

Gold Mining and the Development of Towns: A Study in the History of Minna, 1910 -2015

Salihu Ibrahim¹ Ahmed Zaharuddin Sani Ahmed ibn Sabri, Ph. D²

¹*(School of Languages, Philosophy and Civilization, Ahwang Had Salleh Graduate School
Universiti Utara, Malaysia)*

²*(School of Languages, Philosophy and Civilization, Ahwang Had Salleh Graduate School
Universiti Utara, Malaysia)*

Corresponding Author: Salihu Ibrahim

ABSTRACT: Gold is one of the mineral wealth that nature has deposited for mankind beneath the earth. Its significance is recognized and respected by all generations and every society, be it primordial or industrialized. The working of gold is a herculean task but, a minute find can easily change ones social strata in the society. Gold mining have played very significant role in the development of settlements, empires and kingdoms by attracting population and enhancement of the economy. This paper sheds light on the history of gold mining in Minna during the colonial years and the post-colonial era; it specifically try to explain how gold mining in the area contributed to the historical development of Minna town. The research employed the qualitative method in the approach using both primary and secondary data. It shows that such mineral deposits like Tin, Diamond and Gold are harbingers of population. The work concluded that in view of the present search for where to employ the youths gold mining can solve the problem if properly looked in to.

Keywords: Gold, Mining, historical, development, Minna town.

Date of Submission: 31-07-2017

Date of acceptance: 14-08-2017

I. INTRODUCTION

Towns emerge or grow due to different factors; from antiquity these include availability of fertile land, forest for wood and deposit of such mineral as iron ore, Tin, diamond and gold [16]. Minna located in Central Nigeria area is one of the settlements in the country that possess gold deposit which has attracted the attention of prospector since the early years of colonial rule. Mining activities in general attracted population, but gold in particular have been over the ages responsible for the emergence, expansion and development of human settlements as studies have shown of Brazil [7]. In California the 1848 discovery of gold on American River attracted people from all directions to the area which resulted in the growth and expansion of the settlement [29]. Johannesburg in South Africa owes its emergence and growth to the discovery of gold in 1884 which within a short period raised population from 6000 to 102,000 [33]. Over the ages gold has remained the leading element sought by man. The ancient Egyptian civilization exhibit high level use of gold as it was found in most of pyramids [36]. Gold mining and trade occupied a very significant part of the history of ancient West African states of Ghana, Mali and Songhai [7]. It played important role in the development of States and societies in the Northern Nigeria area. The staff of office a stick that its head is gold plated is the symbol of authority of the Kings, Emirs and even the Sultan. Most of the royal regalia are usually made of gold including the decoration of the royal horses. Most importantly, it was used as a medium of exchange and popularly also for ornamentation. During the Colonial era gold mining was a very serious venture that attracted Europeans and other nationalities and peoples from different part of Nigeria to Minna [31]. It provided employment to the people which enable them pay the repugnant colonial taxes in addition to uplifting their social status in the society. Thus, gold mining in Minna during colonial era in many ways boosted the population of the town.

In recent times gold mining activities have assumed a renewed interest and vigor in most parts of north central Nigeria area for instance in Zamfara State villagers took to its mining as solution to poverty [4]. As global economic meltdown hits harder on the people, gold mining business provided investors some financial relieve as its price sky rockets thus making life better for prospectors [4]. Similarly, in Minna it was the need for man to survive the realities of his day that resuscitated the gold mining activities which have since colonial time been abandoned. It is rewarding for people to go into prospecting for gold as it provides their daily bread. Despite the poor attitude of government to the sector it provides employment for large number of citizens; it is

also enhancing the income of investors and a way of managing youth restiveness. Most importantly it attracts huge population into the area thus increase level of agglomeration of Minna town.

II. METHODOLOGY

This research work employ the qualitative method hence historical writing are mostly better understood by letters than figures and also that historical analysis cannot be simply reduced to mathematical formulas and expressions but rather narrative interpretation [8]. To that effect primary source materials in form of semi structured interview [6] and archival records [11] are utilized. Thus persons involved in mining, processing and distribution were interviewed to provide an in depth and practical experience knowledge of the activity [12]. The Minna Archive was found to be very useful as it yielded records on gold mining during the colonial era. It was from the archives that colonial documents such as those that directly dealt mining issues were found among which are: memos, gazettes, letters and other government documents [11]. Secondary source materials such as published and unpublished books, journal articles and conference papers are examined to provide information from the literature. Therefore various sources are employed to collect information for final analysis. One of such is the conduct of field interview with people engage in gold processing at Chanchaga river near Minna.

