

The Political Economy of Illegal Mining in Nigeria: The Case of Bukkuyum Local Government Area of Zamfara State

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Abstract

The paper examined the political economy of illegal mining in Nigeria with particular reference to Zamfara State. Illegal mining activity is a growing socio-economic challenge in Zamfara state especially in Bukkuyum Local Government Area. This activity has led to loss of ecosystems and increased poverty level especially among peasant farmers who depend solely on environmental resources for a living. Theoretically, it is anchored on Political Economy Theory while methodologically; the paper utilizes both primary and secondary methods of data collection. Primary method on one hand, involves generating data via Structured Questionnaire (SQ) administered to target respondents selected through multi-stage sampling procedure. 400 respondents formed the sample size determined through Yamani (1967) statistical formula for sample size determination. While the secondary method on the other hand entails that data were generated from books, journals and web-based materials among others. The paper revealed that illegal gold mining activities lead to increase in revenue generation of Bukkuyum Local Government Area thereby improving the living conditions of the people. The study concludes that illegal mining sector is seen in Bukkuyum local government to be one of the major economic ventures in which people who are unemployed engage in to generate income which they use to cater for themselves and their families. The study recommends among others, the establishment of Gold mining companies with modern equipment and technology most especially in places where illegal mining activities are taking place to avoid its negative public health outcomes and attendant environmental hazard.

Keywords: Economy, Gold, Mining, Legal, Economic Interest.

Introduction

Political economy was developed in the 18th century as a tool to study the interplay between politics, economy and society. This is why Maier (2008) asserts that the political economy method questions economic doctrines to reveal their underlying social and political assumptions. Similarly, Bohon (2003) asserted that political economy is generally concerned with the production and distribution of goods and services. It specifically highlights the social

context in which economic output and resource allocation occur in a society. Thus, the social context analysis is concerned with how the resources produced are distributed among the people in the society. To finance and develop their civilizations, nations like Australia, Canada, Russia, India, Saudi Arabia, and Botswana have relied on their mineral resources. For instance, Canada profited from mineral exports, bringing in up to C\$97.7 billion in just 2017 alone (NRCAN, 2018). Nigeria, Botswana, Angola, South Africa, and Liberia are all considered mineral economies since they each have extractive industries that are developed and reliable enough to provide income for social and economic growth (Solomon, 2000).

Nigeria is blessed with huge natural resources, both in hydrocarbons and in solid minerals. She has large reserves of crude oil, natural gas, coal, iron ore, tin, limestone, niobium, zinc, and gold. Most often, it is plagued by a high level of illegal mining activities across the country. For example, Nigeria has large deposits of gold in most of the States in Northern region of the country. The gold deposits in Nigeria are more prominently found in Anka, Maru, Gurmana, Binnin Yauri, Tsohon Birnin Gwari-Kwaga, Okolom-Dogondaji in Zamfara State, and also near Iperindo in Osun State. Historically, Gold mining began in Nigeria in 1913 and reached its peak in the 1930s. When the Second World War began, there was a decline in gold mining because the mines were abandoned by the colonial companies such as Royal Niger Company which later changed to Champion (Nigeria) and Tin Field Company (Ayo and Abejide, 2014).

In response, the Nigeria Mining Corporation (NMC) was established early 1980s to explore gold and other solid minerals. However, the NMC could not achieve much in gold mining operations due to poor funding and the concentration on oil production by the government. The indifferent attitude of the Nigeria government towards mining of solid materials remains a major obstacle to a large scale mining of Gold in Nigeria, since independence. The neglect of the mining industry by the government fueled high level of illegal mining in Zamfara State and other parts of the country¹. The illegal mining of gold in Nigeria is usually carried out mostly by local artisans, illegal mine traders from neighboring countries and some South Asian countries, especially China¹. These illegal mining of gold have remained unchecked by the government for several years (Johnson, 2017)

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According to Auwal (2012:4), "a combination of limited laws and bad law enforcement has forced the mining sector to be mostly informal, which is partly accounted for by much of it being outside of regulatory framework. For the nation, this has significant social and economic repercussions. There are three obvious problems. First, as they are conducted without respect to sustainability and environmental protection laws, unregulated mining activities exacerbate environmental damage. Second, governments lose money as a result of unlawful mining. The federal government was said to have lost nearly \$100 million in 2009 to illicit mining, and the Minister of Steel and Solid Minerals said that over 2300 mining licenses had been granted without the approval of the supervising minister (Auwal, 2012). This money may have been used to solve issues in the neighborhood. Third, unregulated mining puts local residents' health at risk. One of the worst instances of this occurred in Zamfara State in 2018 with a lead poisoning case. In April 2010, there were reports of the deaths of approximately 162 children from two communities in Zamfara State's Bukkuyum Local Government Area, Daretu and Giadanbuzu. According to a laboratory examination, they were poisoned with lead and perished. Later research revealed that locals were mining gold, which they brought back to their homes and processed there (Auwal, 2012). The economy, public health, and overall well-being continue to be threatened by the extent of illegal gold mining in Nigeria.

