

How to Resolve the Galamsey Problem in Ghana from A Cultural-Historical Public Policy-Making Approach

By Brig Gen (Rtd), Nana Adu Albert (PhD)

Abstract

This study offers excerpts of a cultural-historical explanation to the question of “why theoretical frameworks underlying the processes of public policy-making on mining in general and artisanal small-scale gold mining (ASM) in particular, have and continue to fail to address the problem of ASM, locally or colloquially referred to as “galamsey” in Ghana. While the interest in the phenomenon of ‘galamsey’ lingers on, the focus of discourses among researchers has been on examining the political, socio-economic, and institutional challenges inhibiting effective implementation of policies on ASM in Ghana. Interestingly, interrogating the impact of the cultural-historical underpinnings of ASM activities in the Ghanaian context on public policy failures on the phenomenon have received limited research attention. Adopting a qualitative research methodology, anchored on the Cultural-Historical Activity Theory (CHAT) in tandem with the ‘Stages Model’ of policy-making, this knowledge gap was empirically interrogated. The study establishes that the processes of designing a theoretical framework to guide public policy-making on Ghana’s ASM is complex but fix better when the process is driven by a mixed approach (modern and cultural) in the public policy-making cycle. This typology is novel as previous studies have not approached the subject in this manner. In addition, the study establishes that adopting a mixed context-specific theoretical framework approach to guide public policy-making on ASM has more diverse implications on policy implementation than just the socio-economic, institutional, and political arguments dominant in the existing literature. The study amongst others concludes that the cultural-historical underpinnings and traditional governance system on ASM should be re-visited, analysed and some aspects incorporated into the current Minerals and Mining Regulatory Framework.

Additionally, it is recommended that traditional leaders of gold-endowed communities including the National House of Chiefs should necessarily be consulted in the development of future public policies on ASM in Ghana. Finally, a constitutionally empowered, trust-worthy community residents and traditional leaders should be trained and supported by government to adjudicate on cultural value offences committed by local licensed and illegal small-scale gold miners in the course of their operations.

Key Words: Artisanal Small-Scale Gold Mining (ASM), Cultural-Historical Underpinnings, Public Policy-making, Theoretical Framework, Traditional Governance System

1.0 Introduction

Ghana as a developing country for the past two to three decades has been bedevilled with some externally influenced and local socio-economic challenges which require effective and efficient policy directions from government. One of such challenges is the expanding and seemingly uncontrolled illegal artisanal small-scale gold mining locally or colloquially referred to as “galamsey”. As a socio-economic activity, ASM has been defined in various ways. These definitions are often characterized in terms of the number of miners, its informality status, and production capacity of a miner, the level of mechanization or the size of capital investments (Fritz et al, 2018).

According to Barry (1996), ASM as a phenomenon is not new to the world and in particular, to the West African Sub-Region. He argues that the illegal aspects have become a problem because of how governments and policy makers, particularly in developing countries including Ghana are handling the issue. For example, in Ghana, the highly centralized bureaucratic licensing acquisition structures instituted by the government prior to engaging in ASM activities have been cited amongst other reasons, as one major reason that has encouraged operational illegalities in the ASM sector (Adu-Baffour, Daum, Birner, 2021).

Noetstaller, a retired Associate Professor of University of Leoben, Austria, at a World Bank International Roundtable on ASM in 1995 during a public lecture also had this to say:

“Ever since man learned to exploit the wealth of inanimate nature, ASM has been one of the essential human economic activities, providing materials for adornment tools, and shelter. From the dawn of civilization, through the beginnings of the Industrial Revolution, it was the exclusive form of mining. At the end of the 20th century, it still plays a significant role in many parts of the developing world. Today, ASM is a highly controversial activity, meaning different things to different people. To some, it is dirty and dangerous, disturbing, and destructive and frequently on the wrong side of the law. To others, it is profitable and productive and the only means of survival in an environment with few alternatives” (Barry, 1996, p.3).

