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Case Study: Unearthing Inequity in Mining Practices

Introduction:

Historically, the definition of colonialism is when a foreign power invades, controls, and exploits another territory for its resources, as well as the subjugation of the land's inhabitants. It is difficult to decipher whether colonial idealism has truly ended, or has it become more subtle and disguised to the point that detection is complicated.

In October 2023, Panama protests started in Panama city when President Laurentino Cortizo and 40 other political officials secretly signed a new contract with a Canadian based mining and metals company called First Quantum Minerals, which had a site known as Cobre Panama located 120 km west of Panama City. The terms of the agreement were giving the company a 20 plus year right for copper mining with an option to extend another 20 years which allowed for their operations to expand to other locations.¹ The President of Panama sold out his country and its people and let Canada dominate the land for its resources. These practices of foreign developed companies going into developing countries to exploit their resources presents modern day colonialism at its finest. Mining operations create hazardous scenarios that contribute to outbreaks of neglected tropical diseases (NTDs), tailings dam pools (technological failure), and environmental disasters. This is a public health emergency for the United Nations to look at all company practices in developing countries to make sure population health is not being jeopardized for corporate gain, to look at how mining practices contribute to climate change and various disasters.

Facts of the Case:

The momentum of the protests picked up in October 2023, when the people of Panama started to realize that the country was losing its sovereignty, its identity, and realizing the trail of destruction by First Quantum Minerals. Before this event, Panamanians were already losing hope in their governments responses to growing health disparities, leading to strong reactions from the public.

The protests became international and took place even in Times Square, where a group of Panamanians chanted "the gold is green" — referring to protecting the Mesoamerican Biological Corridor. In the meantime, Peru warned the Panamanian people through media to not let First Quantum Minerals take over Panama's land, to fight. First Quantum Minerals has two copper mining sites in Peru, one in Haquira and one in Taca Taca. Peruvians were warning Panaminans about the health consequences of mining practices and said they were experiencing higher rates of cancer, specifically in the populations living near the mining system and working in the mines. Mining comes with serious consequences for population health caused by particulate matter 2.5 (PM2.5) being in the air, contamination of local streams, contamination of soil, and situations of occupational hazard for workers. Panama was already experiencing habitat destruction and land degradation creating environmental disaster impacting the country's ecosystems.²

When we map out the negative impacts of First Quantum Minerals mining practices in Panama, there are six areas of focus: public health, environment, geography, government, economics and

sociocultural factors. This demonstrates the need to review bioethical principles of First Quantum Minerals when it comes to their mining practices in the realm of public health.³ This copper company is supposed to assess all complex ethical challenges in the country and share with their stakeholders, which includes the Panamanian Government. This brings to question the ethicalness of the document that was signed so quickly, between First Quantum Minerals and Panama's political officials. In fact, this is part of corporate social responsibility (CSR) to review how First Quantum Minerals' mining practices impact human health, the environment, and sustainability.⁴ By not following these ethical principles, the Panamanian officials are allowing for displacement of indigenous populations along with numerous environmental impacts.⁵ The motive for the government to sign the agreement was economic concerns.⁶ Panama is dealing with a natural disaster that started in early 2023, a drought that is being driven by El Nino and climate change. The water levels are not sufficient; therefore, it forces Panama to let in fewer ships with higher shipping costs. Another factor to the water supply not being enough is that the government gave a river to the mining company called Rio Indio. By the government allowing the mining company to use the river as they wanted, they contaminated it, therefore it could not be recycled back into the Canal.

Another climate change impact has been on indigenous tribes that are dealing with the threat of rising waters. Mining contributes to climate change in direct and indirect ways. The concern is greenhouse gas emissions, energy consumption and water contamination that creates water scarcity, which impacts vulnerable communities such as the indigenous tribes of Panama. Some of these populations live on Islands, but because of rising waters, they have to look at relocating. The option is to come to the mainland, but it will be problematic if the tribes are forming a life on the mainland and encounter another disaster, since it impacts their accessibility to water and cannot use the soil to grow food. They would also be exposed to polluted air and the possibility of disease outbreaks caused by vector borne mosquitos.