Studies by Johnson (2017), Auwal (2012), Bohon (2003), and Ayo and Abejide (2014) focused on the cost and benefits of illegal mining with little or no emphasis on the interplay between politics and economy. This paper seeks to fill the gap using Bukkuyum Local Government Area of Zamfara State as a case study. Zamfara State is one of the States in the North West zone of the federation which has large deposit of solid natural resources. In spite of these huge and abundant resources available in the State, majority of her population still live in abject poverty². Olaniran, (2017) contends that Zamfara has the highest rate (91.9%) of Poverty in the federation. However, Zamfara State does not have any recognized industry to harness the gold natural resources. This led to the illegal mining of gold in the State in some local government areas such as Anka, Bukkuyum, Birni Magaji, Maru, Kaura–Namoda, and Tsafe. It is within this background that this study examines political and economic issues regarding illegal mining of Gold in Bukkuyum Local Government Area of Zamfara State. The paper is discussed under various sub-heads for better understanding.

² Umar Sani, age 45, Interview , Gusau , May, 2022-11-21

Conceptual Clarification

This section of the paper deals with the conceptualization of the basic concepts interrogated in this study. Such concepts include Political Economy, Gold and illegal mining.

Political Economy

The relationship between the economy and the state, as well as the numerous ways that people attempt to use the state to improve their economic welfare, are the subjects of political economy. This viewpoint's main tenet holds that the way things are produced in the material world affects how people live their social, political, and spiritual lives in general (Anifowose, 2008). The method of production and the relations of production are emphasized as being of utmost significance as a significant incidental component in all social phenomena in political economy (Onimode, 1985:27).

Youngman (2000:3) asserts that political economy purposefully shifts the focus of inquiry away from human decision-making and behavior and toward an examination of the structural and historical background of individual activity. Several fundamental principles are included in the political economy. First, the mode of production and its class relations have shaped the historical and structural environment in which social phenomena exist. Second, each scenario calls for a detailed analysis into the way and degree to which the economic base influences different facets of society. Political economy is a branch of social science that examines how people and society interact in terms of how people are tied to the wealth of society. The two layers of this relationship—between the people and the state and between the market and the state—are typically observed. Politics and sociology are heavily cited in its technique (Aina, 2003:26).

Abdullahi (2012) sees political economy as the study of economic system, factors in the public policy and related matters. In other words, political economy refers to a way of studying and understanding social and political phenomena as well as the relationship between economic and politics in human society. Political economy entails the economic growth and development of every human's social formation, and whether the society is developing or not. The concept of political economy hold on to the analysis of human development and fact, human being as they relate to production, distribution, exchange and consumption of the basic necessity for human life and human society.

The primary issue of industrial capitalism, which continues to structure the political and economic conundrum of contemporary society is addressed in the classic texts of political economics, according to Foley (1999:9). In other words, Foley (1999) makes reference to the political and economic interplays in the nature of the major difficulties facing modern society—the political economy nature of these problems. A "great unified theory" of political economy is therefore impossible due to the complexity of human social interaction and the difficulties we have in confronting our own social life objectively. Accordingly, each of the competing theories of political economy accounts for a portion of the truth, but each has its own drawbacks (Foley, 1999). According to the aforementioned perspectives, political economics basically refers to the interaction between politics and the economy, which is yet another important comparative politics topic. This study's conception of political economy leans toward the Dode (2012). Political economy is thus, a theoretical framework for social science research in this area. It examines how politics affects the economy and outlines the results of these interactions.

Gold

Chemically speaking, gold is the most malleable and ductile metal known and is a dense, soft, lustrous metal. (Spall, 2009). Gold's value had already been realized in antiquity. Gold was used to manufacture jewelry and money. It stands for richness, beauty, and tradition while also representing cultures and memories. But in addition to these, gold also significantly advances a wide range of technology. Gold is used in nanoparticle technology, medicine, and space exploration due to its physical properties of being corrosion resistant, highly malleable, and ductile. Additionally, it serves as the bonding wire in the iPhone's core. (Gold's 2011 contribution)

Illegal Mining

Up until this century, mining consisted of small-scale activities that were frequently low-tech and dangerous to health and safety while nevertheless providing society with the essential mineral raw materials. In contrast, the expansion of major mining operations using economies of scale has been a hallmark of resource development in the 20th century (Adekeye, 2001:2). The management of the mining industry has the potential to either alleviate or exacerbate poverty.