This quotation explicitly traces the historical journey of ASM, proving how old, and important ASM as an activity has been in existence and its contribution to the socio-economic development of nations ever since human creation came to know about how to exploit nature. This success story of ASM activities is not different from what pertains in Ghana.

Notwithstanding these benefits and the positive contributions of ASM to the socio-economic development of Ghana’s economy, the adverse impact of illegal artisanal small-scale gold mining, such as water and river pollution, land degradation, and armed land conflicts in the past two to three decades is seriously threatening the security and livelihood of many Ghanaians. In an attempt to control the menace, the government in the year 2017 commissioned a high level inter-ministerial task force headed by the Ministry of Lands and Natural Resources to lead and coordinate government efforts to end illegal mining, and reform the sector. This action was taken in addition to the launch of two Joint Military and Police Task Forces under the flags of “OPERATION VANGUARD” in 2017 and “OPERATION HALT II” on Saturday 8 May 2021 (TV, W. L, 2018). The latter task force was even authorised to carry out raids, and burn excavators found at galamsey (sites (Hilson, 2017; Hilson; Maconachie, 2020). From all

indications, it can be argued that all these government actions and initiatives has rather emboldened gamseyers and the activity keeps spreading very fast throughout the country. The follow-up question is “why the lightning spread of the gamsey menace in the face of the chain of government policies, regulations and series of interventions?”

2.0 Background of ASM Activities in Ghana

According to extant literature, ASM activities started in the then Ghana Empire around the 7th and 8th centuries. As a result of its socio-economic power, ASM has generally been described as a rural community enterprise by renowned researchers (Botchwey, 1995; Hilson, 2016; Hilson & Potter, 2003; Ofosu-Mensah, 2011). Hilson (2016) in particular maintains that there is a wealth of evidence indicating that artisanal mining of rich gold deposits was largely responsible for the wealth and strength of the ancient Ghanaian Empire and its cultures. Ofosu-Mensah (2011) on the other hand attests that ASM activities have a cultural-historical antecedent and have become part and parcel of the culture of some communities in present-day Ghana.

Culture, although subjective in definition, has generally been described as a recognised learned behaviour or activity that is passed on from generation to generation (Brown, 1991). Kroeber and Kluckhohn (1952) define culture as a patterned way of thinking, feeling and reaction acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups including their embodiments in artefacts and the essential core consisting of traditional (historically derived and selected) ideas, especially, their attached values. Idang (2015) adds that tradition represents a critical piece of culture and reminds human societies and groups that they are part of history that defines their past and shapes who they are today and who they would likely become in future.

Attesting the traditional strength underpinning ASM activities in Ghana, a survey conducted by a Geological Survey team from Denmark and Greenland in October 2017 indicated that in rural communities where ASM activities are prevalent, some recognised traditions or

learned social and cultural practices are often performed and observed at ASM sites as part of the traditional belief systems (Tychsen et al, 2017). Their findings went further to indicate that some of these practices and sacrifices which are generally performed by traditional or spiritual heads prior to the commencement of the ASM have become impossible to confront even in this 21st century because they constitute an aspect of learned traditions and beliefs.

Although extant literature on artisanal mining of gold is unable to confirm the specific date that this ASM enterprise commenced and how it was regulated in the then Ghana Empire, a few scholars including Ofosu-Mensah (2011) and Agyei (2016) through traditional storytelling (folklore) have managed to trace and document some sketchy details on the activity. According to them, activities such as winning gold on small-scale by local inhabitants were administered by chiefs and traditional leaders prior to the arrival of the first European adventurers, the Portuguese in Ghana, then the Gold Coast in 1471.

3.0 Why the Spread and Resistance to Government ASM Policies and Armed Security Forces by Galamseyers in Rural Gold-Host Communities in Ghana

Artisanal and small-scale mining was officially formalized by PNDCL. 218 on 19 April 1989, but as of now a very large number of rural artisanal small-scale miners are still illegally operating without satisfying the operational conditions spelt out by the Minerals and Mining Act, (MMA), Act 703 of 2006 (Hilson, 2002). An array of reasons has been offered by scholars for the non-adherence to the law by these illegal miners and why the phenomenon rather keeps spreading to areas that hitherto were not considered as galamsey prone areas in Ghana (Banchirigah, 2008; Bansah et al 2018; Boafo et al, 2019; Crawford & Botchwey, 2017; Hilson & Potter, 2003; Justice et al, 2017; Wilson et al, 2015).

