

# Movers, Motives, and Impact of Illegal Small-Scale Mining: A Case Study in Ghana

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## Abstract

This research unravels the agents and driving motivation behind the rise of illegal small-scale mining in Ghana and its impact. This is accomplished via a qualitative study using illegal small-scale mining in the Talensi and Nabdam districts of Ghana as a case study. At the forefront of this phenomenon are rent-seeking elites, whereas structural factors such as rising unemployment and high population growth, as well as opportunistic factors including low barriers to entry, get-rich quick syndrome, and political corruption/weak institutions are fueling it as well. Although there are some economic benefits of illegal small-scale mining, these benefits are undermined by factors associated with the Resource Curse Hypothesis (RCH) or the ‘Paradox of Plenty.’ We argue that most illegal small-scale mining communities are characterized by increased rent-seeking activities by diverse stakeholders particularly the elites, poor investments in human capital development, and weak institutional structures and processes. To sustainably address the illegal small-scale gold mining menace in Ghana, all efforts should be aimed at holistically dealing with the rent-seekers, especially the elites involved, eliminating their motives and removing the conditions that facilitate their involvement.

## Keywords

Africa – galamsey – Ghana – gold – illegal mining – resource curse

## 1 Introduction

Ideally, countries with significant natural endowments should be at the forefront of development. Contrary to that expectation, many countries and societies with abundant natural resources tend to be less developed. Thus, there have been several attempts over the past several decades to answer the critical question of why countries with abundant natural resources appear to be lagging in development. These attempts started particularly in the 1950s focusing on the possible adversities associated with mineral-based development triggered by deteriorating economic conditions (Prebisch 1950) because of the inability of political leaders of mineral-rich countries to implement forward-looking and sustainable development policies (Auty and Pontara 2008; Murshed and Serino 2011). This situation created dissatisfaction among citizens in countries with huge natural resource endowments. The consequences are that many citizens in those countries took their destinies into their hands by directly extracting the resources, especially gold, themselves using every means possible and tools available to them for direct benefit. The laying off/retrenchment of many trained miners following the Structural Adjustment Programmes (SAPs) introduced in the 1980s made the situation worse, as many of them resorted to small-scale extraction of these natural resources, particularly gold, giving rise to illegal mining activities. To accommodate the activities of these former miners, legal small-scale mining was introduced, but not everyone could acquire the legal license to be able to practice. This led to the emergence of illegal small-scale mining locally referred to as “galamsey,” derived from the phrase “gather them and sell” (Owusu-Nimo et al. 2018).

Galamsey is the unorthodox extraction of gold using unapproved methods and without authorization from regulatory institutions. The number of people working on a given galamsey site or pit varies, ranging from as few as two people to as many as thousands depending on the perceived level of deposits. Indeed, some galamsey sites become established communities permanently engaged in this illegal activity as long as they continue to find gold. The practice of galamsey is spreading at very alarming rates across Africa and Ghana in particular, with huge consequences on the ability of the country to guarantee the sustainability of its environment and water resources.

The benefits of small-scale mining in Ghana cannot be understated, but so are the long-term social and environmental costs. One of the key challenges to fighting galamsey is the difficulty in distinguishing between legal and illegal small-scale miners and their long-term impacts on the ecosystems and livelihoods. Thus, many Ghanaians and even policymakers largely see all small-scale mining activities as illegal. This may be why the moratorium on small-scale mining that started in 2017 by the government did not

distinguish between legal and illegal operators. Many are those who advocate for a total eradication of the subsector because of the seeming disregard of the mining laws and regulations (e.g., Minerals and Mining Act, 2006: Act 703). These laws and the variants thereof, appear not to be adhered to, thereby raising some fundamental concerns among stakeholders.

This article contributes to the discourse on illegal small-scale mining in Ghana by answering these three questions:

1. Who are those involved?
2. What motivates participation?
3. What is the impact of illegal small-scale mining?

Using the illegal mining communities in the Talensi and Nabdam Districts of the Upper East Region of Ghana as case studies, this article identifies powerful rent-seeking elites as the primary drivers of illegal small-scale mining, as well as structural and opportunistic factors behind the rise. Most research about the challenges of Africa's mineral extraction are based on greed, state failure, and neoliberal economic factors. Where the Resource Curse Hypothesis (RCH) has been used, it has disproportionately focused on the impact of macro-level mining. Thus, the novelty of this article lies in the use of the RCH to explain the rise and impact of micro-level mineral extraction (small-scale mining) in Ghana, specifically the Talensi and Nabdam districts.

