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EXPLOITATION OF THE NATURAL RESOURCES: AN OVERVIEW

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Abstract

Natural resources are essential to life on the planet. Most species use them efficiently and within their limits. Humans are a separate category. We have crossed the boundaries set by natural processes of our planet and set off catastrophic changes to the environment, some of which may be irreversible. Resources taken cause huge environmental issues and are generally found in developing countries. These environmental problems include loss of biodiversity, water contamination, air pollution, and deforestation. Many of these problems are put second to economic development. Not only have we altered the ecology of the planet, we have also created enormous social problems and conflict where these resources are found. These social problems are often found in developing countries where the people are impoverished, there is great inequality among wealth and power, and the people are uneducated.

Keyword: *Depletion, Decimation, Human Security, GDP, Multilateral Development Banks (MDB), Stake Holder, Toxic Liquids, Natural Resources.*

Introduction: The exploitation of natural resources is a key factor in economic growth and development, but one that can have serious negative environmental and socioeconomic impacts. These include the destruction and degradation of old growth forests, the depletion and pollution of water resources, the decimation of fisheries, and the despoliation of land in order to extract mineral resources. In addition to the localized negative impact on livelihoods and human security, the environmentally unsustainable exploitation of natural resources can have significant transboundary impacts that pose threats to regional peace and stability. This paper is about the

consequences—for domestic and regional stability and human security—of the unsustainable exploitation of forests, water, and extractable minerals in this region Cronin, Richard. (2009). Steadily rising global demand for raw materials, industrial inputs, and energy have been the main drivers of the depletion and degradation of natural resources in the three regions. China's hyper-growth has made it the single largest importer of natural resource–based commodities and India is fast catching up. More recently, the rapid growth in global demand for energy has created a new Hobson's choice for many of the three regions' governments that subsidize food and fuel consumption. In several countries, efforts to reduce or reallocate fuel and food subsidies have been met by mass demonstrations and violence. While the development of natural resources for domestic use and export has been an engine of growth for resource-rich developing countries, the environmental and socioeconomic costs tend to be high and are rising. Resource-based development often has significant negative transboundary and even global costs, ranging from cross-border damage in the case of upstream hydropower dams to the regional and global impacts of coal burning and deforestation. The dry season burning of trees and peat bogs in Indonesia and Malaysia to make way for plantations spreads haze throughout Southeast Asia and the Southern Pacific islands, and releases vast amounts of carbon dioxide (CO2) into the atmosphere. Creating and operating large hydropower dams in South and Southeast Asia usually involves the destruction of large tracts of carbon-absorbing forests, and their reservoirs can give off more CO2 than thermal power plants. The destruction of coral reefs from the warming of the oceans, industrial scale trawling, and pollutant run-off from cities, farms, and mines has threatened the viability of important fisheries in the Gulf, Indian Ocean, and Western Pacific Planas, Florent (2012).

Objectives:

1. Examine the social and environmental impacts of this exploitation are detrimental and too often irreversible, resulting in loss of livelihoods and increase in poverty, pollution and disease.

2. Observation of developing countries may have resources that are vital to industrial sustainability and revenue, government corruption in these countries leads to lack of economic growth.

3. Due to lack of government regulation on such projects, and the desire for these companies to operate in the least expensive manner, environmental degradation is unavoidable.