Internet services have become a source of large amount of very useful information; many online pages were also found to be useful and as such were consulted. It is based on the adequate use of these methods that our analysis was made with due corroboration of the various sources.

III. LITERATURE REVIEW

3.1 Gold mining in the historical development of towns/cities

The development of any settlement is necessitated by the availability of some socio-economic factors such as food supply, trade, and political authority, a specialized division of labor, social stratification, money and wonderful buildings [5]. Since the industrial revolution and emergence of capitalist mode of production coupled with its resultant imperialist expansion, the quest for solid mineral deposits like: Tin, Diamond, Petroleum, gold and a host of others for industrial and other purposes have greatly increased. Gold mining played significant role in the political, economic and socio-cultural life of many societies and have also tremendously helped in the development of capitalist economy. It contributed to the influx of population in the California gold rush of 1849-53 [15] The trade in gold equally attracted different people to Africa especially the Sudanese States, chief among them were the Arabs [30].

During the colonial era Europeans searched and seized all lands bearing gold in the West African sub region [28]. In Gold Coast, the traditional miners were edged out and capitalist exploitation took over [32]. Similarly, in Nigeria, capitalist exploration of gold among other resources started with the establishment of Colonial rule in the area, precisely in 1913 and peaked between 1933 and 1943 when about 1.4t of gold was produced [24]. The activity created problems for the colonial administration, for instance in Minna part of central Nigeria area, the Assistant District Officer in a 1933 circular requesting for the erection of miners' rest house have this to say:

The position at present is deplorable. They arrive in Minna and filled up the railway rest house to discomfort and even to the exclusion of true travelers for whom the quarters are originally built ... It was reported that out of four hundred European gold prospectors that came to Nigeria in 1933 not less than forty arrived Minna in search for the precious meta [24].

3.2 Gold mining in Minna area 1910-1960

Gold mining was during the colonial era a very lucrative and popular business in Minna that attracted visitors and settlers [2]. Gold mining ranks next to railway in the history of the development and transformation of Minna town [31]. As soon as the area was conquered, Europeans prospectors for solid minerals begin to explore the rich deposits of the area. The Europeans thus spear head gold mining in the area because, they knew the value and possessed the technology for working gold. They initiated and organized mining of such minerals as gold in the area of Minna-Birni Gwari gold belt [27]. The types of gold to be found in the area according to a colonial report are; Free gold in quartz veins, Green gold including finally disseminated gold, Alluvial gold from finest flour to small nuggets [27]. Gold is to be found in most of the rivers of the area as succinctly put by W.Russ in 1934: These low level and high level traces have so far not been touched and remain for exploration. Here is a large field at present untouched and remains for the enterprises of the prospector [25].

Although, it is difficult to ascertain precisely when prospecting in Minna began however, it is clear that mining was a major industry in the area that employed hundreds of people as early as the mid-1930s. Various Europeans companies got lease of hectares of land for prospecting gold. Among them were: The Victoria trust, The Gold area of Nigeria limited, Greenland limited, Walker L.C, Wheaton F.C and Abed C&H [26].

Prospecting for gold in the town led to the influx of both Europeans and Africans into Minna and that consequently led to the over stretching of some of the limited available social amenities in the town, which created some worries to the colonial officials in the town [24]. Of the Nigerian peoples that came to Minna include; the Baribare, Zabaramawa, the Jukun and other ethnic groups of central Nigeria area were the most popular in the gold mining work. The Gwari and the Nupe were rarely involved, while some Hausa took part in the business. However, most people came into Minna solely for the purpose of the business in gold as testified by the chief inspector of mines in Minna (1934) report that there were between 4000 and 5000 laborers employed in the mines [24]. Although the District Officer, Kuta believes that those figures only represent the records of mine managers and that an addition of 25% to 30% could give a more accurate estimate of the actual number [23].

