

Mining and Sustainable Development in the Asutifi North District, Ghana

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Abstract

Mining's developmental is being on equal measures. The presence of precious mineral deposits has been associated with widespread poverty and underdevelopment, at least at the macro level of analyses. This study, through the Asutifi North District case study sought to undertake a micro level analysis of the nexus between mining and the sustainable development of the mine-take communities The focus group discussion, stakeholder validation workshop and analysis of satellite imagery the study finds, particularly in relation to social development that mining has made significant contributions to the development of the mine-take communities in the Ahafo area. The study concludes that issues such as the one-off payment of compensation to people who lose their lands, use of mineral royalties, and the amount of money require some review in local development area.

Introduction

Mining, a major global activity is extolled and chided in equal measure. As far as back of 2000 years observed that mining is generally detrimental for development because it often takes place under conditions and results in inequity in the distribution of wealth, and poor development outcomes. More recently of 2014 the benefits of mining to national economies are obscured by the socio-economic and environmental costs which are wrecked on mine-take communities. It is observed that mining is destructive and capture for corporate and individual benefits. Mining is associated with socio-economic and environmental impacts for the majority and outrageous benefits to a few [1,2].

Sustainable mining has been used to mean the rate of extraction of mineral resource sand exceed the rate of renewability. Sustainable mining requires that mining addresses economic, social and governmental issues. The relationship between mining and sustainable development from the lens of corporate social responsibility with its paternalistic tendencies and benefits for communities beyond the mine. (Emel et al., 2011). The sustainable mining as being the extent to which the interests of mining firms are harmonized with the values of society generally and affected communities in particular. Sustainable mining taken as an environmentally friendly manner [3-5].

The mining sector remains very important to many African countries. Ghana for instance, has recently overtaken South Africa to become Africa's largest producer of gold (Ghana Chamber of Mines, 2020). Mining in Ghana is an age-old and ancient industrial activity from which the country first acquired its name, the Gold Coast. Ghana is blessed with a variety of commercially valuable minerals such as gold, diamond, manganese, and bauxite. the minerals and natural resources sectors of Ghana. Foreign direct investment since 2000 and as a result contributed to the Ghana's economy through job creation and the growth of the country's Gross Domestic Product (GDP). The Government of Ghana 2019 estimates that mining and quarrying contributed 12.6% to GDP in 2019, 18.38% of direct domestic revenue, and 19.05% in corporate tax. The Ghana Chamber of Mines, in its annual report 2020 indicated that there are some thirteen 13 large-scale mining companies, operating 16 concessions and about 1000 licensed small-scale mining companies involved in gold mining in Ghana. The mining companies paid a total of GHC1, 006,668.50 in royalties to the Government of Ghana and affected mining communities in 2019. It is also estimated that the small-scale mining sector employs about 1.1 million and mostly illiterate and unskilled people, whose practices and methods of mining are rudimentary and primitive. The mining sector to the development of Ghana is thought to be central to efforts aimed at achieving the sustainable development goals [6-8].

Although the mining sector of Ghana makes significant contributions to the economy, infrastructure development, and rural livelihoods. It is also viewed as a major cause of environmental degradation (Armah et al., 2013). Adverse impacts of mining in Ghana are catalogued to include loss of productive land to mining operations, excessive cost of living, sporadic contamination of the environment from cyanide and other chemicals, depletion of forest [9,10].

cover, and high rates of unemployment in mine-take communities, increases in diseases such as malaria, respiratory diseases, HIV/AIDS, and social challenges such as drug abuse, social segregation, and forced displacement in many mining communities across Ghana country [11-13].

This study therefore undertakes, through the Asutifi North District case study of Ghana and micro-level analysis for possibilities of mining co-existing with development. The environmental aspect measured variables such as forest cover, land use and land cover (LULC) changes, riverbeds and watercourse dynamics, and land degradation to assess the effects of mining on the environment. The social aspect collected and analyzed data on land access and use rights, access by members of the communities to relevant information and services, stakeholder participation in decisions affecting their lives, and accountability of local chiefs in the use of their share of royalties to assess the links mining and social development.

