

Gold Mining and COVID- 19

Humanities Lab (Fall 2020): Why is the Amazon Burning?
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The Indigenous Inhabitant Effect

In modern times, climate change and environmental degradation is affecting the way in which Indigenous communities can live in the Amazon. Such issues include wet markets, overexploitation of environmental resources, and tourism. This goes without mentioning the recent impact of the COVID-19 pandemic. As a result, for the betterment of their safety, many tribes have chosen to isolate themselves away from metropolitan locations. For their health, the Indigenous people have been utilizing local and traditional practices to grow and prepare food, thus avoiding the need to reach the city for survival. It does not help, however, that natural resources are becoming scarce as less money is invested in environmental programs like forest restoration. Nonetheless, that cognisance may change thanks to the pandemic mandates, one of which includes quarantining. As people are ordered to stay at home, some of their spare time is used to surf the web. Those websearches then expose loads of information, including worldwide issues like those in the Amazon rainforest. Given the opportunities of the internet, such exposure can then influence actions like donations or petitions towards a cause.

COVID-19 Stipulating an Unethical Change

The coronavirus pandemic has not only caused a vast amount of cases and deaths in the Amazon, but it has also affected the way that gold mining is viewed and practiced within the Amazon rainforest. Even though the risk of infection in mines and mining towns is high, the rising price of gold has incentivized Artisanal Small Mining (ASM) gold companies and large mining corporations alike to increase their [gold output](#). This discrepancy between health and safety and financial profit has put the lives of many Amazonian residents, particularly the Indigenous tribes, at high risk of being exploited and exposed to COVID.

Due to the pandemic, keeping Artisanal Small Mining companies accountable has become more difficult, and this is exemplified by the mining company, Anglo American, submitting several hundred [applications](#) with the purpose of exploring the Brazilian Amazon for gold and other minerals. This has allowed mining companies to expand their mining operations without as much regulation, and therefore are more commonly able to push their mines into Indigenous territories. The Brazilian government has not proven to be allies to the Indigenous communities, instead leading the way for international mining companies to continue their [exploitation](#) of the Amazon. This has left many Amazonian lands and tribes vulnerable to land and water degradation from the mining activities.

There have been efforts by Indigenous rights groups to push for protection regimes around the mines and create an Indigenous persons' support network. However, [Bolsanaro](#) has made it difficult for these regimes to become widespread. Bolsonaro has also decreased punishment for criminal mining activities, and at this point, more than 70% of the mining taking place in the Amazon is [illegal](#). His decision to place the output of mines ahead of the safety of the miners and the well-being of the Amazon and its inhabitants has caused exacerbated environmental destruction and a faster spread of COVID cases among Indigenous people and other Amazonian residents.

Mirroring the Past

While COVID continues to spread through Indigenous homelands, the effects cannot go without analyzing the similarities of diseases introduced upon first European contact. Prior to European arrival, there were no notable diseases that affected the Indigenous people of the Amazon. Upon European settlement, the explorers brought many surprise tools, resources, and

agricultural practices. They also brought along diseases, disorganization, and disposability, also known as the three D's. At the time, the Indigenous peoples were vulnerable to all foreign diseases since they had never encountered them before, therefore having no immunity. Europeans decided to colonize and find new lands so they could have more resources extracted and used. They traveled east where they would try to navigate the Amazon, but had no success in the early 15th century due to lack of navigational knowledge of the area. When they initiated further exploration, they encountered natives of the land. Explorers did not create good relations with the natives. Because of the tension, they often got in quarrels over land and resources. Due to these interactions and exposures, European diseases spread afar into the Amazon. The first disease that left a hefty mark on the Indigenous population was smallpox, a disease that attacks a person's immune system, causes flu-like symptoms along with a rash(es), and ultimately leads to death. In addition, gold miners, settlers, and rubber tappers brought along malaria, measles, and influenza. Measles and influenza are no longer a large worry for Indigenous peoples, but at the time of European arrival, they had no immunity to these diseases and nearly 90% of the first American peoples were wiped out. Malaria still affects not only Indigenous people, but everyone around the whole world. To this day it is the number one killer in the world because mosquitos often transmit malaria and/or other diseases.