The number of people coming into Minna in search for prospect continued to increase despite the setback occasioned by the event of the Second World War. The population of Minna in the years before independence in 1960 was largely comprised of people who have entered the town either for the purpose of railway work or gold mining [1]. Thus, in an attempt to foster social interaction and harmony among the various groups a socio-economic welfare programme was arranged for the laborers by the president of the town council Alkali Muazu Sokoto [3]. The scheme includes a recycled loan for purchase of cow which was slaughtered by the people. In addition, free woman were also encouraged into the town for the relaxation of those energetic men. The emirs of Kano sent in a woman leader to help achieve the mission by name Hajiya Lemu Garko Bori [31]. She organized for the woman who came into Minna from various parts of the country including Nupeland and Kontagora Emirate.

Following the upsurge in the population of miners in Minna, various mine camps emerged in different parts of town. Such camps include: Tundun Wada (Tungan Danboyi), Tungan-goro, Chanchaga, Sobandegi (present COE Minna), Maitunbi, Kaffin Tella, Rafin Gora [1]. All these places have today become part and parcel of Minna town, while some are even in the extinct. However, for the limited scope of this paper, places such as Zungeru and Farindoki (a name got from one of the colonial companies) are not discussed herein but, colonial gold mining was wide spread in the areas.

3.3 Gold mining in Minna since 1960

After a long period of abandonment gold mining in Minna has become a profitable business. Since the Colonial time various laws placed mining of gold and other related minerals under the sole right of government [21]. The law which is contained in the minerals act (cap 121 of 1946, gave such power to the Federal Government of Nigeria. The law prohibiting illegal mining of any such minerals in Nigeria as provided says; "No person shall search for or exploit minerals resources in Nigeria or divert or impound water for the purpose of mining except as provided in the Act" (1946:1:2 Act) [21]. These laws have considerably reduced the desire for venturing into gold mining in Nigeria and Minna in particular. However, due to the gross unemployment rate and the increase poverty in the country, able bodied persons have defied the law and are engaged in the mining of gold in Minna area. The business has today employed a number of people with a very long chain of network. A trip to Chanchaga River reveals the interesting and active business activities that exist by the banks of the river [21]. People from different parts of the country including; the Hausa, Kadara, Baribare, Yoruba, Nupe, are all involve in the business. Sometimes in 2011, along Kateregi-Bida Road, a farmer made a lucky found of gold, over night the area was taken over illegal prospectors. People from different parts of the country rushed into the place in search for gold and if not for the Government intervention another miner's settlement had already emerged with a population of about 3000 people.

IV. IMPACTS OF GOLD MINING ON THE HISTORICAL DEVELOPMENT OF MINNA TOWN

4.1 Organization of gold business in Minna Town

As stated earlier, gold mining in Minna was initiated by the Europeans under the British rule in Nigeria. They were in the know of its uses and possess the techniques of its extraction and treatment the native Gwari and other Nigerians in the area knew but little about it. The colonial administration after 1903 conquest of the sultanate of Sokoto had taken control of all lands in the region thus; the colonial government gave lease and prospection right to the various Europeans companies that expressed interest (mining regulation 1946) [21].

The companies organized for labor on the area that was seen to possess the gem. Labor was of different types, there were those on permanent pay rolls of the firms who were usually paid wages and the freelance labourers. The average labor pay per week is estimated to be a little over 11/d- a month or about 4/1/2 a day [23]. The cost of the labor in the gold field of Minna division was exceptionally low. The result was that mining laborers were continuously on the move and always hoping for easy money. The news of a lucky find in one camp immediately attracted laborers from surrounding camps.

The poor payment of laborers created serious problem of gold stealing and leakages which became of concern to both the miners and colonial administration. A memorandum from the officer in-charge of Kuta division to the Resident Niger Province, Minna to that effect explains that;

I am of the opinion that gold is been illegally won on fairly extensive scale in Kuta division. It is by no means and uncommon occurrence to hear a miner's remark that on prospecting, such a river he found, that the place had been worked out, and was no longer worth pegging. I have heard this remark made about part of Esse River and also area in the neighborhood of Minn [25].

On this basis various security measures were taken to curtail the act of gold stealing and illegal trafficking. In 1939, a meeting of mine owners was held at Minna club which discussed issues concerning illicit gold possession. The meeting had the following people in attendance. Mr A.R , lee- in the chair, Captain J.A.H Maund, D.O, Minna representing the Resident Niger Province, Mr H.R, Mitchell, Senior inspector of Miner, Minna. Mine owners present were; Messer du Botha, Stanford, Greenland, Mr. Gill, Brocord, Unilever, Pope, Swift and Lush. The meeting concluded that:-
Illicit traffic in gold was carried on by women than men.
The probable volume of such traffic would be from 25% to 50%.
All gold-smiths operating in Nigeria should be licensed without delay [23].