The Department of Mineral Resources (2014) defines illegal mining as engaging in mining operations without the proper authorization. The length of mining and the size of the

mine are among the terms outlined in mining rights once they have been awarded. Dozolme (2016), on the other hand, describes this as illegal action if it involves carrying out mining operations without a mining license, exploration permission, and permit for the transportation of minerals, or any other document that could support ongoing mining operations. Additionally, unlawful mining is defined as a flagrant legal infringement in the Global Initiative against Transnational Organized Crime Report (2016) when mines operate in protected regions or do not adhere to environmental, tax, and labor laws. Engaging in illicit mining activities without a license or license from the Department of Mineral Resources is the key component of the concept of illegal mining. The Benchmarks Foundation (2016), in contrast to these definitions, claims that illicit mining is caused by improperly closing mining shafts, which makes it easier for illegal miners to access the abandoned mines (Arnold, Duxita, Ramolobi, 2017).

Theoretical Framework

Marxist Political Economy is associated with the German Scholar, Karl Marx. As its tenet, the theory relies heavily on the materialist conception of history and therefore, argues that all social processes in human history is determined by the inherent and ongoing economic activity cum relationship that act themselves out in that particular society.

In other words, Marxist political economy theory holds that all other institutions in any society are subject to the dictates of the economic institution. It therefore, points out that in all instances, those that own the means of production in any society determine the shape of activities in other institutions such as religion, politics, education, etc. In the case of a peripheral capitalist society like Nigeria, the Marxist political economy sees those who own the dominant means of production (the bourgeoisies) as exploiters of labour of the working masses and as such are always in conflict with the later. It is believed that the bourgeoisie who also are the ruling class (either directly or indirectly) are always formulating policies that further ensure their own class interest rather than that of the proletariat.

The setting of the more fundamental poverty phenomenon, which arises as a result of the inadequacy imposed on a group of people by structural factors, is where artisanal mining and the social conflicts associated with it are situated, according to Marxist political economy. These structural factors involve ties between members of society that are social, political, and economic in nature, with the economic relationship serving as the framework for the social and political relationships. Specific structural relationships, also known as social relations of production, are how this economic relationship is articulated. This was justified by Marx himself when he stated that "at the production level, individual cooperation, and the labor of

all members of the family, including women and children, are necessary" (Marx, 1867 cited in Osiruemu, 2007).

Based on the above premise, the adoption of the Marxist political economy theory is justified for a study of political economy of illegal Gold Mining especially when variables such as social conflict and child labour are basic intervening variables. Suffice it to say, the relevance of this theory to the study finds expression in the fact that, the Marxist Political Economy enables us to see how political economy of illegal Gold Mining in Bukkuyum Local Government Area is driven by socio-economic activities within the artisanal mining sector. In the same vein, the conditions that fuel artisanal mining itself are products of political economy of class exploitation. In other words, the capitalist system thrives under a situation that impoverishes the masses who have no choice but to involve themselves in illegal mining activities for the purpose of augmenting their income.

Research Methodology

Bukkuyum Local Government Area of Zamfara State has many villages that have deposits of natural resources such as Gold. These villages are Dabat Akwaki, Dabat Kairu, Dabat Katselle and Dabat Jagafa, of which they are all engaged in illegal mining activities. A carefully selected research questionnaire was distributed to respondents in these villages in order to gather data. The researchers ensured that most of the questionnaires were returned and collected after the respondents were done with answering the questions. The questionnaire was distributed to respondents in Bukkuyum who are 18 years and above.

Bukkuyum local government area has an estimated total population of 211,633 (National Population Commission, 2020). From this study population, the Taro Yamane Formula (1967) was used to determine sample size for this research;

Where:

n= Sample Size

N= Population Size

e= error of significance

I= Constant (1)

$$n = \frac{N}{N+1}$$

$$(e)^2$$

$$n = \frac{211633}{211633 + 1}$$

$$(0.5)^2$$

$$n = \frac{211633}{211634}$$

$$(0.0025)$$

$$n = \frac{211633}{529.085}$$

$$529.085$$

$$n = 399.98$$

$$n = 400$$

Therefore, our sample size is 399.98 which is approximately 400.

Apart from the questionnaire administered to the sample size, the study also made use of ten Key Informants out of the sample size. They included traditional leaders such as the village heads locally called (Mai'anguwa or Mai'gari), and the illegal miners such as the workers, gold dealers and the local traders within the mining areas and also the elderly men and youths within the Bukkuyum Local Government Area. The qualitative technique was used to present and analyze data.

The interface between Illegal Gold Mining and Economic Interest

The "who gets what" condition of the operation is a fascinating component of the activity. For many stakeholders who are directly or indirectly involved, the work of mining operators and how much they contribute has been quite clear. Majority of the community's daily social and economic activities were strongly dependent on the illegal miners, who used illicit mining as their primary means of subsistence. Power dynamics are crucial in determining "who gets what" at this moment. The top miners ultimately receive the most of the profits, which is at the price of the physical labor put out by the actual miners. What goes into the activity is a manifestation of the "who receives what" problem. Although the miners are largely

responsible for the activity's daily operations, quite a lot of background work goes into it as well (Bright, 2014:79).