Gold Mining as a Deforester

Diseases are not the only influencer of colonization. Economic gain is another component of such hegemony. Imagine living at a farm where everything you need is available at your convenience, no need to outsource any commodities. Suddenly, you are displaced and now must scavenge to environments you are unfamiliar with. This is the experience of Indigenous people around the world and especially in the Amazon.

In the Amazon, many Indigenous groups and vast areas of the forest are threatened by legal and illegal mining operations. "Legal and illegal mining now cover more than 20% of Indigenous lands, endangering hundreds of Indigenous communities and critical ecosystems across 450,000 square kilometers" (Vallejos et al). Many of the mining operations tend to be gold-related. Interestingly, COVID-19 has also been a leading factor of increases in gold mining.

With an increase in gold prices of around 35% this year alone, the already dangerous "Amazon Gold Rush" has only become larger (Rubiano A). The majority of the miners heading to the lush Brazilian Amazon are not mining in legal operations. These miners are small groups or individuals who are mining for gold to make a living for themselves and their families. The ever rising price of gold has further incentivized these miners to travel to the Amazon.

Now with the COVID-19 pandemic, miners are increasingly venturing into the Amazon and bringing with them a deadly virus. "Small-scale miners...have been working in the Amazon for decades...in the last two decades, they grew in numbers, partly because gold prices have not stopped rising...it is estimated that today there are more than 500,000 small-scale gold miners in the Amazon" (Rubiano A). Along with bringing COVID-19 to Indigenous people, tensions and even violence can erupt between both legal and illegal miners. Mining operations also threaten the health of the Amazon ecosystem, with more than 18% of the Amazon (~1.28 million square kilometers) covered by industrial mining concessions (Vallejos et al).

Gold mining in the Amazon has been found to be polluting at least 30 Amazonian rivers and eroding [Indigenous] communities' proven ability to prevent deforestation (Vallejos et al). According to an international study led by the University of Leeds in the United Kingdom, "Gold mining significantly limits the regrowth of Amazon forests, greatly reducing their ability to

accumulate carbon” (University of Leeds). It is very important that trees absorb carbon dioxide from the air. While all living beings need carbon and carbon dioxide helps regulate the temperature of earth, too much carbon in the air can lead to an increase in temperatures on earth, further harming the Amazon and the rest of the world.

Mining also drastically affects the re-growth rate in areas that have undergone mining operations. “The [University of Leeds study] found that forest recovery rates on abandoned mining pits and tailing ponds are amongst the lowest ever recorded for tropical forests. At some sites there was nearly no tree regeneration even after three to four years since mining had stopped” (University of Leeds). Not only do trees have difficulty growing back in mining areas, mining also strips the nitrogen needed from the soil (an important part of forest regrowth) and has also contributed to the amount of mercury found in the forest area and rivers/lakes neighboring a mining site (University of Leeds). Active mining sites have much more mercury than inactive sites, though in both cases the amount of mercury is very unhealthy to the plants, animals, and humans living there.

Remove Deforestation, Not Culture

To no surprise are these factors leading contributors of deforestation in the Amazon. These effects are not solely susceptible to the Indigenous populations. Rather, they have an overall impact on Earth’s performance and, thus, on all forms of life.

In Western culture, economic performances are expected to thrive, otherwise it’s challenging to know how one can continue supporting themselves and their family. Thus, economic growth must occur in a way that ensures pollution and unethical activity do not pilfer our finite supplies and resources.

It is challenging to be proactive rather than reactive, however, when it comes to exposure of new diseases. One cannot predict the effects of upcoming diseases nor when a new disease may appear. Like diseases introduced when Europeans arrived in the Amazon, COVID-19 is threatening the lives of the Indigenous people in the Amazon. By comparison, the social, political, and economic effects of historical diseases show no difference to the effects of COVID-19.