Since the inception of colonial rule gold mining brought huge amount of money to those involved in the job as they find life easy especially when lucky to have made a find. While the Europeans take the found or extracted gem away to Europe and other parts of the world for sale at international market rate. The native miners on the other hand, sell whatever they find within the local markets to either agents or the goldsmiths [19].

The arrangement of the businesses made it that: (1) officially recognized companies now exist and are involved as registered organizations (in accordance with the mining regulation act 2007) during the mining business. They employed wage labor and market their products in accordance with government regulations. (2) Small scale prospectors, these are members of the mining association of Nigeria. They have license to mine gold where government have not leased or prohibited. (3) Freelance miners as the name connotes, dig gold wherever they can find [13].

While the first group is an organized corporate investment, the last two operate on the finances from agent. There are agent who bank roll the laborers that go into digging of pegged locations of gold, the finds after due processing is given to the agents who sales the gem(s) at either Minna gold market or even taken to either Dubai or China. Each gram of gold at Chanchaga gold working centre cost #4,500 or more depending on the carats [35]. It is however difficult to say that at the end of the day's investment nothing financial comes out.

4.2 Tools and methods of working gold

Record of the use of machinery such as crushers, Bulldozer and smoother during the colonial era in Minna is elusive; however the use of manual labor was most popular. That might be due to lack of proper knowledge of the commercial quantity of the deposit in the area. However, the basic tools used are: shovel, digger, harmer, and cutlass. Today mobile machine crushers, smoothers and dryers are available and used at both the Chanchaga and Yinkangbin sites.

The miners dig a prospective place removing the top soil and following the quartz vein to any length, breath. The stones are collected and packed in sack (100kg) full to the crushing machine. Each sack is crushed and grinded smooth by the smoother machine at the current price of #2,600 [19]. A group might bring as many as 20 bags. The smoothed powder is taken to the river where it is technically filtered, a process they called "washing" using a wooden pallet on which is a rug carpet that retains the gold. Mercury is then applied to coagulate the gold together and finally, it is cleaned up and ready for sale.

4.3 Risk factors in gold mining business

The business of gold mining is as dangerous as it is lucrative. To both the users of modern equipment and those that rely on crude implements such as used in Minna area, risk factors are enormous. The areas of risk can be summed up to include:-

- **Site collapsing:** it is very easy for miners to have themselves buried alive beneath the earth as the site of digging can collapse. This digging might be in tens or even hundreds of meters underground and if proper care is not taken, any part of it can fall. Thus life underground is at serious risk. Recently, such incidences had occurred in; Australia, Argentina, Chile, China and much closer to us Zamfara.
- **Exposure to dangerous reptiles and animals:** Because the areas of prospecting are largely in the bush, miners become unavoidable exposed to contact with dangerous snakes, terrible insect and even dangerous

animals. Any misfortune could lead to body injury and even death. In addition, at the point of working, the gems which is usually carried our inside a river or stream such reptiles like snaked dwell therein and can be very harmful.

- **Respiratory complications:** In Zamfara gold area, villagers have been reported to have had their children dying of poisonous lead substance following gold mining activities in the area [20]. The situation in the Chanchaga gold (quartz) grinding workshop exhibit high level dusts that affects smooth respiratory system of humans. The result of inhaling such dust from the crusher and smoother machines is unimaginably dangerous. An interview with health personnel reveals that people exposed to such conditions stand the risk of bronchitis, asthma, kidney problem, renal failure and even death [18].

4.4 Economic importance of Gold mining in the historical development of Minna area

Generally, gold is a very important economic mineral that is mentioned next to cash money. Possession of any quantity of gold is equivalent to the possession of its cash value. Thus, gold mining is of significant importance to the national economy. Therefore the importance can be viewed as:

Provision of employment opportunity: Since the colonial times, gold mining in Nigeria area has served as source of employing thousands of people. Many people came to Minna and later settled down in the town principally because of gold business. Today, thousands of youths are involved in the digging of gold within the town. In fact, they go to as far as Suleja vicinities to bring gold stone for refining in Minna. The process therefore provides economic engagement for a long chain of beneficiaries which include; transporters, diggers, grinders, agents, goldsmiths and even international dealers.

