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Large-scale Gold Mining: National Natural Resources Treated as Private Assets with Public Environmental Impacts.

Whenever world financial problems increase, the demand for gold and other precious metals increases. Trust in paper currencies often declines, that in tradable metals increases. National governments encourage gold development because they can show *short-term* “economic growth”, an increase in tax revenues, and often an increase in gold supplies allow countries that lack major internationally-exchangeable currencies flexibility when purchasing commodities such as oil, weapons, etc.

While gold may be considered a national natural resource, most governments allow the mining and mineral-processing sites to be operated as private endeavors. Access to the sites is totally controlled by the private companies, much as if they were private fiefdoms. Government representatives are required to receive prior company approval for any site visit. All technical data and information are supplied by the companies (i.e. the specific processes employed; the volumes and sources of water and processing chemicals used; the chemical content of the ores and wastes; the pre-operational locations of springs, their flow volumes and chemical content; the costs of exploration and operation, etc.). Prolonged times of economic difficulties are also when regulatory agencies have reduced budgets, fewer competent staff, and weaker political support for actual enforcement of most laws---especially social and environmental laws. At such times, the public and political clamor is focused on promoting employment.

The *long-term costs to the public* are often neglected in economic evaluations. Modern gold operations are conducted on a massive scale, involving the excavation of immense open pits, and use of tremendous quantities of water and toxic process chemicals. They inevitably lead to *long-term increases in competition* for water between the mine operations and the surrounding citizens who may be farmers, ranchers, city-dwellers, and all other portions of the biologic world. Long-term contamination of ground and surface waters also inevitably develop, which are often unforeseen. Reuse of these contaminated waters requires the construction and operation of sophisticated water treatment plants, often forever. Frequently, local and regional governments lack adequate funds to operate such plants and remediate the sites, and the mining companies have

departed the country. In addition, while most citizens must pay for their water, frequently mining companies are allowed to use water at no cost for the commodity itself. This aspect, and the inadequate costs allotted to water contamination and related environmental and social impacts, render most cost-benefit analyses meaningless.

At present, it is politically and environmentally-unacceptable to develop large-scale gold mines near highly-populated areas in most of the European Union, the United States and Canada. Hence, the incentive has been to go offshore to countries where regulatory enforcement is lax and labor and land costs are low. In such areas it is exceedingly difficult to gain a reliable, independent understanding of the real, long-term costs to the general public. *Thus actual, long-term costs are often subsidized by the public, usually the future generations.*

This paper attempts to illustrate these issues using concrete examples from recent activities in Bulgaria, Bolivia, Kyrgyzstan, and Colombia.