# Mining as a source of underdevelopment in zambia



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Zambia is a poverty ridden, developing country struggling to survive in a competitive international market. The source of this nation's underdevelopment stems from the second wave colonialism where Europeans exploited the mining industry in Zambia, particularly copper, to fuel industrial growth back home. Consequently, a dependence on mining was created and still exists today as an integral source of foreign capital for this developing nation. This paper will argue that the underdevelopment in Zambia is aggravated by the current mining industry that generates negative economic, environmental, and social impacts. The economic impacts of the mining industry include an undiversified economy and dependence on Core countries for loans and manufactured goods. These are evident through the international trade industry and the debt generated over the past 50 years. In addition to the economic impacts of mining in Zambia, the damage to the environment that this industry creates also affects the agricultural sector as the land becomes infertile from acid rain and chemical https://assignbuster.com/mining-as-a-source-of-underdevelopment-inzambia/

contamination. Finally, the social impacts of the mining industry in Zambia are evident through the labour issues employees in the mines face including insufficient salaries, lack of benefits, and violation of safe mining practices. My connection to Zambia is through its mining industry. Minerals, such as copper, are incorporated in numerous everyday objects like cookware and computers. As a student in Development Studies, I cannot help but wonder if it is fair for the people of Zambia to suffer for my benefit and the benefit of the Global North.

### **History of Colonialism in Zambia:**

Before exploring the negative impacts of mining in Zambia today, it is important to be aware of the origins of this industry and the detrimental impacts of colonialism. Zambia, formerly referred to as Northern Rhodesia, was ruled by the British South African Company (BSAC) from 1890-1923 and the Colonial Office from 1924-1964 (Phiri 2006). During Colonial Office rule, the Copper Belt, rich in copper sulfide ores, was discovered in the northern region of Zambia (Ibid). The Copper Belt was thoroughly exploited by European colonists due to the need for raw materials to create manufactured goods brought on by the Industrial Revolution (Cunningham 1981). The exploitation of the Copper Belt during this period fostered uneven development. For example, since the extraction of copper increased trade in Zambia, only the areas near railroads, that were vital for the transportation of minerals, were not impoverished (Phiri 2006). Europeans also assumed political dominance and were reluctant to provide the Africans with any sort of power because Africans were considered "politically immature" (Phiri 2006).

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Dependence and control by the West began early and due to the strong political control of the Europeans, the people of Zambia were left powerless, as they were unable to make changes to the economic stunting of their society. Colonialism organized the Zambian economy to be centered on the mining industry as they built infrastructure, such as railroads, to facilitate trading with the developed world (Phiri 2006). Zambia became part of an international division of labour where colonies were forced to create a particular commodity that would only benefit the development of the West and maintain a weak economy in the South. Underdevelopment theorists would agree with this statement, as they believe that colonialism is a primary reason for Zambia being classified as a periphery country today.

# **Zambia's Current Mining Industry:**

# **Economic Impacts of Mining in Zambia:**

The economic impacts of the mining industry in Zambia are an undiversified economy and dependence on the Core for loans and manufactured goods. These impacts are apparent through the trade industry and the hefty debt generated over the past 50 years. An undiversified economy is harmful because it makes Zambia more susceptible to economic crisis as the nation relies on the trade of one commodity (Sichingabula 1994). Today, 64% of Zambia's exports are copper-cobalt minerals (Central Intelligence Agency 2010). With such a large portion of foreign capital stemming from profits made in the mining industry, it is no wonder this country's economy nearly collapsed during the Oil Crisis in the 1970s.

After independence in 1964, Zambia refused to expand and move away from the familiarity of copper trading that was imposed during colonial rule (Sichingabula 1994). This is mostly due to the high copper prices between the 1960s and 1970s that allowed the Zambian economy to flourish in the international market (Ibid). Unfortunately, this economic boom came to a destructive end as copper prices declined in the 1970s and the cost of fuel rose due to the Oil Crisis (Ibid). This was particularly detrimental because oil is vital for the transportation of copper abroad. These major price changes forced this one-commodity nation to obtain more capital from Core nations to keep the mining industry afloat (Ibid). The result is heavy debt and being trapped in the vicious cycle of borrowing.

Today, Zambia is about \$3. 091 billion in debt (Central Intelligence Agency 2010). This debt is aggravated by the mining industry as the reliance on the copper trade continues. The demand for copper is being replaced by a rise in popularity of synthetic substances that are created artificially (Servant 2010). Zambia cannot meet this growing demand and, therefore, is unable to earn enough foreign capital to relieve itself of the enormous amount of debt it carries. It appears the quickest solution is to borrow more money from the Core.