Epidemiological Aspects:

When exploring environmental epidemiology, we are examining First Quantum Minerals mining practices and how it is creating serious implications for public health and an environmental disaster. These mining practices are causing air pollution by gas emissions and PM2.5, along with other fumes being released from the copper mining plant. There is data that shows there is high mortality from lung cancer when it comes to copper miners and pneumoconiosis which is caused by airborne respirable dust. The populations living in proximity to the mines deal with air pollutants such as SO₂ (sulphuric acid) which can impact the population with respiratory problems such as asthma.

In terms of water pollution, tailing pools contain waste materials that trail into bodies of water. The waste consists of fine rock particles, chemicals used in the copper extraction process, and other residues. Disaster epidemiology would focus on tailing pools because it is a man-made disaster that creates health consequences to populations that are near that water source. There would need to be a longitudinal study to measure the concentration of the waste, assess the level of health risk, and monitor populations. Other implications from mining practices is soil becoming contaminated and soil erosion which threatens the siltation of the Panama Canal.

Based on all these findings, if First Quantum Minerals was allowed to stay and expand operation, it would create scenarios of limited water access. Not to mention the current drought happening in Panama for longer periods of time meaning this could contribute to water shortages. It would also impact the food supply because of soil contamination, meaning that the land could not be used for

growing produce. The land could grow food, but it would not be safe for human consumption because of hazardous remnants from copper mining. First Quantum Minerals and the President of Panama know these facts, as it is not difficult to see that the land that became Cobre Panama is not viable due to urbanization that has caused destruction.

If First Quantum Minerals is allowed to stay, there will be more deforestation and a loss of biodiversity, which would contribute to climate change. Epidemiologists have researched trends and risks posed by climate-related hazards to human health such as drought, heat waves and vector-borne diseases. Climate epidemiologists also do surveillance when it comes to respiratory conditions and other climate related health impacts. Based on all the data, epidemiologists could come up with strategies for cleanup and rehabilitation to protect human health and promote practices to help with climate change. Lastly, epidemiological studies would present evidence that would support the people's concerns about Panama's future related to mining practices to show how it would impact population health, the environment, and how it can contribute to climate change.

Management of Event:

Management of this event was poor from beginning to end. The Panamanian President was not transparent with the public about his decision from the start. The information was leaked and protests started in Panama City, with people taking to the streets and singing the National Anthem. Within days, the people shut down the country out of anger because of the corruption of the government and the abuse of power to violate laws and in essence to destroy Panama. Laurentino Cortizo once again was abusing power to the point that violent incidents started to happen in these protests by police using expired gas canisters to scatter the people. The protests got bigger; by the end of October the President said that on December 17, 2023, the people of Panama could vote on approving the illegal mining contract or not.

Panamanians continued to protest and the whole country continued not to operate until the demands were met by the people. Other violent incidents occurred, including 3 men shot to death in cold blood, while protesting and one holding the Panama flag. People all over Panama mourned for Tomas, Ivan and Abdiel. Another incident followed when a photo journalist named Aubrey Baxter lost his eye because of police brutality. Finally, after a whole month of protests and incidents, the Panamians were acknowledged by the government. The messages were clear, do not let a foreign entity destroy our land, kill the people with pollution they caused, and lastly, displace fauna or people that are forest dependent. It went to the Supreme Court, it was now in their hands to decide the fate of Panama's future.⁷ People camped outside to await the verdict and continued to protest outside the Supreme Court.

Communication of Event:

There was no communication to the people until the protests escalated; people started receiving communication from government officials then. The events in Panama remained unnoticed on the international stage, until the narrative of the Donoso Fishermen got widespread media attention.⁸ The Donoso Fishermen, esteemed as national heroes, effectively thwarted a First Quantum Minerals shipment from docking, halting all operations. The fishermen stayed around the clock, even sleeping in their boats and enduring police brutality. On November 17th 2023, the vessel withdrew. CNN covered this story, but focused more on First Quantum Minerals' struggles and barely covered Panama's protest to convey the real meaning of these events for the people. It told the facts, but did not create a narrative

from those communities being impacted. In the meantime, environmentalists and environmental conservation organizations were posting Panama's narrative on their social media. The only way Panamanians abroad knew of the events was either calling their loved ones or seeing it on social media. The story up momentum when Leonardo Dicaprio reposted a video from *Re:wild's* social media supporting the Panamanian people.⁹ Social media gave global spotlight to help the Panamanians by signing petitions and showing support for Panama to win a critical victory for biodiversity and a sustainable future.