Indeed, all these varied reasons offered by studies on resistance to ASM policies and spread of illegal artisanal mining in Ghana are significant and commendable. Nevertheless, it is quite clear from literature that

these academic discourses did not sufficiently interrogate other equally important root causes of failures of ASM policies in Ghana. One key factor is the “copy and paste” of foreign or developed countries theoretical frameworks to underpin Ghana’s Minerals and Mining policies in spite of contextual differences. Two other major important “push and pull” factors that seem to have contributed to the spread of illegal mining but have not been sufficiently interrogated are; firstly, the non-acceptance by government and public policy makers to date that ASM activities in the context of Ghana has cultural-historical underpinnings that have occasioned the stiff opposition and open display of resistance to government policies by *galamseyers*; and secondly, the involvement of foreigners, particularly the Chinese in an enterprise constitutionally ordained and described as “special to Ghanaians only” by the Mineral Regulatory Policy (Crawford & Botchwey, 2017; Bofo et al, 2019).

Indeed, according to the literature, some locals particularly, rural communities involved in small-scale artisanal gold mining steadfastly see ASM as an ancestral or cultural enterprise and hold the perception that every natural resource (timber, precious minerals and others) found in or on all ancestral inherited lands are *bona fide* properties of the extended families. Such groups therefore see the central government policies on artisanal mining as foreign (Ofosu Mensah, 2011; Tschakert, 2009).

Armed with the cultural-historical knowledge and shared beliefs and principles underpinning ASM operations in addition to physically observing foreigners, especially the Chinese openly engaging in illegal artisanal gold mining and destroying their perceived inherited ancestral lands and the environment with impunity, rural ASM operators and dwellers seem not to have any other option but to “fight for their rights” of inheritance to their ancestral lands and its endowed minerals. This assertion was confirmed by majority of participants in the study conducted in three prominent towns located in three different geo-ethnic regions in Ghana (Bole in the Savannah Region, Dunkwa-on-Offin in the Central Region, Tarkwa-Nsueam in the Western Region) where *galamsey* is prevalent. Indeed, majority of the study participants shared the opinion that ASM operations have cultural-historical

underpinnings (superstitious and myth-based) and policy matters concerning the activity should entirely be left to traditional authorities who are custodians of traditional matters.

From the angle of judicial, academic and scholarly submissions in the subject area, coupled with the dictates of Article 257 (6) of the 1992 Constitution of Ghana which vests in the President to hold in trust for the citizenry every mineral in its natural state in, under or upon the land in Ghana, one may be tempted to argue that, the perception or beliefs held by such artisanal small-scale gold miners have no merit. But the empirical finding of the study unless proven otherwise, maintain that the thinking of majority of local folks involved in small-scale gold mining regarding control of ASM activities, is at variance with Article 257 (6) of the 1992 Constitution and the entire policy on ASM operations in Ghana.

Another important factor that seems to have emboldened community rural youths to continue to engage in galamsey activities but largely unknown and have not been thoroughly investigated by scholars is the factor of “inward faith” and cultural perception held by some local small-scale gold miners on the origin, ownership of underground gold and its extraction. ‘Faith’ is subjective and is understood and interpreted depending on the philosophy (belief and trust) of a person or group of people. Jonkers (2003) and Addei and Amankwah (2011) contend that a sizeable number of community folks whose doctrines of religion are based on the worship of spiritual beings and are coincidentally illegal gold miners in this 21st century, believe that gold is a spirit and that spiritual beings such as dwarfs, earth goddess, river and mountain goddess are custodians of all precious minerals including gold found on or in the earth and not the government.