Five-year veteran mining operator Bongo provided a thorough explanation of the process involved, thus:

“There is a license holder, who has a mining permit on one or two concessions. That is the top level and these concession owners are usually famous businessmen, politicians and local chiefs. We the workers do not have any personal contacts with them and we do not know who they are. These investors hire someone who has some extensive knowledge about mining activities to oversee the daily operations. They could be family members, a friend or middlemen they can trust. Almost everything that is in and around the mining site runs through these recruited operations manager (Fieldwork interview: mining operator” (15 May, 2022).

Although there is no formal hierarchy in illegal mining, the activity is organized with decision-making at various stages of the activities, much like in any organization or business. When to sell and hoard the gold is decided by those at the top of the hierarchy. When asked about the function of intermediaries in the activity, the respondent didn't really think of them as being a significant part of the entire process. The miners concentrate on mining, processing, and selling the gold to the operations manager, much like many other mining operators do. They have little interest in how the gold gets to the official market. When selling the gold to the Precious Mineral Marketing Company or occasionally smuggling it into foreign markets, middlemen become the single most crucial component of the entire transaction at this stage.

The Relationships between Illegal Gold Mining and the Bourgeois Class in the State

The Bourgeois and illegal gold mining can be categorized into four groups: Every institution or group is made up of individuals who make decisions at various levels of a chain of command, where each level has some influence over what other levels do. The decisions taken by numerous actors at various levels within the activity are likewise arranged in the activities of mining operators. In the context of this study, actors are various social groupings or individuals who have varying degrees of influence and power over a common interest. Despite the organization's uneven power allocation, everyone's efforts are directed toward a common objective (Bright, 2014:79). The actors are as follows:

a. Investors

Investors are the people and organizations that basically finance the entire operation in the illegal mining industry. The necessity for funding has grown to be a significant component of mining operations as their nature has changed. Any operation can get off the ground with the help of investors, both domestic and international. Landowners are increasingly demanding extremely large sums of money before handing their lands away for mining activities since they are well aware of the profits that mining operators may make. The ordinary illegal miner cannot afford land, which could cost up to US\$50,000. Families with gold-rich properties would like to pool resources and launch their own mining enterprises, but they are unable to do so due to the high operating costs. For instance, it costs US\$ 850 a day to hire an excavator to plow the ground. Excavators are frequently left idle at these mining sites for weeks or even months.

Private investors have been required since the activity has changed from being driven by poverty to a large enterprise with enormous profit returns within its circles. It is challenging to name specific investors who contribute to the enormous financial responsibilities related to the new stage of the mining industry. The identities of these investors are still mostly unknown, but data acquired from a mining site in Manso showed that they are not merely locally rich Ghanaians or Chinese tourists. Foreign-based Ghanaians, Nigerians, South Africans, Russians, and Americans are among these investors. They are either politicians or business people with formal and informal ties to the executive branch of government. These investors must utilize middlemen as the link between them and the Precious Mineral Marketing Company, the organization in charge of buying small-scale gold production, due to the illegal and risky nature of the activity as well as the fear of getting caught in the operation. Additionally, investors employ operation managers to keep an eye on everyday operations at their mining locations. Operation managers serve as a link between financiers and the on-the-ground miners themselves.

b. Middlemen

Another crucial aspect that is usually overlooked is the role of intermediaries, who serve as the company's marketing division. People from other industries, like the import and export sector, the lumber and cocoa industries, and other industries that have a history of relying on well-connected middlemen, have been drawn to the illegal gold trade. Although these middlemen may not necessarily have experience in the mining sector, they do have the power to sway decisions both locally and nationally thanks to their extensive networks. The activity's

association with illegality has made the intermediaries' involvement in the operations crucial. The gold ultimately needs to make its way to the official market, and middlemen are the ones who carry this out. Mining organizations maintain a very informal working style due to their illegal status and are typically challenging to find (Mining, Minerals and Sustainable Development, 2002). These middlemen operate as a link between license holders and investors in addition to acting as the activity's marketing unit. Middlemen look for small-scale miners who already have the license to a concession because obtaining a license to operate as a small-scale miner entails onerous bureaucratic procedures. They then utilize their documents to buy land. When a mining site is acquired, middlemen arrange for investors to finance its operation. An operations manager is then in charge of organizing the hiring of local miners to perform the labor-intensive tasks.