Summary

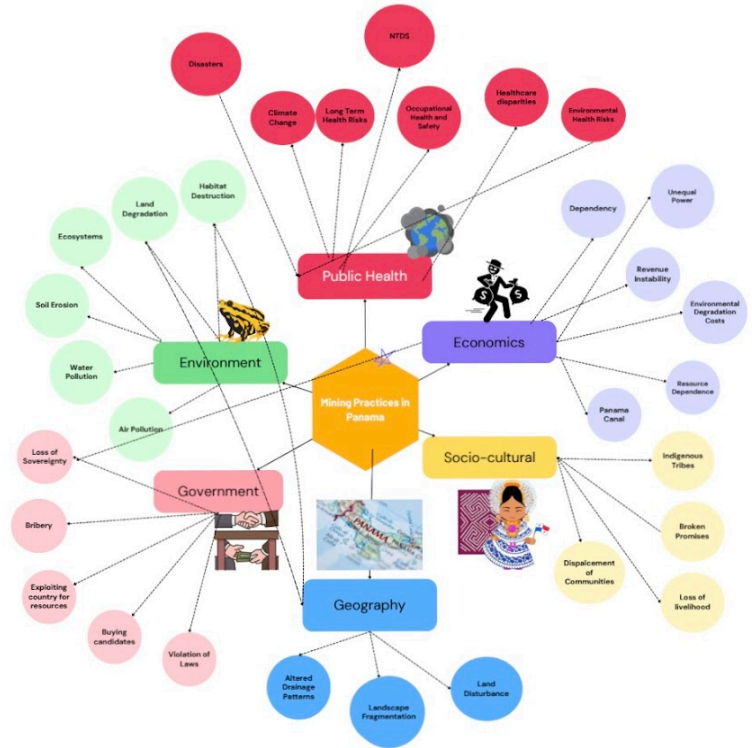
After four days of deliberation, it was announced at 5:30A.M. on November 28, 2024 that the Supreme Court declared law 406 unconstitutional. The people won a monumental victory, with the Supreme Court officially banning the copper mining practices. We need to focus on foreign companies when they operate in developing countries to make sure they do not exploit legal loopholes to maximize profits at the expense of communities and the environment. Additionally, mining companies should be held accountable for environmental and social damages that perpetuate cycles of exploitation and injustices. There needs to be policies and regulations when it comes to health impacts, especially in documented cases of lung cancer related to copper mining practices and other health problems from pollution of mining activities. Mining companies should declare practices that destroy ecosystems and pollute in various ways that impact surrounding flora and fauna. These mining practices also contribute to climate change because of greenhouse gasses and toxins being released into the atmosphere. Lastly, displacement of indigenous communities violates human rights by dictating where they can be or cannot be.

The points explained above make it evident that this is modern day colonization. There needs to be stronger regulations and policies to ensure that foreign investments in developing countries adhere to ethical and sustainable practices. Since the result from the Supreme Court, First Quantum Minerals has proceeded with international arbitration over the disputed contract,¹⁰ even plotting to rig Panama's upcoming election by supporting nominees that would be in favor of mining. This is another example of First Quantum Mineral operating unethically. But the people are alert.

The purpose of this case study is to assess the definition of disaster and how it applies to situations of foreign companies exploiting developing countries. Moving forward, focus should be placed on environmental justice advocacy, policies to address climate change, preventing man-made disasters, and reducing pollution. Developing countries like Panama must protect both population health and environmental health in order to remain sustainable. Resources cannot be jeopardized if these countries want to thrive and have a future.

Unearthing Inequity: Charting Consequences

This map illustrates the detrimental repercussions of mining activities that are controlled by foreign corporations in developing countries. Visual representation of the urgent need to assess mining practices and to promote mine closure.



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