The article, after this section, is organized as follows: literature review; conceptual and theoretical framework; methodology; identification of the movers, analyses of the motives and assessment of the impacts of illegal small-scale mining in Ghana; and the conclusion.

## 2 Literature Review

The works of Jeffrey Sachs and Andrew Warner in the 1990s demonstrate the inverse relationship between mineral endowments and long-term economic growth (Sachs and Warner 1995). Why countries with huge natural resource endowments lagging in development has been attributed to mismanagement, unfair exploitations, and weak institutional frameworks and arrangements that provide less benefits for the primary owners of the resources (for further details see Manzano and Rigobon 2001; Sarr et al. 2011). This has largely been described as the Resource Curse Hypothesis (RCH). Over the past two decades or so, there have been attempts to provide institutional explanations to the resource curse phenomenon. Most of those attempts looked at how mineral resources weaken pro-development institutions through rent-seeking and

corrupt activities (for further discussions see Bulte et al. 2005; Isham et al. 2005; Leite and Weidman 2002). These rent-seeking and corrupt activities are associated with a reduction in democratic accountability (Jensen and Wantchekon 2004; Ross 2001, 2009), encouraging violent conflict (Collier and Hoeffler 2005; Welsch 2008; Wick and Bulte 2006), and poor human development (Atkinson and Hamilton 2003; Bulte et al. 2005; Daniele 2011; Dietz et al. 2007).

There has been a gradual shift in the application of the RCH from the macro/country level to the meso/region and micro/community levels (Angrist and Kugler 2008; Bainton 2008; Banks 2007, 2009; Buccellato and Mickiewicz 2009; Gilberthorpe 2013, 2014; Golub 2007; Hilson 2006; Papyrakis and Raveh 2014; Shao and Qi 2009; Zhang et al. 2008). For example, Hilson (2010a, 2010b, 2010c, 2012), Hilson and Garforth (2012), and Hilson and Laing (2017) examined resource extraction and poverty levels in communities near small-scale mining areas in Ghana, Guyana, and sub-Saharan Africa generally within the context of the RCH. Macintyre (2003), in a micro-level study in Papua New Guinea, indicated that small-scale mining could lead to issues of inequalities. Studies on the cultural aspects of the resource curse show that indigenous populations, with little exposure to market transaction-based economies, may struggle with the idiosyncrasies that come with mineral extraction (Bainton 2008; Crook 2007). This is particularly so as there are always conflicts resulting in social dislocation and underdevelopment in mining communities (Arellano-Yanguas 2011; Watts 2001). It has also been argued that there is always the tendency for environmental degradation and social disruption in mining communities, which lead to long-term underdevelopment (Benson and Kirsch 2010; Gilberthorpe and Banks 2012).

In summary, there are different narratives on the issue of small-scale mining and its livelihood development potentials with some arguing that it creates employment opportunities for the populations in mining communities (Ghose and Roy 2007; Hilton et al. 2003). It is further argued that small-scale mining supports livelihood diversifications as a coping strategy against the increasingly unattractive agricultural sector where most rural people derive their livelihoods (Hilson and Garforth 2012). This is particularly so given the climate-change menace characterized by erratic rainfall patterns (Akudugu et al. 2012). Small-scale mining, thus, offers an alternative to farming (Akudugu et al. 2013; Aspinall 2001). For others, small-scale mining leads to economically and environmentally unsustainable livelihoods in affected communities (Ali 2009), creating irreversible damages (Aryee 2003). These lead to negative socio-economic and politico-cultural consequences on the livelihoods of inhabitants of mining communities (Akudugu et al. 2013; Sandoval 2001).