In addition to relying on the North for foreign capital to pay off debt, Zambia imports manufactured goods, such as agricultural machinery, to spur development (Sichingabula 1994). Unfortunately, trade between Zambia and the Core is quite uneven. The Core almost always has the upper hand as Zambia is forced to trade low-priced primary commodities for high-priced technologies. The Zambian agricultural industry still relies on primitive forms https://assignbuster.com/mining-as-a-source-of-underdevelopment-in-zambia/

of cultivation, such as the slash and burn technique (Biz/ed 2010). This method involves cutting branches off of trees and burning them on land where cultivation is to take place (Ibid). It is widely believed that a more nutrient rich soil will be created, however, it often leads to deforestation and loss of soil fertility due to overuse of the land (Ibid). Therefore, it is essential that Zambia acquire these manufactured goods from the Core for the sake of the environment and the agricultural sector.

## **Environmental Impacts of Mining in Zambia:**

The damage to the environment created by the mining industry in Zambia not only poses a health risk but also puts a strain on the agricultural industry as farmers struggle to make use of land contaminated by air and water pollution. Air and water pollution are just some of the many environmental byproducts created through the mining industry that impact the health of Zambians. Contaminants, such as sulfur dioxide, created from the coppersmelting process, causes severe respiratory illnesses and breathing difficulties (Servant 2010).

Additionally, water pollution by mining companies poses a health risk for communities across Zambia. For example, on November 6, 2006 Vendanta, a multinational mining company based in India and operating as Konkola Copper Mines (KCM) in Zambia, carelessly released toxic waste in the Kafue River in the Lusaka province of Zambia (Servant 2010). Of the two million people in the Chingola district, 100, 000 regularly draw water directly from the Kafue River (Ibid). These people were deprived of drinking water for two days and hundreds were admitted to hospitals after consuming fish from this contaminated body of water (Ibid). Clearly, the health problems that come https://assignbuster.com/mining-as-a-source-of-underdevelopment-in-zambia/

along with the air and water pollution generated by Zambian mining companies is a growing issue that needs to be contained for the sake of the people.

One of the major ways in which mining pollutants impact the agricultural sector is through acid rain and improper disposal of chemical wastes. Acid rain in Zambia is created when sulfur dioxide mixes with water vapour in the air, which changes the chemistry of soil and hinders photosynthesis in plants (Dymond 2007). For example, the agricultural industry in Chingola has been severely harmed by acid rain and the soil has been contaminated to the point that vegetable crops no longer grow in the region (Bid/ed 2010). Chemical wastes from mining are also a hazard as arsenic and carbon monoxide can seep into soil and groundwater, if not properly disposed of (Ibid). These wastes are mostly created during the process of separating copper ore that leaves behind acidic liquid containing bits of sediment (Dymond 2007). If left in water sources, the sediment will build up and hamper the growth of crops growing in Zambian communities nearby (Ibid). For example, farmers near KCM's Nchanga plant have experienced crop loss due to sediment and silt that floods the fields to the point that they are no longer usable (Ibid). Evidently, the environmental impacts of mining have a ripple effect as other sectors of Zambia's economy, such as the agricultural industry, are also harmed.

## **Social Impacts of Mining in Zambia:**

The social effects of mining in Zambia are apparent through the labour issues miners face including meager salaries, lack of benefits, and violation of safe mining practices. It appears that Zambian mining companies put https://assignbuster.com/mining-as-a-source-of-underdevelopment-in-zambia/

profit before the rights of their employees as they hardly ever get paid overtime, are forced to work seven days and week, and money is deducted from their regular pay if they are late or miss days because of an illness (Dymond 2007).

Miners are almost treated as slaves as they are overworked and never provided with breaks. Contract workers are not provided with a company pension plan or free medical care. There is very little job security as some employees have identified that they have not signed any papers to guarantee they will have a job next week (Ibid).

In terms of the mining industry in Zambia, it is estimated that the fatality frequency is 71/100, 000 employee years (Michelo, Moen 2009). This is quite large considering developed countries, such as Canada, have a fatality frequency of 17/100, 000 (Ibid). These statistics are understandable when one looks at the extent to which worker safety is disregarded. Some workers say that they are not provided with the proper equipment to perform their jobs. For example, underground workers should be provided with two pairs of disposable gloves a week but are only given one pair a month (Dymond 2007). Furthermore, much of the protective clothing required to work in mines must be purchased by the employee and is not supplied by the company (Ibid). In another illustration of the lack of work safety, KCM underground miners should not work in an unsupported roof-span of more than two meters so as to reduce rock-fall (Ibid). Unfortunately, KCM employees have confessed to being paid "by the metre" and, consequently, often work under dangerous conditions (Ibid). From the evidence above, it is

apparent that the mining industry in Zambia has several social impacts as it critically violates workers' rights

## **Underdevelopment and Zambia:**

One theory that is essential to know in order to understand why Zambia is classified as a developing nation is the underdevelopment theory. The underdevelopment theory revolves around the idea of colonialism as being a central reason for impoverishing today's developing nations, as mentioned previously. Underdeveloped nations rely on the Core for investment, trade, and loans. Zambia embodies all of these characteristics and it is true that the mining industry furthers this impoverished state through the economic, environmental, and social impacts stated above.