The unsustainable development of natural resource endowments also has several basic limitations as a means of promoting broadly based economic development. Primary product exports have low value added compared to processed and manufactured goods. The lion's share of value added occurs in more developed countries, where raw materials are converted into manufactured goods. Prices of natural resource–based exports tend to fluctuate widely as global economic activity rises and falls. At times of high world demand, as in the past decade, natural resources have commanded high prices and boosted export earnings in resource-rich countries. In times of low global growth, falling prices for natural resources lead to economic setbacks. Additionally, most natural resources are limited in supply and/or are developed unsustainably. Finally, exports of natural resources can fuel overall GDP growth for many years, but eventually, primary forests and mineral deposits become exhausted. In the meantime, in the least developed countries, hydropower dams, the cutting of primary forests, and mining usually benefit urban dwellers more than those whose livelihoods and food security are damaged or destroyed. This is a particularly serious problem in countries where 60 to 80 percent of the population still carry out subsistence farming and fishing, or the small-scale production of items fashioned from natural materials McNicoll, Geoffrey (2007). The assumptions of state control over land and natural resources, and the poor governance of those resources, have become the two greatest threats to human security and livelihoods. Despite considerable efforts by the multilateral development banks (MDBs), bilateral aid donors, and governments themselves, efforts to involve affected communities in decisions about the development of natural resources have largely failed in South and Southeast Asia. The reasons are not difficult to understand. Especially in relatively remote regions, someone nearly always has some kind of claim to land, fisheries, and minerals, either by right of customary use or legal title. These rights are almost always overridden by government and private sector development imperatives that involve interests that are far more powerful than local rights. Typically, local communities are consulted long after the key decisions have been made Pedro and Antonio (2004). Since the colonial era, the main objective of the state and forestry departments has been to alienate the people from their land. "Timber mafias" operate in concert with corrupt officials. Community forestry experiments have generally failed because the process remains under the control of state bureaucracies, and because governments are more interested in managing forests for revenue than providing livelihoods. Establishing trust between local communities and the state is impossible when the forest department police officer is the

face of government. Ironically, deforestation often rises when governments alienate people from their lands by establishing state forests and other protected areas. Where governance is weak, those who have lost their lands have little hesitation about "illegally" continuing to utilize resources while assuming no responsibility for maintaining sustainable conservation practices and stewardship. The situation is largely the same in regard to dam construction and the awarding of mining concessions. The people who will lose their land and livelihoods are, at best, represented perfunctorily in so-called "stakeholder" consultations that are dominated by government agencies and developers. The decisions were made long before—the only question is how much environmental damage will be mitigated, if at all and how much effort and expense will be devoted to relocation and the provision of alternative livelihoods. Mining may present the most difficult problem because mitigation is normally expensive and/or impractical, and the cost of returning land to its original condition is so high as to make it uneconomical. Although large commercial mining operations are often carried out with technically sophisticated machinery, mining remains crude by the standards of any other industry. Because of mechanization, the industry employs relatively few workers, and local people do not normally have sufficient skills for employment. Mining is particularly prone to social conflict because, while big operators are given concessions by the government, numerous small, "artisanal" operators may already be working the sites, often backed by financing from criminal syndicates, which purchase and transport the output to the global market. In reality, natural resource exploitation is an essential, but not a sufficient, component of broad-based and stable economic development. Even more important are education, technical training, and other forms of human capacity building Minerals and water resources are intimately linked in river sand mining. Extensive river sand mining substantially alters the physical, chemical, and biological environments of rivers. Mining and dredging activities, uncontrolled dumping of overburden, and chemical spills reduce water quality and poison aquatic life. Indiscriminate sand mining can make an area prone to flash floods. Sand mining has also been blamed for water shortage, as it deepens the riverbed and depletes groundwater. Bank erosion and channel deepening from sand mining can also undermine nearby bridges and other engineering structures. With rapid urbanization and growth in the housing and infrastructure sector all over Asia, the demand for sand and gravel has grown significantly over the past few years. Most of this demand is being met by rampant, often illegal mining of riverbeds. In July 2008, a professor observed the serious impact of sand quarrying in