### 3 The Conceptual and Theoretical Framework

The article employs a holistic approach to unpack the complexities – push and pull factors – associated with motives and movers of illegal small-scale mining in Ghana, drawing from the Sustainable Livelihoods Framework (DfID 2001) and the RCH (Sachs and Warner 1995) to assess the impacts of the rise. The research argues that illegal small-scale mining creates vulnerability in mining communities as a result of destruction in some of the capital assets upon which people derive their means of living. The situation is exacerbated by weak transforming structures, institutions, and processes that translate into poor livelihood strategies and outcomes that reinforces the RCH (Havranek et al. 2016; Kurtz and Brooks 2011; Ross 2015; van der Ploeg 2011; Venables 2016; etc.). Thus, that the inability of state institutions to enforce laws that ensure that the extraction of these natural resources is to the advantage of the communities and local people could be viewed within the context of the RCH. This article therefore also draws from the hypothesis to examine if indeed, small-scale mining communities in Ghana are suffering from the RCH. The analysis in this article, within the context of the RCH, is done using the following key indicators:

- i. Misallocation of revenue derived from the exploitation of resources by governments (Costantini and Monni 2008a);
- ii. Increase in rent-seeking behavior (Mehlum et al. 2006; Vicente 2010);
- iii. The level of investment in human capital (Bravo-Ortega and de Gregorio 2005; Lay and Mahmoud 2004);
- iv. The level of institutional quality – the laws, individual rights and high-quality government regulations and services (Mehlum et al. 2006; van der Ploeg 2011);
- v. The level of Human Development Indicators (Costantini and Monni 2008a, 2008b).

### 4 Methodology

The study was conducted in the Talensi and Nabdam Districts of the Upper East Region of Ghana. The choice of these districts was because of the high concentrations of small-scale miners there. The study employed a mixed qualitative case study design and data collection by means of Key Informant Interviews (KIIs), individual in-depth interviews, and Focus Group Discussions (FGDs).

According to Mason (2006:10) the “‘qualitatively driven’ approach to mixing methods offers enormous potential for generating new ways of understanding the complexities and contexts of social experience, and for enhancing our

capacities for social explanation and generalization.” Participants for the KIIs were selected via a snowball process due to the sensitivity of the topic and the hesitance of potential interviewees to partake in the study. FGD participants were people directly or indirectly involved in small-scale mining and so were purposively selected for the study because of their expertise.

The data were collected from November to December 2018. The KIIs were with the relevant institutional and community stakeholders such as local policemen, politicians and assemblymen, traditional chiefs, staff of the Environmental Protection Agency and Ghana Immigration Service, and also illegal miners. FGDs were with community members and representatives of local NGOs and community opinion leaders. Individual interviews were then used to gather in-depth life stories of miners and non-miners regarding the short-, medium-, and long-term impacts of mining on their livelihoods. Due to the sensitivity of the topic, all participants were assured anonymity except those who wanted otherwise.

In all, sixty people were interviewed or consulted for this research. This was complemented by primary data from Ghana government, international organizations, and think-tanks as well as references to similar studies and media reports about illegal small-scale mining in Ghana.

## 5 Results and Discussion

### 5.1 *Who Are Those Involved in Galamsey?*

Galamsey in Ghana attracts millions of people from diverse socio-economic backgrounds. Although the government indicates that there are about 200,000 people engaged in galamsey, the figure could be as high as three million according to experts (Burrows and Bird 2017). Fully represented in these figures are the number of people engaged in galamsey in the Talensi and Nabdam Districts of the Upper East Region of Ghana. In some towns such as Nangodi and Salig in the Nabdam District, about half of the youth are engaged in galamsey. A similar pattern of engagement was also observed in the course of this research in Gbani and Datuko towns of the Talensi District. Past research by Hilson (2008:8) in the District puts the number of galamsey miners at 10,000, although this number was expected to have increased over the years and currently ebbed as a result of the on-going crackdown, which started January 2017 as a way of giving government enough time to figure out how to deal with the menace.

At the top of the supply chain of galamsey are politicians, chiefs, local government bureaucrats, and foreigners such as the Chinese and citizens of neighboring countries who mostly provide the resources needed to facilitate

the business. The privileged individuals are able to acquire land for prospecting, in some cases secure or procure mining licenses, supply mining implements, and recruit labor, as well as buy protection from local law enforcement authorities and politicians. Buttressing this point, a local galamsey miner in one of the study communities posits,

Some politicians are also direct financial beneficiaries; they sponsor some of the ‘galamsey’ operators with tools and finance and in turn get a percentage in the gold derived. Some politicians even employ some of these ‘Galamsey’ operators and obtain concession for them to operate.