To corroborate the assertion above, the study gathered that some rural illegal gold miners based on such faith and cultural-historical beliefs (superstitions and myth) about gold hold the perception that these spiritual beings who they believe are custodians of underground gold, can expose bountiful gold to them in their exploration journey if only they satisfy the demands of their spirit entities by performing some rituals. From the study, it came to light that some of these small-scale

illegal gold miners prior to undertaking the galamsey business perform rituals by sacrificing animal and even go to the extent of offering human blood to these spiritual beings or deities in a covenant deal with these gods for higher yields of gold.

This observation may sound ridiculous and could attract counter submissions. But to the contrary, blood-related ritual performances by galamseyers before and during mining are real phenomena. Such groups of miners would most likely continue to mine illegally in spite of government's policies and regulations on ASM, particularly if the performance of such rituals sanctioned by traditional authorities and spiritual leaders coincidentally end up with bountiful gold yields.

4.0 Cultural Approach to Solving the Galamsey Problem in Ghana

During the study in all the three locations in the three different geo-cultural areas, one key takeaway that majority of participants agreed on is that small-scale gold mining is a cultural enterprise and the best handlers of matters arising from the activity should be handled either by their own revered Chiefs or Imams who are the custodians of the land instead of the central government. It is true that many scholarly works on ASM including Afriyie et al (2016) have blamed traditional authorities or the traditional governance system for the spread of the galamsey menace in Ghana. Although it is a fair observation, the study strongly argues that such claims do not suggest that the traditional authorities have entirely lost grounds in terms of their cultural powers. There are still some impeccable traditional authorities who are reliable and can be counted on if the government intends to re-frame its policy architecture on galamsey, taking cognizance of the fact that the enterprise as established earlier is underpinned undoubtedly by cultural-historical factors in the Ghanaian context.

Under the traditional governance concept in Ghana, one key established and accepted traditional and cultural practice or norm that is observed as a taboo in most ethnic spaces in the Ghanaian social setting, is to openly defy or disobey instructions from kings, chiefs and traditional

leaders superintending kingdoms, towns and villages. Refusal to obey or accord the necessary respect or protocols to such group of persons could attract severe sanctions. However, in contemporary Ghana, as already indicated, some traditional leaders and their acknowledged authority seem to be waning as a result of a myriad of claims and accusations that some traditional leaders are directly involved in illegal mining activities. Despite the growing trend of accusations, observed displays of respect shown by Ghanaians in key volatile cases suggest that traditional leaders could play a pivotal role in finding a lasting solution to this culturally and historically rooted enterprise. To buttress the submission that traditional leaders are key constructs and cannot be left out in any plan aimed at solving the galamsey problem in Ghana, the study shares this reported event below with readers.

On 9th December 2017, as part of traditional rituals accompanying the burial of the Asantehemaa, Nana Afiya Kobi Serwaa Ampim (the late Queen Mother of the Ashanti Kingdom) and mother of Otumfuo Osei Tutu II (the King of the Ashanti Kingdom), it was reported that the Asantehene imposed a “traditional curfew” on movement of persons from 9pm to 2am in the entire Kumasi Metropolis (Joyonline, 2017). This order coming from the King was obeyed and enforced to the core by only traditional soldiers (abrafu) from the King’s Palace armed with only clubs and without any assistance from government security agencies. What was striking in response to this order was that, all persons in the Kumasi Metropolis including security personnel made no attempt to go out in between the stated period of time.

In a related development, the same Asantehene Otumfuo Osei Tutu II on 22 March 2021, instructed a private developer who destroyed over 500 trees planted along the banks of Lake Bosomtwe meant to protect the lake from shrinking and pollution, to plant over 59, 800 trees within a period of five years and hand same over to the community (Joyonline, 2021). This instruction was adhered to without resistance. This is a display of the might of the traditional governance system.

Drawing on these examples and considering the cultural-historical links underpinning ASM, it is prudent for contemporary policy-making bodies, such as the Legislature and the Mineral and Mining Commission

and its affiliated agencies, to collaborate with distinguished traditional leaders. This collaboration should aim to develop a home-grown or hybrid public policy-making framework, combining traditional and orthodox approaches, to guide public policy on ASM operations in Ghana and regulate the activities of artisanal small-scale gold miners.

