathers and grandmothers to protect the environment against destruction. Besides, most of the people who engage in the illegal small-scale mining usually perform traditional rituals before they start their activities. It was on the basis of these information that the researcher wanted to ascertain if these traditional beliefs and the historical ways of protecting our environment have any relevance in the fight against the menace this time. With this question, interviewees or informants asserted, that illegal mining can be controlled via the citizens adherence to their traditional beliefs. They further stated that even though most of the people who destroy the environment are young in terms of age, they believe that the power of the deities and traditional gods are still potent to destroy the life of the people who incur their wrath. They indicated that the punishment from these traditional sources is instant and they cannot be bribed also therefore if the political measures are not working, we must try

traditional beliefs, customs, and rituals in our campaign to stop galamsey since they have the potential to deter people who engage in the illegal act. In supporting this point of view the following statements were made. For example, during the interview, this is what one of the interviewees who engages in galamsey had to say:

*“I think that the rituals that we performed at the commencement of our mining activities to appease both the land and the spirit of gold goddess must tell you that these spiritual beings are always watching what we are doing but because they have not been invoked to deal with those who destroy the environment, they look unconcern. For me, these rituals including the sacrifices we offer to the gods do not only promote sufficient gold harvest but they also embolden us to do our work without fear.*

Another interviewee stated that:

*“I see that the successful gold mining exploits are associated with successful rituals and powerful spiritual fathers and that such actions and behaviours can affect our activities so much if we are forced to stop using them”*

One traditional ruler who participated in the study also revealed that:

*“I must admit that we the traditional rulers have not done enough to highlight how traditional beliefs are associated with the galamsey activities and how they can be used to reduce this social canker. It is common to note that many of the young people who engage in the illegal small-scale mining believe in juju and usually go to “juju men” for protection. I believe that we can win the fight against galamsey if we are able to stop the activities of these juju men in our communities from supporting the galamseyers. This exercise can be led by the traditional rulers, priests and priestesses”*

One of the interviewees claimed that:

*I can boldly say that anyone who does not believe that black power plays a significant role in galamsey does not know how the galamsey work operates. All those who do it believe that the more blood pours into the land the more you get gold. With this in mind the death of a galamseyers does not scare anybody but it rather encourages them to enter underground''*

Again, when the question of how the promotion of traditional beliefs can assist in the fight against galamsey was put to some Christians and Moslem who participated in the study, the responses were instructive as they all conceded that invocation of curses on the galamseyers through the traditional deities can also serve as an effective tool to reduce the galamsey activities if not stopping it completely. In supporting this view this is what one Christian had to say:

*As for me even though I am a strong Christian I do not joke with these traditional deities because for them their punishments are delivered instantly when one gets them annoyed. For instance, I have witnessed a number of incidents whereby people who stole or had sex with other people's wives and also had sex in the bush or around rivers, have died a miserable death in this community. These days the use of Antoa Nyama and other traditional gods to curse people when they commit crime and their immediate consequences have even reduced crime in our communities. People know that when they commit crime and you curse them with God they don't panic because they know the punishment of God delays but that of the traditional gods is quick."*

From the above discussions it is clear that traditional beliefs and the activities of the small-scale illegal mining are intertwined. While the people who engage in the galamsey activities significantly resort to the use of spiritual powers as the sources of



their inspiration, the strict enforcement of environmental taboos, customs and the regulation of the activities of the juju men by the traditional rulers can play a major role to reduce the activities of the small-scale illegal miners.

#### **4.3.2. To what extent can the Christian beliefs be used as tools aid the fight against illegal small-scale mining?**

This research question was meant to determine the extent to which Christian beliefs can aid the fight against illegal small-scale mining. This is because in Genesis 2:15, the bible enjoins Christians to take good care of their environment and therefore it was hoped that Christian beliefs can be used as tools to support the fight against illegal small-scale mining. This question was meant to solicit the views of the participants on how Christian beliefs can help in the protection of the environment. With this question, the interviewees provided various answers that suggest that strict adherence of Christian principles can also be useful in the fight against galamsey in the district. The following statements are some of the views expressed by the participants:

When the question of how Christian beliefs can be used to support the fight against galamsey was asked, this is what one of the interviewees had to say:

*“What I can say is that in many of the churches today if a person goes to engage in fornication and it comes out that the person is sanctioned by being suspended from the church or will be asked to sit at the back of the church for about six months. This culprit is disgraced in such a way that it serves as a deterrent to others. This same bible commands Christians to protect the environment so I suggest that if the churches can treat a person who destroys the environment through galamsey like the way they treat a fornicator then we*

*can win the fight against illegal small-scale mining in a significant way because majority of the galamseyers are Christians”.*

Another interviewee responded that:

*The fight against galamsey is a divine assignment for every Christian to fulfil and I want the preachers to dedicate more time to educate their congregation on the effects of galamsey on the environment and also to help them to accept this divine assignment as their responsibility, and once Christians accept this task, they will do everything possible to protect the environment*

One of the interviewees stated that:

*“As Christians, we all know that the environment falls within the context of God’s creation and we shall give account to Him on how we treat it. I believe that care for God’s creation is still a “divine mandate that must be a fundamental responsibility of all Christians. For this reason, I believe that one of the ways to reduce illegal small-scale mining in this district is for the church leaders to reject the money of those who engage in galamsey when they bring it to support church activities. These days churches make rich people leaders or elders in the church without checking how they get their money and if you are poor you will continue to remain a floor member. Because of that people want to find any means including galamsey regardless of the damage they will cause to the land to make money so that they will be recognized in the church and I know rejecting galamsey money by the church will discourage Christians to engage in the act”*

The ongoing findings reveal that Christian beliefs can be useful in the fight against illegal small-scale mining in different ways. First, it has been discovered that the churches can take the fight to the next level if they ensure that they will make

galamsey activity unattractive. They can do this by suspending or excommunicating people who engage in galamsey from the church as most of them do to those who commit fornication. Again, the church can also use the pulpits to educate their congregations to recognize that, destruction of the environment is not only a sin against humanity but it is also a sin against God since the protection of the environment by Christians is a divine assignment. It has also been found that when the churches begin to reject money from galamsey activities and ensure that money generated from legal means will be accepted as legitimate money to support church activities, it will discourage most of their members to go into illegal small-scale mining (galamsey).

#### **4.3.3. What are the ways by which Islamic beliefs can assist in the fight against the illegal small-scale mining in the district?**

This question sought to determine the ways by which Islamic beliefs can assist in the fight against the illegal small-scale mining in the study area. With this question, majority of the interviewees described how illegal miners have inadvertently destroyed ecologically sensitive lands, contaminated rivers and drinking water with mercury and other toxins, and otherwise exposed many communities to serious environmental and health risks. They unanimously agreed that strict adherence of Islamic teachings can go a long way to protect the environment. They revealed that Prophet Mohammed made a lot of teachings in the Quran which enjoins all Moslems to protect the environment and as such no true Moslem will engage in illegal small-scale mining which is characterized with the destruction of the environment as it says protecting the planet Earth, Allah (God) says “Do no mischief on the Earth after it hath been seat in order”. The following were some of the statements made by some participant to support the above narratives:

For example, one of the interviewees stated that:

*“I believe that as a Moslem, I must maintain relations with humans and other creations of Allah including the environment on the basis of justice as commanded by Allah (God). I learnt from the Quran that humans must eat and drink the sustenance God has provided and do not act wrongfully in the land, causing destruction”*

Another interviewee stated that:

*“I can say that many Quranic verses emphasize that one should utilize the resources need by man without resorting to the destruction of the environment. I believe in the Quran principle that commands Moslems to protect the environment and its resources such as water, air, land, trees and animals. All we need is constant reminder of these verses by the Imams so that even one is tempted to do anything that can destroy the environment he will remember because no good Moslem will intentionally disobey the Prophet. The leadership can also name and shame those who destroy the environment and praise those who protect the environment too in the Mosques”*’.