Revenue generation: although government in the bid to encourage mining in Nigeria have provided a lot of incentives which include some years of tax concession and other forms of revenue derivation [9]. It is an industry that generates a lot of fund into the government coffers. Government should levy taxes on the machines being used for crushing and smoothing as well galvanize the scattered illegal minerals together so that revenue can be easily generated.

Reduction in crime rate: youth involvement in quasi and unorthodox mining have seriously reduced crime rate in the area, because with that they are making a living. This is because they are able to generate enough to maintain themselves. By this a lot of economic security is thereby provided. Government should rather encourage miners by providing more licenses to small and quasi miners so that they can feel safe in doing their economic activities. Government should in addition make available easy and soft credit facilities for these small scale prospectors.

V. CONCLUSION

Gold mining is a very old and lucrative business that is recognized all over the world. During the colonial time, gold mining played important position among the economic extractives in the Nigerian soil. It was next to railway as far as the transformation and development of Minna was concerned. The area of Minna-Birni Gwari has been recognized as a gold belt. Large deposit of gold in some areas of Nigeria tells that other than petroleum, Nigeria is endowed with other potentials that if properly exploited will generate a lot of revenue, provide employment for large number of people particularly the youth and reduce crime in the country.

Government should look into the recent increase in the development going on in gold mining business with the view of making improvements. Youths should be encouraged if possible to form associations so that the exploitative role of agents can be forestalled while the miners are empowered. Although, federal government according to the 2007 minerals regulation act, have opened up the section. However, much need to be done to bring into main stream the quack and illegal miners. Palliative measures are to be taken to encourage the poor indigenous population involved in the business.

Finally, despite the lucrative but though risky nature of the business, gold mining pose serious problem to the environment. It causes erosion, land side and general degradation of the environment. To that effect, government needs to learn to manage the problem created as a result of mining activities.

REFERENCES

- [1]. Abdulrahman Gara an elder statesman aged seventy five Interviewed 6/5/2017 Abuja, University of Abuja, 2013, P.47
- [2]. Baba Na ta a la interviewed at his residence in Minna Town on 12/11/2017
- [3]. Bawa M.M. Ahmadu Bahago the First Emir of Minna, 1918-1987, M.A. Thesis Abuja, University of Abuja, 2004
- [4]. Blas, J. 2011 wild week as gold touches record before plunging, *financial times* 26 August
- [5]. Coquery-Vidrovitch. C. 2005. *The History of African Cities south of Sahara*. Princeton, NJ: Markus Weiner Publishers