A 2017 Bureau of National Investigations (BNI) report about the state of galamsey in Ghana corroborates the aforementioned observations about the studied districts. For example, the report named the opposition National Democratic Congress (NDC) Member of Parliament for Talensi, Benson Tongo Baba, and a major financier of the ruling New Patriotic Party (NPP), Bunyak Kolog, as major galamsey kingpins in the district. The report indicated that the activities of the two are aided and abetted by an official of the *Precious Minerals Marketing Company (PMMC)*'s Office in the regional capital (Brako-Powers 2017).

The BNI report also cited the complicity and involvement of some prominent Chiefs in Ghana including Okyenhene Osagyefuo Amoatia Ofori Panin II, the Chief of Kibi (one of the most negatively affected towns by galamsey in Ghana). Many of these chiefs are not directly involved in galamsey per se, but encourage it because of the financial returns of their rent-seeking ways. This is evidenced by the perception of residents of Kibi that an Environmental Protection Task Force constituted by the Chief (Okyenhene) of the town was just a disguised rent-seeking apparatus (Brako-Powers 2017). Miners in the studied communities echoed this perception of rent-seeking among chiefs, noting that chiefs in their communities had committees that go around to collect taxes for the purpose of community development. Thus, it is important to note that galamsey is carried out in “collaboration with some Ghanaians of all educational, social and political backgrounds” (Multilateral Mining Integrated Project, 2017:9).

## 5.2 *Factors Contributing to the Rise of Illegal Small-Scale Mining in Ghana*

Factors fueling the rise of galamsey in Ghana can be categorized under structural factors such as rising unemployment, high population growth, and poor agricultural production, as well as opportunistic factors such as ease of entry, get-rich quick syndrome, and political corruption/weak institutions.

### 5.2.1 Rising Unemployment

The extraction of natural resources in an area should naturally create employment opportunities for the people. This is only possible if there is a pool of people with the requisite knowledge and skills in the extraction of the resources. Unfortunately, low level of investment in human capital in those communities means that citizens lack the requisite qualifications and skill-sets to be actively involved in the extraction of those resources in order to benefit, and this leads us to the RCH (Bravo-Ortega and de Gregorio 2005; Lay and Mahmoud 2004). The low level of human development dimensions (Costantini and Monni 2008a, 2008b) reinforces the phenomenon of rising unemployment in the studied communities, a characteristic of RCH. Thus, the high rate of youth unemployment in the study districts and elsewhere in Ghana has pushed many of them to take up galamsey as their source of livelihood. According to a 2016 World Bank report, 48 percent of Ghana's youth aged between 12 and 24 years are unemployed (Allotey and Mensah 2016). At Gbani, most of the respondents and people seen engaged in galamsey could be classified in this category. Even unemployed university graduates were seen engaging in galamsey activities due to the lack of suitable employment. These findings are consistent with global trends indicating that about 13 million people are directly engaged in galamsey worldwide (Addah 2014), while about 100 million people are indirectly engaged in galamsey globally (Addah 2014; CASM 2009, cited in Ingram et al. 2011).

### 5.2.2 High Population Growth

According to Ghana's National Population Council (NPC), the country's annual population growth rate of 2.5 percent compared to the 1.5 percent global average is alarming and poses a developmental challenge, which requires urgent governmental action (GhanaWeb 2017). At the micro-level, Ghana's 2010 Census report indicated that the Talensi District had a fertility rate of 3.6 births per woman, which was higher than both the regional rate of 3.4 and the national rate of 3.3 (Ghana Statistical Service 2014). High population and birth rates are likely to compound the unemployment rate in the country as more young people joining an anemic job market are bound to be unemployed and thus enticed into galamsey for a livelihood as it is the case in the mining towns of the Talensi and Nabdam Districts. In addition, as the country's population keeps increasing, people would have to find ways and means to survive, as the agriculture sector continues to be plagued with several challenges rendering it increasingly unattractive to the youth.

Furthermore, a high population growth rate coupled with poor access to education is likely to create a large pool of unskilled labor likely to be attracted



by a low-skilled economic venture such as *galamsey*, which also offers higher and quicker financial returns. This adversely affects the level of human development dimensions (Costantini and Monni 2008a, 2008b) in the districts resulting in poor ability to benefit from the extraction of the resources, thereby trapping them in the resource curse.