5.0 Altercations in the Minerals and Mining Laws and its Impact on ASM Policy Implementation in Ghana

As already indicated, by the dictates of the 1992 Constitution, Article 257 (6) the Presidency as an institution has a wide-ranging authority in all matters concerning the mining sector. Parliament (the legislature) as an institution can also make specific laws to regulate rights and interests in the mining sector. Other institutions and agencies including the Ministry of Lands and Natural Resources, Ministry of Finance, Ministry of Local Government and Rural Development, Ministry of Environment, Science and Technology, National Development Planning Commission (NDPC), Minerals Commission, Geological Survey Department, Precious Minerals Marketing Company Limited, Environmental Protection Agency, Forestry Commission, Water Resources Commission, Lands Commission, Office of the Administrator of Stool Lands, Bank of Ghana, Ghana Revenue Authority, District Assemblies, Traditional Rulers, Mining Communities, Ghana Chamber of Mines and Non-Governmental Organizations (NGOs)/Civil Societies, according to the Minerals and Mining Policy Document (MMPD) released in 2014, are also assigned roles and responsibilities with regard to the management and regulation of activities in the mining sector.

A notable anomaly is the limited involvement and participation of the Ministry of Chieftaincy Affairs in public policy-making on mineral and natural resources, despite most minerals and natural resources being located on stool lands vested in traditional chiefs. Again, it is worth noting that the ***Chieftaincy institution together with traditional councils*** are not part of the policy-making body on mining, per the Minerals and Mining Policy Document (MMPD), 2014, p 46, 47), but when it comes to the implementation of mining policies, they are

expected to ensure that mining operations are conducted legally and in consonance with the country's environmental regulations. This is a clear overlapping and duplication of the roles of the Environmental Protection Agency.

Another example of conflict of roles is as follows: Article 257 (1, 2, 6) of the 1992 Constitution in part states that, "all public lands in Ghana, including every mineral are vested in the President" but Article 267 (1) of the same 1992 Constitution also in part states that, "all stool lands are vested in the stool on behalf of, and in trust for the subjects of the stool in accordance with customary law and usage". Article 257 (3), (4), and (5) in particular vests all lands in the former Northern, Upper East and Upper West Regions of Ghana to their various traditional authorities.

It is a fact that by an Executive Instrument, the government through negotiations and other reasons can acquire and convert land in Ghana to public land but in the face of recent economic hardship and reported economic gains from galamsey activities, the study observed that majority of traditional leaders in charge of lands as listed in Article 257 (3) prefer to hold on to their ancestral lands than to hand them over to the government 'all things being equal'. So, the question is "which institution takes control of any potential mineral resources discovered on the land in these three regions? Is it the President or the stool owners who are host and custodians of these minerals? By the dictates of the 1992 Constitution, many would go for the President but the traditional leaders need to be seriously engaged.

It is on the basis of such anticipated confusion amongst others that the study argues that side-lining traditional rulers and some key community stakeholders in designing policy frameworks on such issues could be a source that could encourage local dwellers to engage in galamsey. It is therefore suggested that these and other legal issues involving ownership, mining and management of such mineral resources should holistically be addressed to ensure a smooth policy formulation and implementation on ASM activities in Ghana. Going forward, there is the need to re-visit the concept of public policy-making on mining in general and ASM in particular and align mining policies, particularly on ASM to conform with some traditional norms and aspirations of

communities endowed with minerals and other natural resources in Ghana.

Such discourse would help scholarship to come out with a theoretically grounded and practically convincing public policy-making framework that can replace the existing 'foreign inherited' theories underpinning public policy-making frameworks on mining in general and ASM operation in particular. Indeed, a robust public policy-making architecture that constitutionally captures some aspects of the history, culture and traditional environmental laws that empower traditional rulers who are custodians/hosts of stool lands to prosecute some relevant traditional aspects of the Minerals and Mining laws should urgently be considered. Such a consideration can go a long way to help solve the unending impasse between the government, traditional leaders, and communities on illegal artisanal small-scale gold mining.

