Many communities in the Philippines suffer the disastrous effects of open-pit mining. At least 75% of mining corporations audited by the Department of Environment and Natural Resources (DENR) in 2016 employed open-pit mining methods for extracting copper, gold, nickel, and chromite. From 2017 to 2021, several open-pit mining exploration permits and all other pending applications were suspended as a result of the mine audit, which found widespread violations of environmental and social standards in a majority of existing open-pit sites.

Open-pit mining is a type of mining operation that involves removing large amounts of earth to access deposits of valuable minerals or ore and remains to be the most widely employed method for mineral extraction in the Philippines. While the mining industry promises that mineral extraction is an important source of income and economic development for a community, open-pit mining has been proven to be associated with several negative impacts.

Communities witnessed how open-pit mining largely contributed to destruction of the local environment. To access the minerals or ore, large amounts of topsoil and underlying earth must be removed. This results in air, water, and noise pollution, as well as damage to habitats and ecosystems.

This has a range of negative consequences for the local flora and fauna, and results in the loss of essential resources like timber, arable land, and clean water. This was clearly demonstrated by the 1996 Marcopper disaster in Marinduque which annihilated the biosphere of the Boac River and the flooding of twenty villages due to polluted water from mine tailings contaminating the river basin. In Manicani, the waste produced by the Hinatuan Mining Corporation’s nickel mine led to environmental degradation via polluted water due to excessive soil extraction and rain run-off.
In addition to environmental impacts, open-pit mining also has social and economic impacts on the local community, such as public health. The noise, dust, and other forms of pollution triggered by mining operations have been linked to respiratory and other illnesses as well as water-borne diseases from polluted water. In Sta. Cruz, Zambales where four major nickel mining companies were suspended in 2014 for violations of environmental regulations, there were noted instances of acute upper respiratory infections, skin rashes, and several other diseases among mining-affected communities. As such, mining-affected communities have specific medical and other health needs that arise because of their direct and indirect exposure to mining operations’ hazards and other impacts. This requires access to services that address, among others, the specific health impacts of pollutants created by the mining operations.

Due to the location-specific nature of the extractive industry, mining operations strike deep into remote areas where mineral and other natural resources are most rich and where communities’ livelihoods and cultures are defined by their close affinity to the natural environment. These communities, however, have historically been among the most marginalized from the centers of political power and economic decision-making, and have had to survive with the least access to public services and other support systems, including basic medical care and preventative health services, such as vaccinations and screenings. Region IVB (MIMAROPA), home to some of the largest mining operations such as the Rio Tuba Nickel Mining Corporation in Palawan and previously Marcopper in Marinduque, is the region with one of the lowest doctor-to-patient ratios (1.8/10,000) and hospital bed-to-patient ratios (1/10,000) in the country. These figures fall drastically below the 10/10,000 ratio prescribed by the World Health Organization. In addition, the health spending of provinces affected by mining decreased from 21.43% of their total operating expenses in 2005 to only 16.1% in 2010 despite the generally upward trend of mining output in this period.

As it stands, mining does little to improve the social and economic health of these communities. Indeed, mineral-rich communities have historically been deprived of access to public services such as electrification, schools, and hospitals. This lack of access is compounded and further compromised by the impact of mining on the land and water resources of these communities through mining pollution, affecting agricultural livelihoods. In Didipio where mining operations of Oceana Gold Inc. (OGI) take place, households are estimated to only utilize 0.4% of the water resources used by corporations in the Didipio Mine.
Public Services Essential to Communities’ Health and Resilience

To mitigate the effects of pollution caused by open-pit mining, the government must urgently provide public services such as clean drinking water, health care, and education to mining-affected communities.

Much of this damage co-occurs with the continuation of mining operations, hence communities’ call to halt mining activities in severely impacted areas. The Writ of Kalikasan is an important legal tool in this regard, as used successfully by the Concerned Citizens of Santa Cruz Zamboanga against five mining corporations in 2016. The issuance of the Writ urged the court to suspend mining operations in the area to halt immediate damage to the water sources.

Likewise, if the mining operations result in air or water pollution, it is essential to prioritize ecological restoration to help protect the health and well-being of the community. As it stands, there is a lack of sufficient recognition of ecological destruction by government or the culpability of this destruction by large mining corporations. Mining companies must account for the costs of community rehabilitation and ecological restoration.

Not only do public services mitigate immediate impacts, they also build or restore communities’ resilience, including abilities to sustain livelihoods in the long run. Providing access to education and jobs, as well as subsidies for local businesses, helps to ensure that members of the community are equipped to participate in the local economy and prioritize ecological restoration.