### 5.2.3 Poor Agricultural Production

The studied communities are characterized by degraded agricultural lands due to arid conditions and increasing negative effects of climate change and poor land usage. According to Owusu (2009:12), “land degradation poses a serious threat to the natural resources, agriculture, and the entire livelihood support system of the savannah regions, northern and southern Ghana, and more importantly, to the Sahel-Sudan savannah transitional zone of the Upper East Region (UER).” The *galamsey* communities in the Talensi and Nabdam Districts fall within the savannah belt of Ghana where the weather and land are increasingly becoming unsuitable for agricultural activities due to increased desertification as a result of climate change. In addition, most farmers in Gbani and Datuko are dependent on erratic rainfall patterns for agricultural activities where they cultivate their farms in the short raining season, but are idle in the dry season. The situation has been aggravated by the lack of policy intervention by successive governments to promote holistic human development (Costantini and Monni 2008a, 2008b).

### 5.2.4 Low Barriers to Entry

There is ease of entry into *galamsey* operations in the study districts coupled with the low cost of start-up. A visit to mining sites in the Talensi and Nabdam Districts revealed miners using a variety of cheap and crude implements such as axes, pick axes, head pans, spades, sieves, etc. This is because of the ease associated with extracting alluvial deposits such as gold and diamond. Indeed, the ease of exploitation of gold remains a major attraction to illegal miners in many places around the world where small-scale gold mining is prevalent. Hence, scholars such as Le Billion (2001), Snyder (2003), and Ross (2004), as well as Snyder and Bhavnani (2005) have categorized mineral resources such as diamond and gold as ‘lootable resources’ because of their high market values and ease of entry. Exploitation of these lootable resources often attracts rebels and the masses of unemployed young men (Le Billion 2001). Buttressing this point, Tieguhong et al. (2009) have observed that the ease of entry includes minimal start-up time and capital, low-level mechanization, abundance of low-skilled labor, and the ability to attract workers while simultaneously engaged

in other economic activities. These promote rent-seeking behaviors among influential members of mining communities (Mehlum et al. 2006; Vicente 2010). This ultimately results in few people benefiting disproportionately from the mineral wealth at the expense of the masses, thereby reinforcing the RCH.

#### 5.2.5 Get-Rich-Quick Syndrome

The desire to get 'quick money' is a major source of gamamsey attraction. The get-rich mentality among respondents was very high as many admitted to shifting from other sources of livelihoods or professions into gamamsey in order to make more money within the shortest possible time. Whether it was the teacher, carpenter, or the school boy who was engaged in gamamsey, the motivation was the same. Further heightening the get-rich-quick syndrome is the "relatively high gold price, which makes gold deposits economic for illegal small-scale miners" and the fact that "illegal mining appears to be more lucrative than other small-scale poverty-alleviation ventures" (MLNR 2017:9). The few with financial muscles therefore engage in rent seeking (Mehlum et al. 2006; Vicente 2010) by using the desperate and vulnerable populace to engage in illegal mining, a populace who in return gets very low rewards, and this perpetually keeps them trapped in the vicious cycle of poverty.

#### 5.2.6 Political Corruption/Weak Institutions

Although gamamsey is illegal under Ghana's laws, non-enforcement of the law, coupled with the lure of quick money has emboldened and attracted a number of people into the activity. Respondents throughout interviews accused law enforcement officers, politicians, chiefs, and officials of mineral resources regulatory bodies of compromising their authority in aid of gamamsey. There was a pervasive belief among respondents that all layers of the mining regulatory structure from the politicians, regulators, and law enforcement to local chiefs could be bought off. According to an informant at the Ministry of Lands and Natural Resources, "the Chiefs are culpable, the Assemblies are culpable, some MPs are culpable, some ministers are culpable. This is how bad it is".

Hence, the absence of an effective legal deterrence regime has led to impunity in most mining communities including those in the Talensi-Nabdam area, which has bolstered gamamsey. In addition, many communities where alluvial deposits have been discovered view the resource as a community resource worthy of casual communal extraction just as they utilize lands for farming or water bodies for drinking or for their animals. For them, mining was akin to another mode of earning a livelihood from the land just as they do with farming. Thus, the level of institutional quality (Mehlum et al. 2006; van

der Ploeg 2011) in the studied communities is such that inhabitants of those communities will never benefit adequately and sustainably from the mineral deposits. This lends credence to the argument that mining communities in the studied districts are suffering from the RCH.