As the pandemic continues to create restrictions, and isolation limits what people can do and where they can go, greater extraction opportunities arise for gold miners in the Amazon. Indigenous territories are vulnerable. Simple action from the government can eliminate such recognized communities. Especially with COVID, Indigenous populations are unable to defend their territories. Likewise, miners can (and do) excavate within Indigenous reserves. As a result, for every Indigenous life lost is a loss of traditional knowledge on forest resources, creating greater risk of deforestation. What is happening to the Indigenous communities today mirrors what occurred when the European colonizers first arrived in South America. The spread of disease is rampant, gold mining and resource exploitation is viewed as the right of the countries, and thousands of deaths are occurring within the Indigenous populations. Despite the resilience of these communities, if trends continue to follow this path, the decreasing numbers of Indigenous people will lead to even more deforestation of the Amazon. The gold mining dilemma will live to create a new Amazon environment, one that may be a grassland filled with toxic pools, rather.

Sources:

A., M. P. (2020, October 12). A pandemic-created 'gold rush' in the Amazon is destroying Indigenous lands. Retrieved November 17, 2020, from <https://www.popsoci.com/story/environment/covid-increases-mining-indigenous-lands-in-amazon-rainforest/>

Calvimontes, J., Massaro, L., Araujo, C., Moraes, R., Mello, J., Ferreira, L., & Theije, M. (2020, September 03). Small-scale gold mining and the COVID-19 pandemic: Conflict and cooperation in the Brazilian Amazon. Retrieved November 17, 2020, from <https://www.sciencedirect.com/science/article/pii/S2214790X20302537>

Ford, J. D., Arotoma-Rojas, I., Lwasa, S., Lancha-Rucoba, G., García, P. J., & Zavaleta-Cortijo, C. (2020, September 1). Climate change and COVID-19: Reinforcing Indigenous food systems. Retrieved November 2, 2020, from [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(20\)30173-X/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30173-X/fulltext)

Laing, T. (2020, April 16). The economic impact of the Coronavirus 2019 (Covid-2019): Implications for the mining industry. Retrieved November 17, 2020, from <https://www.sciencedirect.com/science/article/pii/S2214790X2030126X?via=ihub>

Leeds, U. (2020, June 29). Gold mining restricts Amazon rainforest recovery. Retrieved November 17, 2020, from https://www.leeds.ac.uk/news/article/4619/gold_mining_restricts_amazon_rainforest_recovery

Mining the Amazon and Pandemic Profiteering. 6 May 2020, theecologist.org/2020/may/06/mining-amazon-and-pandemic-profiteering.

Preiss, Rainer Michael. *Gold Prices To Continue Rising As Coronavirus Upends Global Economy*. 1 Apr. 2020, www.forbes.com/sites/rainermichaelpreiss/2020/04/01/gold-prices-to-continue-rising-as-coronavirus-upends-global-economy/?sh=3529348742e4.

Terrence McCoy, Heloísa Traiano. *In the Amazon, the Coronavirus Fuels an Illegal Gold Rush - and an Environmental Crisis*. 7 Sept. 2020, www.washingtonpost.com/world/the_americas/in-the-amazon-the-coronavirus-fuels-an-illegal-gold-rush--and-an-environmental-crisis/2020/09/03/0a4c62e6-e624-11ea-970a-64c73a1c2392_story.html.

Vallejos, P., Veit, P., Tipula, P., & Reyntar, K. (2020, October 19). Undermining Rights: Indigenous Lands and Mining in the Amazon. Retrieved November 17, 2020, from <https://www.wri.org/publication/undermining-rights>

Zahawi, R., Reid, J., & Fagan, M. (2020, September 29). Potential impacts of COVID-19 on tropical forest recovery. Retrieved November 17, 2020, from <https://onlinelibrary.wiley.com/doi/10.1111/btp.12851>