c. Operation Managers

The daily operations at the mining sites are under the control of operation managers. The fact that operation managers have access to mercury is a key factor in why they are also a crucial component of the activity. Mercury is a crucial component of many mining processes, but it can only be purchased through a licensed representative. According to Ghana's mining legislation, the Mercury Act, anyone who brings any amount of mercury into the nation, has it in his possession, or purchases, sells, or transfers any mercury commits an offense and faces a fine of GHC 200 (about US\$ 90) or a prison term of no more than two years. The nature of the mining operation necessitates such expertise with how work is carried out on a site, and they are typically experienced in the field. The miners have a responsibility to sell the operations manager all the gold they were able to extract at the end of the day. They are in charge of managing daily operations at the mining sites and are solely answerable to an unidentified group of private investors who could be located anywhere.

d. Local Miners

Several miners must work together to complete the real groundwork. There may be several hundred people arriving to work on the site, depending on the size of the concession and how word of the gold discovery in a particular settlement traveled throughout the area. A field survey on a mining location in Manso Assamang revealed that close to 200 miners were busy using basic tools in difficult working circumstances. Operations manager Kofi Tawiah disclosed that, on a busy day, there may be over 800 individuals working on various jobs at one location. Most of these individuals were young, fit men, middle-aged women, and

occasionally, little toddlers who appeared to be incredibly powerful. The diverse forms of mining that the miners engaged in, was another feature that distinguished them.

Data Presentation and Analysis

356 of the 400 questionnaires that were distributed were returned, or 89% of them. However, 11% of those questionnaires—44 of them—were not returned. Since more than 89% of the disseminated questionnaires were returned, it can be inferred that the majority of them were returned. As a result, the data obtained from the 89 respondents is sufficient to make an analysis that might be categorized as empirical study.

Table 1.1: Respondents’ Age Categories

Age Range	Frequency	Percentage
18-25 years	150	42.1
25-30 years	100	28.1
30-35 years	36	10.1
35-45 years	36	10.1
50 and above	34	9.6
Total	356	100.0

Source: Field Survey, (2022).

Table 1.1 signifies that 42.1% of the respondents were of the age of 18-25, 28.1% of the respondents are of the age of 25-30, 10.1% of the respondents are of the age of 30-35, 10.1% of the respondents are of the age of 35-45, and 9.6% of the respondents are of the age of 50 and above. From all indications, there is no doubt that respondents between the ages 18-25 constitute the majority. 150 respondents of 42.1% and 100 respondents of 28.1% were more of the respondents that contributed more of their opinion on the topic under study. This age bracket constitutes the youths as youthful age starts from 18-30. As such, it implies that the information collected is highly valid as the work focuses majorly on youth.

Table 1.2: Respondents’ Sex

Gender	Frequency	Percentage
Male	284	79.8
Female	72	20.2
Total	356	100.0

Source: Field Survey, (2022).

Table 1.2 shows that 79.8% of the respondents are male while 20.2% of the respondents are female. Implicitly, sex has great influence in many regards as one cannot just take the opinion of one sex and then run into conclusion. But, it is rather very important to sample the opinion of both genders in order to come out with an empirical data. The male are more than

the female due to the fact that the locality in which the questionnaires were distributed was dominated with more male than female.

Although, the male respondents of 79.8% which is more than that of the female of 20.2% cannot be underrated as the difference between them is very high and as such, highly significant. This is an indication that the administration of the questionnaire is void of biasness, segregation or discrimination of any form as the female respondents were also highly represented, even though it was a little bit less than that of the male folk. As such, the study took into account gender differences.

Table 1.3: Respondents’ Marital Status

Marital Status	Frequency	Percentage
Married	143	40.2
Single	111	31.2
Divorced	42	11.8
Engaged	51	14.3
Widowed	09	2.5
Total	356	100.0

Source: Field Survey, (2022).

Table 1.3 signifies that, 40.2% of the respondents are married, 31.2% are single, 11.8% are divorced, and 14.3% are engaged while 2.5% are widowed. From the figure discovered in the table, it is evident that the married are more of the sampled respondents. This implies that the opinions of those within the age of 25-50 were captured more as the study focuses majorly on the elderly, since they stand at the better position to determine the effect of political economy of illegal mining in Bukkuyum local government. The researchers have captured the opinions of both the married, engaged, divorced, single and widowed. But that of the married is more due to the fact that they responded more to the questionnaire.

Table 1.4: Respondents’ Highest Educational Qualification

Educational Qualification	Frequency	Percentage
First School Leaving Certificate	35	9.8
SSCE	137	38.5
Diploma/NCE	134	37.6
B.sc/	12	3.4
None of the above	38	10.7
Total	356	100.0

Source: field Survey, (2022).