### 5.3 *Impacts of Galamsey*

#### 5.3.1 Decreased Government Revenue

The contribution of small-scale mining towards the economies of countries where it has been formalized and regularized is very significant and is well documented (e.g., Akudugu et al. 2013). However, the contribution of the sector is undermined by the low level of institutional quality (Mehlum et al. 2006; van der Ploeg 2011) leading to leakages and loss of revenue. Governments expect increased revenues in the form of taxes from the mining activities in addition to increased foreign exchange from exports. In the case of Ghana, the total gold production by small-scale mining increased from 2.2 percent in 1989 to 31.0 percent of the total national production in 2016 (MLNR 2017). However, expected increases in tax revenues have been elusive, as it remains difficult for the government to adequately capture all those engaged in small-scale mining, including galamsey, into the tax net. This is due primarily to the poor level of institutional quality (Mehlum et al. 2006; van der Ploeg 2011).

Thus, state institutions mandated by law to collect the appropriate taxes from operators in the small-scale mining sector appear incapable of doing so. Tax evasion is therefore a common phenomenon in the sector. In addition, while the goal of the government's regularization of small-scale mining was meant to encourage more Ghanaian participation in the sector, the policy is being undermined by the activities of foreign-backed multinational companies and smaller mining firms who dominate the gold mining sector (MLNR 2017:9). This was evidenced in Gbani in the Talensi District where the most dominant actor in gold mining is Shaanxi *Mining* Ghana Limited, a Chinese company fronted by some Ghanaians.

#### 5.3.2 Employment Impacts

Galamsey is a major source of employment and livelihood for many of the youth in the mining areas and beyond. This was evident during visits to mining communities in the Talensi and Nabdam Districts where respondents suggested that galamsey has either replaced farming or is fast becoming the biggest employer among the youth between the ages of 15 and 24. In Ghana, the Minister of Information estimated that 200,000 to three million people were engaged in galamsey in 2017 (Burrows and Bird 2017).

The ability of small-scale mining to generate the appropriate employment is hampered by low human capital development in mining communities

because of low investments (Bravo-Ortega and de Gregorio 2005; Lay and Mahmoud 2004). Thus, many inhabitants of the studied communities lack the requisite skills to gain meaningful employment with mining companies. The situation is exacerbated by low institutional quality (Mehlum et al. 2006; van der Ploeg 2011), as institutions mandated to enforce the mining law that reserve small-scale mining for citizens appear to be incapable of doing so. Besides, employment generated by galamsey is expected to enhance human capital development in the mining communities via the transfer of meaningful new skills, but that does not seem to be happening, as very few locals are involved in high-level management of organized mining. Thus, there is a low level of human development (Costantini and Monni 2008a, 2008b) in mining communities thereby affecting the employment potentials of people in such communities. In fact, the working conditions of small-scale miners are extremely harsh and thus inimical to holistic human development such as health and education.

### 5.3.3 Development Impacts

Galamsey increases economic activities in communities where it is prevalent, as was observed both in Gbani, and Nangodi. These economic activities include the sale of provisions, cooked foods, drinkable sachet water, and medical supplies. Galamsey in Gbani has even created a mini-real estate boom in the context of a rural community, thereby boosting the livelihood of the community, which was hitherto agrarian. As economic activities have boomed, so has Gbani thrived economically. Respondents expressed their amazement about the transformation of Gbani from a typical rural hamlet into a bustling mining town in less than ten years following the discovering of gold.

The level of Human Development Dimensions (Costantini and Monni 2008a, 2008b) is critical for economic development. However, galamsey adversely affects all the dimensions of human development in several ways. First, because galamsey is solely dependent on finite gold deposits it is not a sustainable avenue for long-term economic development. Second, there are doubts about the sustainability of increased economic activities in galamsey communities because it is dependent on mostly migrant laborers whose movements are very volatile. This volatility was evident in the studied communities where the ongoing government anti-galamsey crackdown has led to a lull in mining, as well as allied economic activities.

### 5.3.4 Environmental Impacts

A major environmental livelihood impact of galamsey is its negative impact on land usage for food crops. According to research findings by Rutger De Wolf, a senior consultant with Form International (Netherlands) titled 'Feasibility

Study for Restoration Project' the high concentration of mercury and arsenic chemicals in the soils of former galamsey sites render such sites unsuitable for food production for over a decade. The research recommends that the government should only permit such sites for non-food crops while immediately banning the use of such sites for food crops until a successful land restoration program (Ansah 2017). All these environmental challenges are prevalent in galamsey sites in the Talensi-Nabdam area, which are bound to have devastating short- and long-term livelihood impacts on the community.