However, public education and job trainings mean little if the land becomes unusable for economic development. This was indeed the case in Tampakan, South Cotabato, where mining waste from tailing ponds threatened the fecundity of local farmlands and the viability of the tuna industry in General Santos. Philippine provinces hosting large-scale mining operations are among those with the highest poverty incidence with at least 30% of their population living below the poverty line, with the exception of provinces that have diversified economic activities beyond mining. Hence, it is necessary to prioritize the preservation of land and water resources such as agriculture and fisheries that are independent of mining activities.

Increased vulnerabilities to natural disasters and Irreversible Effects of Mining

Mining-affected communities are also more vulnerable to natural disasters and require specific disaster risk management services. Open-pit mining creates risks of landslides, flash flooding, and other natural disasters that occur with heavy rains or earthquakes because forests absorb and retain a lot of water and open-pit mining destroys an environment’s ability to absorb water through the destruction of the forest and compromising soil integrity. These vulnerabilities are first and foremost caused by the open-pit method itself. Hence, many communities advocate for the reduction or cessation of these operations to alleviate these vulnerabilities.

However, restoration may even be more challenging, if not impossible, for areas with long-term exposure to open-pit mining or other irreversible effects of mining. In a number of high-profile cases, mining results in the complete destruction of the local environment, making it difficult or impossible to restore the area to its previous natural state. In other cases, the damage may be more limited, but can still be significant, requiring large-scale restoration efforts. The restored environment may also be vulnerable to future damage from other human activities, such as logging or development. Hence, communities in these areas demand rehabilitation and ecological restoration as urgent measures that governments must compel mining corporations to undertake.
There is a need to systematically address mining’s social and environmental impacts through stricter regulation of the industry and comprehensive provision of public services. Mining companies should be made to pay for rehabilitation and compensation for social and ecological damages. Mining profits should be taxed fairly and justly to raise the countries’ domestic revenues.

All in all, the scale of the extractive industry’s environmental impacts and communities’ heightened vulnerability to poverty, food insecurity, and ecological risk underscores the critical importance of tax justice in the extractives sector. In the Philippines, the minuscule contribution of the extractives sector to the economy and employment sharply contrasts with the profits enjoyed by corporations. These issues to an environment where financial secrecy and regulatory loopholes in the taxation system enable large-scale tax avoidance.

Instead of plugging the leaks and addressing tax abuses by corporations, the Philippine government itself allows for large-scale revenue erosion in the sector through its provision of tax incentives in mining permits. Fiscal devolution where several layers of taxation operate from the local to the national level has also provided corporations the leeway to skirt tax obligations, and engendered legal challenges by local governments over taxing rights and revenue management.

Meanwhile, resources available for public services and addressing impacts of mining for affected communities are severely limited. Municipalities affected by mining were found to utilize and depend on tax revenues from mining to fund as much as 43% of their annual budgets. As such, mining corporations’ repeated attempts to dodge taxation through challenging tax claims of local governments in court as in Nueva Vizcaya and South Cotabato gravely impede the provision of public services in communities most directly affected by extractives activities. To address the multiple crises faced by mining-affected communities, it is imperative that corporations are sanctioned to pay for the impacts and damages caused by mining and their just share of taxes to fund the provision of public services.

At the end of the day, the extractive industry impacts mining-affected communities’ ability to enjoy their right to access to quality public services many times over: firstly, by exposing communities to health hazards and other risks; secondly, by negatively impacting livelihoods and access to water and other natural resources which in turn increases their social and economic vulnerabilities and abilities to access affordable social services; and thirdly, because the foregone revenues lost to the extractive industry’s profit shifting and the tax incentives they enjoy, the public financing of social services for the entire country is also severely compromised.

Moving forward, addressing deficits in public services due to extractives activities requires transformative and multi-level policy reforms on the local, national, and global levels. The national government must proactively strengthen tax enforcement to make corporations pay their just share and ensure that mining tax revenue-sharing is made fairer, reducing the burden on local governments to generate revenues. There must also be efforts towards improving financial transparency in extractives on the local level, involving communities in reporting and analysis, on the national level through a stronger and public beneficial ownership registry, and on the global level through ensuring that developing countries like the Philippines are able to access automatic exchange of information (AEOI) and be able to work with other countries affected by extractives activities to curb transfer-pricing and other illicit financial flows (IFFs) in the sector through a democratically negotiated tax convention at the United Nations.
Endnotes


10 The Writ of Kalikasan is a legal remedy that seeks to protect citizens and communities against acts that damage the environment, as guaranteed by the Philippine Constitution in recognition of the “right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature” (Article II, Section 16 of the 1987 Constitution)


14 Ibid.
