

THE REAL COST OF MINING IN THE CLOUD FORESTS OF ECUADOR: A CASE STUDY OF VALUING INTAG'S ECOSYSTEM SERVICES

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Abstract:

We need minerals, and copper is no exception. You are probably reading this on a device that contains copper. Minerals like copper are also valuable commodities, so it is no wonder that nations across the globe have aggressively pursued natural resource extraction as a quick and easy path to economic development. In 2003, however, an independent panel of the World Bank released a groundbreaking report indicating that countries that relied on extractive industries actually suffered negative growth. This finding makes sense when one compares the short-term income provided by mining to the inequitable distribution of benefits and costs, and its longer-lasting deleterious environmental and social impacts. The extent of the damage inflicted depends on the type of industry. Copper mining, for example, almost always results in polluted waterways, eroded topsoil, denuded forests, diminished biodiversity, contaminated air, and in the case of the Intag Region (Ecuador) the potential loss of a unique cloud forest system- all of which affect quality of life.

Is mining worth jeopardizing critical natural capital? Years ago, when the first multinational mining company arrived at Intag, the majority of the residents decided it is not. Social movements arose and the community of Intag explored alternative development models for their region. In 2010, Earth Economics began a project in the Intag region to assess the economics of copper mining in biological hotspots. The area straddles two important biological hotspots: the Tropical Andes, and the Choco-Darien Western. Conventional economic analysis was used to measure the profits of copper extraction, and ecosystem service valuation was used to measure potential impacts of the copper mine on the surrounding cloud forest. Ecosystem service valuation is a growing area within the ecological economics field, and this economic tool has been surprisingly well received by the rural community leaders as a challenge to the copper mine. Results confirm the cloud forests of Intag provide tremendous ecological, cultural and economic value over generations. The relatively short-term benefits of the proposed copper mine should be considered in light of this value.