6.0 Conclusion

Implementation of the existing public policy framework on artisanal small-scale gold mining (ASM), locally or colloquially referred to as "galamsey" in Ghana has and continues to fail to address the menace. Many reasons and explanations have been offered on the subject matter by various scholars. However, one significant finding about artisanal small-scale gold mining in Ghana, which has not received adequate scholarly attention, is that ASM in the Ghanaian context has cultural-historical underpinnings that are directly linked to the current policy implementation challenges facing the industry. The study therefore sought to explore how understanding the cultural-historical underpinnings of ASM could lead to the development of a holistic and effective context-specific public policy-making framework to guide the process of public policy-making in the future to address the problem of ASM in Ghana. To achieve this objective, a study was conducted in three prominent towns in three different geo-cultural regions in Ghana (Bole in the Savannah Region, Dunkwa-on-Offin in the central Region, Tarkwa-Nsueam in the Western Region). The study establishes and concludes that ASM activities in Ghana have cultural-historical underpinnings that impact public policy implementation

regarding the enterprise. It suggests that current Mineral and Mining policies on ASM activities in Ghana should be revisited and analysed, with aspects of the traditional governance system incorporated into the existing Minerals and Mining Laws.

7.0 Recommendations

The study makes the following recommendations to the development of a holistic and effective future public policy-making framework aimed at addressing the galamsey menace in Ghana:

- a. The current public policy-making framework on ASM in Ghana should be reviewed.
- b. A more 'Ghana-made' context-specific public policy-making framework that takes into consideration modernism and cultural constructs underpinning ASM activities in Ghana should form the foundation for future public policy-making frameworks.
- c. Public policy makers should adopt a bottom-up approach in ASM policy-making by widening the net of consultation and engagement to include resident community traditional leaders and key stakeholders in artisanal small-scale gold mining communities.
- d. A constitutionally empowered mixed judicial body or system made up of trusted and renowned community traditional leaders and state jurors should be formed, trained and sincerely supported by government to adjudicate on cultural-historical offences committed by illegal small-scale gold miners.
- e. Government should seriously consider educating co-host gold and other natural resources communities on Ghana's Minerals and Mining Act, Act 703 of 2006.

References

- Addei, C., & Amankwah, R. K. (2011). Myths and superstition in the small-scale gold mining industry of Ghana. *Research Journal of Environmental and Earth Sciences*, 3(3), 249-253.
- Adu-Baffour, F., Daum, T., & Birner, R. (2021). Governance challenges of small-scale gold mining in Ghana: Insights from a process net-map study. *Land Use Policy*, 102, 105271.
- Afriyie, K., Ganle, J. K., & Adomako, J. A. A. (2016). The good in evil: A discourse analysis of the galamsey industry in Ghana. *Oxford Development Studies*, 44(4), 493-508.
- Agyei, G. (2016). Internationalisation of artisanal and small-scale mining in Ghana: opportunities and challenges. *Ghana Mining Journal*, 16(2), 20-27.
- Banchirigah, S. M. (2008). Challenges with eradicating illegal mining in Ghana: A perspective from the grassroots. *Resources policy*, 33(1), 29-38
- Bansah, K. J., Dumakor-Dupey, N. K., Kansake, B. A., Assan, E., & Bekui, P. (2018). Socioeconomic and environmental assessment of informal artisanal and small-scale mining in Ghana. *Journal of Cleaner Production*, 202, 465-475.
- Birkland, T. A. (2019). *An introduction to the policy process: Theories, concepts, and models of public policy making*. Routledge.
- Botchway, F. N. (1995). Pre-colonial methods of gold mining and environmental protection in Ghana. *Journal of Energy & Natural Resources Law*, 13(4), 299-311.
- Brown, P. J. (1991). Culture and the evolution of obesity. *Human nature*, 2(1), 31-57.
- Crawford, G., & Botchwey, G. (2017). Conflict, collusion and corruption in small-scale gold mining: Chinese miners and the state in Ghana. *Commonwealth & Comparative Politics*, 55(4), 444-470.
- Barry, M. (1996). *Regularizing informal mining-a summary of the proceedings of the international roundtable on artisanal mining*. The World Bank.
- Fritz, M., McQuilken, J., Collins, N., & Weldegiorgis, F. (2018). *Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues* (pp. 81-81). International Institute for Sustainable Development (IISD).