Furthermore, small-scale, gold-mining activity also causes significant damage to landscapes. More specifically, as a migratory industry, small-scale gold mining has been responsible for the removal of vast quantities of surface vegetation and mass deforestation. Furthermore, miners typically abandon pits and trenches without properly reclaiming spoils. It is therefore quite common to find, following periods of intensive prospecting, landscapes scarred with potholes and virtually devoid of vegetative cover.

Furthermore, the environmental damage caused by galamsey is so severe and daunting that it will require enormous cost to clean up. According to Professor Frimpong Boateng, Ghana's Minister of Environment, Science, Technology and Innovation, Ghana needs US\$650 billion in order to clean up the environment by restoring degraded lands and forests, as well as polluted rivers. The Minister observed that such a Herculean task will take sixteen consecutive years to undertake even if funding were to be secured (Peacefmonline 2018.). This is an unrealistic and unattainable objective that shows the long-term damage of galamsey on the environment. All these negatively affect all dimensions of human development (Costantini and Monni 2008a, 2008b).

### 5.3.5 Social Impacts

The Talensi-Nabdam area has one of the highest school dropout rates in Ghana. While there are many contributory factors, a major factor is the prevalence of galamsey in the area, which continues to attract and distract young people of school-going age. This situation has led to a decline in educational performance among young people in the area. Buttressing this point, the District Chief Executive of the area Dr. Christopher Boatbil Sormiteyema has pointed out that less than 50 percent of (middle) junior high school pupils qualify for admission into senior high schools mainly because of the attractiveness of galamsey (Kale-Dery 2017).

Related to the high school dropout rates is the twin challenge of high teenage pregnancy rates in the district. The Talensi and Nabdam Districts fall within the Upper East Region, which is ranked as having the highest rate of teenage

pregnancy in Ghana. According to 2016 figures, the Region experienced 5,587 cases of adolescent pregnancies representing 15.4 percent of all teenage pregnancies in Ghana. In addition, about 2.1 percent of these pregnancies occurred among adolescents between the ages of 10 and 19 years, making the Region the highest in teenage pregnancy. This represents an increase from the 5,518 and 5,564 adolescent pregnancy cases recorded in 2014 and 2015 respectively (Awuni 2017). Furthermore, the Talensi and Nabdam District Assemblies and the Ghana Education Service reported that a total of 54 students who sat for the Basic Education Certificate Examination were pregnant during the 2014/2015 academic year (Tanko 2016).

Although available research on the causes of this troubling social problem have often identified socio-cultural factors and the lack of education for this problem, the study respondents also blamed the presence of the high number of male migrant miners engaged in *galamsey* in the area. Many of the illegal miners are migrants from other regions of the country and in some cases foreign countries who move into the mining areas without their partners. This dovetails with findings by Good Governance Africa in three mining communities in the Ashanti Region of Ghana, which also discovered that teenage pregnancy was high because illegal miners used their earnings to lure young girls into sexual activities (Amoah 2017).

Another social ill that was often cited by respondents was the high crime rate in mining communities. This has altered the social dynamics in a once very small communal community with high social capital. Many respondents attributed the diminished social capital to the loss of communal spirit due to the influx of non-locals and foreigners who capitalize on the loss of anonymity in the community to engage in illicit activities to the detriment of the welfare of the community. Citing police reports, Burrows and Bird (2017) point out that there is a high level of crime such as armed robbery in mining areas often with guns bought by illegal miners to safeguard their mining activities. In addition, there is high drug usage among illegal miners who seek a mental as well as a physical boost from its use in order to withstand the physical demands of *galamsey*. The trafficking and use of illegal drugs can trigger a crime spiral whereby the proceeds from the sale can be funneled overseas via money laundering (Burrows and Bird 2017).

Furthermore, child labor is a major problem associated with *galamsey*. For over a decade, the Upper East Region where the Talensi-Nabdam area is located has been identified as the location with the highest concentration of child labor in Ghana with about 53.5 percent of the children active in the labor force (Hilson 2010a: 459). A visit to mining sites in Gbani and Nangode clearly

shows children engaged in mining activities with adults. According to Hilson (2010a:458), no single theory can explain the surge in child labor in gold mining camps in Talensi-Nabdam in recent years. This phenomenon could be part of a growing diversification of livelihoods taking place in the Upper East Region. Nevertheless, 'the situation in Talensi-Nabdam's mining camps supports the poverty – child labor thesis: that family hardship is indeed driving children to pursue work in the district's mining camps' (Ibid: 459).