Another interviewee claimed that:

*“Hadith of Prophet Muhammad instructed we the Muslims not to waste water even if someone is standing in a running stream. Thus, I can therefore infer the importance of water and its conservation in Islam. Wasting natural resources is not permissible and is not an act of good human but an act committed by devil and that those who mistreat the created are the brothers of Satan, and Satan is most ungrateful to Allah. I learnt from the Quran that those who mistreat the inter-human relationships and living species of plants, rivers and lands will be judged. As human we can easily forget therefore our leaders*

*must always highlight the religious consequences of engaging in illegal small-scale mining in our mosques’’*

It is clear from the statements that Islam has the most comprehensive teachings on the protection of the environment by all Islamic faithful. What is left to be done is for the Muslim leadership to constantly highlight the religious consequences that await any Muslim that directly or indirectly does something that destroys the environment. Besides, it has been suggested that the use of name and shame strategy to expose those who destroy the environment while praising those who protect the environment in the mosque too will help to support the fight against illegal small-scale mining.

#### **4.3.4. What are the Challenges that will be associated with the use of religious beliefs in the fight against illegal small-scale mining in the district?**

The research question sought to determine the challenges associated with the use of religious beliefs in the fight against illegal small-scale mining in the Abuakwa North District. When the question was asked, the participants provided a number of likely challenges that are going to emerge if religious beliefs are resorted to as tools to assist the fight against illegal small-scale mining.

Key among the challenges associated with the use of these strategies includes lack of legal backing to ensure compliance. The participants asserted that religious beliefs are not backed by law therefore people can easily challenge the decisions by the religious leaders at the court when they feel that their fundamental rights are being violated. For example, during an interview one of the interviewees stated that:

*“You know that Ghana’s constitution does not allow anyone to threaten the life of any person. In view of this if you are a traditional ruler and you want to curse a person with a deity with the reason being that he is engaging in illegal*

*mining, the court will come to the defense of the galamseyers because under no circumstance should one threat the life of another person.*

In their attempt to point out some of the associated challenges in the use of religious beliefs to fight against illegal small scale mining an informant had this to say:

*“One challenge I can foresee is that these religious leaders who are to enforce the religious beliefs are also human and they need money. This means that in their attempt to ensure that people obey the environment commandments in their respective religious groups, they can also get corrupted along the way. I can say with all confidence that they can also be bribed and get compromised. Everyone needs money and I strongly believe that only few leaders can resist this temptation when it comes their way”*

Another interviewee stated that:

*“As for me one problem I see with the use of religious beliefs to fight the illegal small-scale mining is the likelihood that some of the members who want to engage in the activity will end up leaving the group to avoid embarrassment. You know that joining any religious group is voluntary therefore strict enforcement of environmental commandments by these religious leaders to protect the environment can cause many members to leave such group. Again, although I believe resorting to religious beliefs to assist the galamsey fight is a good idea but my problem is that it cannot cover those people who do not believe in anything”*

Flowing from the above empirical evidence from the field, it is clear that the attempt to use religious beliefs as strategies to fight the illegal small-scale mining also come with its own challenges. However, this study argues that the use of the religious beliefs as tools to support the fight against galamsey is not an end in itself but as a

means to supplement the other measures that have been used over the years by the government which have not produced the desired results.

#### **4.3.5: Discussion of the Research Findings**

The study set out to establish the ways by which the beliefs of the three major religions in Ghana can be used as tools to fight the illegal small-scale mining in the study area.

##### **Findings from the use of Traditional Beliefs**

The first set of questions were asked to ascertain how the beliefs of the traditional religion can be used.

First, the study revealed that there are many environmental taboos, customs and traditions in Ghana in general and in the district in particular of which if they receive strict enforcement by the stakeholders such as traditional rulers, traditional priests and the citizens will add impetus to the galamsey fight. These environmental taboos and traditions were the very measures used by the forefathers to protect the environment. However, because those who are clothed with traditional authority have relaxed in enforcing them, the environmental destruction has become the order of the day.

Secondly, it was also discovered that in spite of modernization people still fear the anger and punishments that come from the traditional deities such as “Antoa Nyaama”. For this reason, it was noted that the invocations of curses using the powerful deities in the locality can also discourage people from engaging in galamsey activities.

Again, the study established that most of the people who engage in the illegal small-scale mining consult juju men who in turn fortify them to get the courage to do galamsey. It was therefore suggested that placing restrictions on the activities of the

juju men in relation to fortification of the galamseyers by the traditional authorities will go a long way to contribute to the fight against this social canker.

