

# **THE EFFECT OF ACTIVITIES OF ILLEGAL MINING ON COCOA PRODUCTION AND ITS IMPACTS ON ECONOMIC DEVELOPMENT**

## **ABSTRACT**

Mining in tropical countries contributes significantly to the global minerals supplies but unregulated mining activities in reserved forests is associated with destruction, loss of habitats and loss of biodiversity. In recent times, several reports both from the electronic and print media had indicated that, arable land meant for farming activities within the cocoa growing areas has been taken over by the activities of illegal mining popularly known as “galamsey”. The main purpose of this study is to investigate the effects of the activities of illegal mining on cocoa production, what are the reasons why cocoa farmers opt to offer their lands to the illegal miners, what are the economic implications and many other things including environmental issues.

Illegal gold mining in Ghana further exacerbates a volatile cocoa market. In 2014, experts predicted a global cocoa shortage by 2020. “Galamsey” is regarded as the biggest threat to cocoa production. According to the Ghana COCOBOD, the crop generates about \$2 billion in foreign exchange annually for the country. The economic reward of cocoa production is enormous and cannot be ignored.

Using a case study approach, the research work will use interviews, observations and documentary sources to obtain data for the study. The case study will be carried out at Upper Denkyira East in Central region, Ghana.

The study reveals that, about 65 farms have been totally destroyed and some 53 other farms are at risk of being destroyed by the activities of illegal miners. Moreover, as some farmers are willing to offer their lands to illegal miners, some do that in situations beyond their control.

**Key words: Illegal mining, Galamsey, cocoa, economic development.**

## **INTRODUCTION**

Ghana has a 550 km long coastline and a total estimated land area of 23 884245 hectares. The country's population is currently predicted to be 33 766 217 with a 2.15% annual growth rate. It comprises 261 districts and 16 administrative regions. The nation is richly endowed with natural agriculture and mineral resources. With an employment rate of nearly 60% and a GDP contribution of roughly 30%, agriculture is the foundation of the economy.

Between 2006 and 2014, mining (including quarrying) contributed annually to the GDP at a rate of about 7.2% and employed a sizable share of the labor force (Gilbert and Albert, 2016). Despite the fact that mining is vital to the economy, small-scale, illicit gold mining has a negative impact on the nation's environment (land, water, and air), society (health, education), and economy (livelihoods, agriculture). There are currently more than 1000 registered small-scale firms in the industry, along with roughly thirteen (13) large-scale mining corporations and sixteen (16) operations.

Natural resources are crucial to the industrial and economic growth of the nation, but because they are finite and cannot be replenished, they can never be a sustainable replacement for agriculture.

## **COCOA PRODUCTION IN GHANA**

Ghana's economy has always centered on cocoa. The country started its twenty-year reign as the top exporter of cocoa soon after achieving independence in 1957. The combination of declining prices, political unrest, and drought, which began in the early 1980s, caused production to collapse. In 1983, raging bushfires decimated most of Ghana's cocoa production woods. The cocoa industry began to recover in the 1990s, and The rate of growth increased in the early 2000s as a result of increased usage of chemical fertilizers and pesticides (Hicks et al., 2022).

Cocoa provides resources for reducing poverty as well as food, money, employment, and industrial raw materials (Peprah, 2015). According to reports, Ghana is the world's second-largest cocoa producer (Boateng et al., 2014; Afele et al., 2021). Along with Côte d'Ivoire, it produced nearly 52% of the global total in 2016. About 800,000 cocoa households produce 75 percent of all the cocoa in Ghana (MaguireRajpaul et al., 2020). According to the Ghana Cocoa Board's 2018 report, seven regions—Ashanti, Bono Ahafo, Eastern, Volta, Western North, and Western Region—are currently the main producers of cocoa in Ghana.

## **ARTISANAL AND SMALL-SCALE MINING (ASM) IN GHANA**

In contrast to large-scale mining, according to the World Bank, ASM "is predominantly a distant rural areas of a country by a generally transient, illiterate population with little other employment possibilities" (World Bank n.d.). For many rural inhabitants in Ghana, ASM has recently become a sizable source of income. They frequently utilize mining to supplement or totally replace farming revenues (Jonsson and Fold, 2011: 480; Hilson and Garforth, 2012). Although ASM was formally prohibited in Ghana until 1989, it was nonetheless widely performed there. By establishing a registration and licensing process, the Small-Scale Gold Mining Law of 1989 (PNDCL 218) legalized small-scale mining and attempted to control it. This was then incorporated into the current Minerals and Mining Act of 2006 (Parliament of the Republic of Ghana, 2006). By means

of this formalization procedure, In some mining zones, artisanal miners were permitted to apply to the Minerals Commission for a concession of up to 25 acres, after which they may get a mining license.

For the past 20 years, tens of thousands of Chinese migrants have arrived in Ghana in the hopes of profiting from the massive mineral riches that lie beneath Ghana's lush forests. The growth in mining activity countrywide caused by the migration of these immigrants expanded the long-established industry of artisanal small-scale mining (ASM), commonly referred to as "galamsey" in Ghana, becoming a much larger, more disruptive industry with substantial impacts on water quality and forest ecosystems (Antwi, 2014; Boateng et al. 2014). The majority of these Chinese were involved in illicit mining, and the gold they extracted was not traceable. This has detrimental effects on Ghana's economy.