Table 1.4 shows that 38.3% of the respondents have SSCE, 37.6% has Diploma/NCE, 3.4% has B.sc and 10.7% has First School Leaving Certificate while 19.5 did not have any of the Certificates. It is evident that the respondents were literate to some extent to provide important

relevant information. Qualification in a research work is very important as it tells the researcher the level at which the respondents understood the questions so presented to them. In this study, 38.5% of the respondents have Diploma/NCE and SSCE, which implicitly connotes that there are possibilities of answering the question properly as they could understand better, all that is required from them.

Table 1.5: Respondents' Employment Status

Employment Status	Frequency	Percentage
Employed	42	11.8
Unemployed	143	40.2
Business	133	37.4
Others	38	10.6
Total	356	100.0

Source: Field Survey, (2022).

Table 1.5 indicates that 40.2% of the respondents are unemployed, 11.8% of the respondents are employed, 37.4% of the respondents are business people, while 10.16% of the respondents are others. Which shows that majority of the respondents to the questionnaire are unemployed as most of them are students in different educational strata. This implies that the high rate of unemployment among the youths could result to illegal mining as the youths could be feeling that the government might not have done anything to help the situation. In tandem with this perception, the respondents opined that the major cause of illegal mining is the issue of unemployment and lack of assistance from the government.

Questionnaire Responses

Table 1.6: Responses on: Does illegal Gold mining activity lead to the increase in revenue generation in Bukkuyum Local Government Area?

Does Illegal mining activities increase the Revenue generation of Bukkuyum Local Government	Frequency	Percentage
Yes	246	69.1
No	107	30.1
Don't know	003	0.8
Total	356	100.0

Source: Field Survey, (2022).

Table 1.6 shows that 246 respondents with 69.1% identify that the Illegal mining activities have increased the Revenue generation of Bukkuyum Local Government, 107 respondents with 30.1% did not agree that Illegal mining activities have led to increase in the revenue generation of Bukkuyum Local Government, while 3 respondents with 0.8% indicate

that they have no idea as to whether illegal mining activities increase or reduce revenue generation of Bukkuyum Local Government. From the survey, it is evident that Illegal mining activities have increased the revenue generation of Bukkuyum Local Government with the high response of 69.1 % respondents.

Table 1.7: Responses on Does illegal mining activities improve the living condition of the people of Bukkuyum Local Government Area?

Does Illegal mining activities improve the living condition of the people	Frequency	Percentage
Yes	232	65.2%
No	97	27.2%
Don't know	27	7.6%
Total	356	100%

Source: Field Survey, (2022).

Table 1.7 shows that, 232 respondents representing 65.2% agreed that Illegal mining activities has improved the living condition of the people of Bukkuyum Local Government, 97 respondents 27.2% did not agree that Illegal mining activities has improved the living condition of the people of Bukkuyum Local Government while 27 respondents with 7.6% don't know whether the Illegal mining activities have improved the living condition of the people of Bukkuyum Local Government or not. Here 65.2% respondents which is the highest percentage indicate that Illegal mining activities have improved the living condition of the people of Bukkuyum Local Government area of Zamfara state.

Table 1.8: Responses on is there any law against Illegal Gold mining activities in Bukkuyum Local Government Area of Zamfara State?

Is there any law against Illegal mining activities	Respondents	Percentage
Yes	0	0.0
No	81	22.8
Don't know	275	77.2
Total	356	100.0

Source: Field Survey, (2022).

Table 1.8 shows that, 81 respondents representing 22.8% disagreed that there is a law against illegal mining activities in Bukkuyum Local Government of Zamfara State, 275 respondents with 77.2% indicate that they did not know about any Law against illegal Mining activities in Bukkuyum Local Government Area of Zamfara State, While 0% or none of the respondents agree that there is a law against the activities of illegal miners in Bukkuyum Local Government. Here 275 respondents with 77.2% which is the highest shows that they don't know whether there is a clear law against illegal mining activities in Bukkuyum Local Government or not.

Table 1.9: Responses on is there any law that protects the interest of illegal miners that you know?

Is there any law that protects the interest of illegal miners	Frequency	Percentage
Yes	55	15.4
No	85	23.9
Don't know	216	60.7
Total	356	100.0

Source: Field Survey, (2022).

Table 1.9 shows that, 55 respondents representing 15.4% agree that there is a law that is protecting the interest of illegal miners in Bukkuyum Local Government Area, 85 respondents with 23.9% disagree that there is no law protecting the interest of illegal miners in Bukkuyum Local Government Area, while 216 respondents with 60.7% declare that they don't know whether there is a law protecting the interest of illegal miners in Bukkuyum Local Government Area or not. Thus, despite the fact that 60.7% which is the highest respondent indicate that they don't know about any law protecting interest of illegal miners in Bukkuyum Local Government Area, still 55 respondents with 15.4% agreed that there is a law protecting the interest of illegal miners in Bukkuyum Local Government Area of Zamfara State because the illegal miners do pay tax to the local government and also to the local traditional rulers.