The above findings confirm the studies made by Opoku, A. K. (2018) who noted that most of the illegal small-scale miners (galamseyers) do seek the help and the protection of spiritual leaders and some ‘juju’ men to fortify them and cleanse them from evil befalling them during their work.

The finding is in line with Appiah Opoku (2017) who noted that, when a blood sacrifice is involved, it means that, the purpose must be serious. This finding also confirmed the study done by Nasr (2016) when he stated that, adherent to traditions, customs and taboos are concern not only the causes of evil, but also have to deal with evil. The findings also confirm the studies done by Ofosu-Mensah (2010) who noted that the miners share the notion that failure to perform the right ritual leads to several negative consequences like the carving in of the pits, killing a lot of people and it is as a result of this that is why, these galamseyers go through all forms of sacrifices to fortify themselves before the act. This finding was also in line with Hirsech (2017) who claimed that miners attribute the frequent accidents, for example, pit collapse and fall to erroneous rituals performed by miners. This finding affirms that of Ofosu–Mensah (2010) who posits that local miners finance fetish priests to perform rituals to enhance their chances of getting plenty of gold in mining pits as the road to success is being paved through spiritual undertakings, large tracts of virgin lands are being debilitated and remain useless for agricultural activities. This finding supports that of Kpieta and Bonye (2012) who noted that rituals induce land degradation in mining and lack of it minimize the miners’ operations.



### **Findings from the use of Christian Beliefs**

The study also found that Christian beliefs can to a large extent be used to contribute to the fight against small-scale mining. Interview with the participants revealed the following ways by which the Christian beliefs can be used to support the fight:

It was noted that God from the beginning planted man on earth to protect the land therefore the destruction of the environment is also considered as sinful as stated in the Bible; Jermiah 2:7 “I brought you into a fertile land to eat its fruit and rich produce. But you came and defiled my land and made my inheritance detestable”. The study found that the fight against small-scale mining will gather momentum if the Christian community and its leadership begin to treat galamseyers like the way most churches treat fornicators by suspending them from the church when caught. They argued that most churches suspend fornicators from the church for some months when they are found engaging in the act. It was therefore suggested that because no one wants to be associated with this embarrassing suspension, many Christians will think twice even if they want to engage in galamsey. Besides, those who will still engage in this destruction of the environment will not get the courage to boast with it in public as they usually do in recent times.

The study also found that the consistent use of the pulpit by the church leaders to educate the negative effects of small-scale mining on the environments and its attendant effects on human life can significantly contribute to the fight. It was agreed that once the congregations at various churches are constantly reminded of the negative effects of galamsey, more people will join the campaign against the illegal small-scale mining once they become well informed.

Another interesting finding from the study was that church leaders must begin to reject money people bring to support church projects if it comes from illegal small-scale mining. It was argued that because churches these days do not question the sources of people's wealth many church members hold the view that for one to be respected or hold key positions in the church money plays a key role and it does not matter how one acquires the money. Once the churches begin to reject monies from galamsey and make it clear to the members the reason for their rejection, the motivation to go into illegal small-scale mining in order to support church fundraising activities will be gradually killed.

The above findings confirm the studies done by Emmons (2017) who posited that, all Christians believe the teachings of the Christ Jesus and the Holy Bible that teaches against sin committed against mankind or creation and therefore admonishes that, whoever go against that should be suspended from fellowship. This finding is also in line with Gnanakan (2019) who also noted that, the Bible teaches nothing else than love and condemns the desire and pride which result in the lust for power, and the unacceptable ways of affluence, this notion appears in almost all the scriptures for Christian believers that are preached in the chapel everyday as a sin.

The finding also confirms the study made by Myers (2018) who stated that, one of the greatest features of Christianity is humility, which is the fundamental virtue, the virtue of all virtues as opposed to the sin of pride and the happiness of offering huge sums of money in the church openly which the scriptures teach against it as a sin.

This finding was in line with Izzi-Deen (2016) who noted that given the menace that captures something of the destructive impact of mining, Christians may be inclined to denounce all forms of mining as sinful, lack legal backing or court order to pursue

their case at the law court. This finding supports that of Hassan (2017) that illegal mining may well be true that all mining is polluted by human sin but there is no legal backing for religions to implement their actions in the law court in the fight against illegal mining activities.