With regards to the economic impacts, the mining industry aggravates Zambia's underdevelopment by encouraging it to be a one-commodity nation. Diversification is necessary in order to create a more stable economy that will not be as susceptible to crisis. The price of copper, and other minerals, can be quite unpredictable. Therefore, if Zambia were to expand its trade industry to include more commodities, there would be something to fall back on when the value of copper suddenly drops. With diversification, this developing nation can deviate away from assistance from the Core. Zambia will not require as many loans to make up for lost capital in its currently fragile economy. There is some indication that Zambia is attempting to expand its export commodities to include non-traditional agriculture, such as flowers (Biz/ed 2010). Flowers have a value in the international market and it is an excellent step away from reliance on the mining industry (Ibid).

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The environmental impacts of the mining industry in Zambia are worsening underdevelopment because of the effects on the agricultural industry and the lack of enforcement of environmental regulations (Dymond 2007). As stated earlier, the air and water pollution created from mining plants is contaminating soil through acid rain and the improper disposal of chemical wastes (Ibid). Consequently, crops are difficult to grow in areas close to mining plants (Kambiani 2003). Diversification is important to promote development but it is contradictory to this idea to have one industry hindering the expansion of another. 85% of the Zambian labour force is in the agricultural industry (Central Intelligence Agency). Therefore, it is important to ensure that nothing is done to harm this important source of income for so many people and potentially increase the already high rates of unemployment. Unemployment fosters underdevelopment, as more Zambians are unable to purchase goods and services that would provide the country with the capital necessary to invest in development programs.

Sustainable development is crucial to reverse underdevelopment by using environmentally conscious mining methods and properly enforcing environmental regulations for companies. For example, the KCM indicates that they take measures to increase sulfur dioxide capture and decrease the amount of solids in mine water and the use of indigenous trees (Dymond 2007). Although these are ecologically friendly goals, KCM fails on many accounts of following through on them, as seen from the release of toxic waste in the Kafue River in 2006. As of now, mining companies, such as Vedanta self-regulate the environmental standards set by Zambia (Ibid). The Zambian government needs to take control of the mining companies to

ensure sustainable methods are used to prevent further harm to the agricultural industry and to the health of Zambians.

The social impacts of the mining industry in Zambia include labour issues, such as meager salaries, lack of benefits, and violation of safe mining practices. Workers are slowed down by exhaustion from long hours on the job and the stress from the inability to provide for their families because of an insufficient salary (Dymond 2007). In order to increase productivity of workers increased pay and benefits must be granted. Currently, employees and mining companies are unable to pay for education for their children because of low wages. In the following quote, a worker talks about his hardship as a miner at KCM:

"I have three children but currently only the eldest is in school. She is supposed to sit her grade 9 exams this year, however, because of the hardships we are experiencing, I doubt whether she will be able to. We know education is very important but can't afford to send [the others] to school. It is just beyond our reach as parents" (Dymond 2007: 14).

This is a large barrier to development because education is essential to meet the demand for skilled workers in Zambia and improve the standard of living for people across the nation. Therefore, due to the negative impacts of the mining industry, underdevelopment in Zambia is increasing and preventing this nation from growth and expansion.

### **Conclusions:**

In conclusion, due to the economic, environmental, and social impacts described above, underdevelopment in Zambia is worsening. The economic https://assignbuster.com/mining-as-a-source-of-underdevelopment-in-zambia/

impacts of the mining industry are an undiversified economy and dependence on the Core for capital and manufactured goods. This is evident through the international trade industry and the enormous debt generated. Mining in Zambia also hurts the environment and affects the agricultural sector as the land becomes infertile from contaminants. Finally, the social impacts of the mining industry in Zambia are evident through the labour issues faced by employees in the mines including insufficient salaries, lack of benefits, and violation of safe mining practices. In order to reverse underdevelopment in Zambia, it is necessary to diversify the economy, pay closer attention to environmental regulations and rights of employees in the mines. With these ideas in mind, Zambia can see great improvement in their economy and the well-being of their society.