- Ghana Minerals and Mining Policy Document (MMPD), 2014
- Hilson, G. (2002). Promoting sustainable development in Ghanaian small-scale gold mining operations. *Environmentalist*, 22(1), 51-57.
- Hilson, G. (2016). Farming, small-scale mining and rural livelihoods in Sub-Saharan Africa: A critical overview. *The Extractive Industries and Society*, 3(2), 547-563.
- Hilson, G., & Potter, C. (2003). Why is illegal gold mining activity so ubiquitous in rural Ghana? *African Development Review*, 15(2-3), 237-270.
- Hilson, G. (2017). Shootings and burning excavators: Some rapid reflections on the Government of Ghana's handling of the informal Galamsey mining 'menace'. *Resources Policy*, 54, 109-116.
- Hilson, G., & Maconachie, R. (2020). For the environment: an assessment of recent military intervention in informal gold mining communities in Ghana. *Land use policy*, 96, 104706.
- Idang, G. E. (2015). African culture and values. *Phronimon*, 16(2), 97-111.
- Jonkers, P. (2003). True Faith In» faith And Knowledge «. *Hegel-Jahrbuch*, 2003(1), 183-189.
- Joyonline. (2017). Curfew in Kumasi as Asantehene makes midnight visit to buried mother. Retrieved from: <https://www.myjoyonline.com/curfew-in-kumasi-as-asantehene-makes-midnight-visit-to-buried-mother/9> December.
- Joyonline. (2020). Asantehene storms Lake Bosomtwe after Akoma FM report. Retrieve from: <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Asantehene-storms-Lake-Bosomtwe-after-Akoma-FM-report-1238158> 20 April.
- Justice, I. M. S., Ahenkan, A., Bawole, J. N., & Yeboah-Assiamah, E. (2017). Rural Poverty and Artisanal Mining in Sub-Saharan Africa: New Perspective through Environment–Poverty Paradox. *International Journal of Rural Management*, 13(2), 162-181.
- Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. *Papers. Peabody Museum of Archaeology & Ethnology, Harvard University*.
- Ofori-Mensah, E. A. (2011). Historical overview of traditional and modern gold mining in Ghana. *International Research Journal of Library, Information and Archival Studies*, 1(1), 006-022.

- The 1992 Constitution of the Republic of Ghana. Printed by Ghana Publishing Company Limited Assembly Press, Accra. www.ghanapublishing.com
- Tschakert, P. (2009). Digging deep for justice: A radical re-imagination of the artisanal gold mining sector in Ghana. *Antipode*, 41(4), 706-740.
- Tschakert, P. (2009). Recognizing and nurturing artisanal mining as a viable livelihood. *Resources Policy*, Elsevier, vol, 34 (1-2), pages 24-31.
- TV, W. L. (2018). The effectiveness of 'Operation Vanguard' against illegal mining: survival of security personnel.
- Tychsen, Boamah, Ahadjie, Sandow, Alidu, Awuah, Quaicoe, Amankwa, Fobil, Nyame, Davis (2017). ASM Handbook for Ghana Geological asurvey of Denmark and Greenland (GEUS) Copenhagen, Denmark, 160 pp.
- Vygotsky, L. S. (1978, 1997). *The collected works of LS Vygotsky: Problems of the theory and history of psychology* (Vol. 3). Springer Science & Business Media.
- Wilson, M. L., Renne, E., Roncoli, C., Agyei-Baffour, P., & Tenkorang, E. Y. (2015). Integrated assessment of artisanal and small-scale gold mining in Ghana—Part 3: Social sciences and economics. *International journal of environmental research and public health*, 12(7), 8133-8156.