### **Findings from the use of Islamic Beliefs**

It was also established in the study that one way to use the Islamic beliefs to support the fight against small-scale mining is for the leadership of the Muslim community to regularly highlight the numerous Qur'anic verses that speak against destruction of environment. It was observed that every true Muslim respect Prophet Mohammed and will do everything to abide by his teaching. For them to be conscious of these teachings in their dealing with the environment they have to be reminded very often. Besides, their daily sermons must also be used to highlight the religious consequences of destroying the environment as it can prevent a believer from making heaven.

It was also identified in the study that Muslims meet in their mosques very often than any other religious group and this provide the leaders the opportunity to make use of naming and shaming strategy to support the fight. It was asserted that the leadership of the Islamic believers must start praising members who make conscious effort to protect the environment in their mosques and also name and shame those who engage in galamsey activities to destroy the environment.

The findings confirm the studies done by Armstrong (2020) who noted that, Muslims believe that humans should act as guardians of the planet, and that they will be held accountable by Allah (God) for their actions. He added that, the concept of stewardship is a powerful one, and the Islamic attitude towards environment and natural resource conservation is not only based on prohibition of over-exploitation but

also on sustainable development. He added again that Prophet Muhammad encouraged the planting of trees and the cultivation of agriculture which are considered as good acts. The finding was also in line with that of Faruqi (2019), Prophet Muhammad said that he who cuts trees without justification, Allah (God) will send him to Hell fire. The trees very much needed for human existence and to improve prove vegetation. The devastation caused by deforestation in many countries causes soil erosion and kills many of the biodiversity of the earth. The finding also supports that of Mazrui (2017), Allah (God) has declared in the Quran that, Allah established the earth for living creatures. Moreover, Allah has made humans to grow, as a plant from the earth; then to it human beings return, and bring human beings forth. These statements emphasize the importance of land for all living species as it provides every kind of sustenance to living beings. Allah has made the land for humans' home and the home of all terrestrial beings. Soil is fertile and productive which causes vegetation to thrive and supports other life forms directly as well as indirectly. Thus, it is imperative for human beings to preserve the productivity of the soil, and not expose it to erosion by wind and flood; and by other human activities such as illegal small-scale mining (galamsey).

This finding was in line with that of Field and Field (2019), who noted that man has the responsibility of protecting all the assets on this planet, i.e., natural resources created by Allah (God) and that those who cause destruction on the earth without honest and fair practices in order to maintain balance and justice on the Earth will be punished by Allah. The finding also supports that of Yinger (2018) who noted that clean environment has a profound and soothing effect on man who lives in harmony with nature and that a physical cleanliness creates environmentally friendly society and sound ethical practices in consonance with Allah desire. This finding was in line

with Mortada (2018) who noted that Islam beliefs that indicated that Islam necessitates the states to preserve the natural resources and environment alongside economic development for the future generations and setup protected areas, the land and the living beings of a protected area are not exploited.

### **Challenges Associated with the use of Religious Beliefs to Support the Fight against Galamsey**

The study further found that the use of religious beliefs to support the fight against illegal small-scale mining is not without challenges. Among the challenges established in the study include the following:

Firstly, the study revealed that the use of religious beliefs to support the fight against illegal small-scale mining will be confronted with numerous legal battles. This is due to the fact that the enforcement of these religious beliefs cannot be backed by the laws of the land but can only be supported by moral suasion. This means that the attempt by the religious leaders to ensure that their members comply with the environmental protection principles can be thwarted by a myriad of law suits from disgruntled members.

It was also found in the study that the approach of using the religious beliefs can though be useful there is a possibility that the religious leaders who are to championing this course of action can also get compromised. The government attempt to use task force to fight galamsey failed because of alleged bribes and corruption. The study found that since these religious leaders too are humans who need money, they can equally be bribed and thereby give up on the attempt to stop the illegal small-scale mining easily.

Again, the study further discovered that the approach can also lead to a situation whereby members in various religious grouping who prioritize money over religion can decide to leave the religious groups if they feel their source of livelihood is being threatened. This is so because membership of every religious organization is voluntary and one can decide to leave the group at any time if their interests are not being served. Besides, it was found that the approach may not be expansive enough since we can also have people who engage in illegal small-scale mining but consider themselves as atheist.