- [6]. Creswell W. John, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, London, Sage Publications, 2007
- [7]. Deborah F. Bryceson and Danny Mackinnon (eds) Eureka and beyond: Mining's impact on African urbanization, Special Issue of the Journal of Contemporary African Studies, vol 30(4), 515-37 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwj48LKpjK7VAhUHQo8KHx_tDgMQFggnMAA&url=http%3A%2F%2Fwww.tandfonline.com%2Fdoi%2Fabs%2F10.1080%2F02589001.2012.719376&usg=AFQjCNHEG-_Q5PzU5KajZ4RggrGaRmCzoA Accessed 29/7/2017, 4:42pm
- [8]. Deffontaines, P. The origin and growth of the Brazilian network of towns www.jstor.org/stable/209737?seq=1//page_scan_tab_content
- [9]. E.H. Carr, *What is History*, London, Penguin, 1982
- [10]. Federal Government of Nigeria, 2007 Mineral Regulation Act of Nigeria. Ministry for Solid Minerals, Mines and Power, Abuja, Nigeria
- [11]. FGN Mines Manual, containing the Mineral Act, (cap 121) of 1946 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ved=0ahUKEwi5gdjP-q3VAhWet8KHfg1A10QFghAMAQ&url=https%3A%2F%2Fbooks.google.com%2Fbooks%2Fabout%2FMines_Manual.html%3Fid%3DICKDHAAACA&usg=AFQjCNGfEuTuHD1pdO_fcVzAp2uZo4RqeQ Accessed 29/7/17, 3:36pm
- [12]. Gunn. S and Flaire L, (2013), *Research Methods for History*, Edinburgh, Edinburgh University Press
- [13]. Franklin M.I, (2013) *Understanding Research: Coping with the quantitative and qualitative divide*, London, Routledge
- [14]. Gatari Albarka a gold miner interviewed 26/2/2017
- [15]. Haydn, Terry, et al. *Learning to teach history in the secondary school: A companion to school experience*. Routledge, 2014
- [16]. Holliday, J.S. 2002 *The World Rush in : The California gold rush experience*. Norman OK: University of Oklahoma Press
- [17]. Ibn Khaldun, *Muqqadimah*, Vol.2, New York, Pantheon Books, 1958; Smith, A, *A Little new light*, Zaria, Gaskia Corporation, 1987, 57; Janet L Abu Luquhod, *Changing Cities: Urban Sociology*, New York, Harper Collins Publishers, 1991, 28
- [18]. Ibrahim, S.L. "The Migrant factor in te Economic and Political History of Minna Since 1908" Abuja, M.A Dissertation, University of Abuja, 2011
- [19]. Interview with Dr Hussaini Ibrahim a medical practioner and Director Rayyuwa Medical Center, Minna, on March, 3 2017
- [20]. Mallam Isah a miner and a machinist at the Chanchaga River, interviewed on February 22, 2017
- [21]. Medecine San Frontieres, MSF Briefing Paper 2012 Lead Poisoning Crisis inZamfara State Northern Nigeria, <https://www.google.com.my/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ved=0ahUKEWj48LKpjK7VAhXDs48KHV4GCSYQFghCMAQ&url=http%3A%2F%2Fwww.doctorswithoutborders.org%2Fnews-stories%2Fbriefing-document%2Flead-poisoning-crisis-zamfara-state-northern-nigeria&usg=AFQjCNFArhP2J31hzhqAoeMVsmW7x1PsQQ> Retrieved 29/7/2017, 4:00pm
- [22]. Mining law 1946 and Nigerian Mineral and Mining Act, 2007 <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwid-e6x9q3VAhXMN48KHyrxDQ4QFgg1MAM&url=http%3A%2F%2Fwww.nassnig.org%2Fdocument%2Fdownload%2F5798&usg=AFQjCNE7GzE0kuN3-6AajA9QdSjiQsIdcQ> Download 29/7/17 3:20pm
- [23]. NAK Min Prof 279/1909
- [24]. NAK; Min Prof, M. 187 Vol. 4
- [25]. NGS Minna Archives: M.428, Rest House at Minna for European Gold Miners.
- [26]. NGSAM ACC 3723 illegal Mining
- [27]. NGSAM APN11680
- [28]. NGSAM NAK. Min Prof; M. 285
- [29]. Ogunremi, G.O. and Faluyi, E.K. (eds) *Economic History of West Africa since 1750*, London, Rex Charles, 1996
- [30]. On a visit to the Chanchaga river different economic activities were seen to be ongoing, these include; food Vendors, commercial cyclist (okada), crushers, smoothers and other service providers
- [31]. Rahrrough, M.J. Day of Gold: The California Gold Rush and the American Nation.
- [32]. Saad, E.N. 1983. *Social History of Timbuktu: The role of Muslim scholars and notables, 1400-1900*. Cambridge: Cambridge University Press.

- [33]. Salihu Ibrahim The Transformation of Minna Town 1910-1976, Abuja, M.A. Thesis, University of Abuja, 2013, P.52
- [34]. Sanderson Beck West Africa and the British 1750-1950. File://localhost/Application%20Data/Opera9/saved%20pages/16-10-WestAfricaBritish.html
- [35]. South African History Online, Colonial history and development of Johannesburg www.sahistory.org.za Retrieved 10/26/16, 2:42am
- [36]. The Making of Cosmopolitan California: An analysis of immigration 1848-1870. California Historical Society Quarterly
- [37]. Tijjani Bulus a gold miner interviewed 26/2/2017
- [38]. Wikipedia, Gold, <https://en.wikipedia.org/wiki/Gold> Accessed on 29/7/2017, 4:20

Salihu Ibrahim. "Gold Mining and the Development of Towns: A Study in the History of Minna, 1910 -2015." IOSR Journal Of Humanities And Social Science (IOSR-JHSS) , vol. 22, no. 8, 2017, pp. 37–43.