Table 1.10: Responses on; Do you think illegal Gold mining activities has negatively affected the economic activities in Bukkuyum Local Government area?

Do you think illegal Gold mining has affected economic activities in the area?	Frequency	Percentage
Yes	51	14.33
No	242	67.98
Don't know	63	17.69
Total	356	100.0

Source: Field Survey, (2022).

Table 1.10 shows that, 51 respondents representing 14.33% agree that illegal Gold mining activities has affected economic activities in Bukkuyum Local Government area, 242 respondents with 67.98% suggest that the illegal Gold mining activities did not affect the economic activities of Bukkuyum Local Government Area while 63 respondents 17.69% did not even know whether the activities of illegal mining has affected the economic activities of Bukkuyum local government. Here 67.98% is the highest percentage which shows that illegal mining activities did not affect the economic activities of Bukkuyum Local Government Area because it is also a source of revenue to the local government. But 14.33% respondent still agree that illegal mining activities negatively affect economic activities in Bukkuyum Local because illegal mining has taken away attention of able bodied young people from agricultural activities that was once a great source of revenue to the local government.

Discussion of the Findings

The study reveals that most of the respondent's age is within 18-25 years with 42.1% of respondents followed by 25-30 years with 28.1% of respondents. This is because illegal gold mining activities demands the use of physical strength in digging for the gold. Therefore, the percentage of the young people is high in the activities of illegal gold mining because they are mostly energetic. The finding shows that majority of the respondents are male with 79.8% respondents. This is because illegal gold mining activities involve strenuous digging of hole in search of gold day and night of which the female counterpart may not find it easy to do.

Educational qualification: The study revealed that most of the people that are engaged in illegal gold mining activities fall within the educational category of SSCE with 58.5% and diploma/NCE 37.6%. Thus, most of the illegal gold miners are educated not illiterate. The study discovered from the respondents that most of the people that engage in illegal gold mining activities are unemployed with 40.2% respondents. This is because the youths in Bukkuyum Local Government Area are unemployed or jobless, thus they may be tempted to go into illegal mining activities for personal survival and to also meet family needs.

This research discovered that illegal gold mining activities have greatly increased the revenue generation of Bukkuyum Local Government Area, this is evident in the high response of 69.1% respondents. This is because, the illegal gold miners pay unofficial tax to the Local Government officials and also to the traditional rulers. In other words, this finding is the underlying thrust of this study and the position is obviously different from the thrust of previous studies such as Johnson (2017), Auwal (2012), Bohon (2003), and Ayo and Abejide (2014). This implies that the political class being it circular or traditional authorities encourages illegal mining in the area for personal economic interest.³ No wonder, the study reveals that illegal gold mining activities in Bukkuyum Local Government Area have not improved the living condition of the people in the area with the response of 65.2% respondents. This is because most of the people engaged in activities of illegal gold mining lives within the area and all the money gotten through the illegal gold mining are used within their locality. However, this has not led to the development and improvement in their living conditions.

Conclusion

Illegal mining as seen by many researchers is mining by individuals, group of people or a corporation that mine for precious minerals, particularly gold, using minimum specifications on a small piece of land including rivers which is often done on illegal basis. This is evident in Dabat Akwaki, Dabat Kairu, Dabat Katselle and Dabat Jagafa communities where individuals and group of people mine for gold in which crude tools and methods are used in their operations. Though the sector has been seen by many as dirty, unprofitable and basically unsustainable, nevertheless, the sector provides lots of monetary benefits to the people of Bukkuyum local government. Moreover, illegal mining sector is seen in Bukkuyum local government to be one of the major economic ventures in which people who are

³ Kabiru, Aba, age 68, interview , Bukkuyum, May,14,2022

unemployed engage in to generate income which they use to cater for themselves and their families. Illegal gold mining operation in actual fact impact people's lives in the community. It has a direct bearing on trading activities, increases the disposal income not only to the miners but a large portion of the community especially those into trading of goods and rendering of services. It creates an avenue for people to get some form of employment and earn huge sums of money. It also has an impact in their social life. In as much as it has an impact in the lives of both the illegal gold mining workers and some members of the community, its negative effects outweigh its positive impact. These effects include; land degradation, deforestation, water pollution, air pollution and noise pollution. Other effects are decrease in the output of farm product, high rate of teenage pregnancy and prostitution, school drop-out and absenteeism in school. A lot of lives are also lost, some get severe injuries and other health related problems. Illegal gold mining really affects the community than it benefits it. The effects are significantly high than the impacts. These issues which have been outlined have to be addressed by the authorities in the community and the district of Bukkuyum. This study concludes that the political elites encourage illegal mining in the area for their economic interest by using the instrumentality of the state to protect the illicit activities.

