Directions

Minerals, National Security, and Foreign Policy

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As the world's principal minerals-consuming nation, the United States has a long history of concern about access to the minerals necessary to the functioning of its economy and maintaining a strong national defense (Eckes, 1979). These concerns first arose after World War I when the nation recognized that it was not self-sufficient in all of the minerals it needed. Although these concerns abated in the 1930s and 1940s, the onset of World War II again brought home its vulnerability to disruptions in the supply of critical mineral commodities. These concerns were only heightened by the dawning of the atomic age as the United States emerged from World War II as a net importer of many minerals. The rise of a communist government in China and the termination of access to Chinese tungsten, as well as with the onset of hostilities in Korea, which also was a significant source of that metal, raised concerns about the vulnerability of the United States to disruptions of mineral supplies to new heights (Eckes, 1983). Such fears prompted the creation of a program of government loans for exploration (the Grubstake Loan Program of the Defense Production Act of 1950), the renewed interest in government stockpiles, and the establishment of the Paley Commission (President's Materials Policy Commission, 1952), which produced a report that documented the Nation's mineral position and developed recommendations to address mineral-supply problems (Eckes, 1979). Following the Korean Conflict, however, minerals were in surplus rather than shortage, and public interest in sources of mineral supplies ebbed; by 1956, even uranium was in oversupply (Finch and others, 1973). Although concerns about mineral supplies never again reached the levels of the early 1950s, access to minerals remained an intermittent concern of the United States throughout the Cold War, rising and falling with international events. In the late 1970s, guerrilla activity in Shaba Province, Zaire, caused cobalt prices to rise precipitously (Kesler, 1994). Heightened tensions with the Soviet Union in the early 1980s fueled apprehensions about a "resource war" and global competition for resources. Some observers cited mineral resources as one of the factors that led to the invasion of Afghanistan by the Soviet Union (Shroder, 1983). The broader concern was that the Soviet Union would deny the United States access to foreign supplies of minerals that were critical components of defense systems or to the functioning of the U.S. economy. Planning by the U.S. Government again focused on access to critical and strategic minerals and the maintenance of adequate stockpiles of materials to meet projected national emergencies.

The end of the Cold War and the breakup of the Soviet Union in 1991 prompted major changes in the defense planning, foreign policy, and economy of the United States. These changes have altered and broadened the areas in which minerals, national security, and foreign policy will likely intersect. Some issues where mineral resources may motivate, complicate, or ameliorate national security and foreign policy include (1) the creation of stable societies through economic development, (2) the initiation of disputes related to environmental effects of mineral production and use, (3) social disruption owing to major changes in mineral markets, (4) the development of trade disputes as a result of increased competition for the raw materials needed to support rapid economic growth, (5) temporary disruptions of supplies of strategic materials owing to regional political instability, and (6) the exacerbation of existing regional disputes and conflicts.

MINERALS AND ECONOMIC DEVELOPMENT

Mineral resources can play a helpful role in developing sustainable societies in less-developed countries. Minerals may represent one of the few "quick assets"...
a country can use to start development and can help underwrite the costs of new infrastructure and provide high-paying jobs.

Although development of mineral resources has long been considered to be a logical option for a country that wished to develop its economy, the record of minerals in economic development is checkered. For some countries, such as Chile, mineral resources have played a significant role in economic development. In other countries, such as Papua New Guinea, Bolivia, and Peru, the attempt to convert mineral resources into economic development has met with mixed results in the past. A review of mineral development demonstrates that broader social and economic policies and forces have often combined to frustrate well-intentioned attempts to use mineral development to achieve economic development.

New research on economic growth and the recent experiences of Peru and some other developing countries, however, suggests that mineral development must be a part of a broader reform of social and government policies and practices if economic development is to succeed. Although privatization of state-owned operations can prove to be a successful strategy for alleviating foreign debt and providing new capital to revitalize existing mining operations, rents from mineral production and processing must be reinvested to insure economic growth. Further, not all economic linkages related to mineral production are positive. For example, a mineral boom may cause appreciation of currency and real assets that makes it difficult for other local manufacturers and farmers to compete in foreign and domestic markets. The resulting increase in the price of nonmineral goods may cause a contraction of these sectors of the economy unless policies are instituted to deal with broader macroeconomic affects of mineral development and to avoid capital flight (Tilton, 1992). In addition, broad societal support must be maintained for economic restructuring and privatization to succeed; this requires a continuing acceptable rate of growth of the economy as a whole.

ENVIRONMENTAL EFFECTS OF MINERAL PRODUCTION AND USE

Increasing international concern for the environmental effects of mineral production and use is likely to contribute to foreign policy disputes. Protection of clean air and water quality has become the most visible aspect of these concerns. Negotiations concerning permissible levels of gases emitted into the atmosphere are receiving prominent attention. A number of derivative concerns such as the need to ensure that environmental standards are developed, monitored, and enforced to assure that countries neither export their wastes to their neighbors nor obtain temporary economic advantages by ignoring environmental affects of mineral production and use will also require careful attention. Disputes over acidic rain generated by coal-burning powerplants and metal smelters in neighboring countries are but one example of such issues.

DISRUPTION CAUSED BY CHANGING MINERAL MARKETS

Many mineral markets are dominated by a few large deposits. Consequently, major market and related social disruptions can be caused by the discovery of additional large, high grade deposits (Menzie, 1995). For example, during the early 1980s, a crisis in the international tin market and in tin-producing countries was caused by the discovery of very large alluvial tin deposits in Brazil, and the development of tin deposits in China that had been discovered during the 1970s. Because these two countries were not members of the International Tin Council (ITC), they were not bound by ITC producer agreements whose purpose was to maintain high prices for tin. The ITC's policy had stimulated production from marginally economic deposits in Bolivia, Canada, Malaysia, and the United Kingdom. In October 1985, the ITC announced that it could no longer support the price of tin, and in the ensuing months, the price fell by 65%.

This precipitous decrease in price caused serious social problems in many of the countries with marginally economic deposits. In the United Kingdom, the government had to reexamine its policy with regard to subsidies for the mines of southwestern England. In Malaysia, unemployment among the ethnic Chinese tin miners reached high levels. In Bolivia, the state-owned mining company, COMIBOL, was forced to close many mines that employed a significant portion of the Bolivian work force.

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