

The Need of Sustainable Mining: Communities, Government and Legal Mining in Central Andes of Peru

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Abstract : The Peruvian Andes have a high potential for mining, but many of the mining areas overlay with campesino community lands, being these key actors for agriculture and livestock production. Lead by economic incentives, some communities are renting their lands to mining companies for exploration or exploitation. However, a growing number of campesino communities, usually social and economically marginalized, have developed resistance, alluding consequences, such as water pollution, land-use change, insufficient economic compensation, etc. what eventually end up in Socio-Environmental Conflicts (SEC). It is hypothesized that disclosing the information on environmental pollution and enhance the involvement of communities in the decision-making process may contribute to prevent SEC. To assess whether such complains are grounded on the environmental impact of mining activities, we measured the heavy metals concentration in 24 indicative samples from rivers that run across mining exploitations and farming community lands. Samples were taken during the 2016 dry season and analyzed by inductively-coupled-plasma-atomic-emission-spectroscopy. The results were contrasted against the standards of monitoring government institutions (i.e., OEFA). Furthermore, we investigated the water/environmental complains related to mining in the neighboring 14 communities. We explored the relationship between communities and mining companies, via open-ended interviews with community authorities and non-participatory observations of community assemblies. We found that the concentrations of cadmium (0.023 mg/L), arsenic (0.562 mg/L) and copper (0.07 mg/L), surpass the national water quality standards for Andean rivers (0.00025 mg/L of cadmium, 0.15 mg/L of arsenic and 0.01 mg/L of copper). 57% of communities have posed environmental complains, but 21% of the total number of communities were receiving an annual economic benefit from mining projects. However, 87.5% of the communities who had posed complains have high concentration of heavy metals in their water streams. The evidence shows that mining activities tend to relate to the affectation and vulnerability of campesino community water streams, what justify the environmental complains and eventually the occurrence of a SEC.

Keywords : mining companies, campesino community, water, socio-environmental conflict

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