Recommendations

Based on the findings of this study, the following recommendations are hereby made:

Government should establish Gold mining companies with modern equipment and technology most especially in places where illegal mining activities are taking place to avoid its negative public health outcomes and attendant environmental hazard.

In addition, there is the need for government to create employment opportunities for the teeming youth's population to discourage youths from illegal mining activities in Bukkuyum Local Government Area of Zamfara state.

Ensure training and educational awareness campaigns on the negative impacts of illegal mining. Raising awareness and environmental education. This is because the paper finds that most artisanal small scale miners are ignorant of long-term effects of their activities. Therefore there is the need for extensive education to the local community about the environmental dangers and their long-term effects.

References

- Abdullahi, S. K (2012). "Foundation of Political Economy", lecture note, Department of Political Science UDUS. Unpublished.
- Anifowose, R. & Enemu, F (2008). "*Elements of Politics*". Sam Iroanusi Publications.
- Aina, T. (2003). "*What is Political Economy? The Nigerian Economy Approach*", Nigerian Economic Society, Lagos
- Ayo, R. & Abejide, T.S (2014). "*The British mining & oil regulations in Colonial Nigeria*": C. 1914-1960S: An assessment. Singaporean journal of business economics and management Studies, 2 (10), 65
- Arnold P, Duxita M & Ramolobi L.G.M. (2017). "*Implications of illegal mining in gauteng province*". International Journal of Humanities and Social Science Invention, Vol. 6 (4), 56-57.

- Armah, F., Luginaah, I., and Odoi, J. (2013). *“Artisanal small-scale mining and mercury pollution in Ghana: a critical examination of a messy minerals and gold mining policy”*. Journal of Environmental Studies and Sciences, 3:381–390.
- Auwal, I.M. (2012). *“Policy brief on solid mineral sector for the national assembly”*: civil society legislative advocacy centre. July 2012. <http://www.cislacnigeria.net/wp-content/uploads/2012/07/Policy-brief-on-solid-minera-sector.pdf>
- Bohon, S, Dahms, H.F, Dandaneau, S. P, Freu, R.S, Gellert, P, Jalata, A. & Shefner, J. (2003). *“Political Economy”*. Tennessee: The University of Tennessee, College of Arts and Science; Development of Sociology.
- Bright, B.A. (2014). *“Galamsey (Mining) as a livelihood approach in Ghana”*: From a poverty Reduction strategy to a Money-spinning Business. (masters Thesis), University of Olo, Narway.
- Gold's contribution. Retrieved on 2021-09-26 from World Gold Council Homepage. http://www.gold.org/about_gold/story_of_gold/golds_contribution
- GHEITI, (2013). *“Reflections on illegal Mining Activities in Western Region”*. Retrieved from http://www.geiti.gov.gh/site/index.php?option=com_content&view=article&id=72:reflections-on-illegal-mining-activities-in-western-region&catid=1:latest-news&Itemid=29 [Accessed 10 July 2021].
- Johnson, O. (2017, October 23). *“Illegal gold mining in Nigeria: influence on economy and citizens”*. Retrieved from <https://www.naija.ng/1124741-illegal-gold-mining-nigeria-influence-economy-citizens.html#1124741>
- Lawal, M. (2002). *“Constraints to small-scale mining in Nigeria: policies and strategies for development”*. Centre for Energy Petroleum Minerals Law and Policy Annual Review - the Dundee Yearbook of International Natural Resources and Energy Law and Policy, pp. 17.
- Maier, C.S. (2008). *“The Political Economy Approach”*. <http://en.wikipedia.org/wiki/political-economy> (Accessed 15 November, 2021).
- Marx, K. 1867 Cited in Osiruemu, 2007. *“Is Poverty an Urban Phenomenon?”* Proceedings of the National Conference on Urban Poor in Nigeria: I–23.
- National Population Commission (2020)
- Olasunkanmi. (2017). *“Poverty Rate Of The 36 States Of The Federation”*: Zamfara Top The Chart With 91%: Retrieved from <http://tellymystory.com.ng/poverty-rate-of-the-36-states-of-the-federation-zamfara-top-the-chart-w-th-91/>
- Organization for Economic Cooperation and Development (2002). *“Environmental impacts of foreign direct investment in the mining sector in sub-Saharan Africa”*. Conference on Foreign Direct Investment and the Environment, 7-8 February. Paris, France: OECD.
- Solomon, M. H. (2000). *“Growth and diversification in mineral economies: planning and incentives for diversification”*. South Africa: United Nations Centre for Trade and Development.
- Spall, J. (2009). *“Investing in Gold – The Essential Safe Haven Investment For Every Portfolio”*. McGraw Hill 2009.
- Yamane, T. (1967). *Statistics, An Introductory Analysis*, 2nd Ed., New York: Harper and Row.
- Youngman, F. (2000). *The political economy of adult education and development*. London: Zed Books.