the Amaravathy River in Chettipalayam, India: "Amaravathy used to provide drinking water for the entire Karur town but now it is not even able to supply water to the villages on its bank." In the Palakkad district, the diminishing stock of sand and increasing environmental concern forced the state government to ban sand mining in the district. But illegal mining still takes place, and some have been selling river sand mixed with cheap sea sand, which causes structural failures in buildings. Kelani River, one of the major rivers in Sri Lanka, has also been badly affected by sand mining in recent years. Over mining has caused problems such as salination of Colombo's drinking water and the collapse of the river bank. However, it is difficult to ban sand mining in the river because many people living nearby depend on it as a source of living. Sand mining has considerable implications for food security. It not only leads to water shortages affecting agriculture, but many farmers, seeing the high profits to be made, have abandoned their traditional ways of rice farming for it. Some in Bantul, Yogyakarta, have realized that sand mining is more profitable and less labor intensive than rice production. In India, the Indian Bureau of Mines clears mine plans and closure plans, and oversees monitoring and regulation under the Mineral Conservation and Development Rules (1988), which includes air pollution and discharge of toxic liquids. Although the bureau is clearly responsible for environmental issues, it has no power to oversee environmental impact assessments and management plans. State pollution control boards (SPCBs) provide consent to establish and operate mines and monitor water and air pollution, much like the Indian Bureau of Mines but under different legislation: the 1974 Water (Prevention and Control of Pollution) Act and the 1984 Air (Prevention and Control of Pollution) Act. Vague laws and lack of capacity also play significant roles in natural resource management. The laws are particularly ambiguous in the mining sector. In India, the environmental law, especially tailored for mining under the 1998 Mineral Conservation and Development Rules, is full of indefinite statements, which leaves plenty of room for interpretation by miners. For example, the rules say that land should be restored to its original use "as far as possible." They also say that trees logged to make way for mining have to be replaced by double their numbers but there is no mention of the type of afforestation to be done Weber (2001). Although there is a general recognition that deforestation destabilizes water supply and that mining is destructive to forests and water resources, there is still insufficient information and statistics showing these relationships. There is a lack of data, for instance, on how degradation of one watershed affects flood risks in the Philippines. In India, although the

civil society has been active in shedding light on the negative effects of sand mining, there has been little research on how mining affects rivers and groundwater in the country. The research on such linkages has not been carried out in most countries in the region due to lack of capacity or sufficient interest, or lack of communication between the scientist's researchers and the general public and policymakers. Governments and businesses may also purposely withhold information that may reflect negatively on them or conflict with their development strategies. Lack of sufficient information hinders the ability of local communities to reject proposals from industries for natural resource exploitation that would have a negative impact on them Pegg, Simon (2006). Recognizing the interdependence of water, forests, and minerals is essential in effectively managing the resources and reducing environmental degradation and the impacts of natural disasters. As more people have directly experienced the impacts of natural resource exploitation through loss of livelihoods, natural disasters, or public health problems, there has been increasing awareness that deforestation may make floods more severe and that mining causes water pollution. Understanding the interconnectedness between natural resources and human security issues is essential for effective policymaking, sustainable use of resources, and limiting further environmental degradation and natural disasters. Unfortunately, responses have so far lacked cohesion, and the problem needs to be addressed in a much more integrated and strategic manner. As an initial step, all stakeholders—relevant government agencies, businesses, NGOs, local communities, scientists/researchers, and the media—need to communicate openly with one another, and share information and develop a common understanding of the interaction of water, forest, and mineral resources. Ideally, the process will result in a reduction of competitive behavior; provision of better definitions, laws, and institutions relevant to natural resource management; and policies that maximize economic and social development, while minimizing environmental degradation and threats to people's livelihoods. However, governments and businesses are likely to continue placing economic interests over the environment at the expense of community interests. Empowering communities to effectively manage natural resources cannot occur so long as bureaucracies are responsible for defining and representing community interests. The answers lie in the reform of governance structures and the political process, and genuine participation by everyone in decision making.

Conclusion: Resource exploitation in developing countries is an important issue in today's globalized world. The social and environmental impacts of this exploitation are detrimental and too often irreversible, resulting in loss of livelihoods and increase in poverty, pollution and disease. We have seen through various case studies in India that though these projects are ultimately beneficial to multinational corporations and even large industrial centers within the developing country, they are also devastating to the poor villagers who pay the price of the projects. Many of those countries rich in natural resources face the inevitable resource curse, which states that countries abundant in natural resources, especially those with weak government regulations, tend to have weak economic growth and worse development outcomes than their counterparts. Though developing countries may have resources that are vital to industrial sustainability and revenue, government corruption in these countries leads to lack of economic growth. Multinational corporations are allowed to enter countries such as India for oil extraction, but with a lack of government regulation on such projects, and the desire for these companies to operate in the least expensive manner, environmental degradation is unavoidable. With the environment destroyed, poor farmers who depended on that very land are forced further into poverty. Governments gain revenue from corporations tend to put their own needs before those of the overall economy, leaving the majority of their country impoverished continuing the cycle, and never seeing sufficient economic growth.

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