This finding confirms the studies made by Hilson & Potter (2018) poverty is the remote factor the pushes people into illegal small-scale mining activities. Most of the religious believers are poor and they therefore decide to venture into doing illegal mining which they prioritized it over their religious faith and beliefs. The finding is also supported by Nyame & Yakovleva (2018) that, small-scale mining is a poverty-driven activity and Owusu and Mensah (2019) further added that the most widely accepted reason for the upsurge of illegal mining is nationwide poverty. Owusu & Mensah (2019) Aside from poverty, unemployment especially among the youth is another remote cause of illegal mining in Ghana that is the high level of unemployment in the country makes the youth susceptible to illegal activities including small-scale mining in order to earn a living.

This finding was in line with that of Hilson (2017) who noted most Ghanaians claim to be religious and yet the vicious destruction of our ecosystem as a result of illegal gold mining tends to suggest that many of them have chosen to ignore their call as God's stewards because of the "lucrative" in the exploitation of God's creation. To Hilson (2017), human beings ignore the fact that they are the custodians and stewards of everything God has created, and it is incumbent upon them to safeguard it

against destruction. This finding was consistent with that of Agyemang and Okoto (2018) who noted that the care of God's creation is both our social and divine responsibility that must not be underrated. Just as caring for the poor and the vulnerable is a vital responsibility in society, so also must we care for our vulnerable ecosystem as God's creation. This finding was in line with that of Hilson and Potter (2018) who noted that it is incumbent upon human to commit themselves and resources to care for the ecosystem and the integrity of God's creation. To Hilson and Potter (2018), human stewardship to protect the dignity of the ecosystem must not be an exclusive responsibility of some specific stakeholders, agencies, or individuals in society. This finding also supports Hilson & Potter (2018), the output of and soaring prices of gold also has always been lucratively appealing hence the patronage by many Ghanaians especially the youth who nowadays prioritize money more than religion and faith. The finding is also in line with Kwai & Hilson (2016) who noted that, corruption within Ghana's public sector is a proximate cause of illegal mining activities in the country since the official who are hired to enforce the laws and regulations are all religious believers who are in dye need of money to either show off in the church for positions and also to support religious projects. They are the same people who make acquisition of license to operate legally to bureaucratic and discourage people from going through such stressful and tedious process to acquire the license to operate, hence resort to illegal small-scale mining in an unprofessional manner.

#### **4.4 Conclusion**

From the above discussion, it is obviously clear that the use of the beliefs systems of the three major religions in Ghana namely; traditional religion, Christianity and Islam to assist the fight against illegal small-scale mining in the district can be useful in

various ways, however, the approach cannot be used in isolation since it has a number of challenges. It is therefore important to note that the approach should be used to complement the political measures that have been used over the years. This will provide a comprehensive list of measures to deal with the galamsey problem once and for all.





## CHAPTER FIVE

### SUMMARY OF STUDY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the major findings of the study. The entire study sought to determine the role of religious beliefs in the fighting of illegal small-scale mining in Ghana, particularly in Abuakwa North District of the Eastern region. This chapter includes the summary of the research findings, and conclusions from the results and finally the recommendations for further action.

#### 5.2 Summary of the Study

The study sought to determine the role of religion towards the fight against illegal small-scale mining in Ghana, particularly Abuakwa North District. The following research questions guided the study:

- i. In what ways can the traditional beliefs be useful in the fight against illegal small-scale mining in the district?
- ii. To what extent can the Christian beliefs be used as tools to aid the fight against illegal small-scale mining?
- iii. What are the ways by which Islamic beliefs can assist in the fight against the illegal small-scale mining in the district?
- iv. What are the challenges that will be associated with the use of religious beliefs in the fight against illegal small-scale mining in the district?