## **THE EFFECTS OF THE ACTIVITIES OF ILLEGAL MINING ON COCOA PRODUCTION**

Since the World Bank's Structural Adjustment Programme was implemented in Ghana in the middle of the 1980s, there has been a growing influx of international mining companies into the nation. This has increased the nation's mineral mining, which has benefited the economy (Owusu-Ansah and Smardon, 2015). With an average contribution of 6.63% from 2010 to 2017, the industry has been a significant contributor to both government revenues, including taxes, and GDP, according to the Ghana Statistical Service (GSS), 2018. Mining firms have also contributed to the development of roads, employment opportunities, clinics, and other social amenities in mining regions. Small-scale and artisanal mining provides people and groups with little financial resources with the chance to operate in the mining industry. Illegal mining, also referred to as "galamsey," is a substantial source of revenue for individuals lacking the appropriate tools (Boateng et al., 2014).

Galamsey, which literally translates to "collect and sell," has grown to be a significant issue in Ghana's mining regions. The problem has several negative effects on the environment, including water and air pollution, deforestation, and land degradation. It lowers cocoa yield and so adds to economic instability by harming the topsoil that fosters plant growth or a whole cocoa farm (Bach, 2014). As illicit mines expand, gold is smuggled out of Ghana (\$2.3 billion in 2016), and local land, particularly cocoa plantations, is purchased from farmers and turned into a mine, Ghana loses money (Boafo et al. 2019; Snapir et al. 2017).

Boateng et al. (2014) asserted that between 1 and 20 hectares of cocoa lands have been taken over by galamsey activities in numerous Ghanaian cocoa-producing districts, including the Upper Denkyira East District. Furthermore, according to Essabra-Mensah (2013), illegal miners raided between 1 and 2 million hectares of Ghanaian cocoa land. Additionally, the GDP contribution of cocoa has been trending downward over time. According to GSS (2018), the GDP contribution of cocoa decreased from 3.6% in 2011 to 1.8% in 2017. The rife mining activities in the nation have been partly blamed for the reduction in cocoa production and economic contribution.



*Figure 1 : Arable land lost to illegal mining. (Source: Internet, picture taken at Upper Denkyira East)*

## **METHODOLOGY**

### **Study Site Description**

One of the twenty-two Administrative Districts in the Central Region is the Upper Denkyira East Municipality. Prior to the northwest portion of the district being split off to create Upper Denkyira West District on February 29, 2008, it was a part of the then-larger Upper Denkyira District, which was formed from the former Denkyira District Council. The remaining portion of the district was renamed Upper Denkyira East District, and it was later elevated to municipal district assembly status on that same year to become Upper Denkyira East Municipal District. The municipality's capital city is Dunkwa-On-Offin, which is situated in Central Region's northwest.

It is located between latitudes 5° and 6°. Longitudes 1° and 2° west of the Greenwich Meridian and north of the equator. Its borders coincide with those of Adansi South, Assin District in the North, Twifo Hemang Lower Denkyira in the West, Upper Denkyira West District in the North-West, and Assin District in the East. 1020 square kilometers, or nearly 10% of the total land area of the Central Region, make up the Upper Denkyira East Municipality.

The Municipality's characteristics place it in the semi-equatorial zone. The hottest months of the year average 29° C, while the coolest months are around 24° C. Although there are two distinct rainfall patterns, the yearly mean rainfall ranges from 120 to 200 cm. The heaviest rain falls during the first rainy season, which lasts from May to June, and during the second rainy season, which lasts from September to Mid-November. From late November through early February is the primary dry season.

The semideciduous woodland zone is where the Upper Denkyira East Municipality is located. It has three strata, which are the same as in a rain forest. The trees in this forest zone are not all of the same species, nor do they all lose all of their leaves at once. Some trees in the top layer and

some trees in the lower layer remain evergreen all year. This is a result of the region's general moistness. Much of the original forest has been replaced by secondary woods as a result of the expanding mining operations in the region, particularly in the northern section of the Municipality. Many important timber species, including mahogany and wawa, can be found in the woodland.

### Data Collection

For the analysis in this study, secondary data were gathered. The researcher also collected some information from observation and documentaries. To gather information, semi-structured interviews were performed with both farmers and illegal miners.

### Result and Discussions

#### Galamsey Effects (Farms at Risk and Farms Destroyed)

Matured No. of Farms destroyed	Est. Area of Farms destroyed	No. of Farms at Risk	Est. Area of Farms at Risk	Total No. of Farms	Total Area of Farms
65	95	53	117.15	118	212.15

Source: Cocoa Health and Extension Division Annual Report 2021/2022

From the table above, we realized that a total of 65 farms were destroyed with the estimated land area destroyed being 95 hectares. This has great impact on the be cocoa beans production in the country and reduction in cocoa revenue generated. Moreover, there are about 53 number of farms being at risk to be for illegal mining activities with an estimated land area of 117.15 hectares. This shows that there more cocoa lands yet to be destroyed than those that have been destroyed. The danger of losing arable land for cocoa production must tacked with serious attention.

From the interview conducted on some cocoa farmers indicated that some of the farmers willingly sell out their lands to these illegal miners because of the juicy package they offer to the cocoa farmers. He said “this is our land and no one can use them for galamsey without our concern, it can happen elsewhere but not in Dunkwa”. However, some of the farmers indicates that, they give out their lands for galamsey when the cocoa farm is infected and they need to cut down all the cocoa trees and re-plant news ones. This will take time for them to generate income in order to be able to take care of their family members.

### Conclusion

Both gold mining and cocoa farming are critical to the nation's economic development. Yet, the production of cocoa will be impacted if unlawful mining practices are not controlled. It is necessary to take the appropriate steps to prevent the loss of arable land designated for cocoa production and much attention should also be given to cocoa farmers in order to demotivate the farmers who are willing to offer their farmlands for galamsey activities.

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