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AsutifiN orth District

Figure 1: Map of Ahofo Region.

Study area

The study area is the Asutifi North District of Ghana, which serves as the African headquarters of Newmont Goldcorp, an American mining giant headquartered in Denver Colorado. The Asutifi North District is located between latitudes 6°40′ and 7°15′ North and Longitudes 2°15′ and 2°45′ West, with Kenyasi as its capital. The district has a total land area of 1500 sq. Newmont's operations in the Asutifi North District affects five communities as Ntotroso community, Hwidiem community, kenyasi community, Wamahinso community. etc. The study area of these communities of its environmental impact assessment enables to ignore the environmental degradation of lands and therefore with leading environmental conditions in the Asutifi North District.

The Asutifi North District is among the districts in the Ahafo Region of Ghana.It shares its boundaries with Ahafo Ano North of its capital Tepa, Asutfi South of its capital Hwidiem, Ahafo Region of its capital Sunyani (Figure 1).

Methodology

Adoption of modern technology, research and innovation to address multiple concerns emanating from mining environments. This paper is divided into five main sections. Following the introduction is a review of the theories related to mining and development. Section three discusses the study area and methods. Section four is used to undertake an analysis of the data with section five dedicated to discussion of the results, leading to a conclusion.

Result and Discussion

From the results, it could be seen that, the sustainable development in the Asutifi District from Newmont gold company mines with its environmental impact assessment has gone along way of useful land from degradation in the environment.

Conclusion

The conclusion opens that the Asutifi district in the Ahafo region

and the Newmont gold mines company together with one plan policy measures has contributed more development as social infrastructure as schools, hospitals etc in the Asutifi districtin the Ahafo region of Ghana.

References

- https://www.semanticscholar.org/paper/Introduction%3A-sustainable-miningin-the-future-Allan/7892b2e82c6aebe6ed1656d65513ee7181e29001
- AM Estevez (2013) Sustainable development of mining mineral resources. Journal of Sustainable Mining.
- Ana Maria Esteves (2008) Mining and social development: refocusing community investment using multi-criteria decision analysis. Resources Policy 33:39-47.
- NBR Monteiro (2019) Sustainable development goals in mining. Journal of Cleaner Production 228.
- 5. https://www.researchgate.net/publication/326925600_Water_Pollution_ Resulting_From_Mining_Activity_An_Overview
- https://www.researchgate.net/publication/352546488_The_contribution_of_ mining_sector_to_sustainable_development_in_Saudi_Arabia
- AS Worlanyo (2022) The impacts of gold mining on the welfare of local farmers in Asutifi-North District in Ghana: a quantitative and multi-dimensional approach. Resources Policy 75: 102458.
- https://www.researchgate.net/profile/Richard-Amoako-3/publication/273771820_ Environmental_and_Security_Aspects_of_Contemporary_Small_Scale_Mining_ in_Ghana/links/550c453d0cf212874160b19b/Environmental-and-Security-Aspects-of-Contemporary-Small-Scale-Mining-in-Ghana.pdf
- https://www.semanticscholar.org/paper/ls-gold-mining-a-bane-or-a-blessingin-Sub-Saharan-Appiah-Buaben/71bfb26f7ac1ce1904a2cd923d11651722cb6 9ce
- 10. Aubynn T (2013) Mining and Sustainable Development: The Case of Ghana. Retrieved.
- 11. https://www.oecd.org/countries/ghana/1819492.pdf
- FP Carvalho (2017) Mining industry and sustainable development: time for change. Food and Energy Security 6 61-77.
- MO Erdiaw-Kwasie (2014) Impacts of mining on the natural environment and wellbeing of mining-fringe communities in Prestea, Ghana. Greener Journal of Social Sciences 4.