The study followed the subjectivist position in that the researcher believed that reality is constructed through human experiences. Moreover, the researcher is of the view that knowledge as a human construct is either socially and culturally constructed or negotiated. This implied that the researcher approached this study qualitatively. The present study adopted a case study research design. The case study design was

employed to allow for in-depth exploration of illegal small-scale mining in the Abuakwa North District. The case study method helped the researcher in collection of very extensive data in order to produce an in-depth understanding of the subject under investigation. Fifteen (15) participants of fighting against illegal scale mining participated in the study for the face-to-face interview because of their in-depth knowledge on the subject under investigation. Purposive sampling ensured the selection of the participants who were easily accessible and willing to be involved in the study. The data collected were analyzed thematically and the findings are summarized below:

### **5.3 Summary of the Findings**

At the end of the study, the following findings were established:

#### **Ways to use Traditional beliefs as tools to assist the fight against galamsey:**

1. The study revealed that there are many environmental taboos, customs and traditions in Ghana in general and in the Abuakwa North district in particular of which if they receive strict enforcement by the stakeholders such as traditional rulers, traditional priests and the citizens will add significant momentum to the galamsey fight.
2. It was also discovered that in spite of modernization people still fear the anger and punishments that come from the traditional deities such as “Antoa Nyaama”. For this reason, it was noted that the invocations of curses using the powerful deities in the locality can also discourage people from engaging in galamsey activities.
3. Again, the study established that most of the people who engage in the illegal small-scale mining consult juju men who in turn fortify them to get the courage to engage in the galamsey activities.

### **Ways to use Christian beliefs as tools to assist the fight against galamsey**

Using Christian beliefs to assist the fight against illegal small-scale mining;

1. The study found that the fight against small-scale mining will be effective if the Christian community and its leadership begin to treat galamseyers like the way most churches treat fornicators by suspending them from the church when they are caught.
2. The study also found that the consistent use of the pulpit by the church leaders to educate the negative effects of small-scale mining on the environments and its attendant effects on human life can significantly contribute to the success of the galamsey fight.
3. Another interesting finding which was established from the study was that church leaders must begin to reject money people bring to support church projects if it comes from illegal small-scale mining.

### **Using the Islamic beliefs**

In using the Islamic belief as a tool to aid in the fight against galamsey;

1. It was also established in the study that one way to use the Islamic beliefs to support the fight against small-scale mining is for the leadership of the Muslim community to regularly highlight the numerous Qur'anic verses that speak against destruction of environment.
2. It was also identified in the study that Muslims meet in their mosques very often than any other religious group and this provide the leaders the opportunity to make use of naming and shaming strategy to support the fight.
3. It was observed that every true Muslim respect Prophet Mohammed and will do everything to abide by his teaching.

### **Challenges associated with the use of religious beliefs to support the fight against galamsey.**

In using religion as a tool to assist in the fight against the menace of galamsey;

Firstly, the study revealed that the use of religious beliefs to support the fight against illegal small-scale mining will be confronted with numerous legal battles. This is due to the fact that the enforcement of these religious beliefs cannot be backed by the laws of the land but can only be supported by moral suasion.

Secondly, it was also identified in the study that the approach of using the religious beliefs can though be useful there is a possibility that the religious leaders who are to championing this course of action can also get compromised.

Thirdly, the study further discovered that the approach can also lead to a situation whereby members in various religious grouping who prioritize money over religion can decide to leave the religious groups if they feel their source of livelihood is being threatened. This is so because membership of every religious organization is voluntary and one can decide to leave the group at any time if their interests are not being served.

### **5.4 Conclusions**

From the above, it is safe to conclude that, there are many ways by which religious beliefs can be used as a tool support the fight against small-scale mining in the Abuakwa North District in the Eastern region of Ghana.

However, the study also identified some challenges that must not be effective.

There challenges among others include;

Firstly, that the use of religious beliefs to support the fight against illegal small-scale mining will be confronted with numerous legal battles. This is due to the fact that the

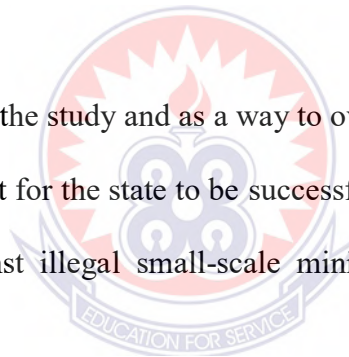
enforcement of these religious beliefs cannot be backed by the laws of the land but can only be supported by moral suasion.

Secondly, that the approach of using the religious beliefs can though be useful there is a possibility that the religious leaders who are to championing this course of action can also get compromised.