### 5.3.6 Economic Impacts

The major reason why the government of Ghana legalized small-scale mining was to boost gold production and the attendant foreign exchange that its export will derive. The Precious Minerals Marketing Company (PMMC) is the regulatory authority mandated by law to oversee the exports of gold derived from small-scale mining and to ensure that 80 percent of the proceeds are repatriated to Ghana (Adogla-Bessa 2017). However, recent evidence shows that this goal is seriously being undermined because much of the gold accrued from illegal small-scale mining is not accounted for in official channels, but smuggled abroad. According Professor Frimpong Boateng, Ghana's Minister of Environment, Science, Technology and Innovation, about US\$30 billion worth of illegally mined gold is smuggled out of Ghana annually, while the country goes out to borrow US\$200 million dollars for development projects (GhanaWeb 2018). This evidence was further buttressed by a revelation by President Nana Akufo-Addo "that although the United Arab Emirates (UAE) recorded US\$7 billion worth of gold imports from Ghana, official records (in Ghana) report only US\$2 billion in exports of the precious metal to the Gulf country" (MyJoyOnline 2018). This illegality prompted the Bank of Ghana in 2017 to suspend the PMMC from shipping gold outside the country until a further review of its activities by law enforcement.

Burrows and Bird (2017) blame a lacuna in the regulatory framework of gold sales, which does not mandate gold dealers to attest that their gold is legally mined as a major contributory factor for low accruals. Thus, licensed gold dealers are able to buy and sell gold irrespective of its origin. The loss of billions of dollars in potential gold revenue denies the government the much-needed financial resources required for the improvement of the livelihoods of the average Ghanaian.

According to respondents from The Association of Church-based Development NGOs (ACDEP), the Talensi-Nabdam youth have now drifted towards mining, and this has led to the loss of farmlands, which has drastically affected agricultural activities. This conforms to a nationwide pattern whereby some

cocoa farmers in the south are converting their lands into mining as a result of the high short-term yields from mining. It is therefore not surprising that some farmers in the Talensi-Nabdam area have converted their low-yield agricultural lands into galamsey sites. As an ACDEP respondent observed about Talensi and Nabdam,

... many farmers in the districts have left farming and have gone into mining because they think that is where they can make ready cash. Part of the Talensi and Nabdam Districts are being used for illegal mining. This has destroyed a lot of very useful lands that would have been used for agricultural production.

Furthermore, respondents from ACDEP lamented the fact that Nabdam and Talensi used to be very good agricultural areas in the region, but in recent years these areas have drastically dropped in agriculture production because of the galamsey activities taking place there. The youth who were primary drivers of agricultural activities in these communities have now joined galamsey activities in their quest for quick money, leaving mostly the aged to work on the farms. This will ultimately decrease the quality of lives of farmers as well as consumers.

## 6 Conclusions

In spite of the positive contributions of small-scale mining to the socio-economic and politico-cultural development of Ghanaian mining communities, it could also be a waste of their vast human and natural resource base for sustainable livelihood development. Inhabitants of mining communities abandon farming and other sustainable livelihood activities for illegal mining.

Corrupt public officials mostly misallocate revenues generated from these illegal mining activities. There are high levels of rent-seeking behaviors in mining communities that put resources beyond the reach of the poor with low investments in human capital, as parents allow their children to engage in illegal mining instead of attending school or engaging in skills-acquisition activities. There is poor institutional quality in mining communities, as state institutions mandated to ensure proper enforcement of the mining laws of Ghana appear incapable.

There are generally low levels of human development in mining communities, largely due to the hazardous activities of illegal miners. The livelihoods



capital base of inhabitants of these communities are exploited and depleted beyond their carrying capacities. All the above could compromise the ability of the country to achieve the Sustainable Development Goals (SDGs). This is because the long-term negative impacts of small-scale illegal mining far outweigh the positive impacts. It is concluded that the gold deposits in mining communities are more of a curse to them than a blessing. Any attempts to deal with illegal small-scale gold mining in Ghana must eliminate the rent-seeking opportunities for the elites, as well as the structural and opportunistic factors that facilitate the phenomenon.

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