Thirdly, that the approach can also lead to a situation whereby members in various religious grouping who prioritize money over religion can decide to leave the religious groups if they feel their source of livelihood is being threatened. This is so because membership of every religious organization is voluntary and one can decide to leave the group at any time if their interests are not being served.

### **5.5 Recommendations**

Based on the findings of the study and as a way to overcome the identified challenges, it has been suggested that for the state to be successful in using the religious beliefs to assist in the fight against illegal small-scale mining, the study recommended the following;



It is recommended that the strategy is to use the religious beliefs to support the fight against illegal small-scale mining can only be effective if it is used in addition to the political measures such as legal prosecutions, use of task force made up of the security personnel and public education among others.

It is also recommended that religious leaders from the three religions must take the opportunities of their regular meetings to educate their believers to desist from the destruction of the land and the water bodies. They must also avoid the taking monies from galamseyers for their religious projects, and also adopt the strategy of naming and shaming of those who do galamsey in their gatherings. They must also suspend

members who indulge in illegal mining from worship and publicly reward those who protect the environment.

Moreso, it is recommended that, the strategy to use religion to fight illegal small-scale mining can be successful if the government can resource the Forestry Commission and the Environmental Protection Agency by employing more people, resource them with legal backing in order to work effectively to protect the land. They can visit the religious groups in their meetings and educate them on the dangers of illegal mining.

Furthermore, it is recommended that the use of religion to fight against illegal small-scale mining must be supported by the Ministry of Lands and Natural Resources coupled with the Ministry of Information to do intensive general public education to outline the dangers involved in the illegal mining to the water bodies, human beings and other living organisms.

#### **5.6 Recommendations for Further Research**

Since the study found out that, the religious beliefs can be used as a tool to support the fight against illegal small-scale mining, a further study should be conducted in similar communities in other district to investigate the use of religious beliefs as a tool to fight against illegal small-scale mining.

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## **APPENDIX**

### **INTERVIEW SCHEDULE FOR INTERVIEWEE**

#### **RELIGION AND THE FIGHT AGAINST ILLEGAL SMALL-SCALE**

#### **MINING IN GHANA: A CASE OF ABUAKWA NORTH DISTRICT**

#### **SECTION A-USEFULNESS OF TRADITIONAL BELIEF IN THE FIGHT**

#### **AGAINST ILLEGAL MINING**

##### **Introduction:**

The objective of this research work is to ascertain the various ways by which religious beliefs can be used to assist the fight against illegal small-scale mining in the Abuakwa North district specifically, to find out why political and legal measures have not been able to minimize or stop illegal small-scale mining (galamsey). The data being collected would be used purely for academic work and that, all information provided would be treated with strict confidentiality and anonymity. The questions pose no harm to the participants and would therefore be very grateful to respond objectively to the questions to make the study a success. Thank in advance for your cooperation.

1. To what extent does the traditional religion control the behavior of the people in this community?
2. Do you believe that, traditional religion can assist in the fight against illegal small-scale mining (galamsey) in this community?
3. In what ways can we use the traditional religion as a tool to support the fight against illegal small-scale mining (galamsey)?

**SECTION B-CHRISTIAN BELIEFS AID THE FIGHT AGAINST ILLEGAL SMALL-SCALE MINING**

4. To what extent does the Christianity as a religion control the behavior of the people in this community?
5. Do you believe that, Christianity can assist in the fight against illegal small-scale mining (galamsey) in this community?
6. In what ways can we use Christianity as a tool to support the fight against illegal small-scale mining (galamsey)?

**SECTION C-ISLAMIC BELIEFS IN THE FIGHT OF AGAINST ILLEGAL SMALL-SCALE MINING**

7. To what extent does the Islamic religion control the behavior of the people in this community?
8. Do you believe that, Islam as a religion can assist in the fight against illegal small-scale mining (galamsey) in this community?
9. In what ways can we use the Islamic religion as a tool to support the fight against illegal small-scale mining (galamsey)?

**SECTION D-CHALLENGES ASSOCIATED WITH THE USE OF RELIGIOUS BELIEFS IN THE FIGHT AGAIANST ILLEGAL SMALL-SCALE MINING**

10. What are the strengths of using Christianity / Islam / and Traditional religions to fight against illegal small-scale mining (galamsey)?
11. What will be the weakness of using religion to fight against illegal small- scale mining (galamsey)?