

Exploiting Natural Resources

**Growth, Instability, and Conflict in the
Middle East and Asia**

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Editors

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Natural Resources and the Development-Environment Dilemma

Richard Cronin

The recent rapid and environmentally unsustainable pace of natural resource depletion in the Middle East, South Asia, and Southeast Asia is one of the most visible consequences of globalization. The exploitation of natural resources is a key factor in economic growth and development, but one that can have serious negative environmental and socio-economic 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 the three regions.

Global Drivers of Natural Resource Depletion

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.

Except during the Great Depression, trade in natural resources has been increasing since the industrial revolution and the advent of fast and reliable motorized cargo ships. In recent decades, several developments have created an almost exponential growth in demand and prices. One of the most important has been the liberalization of trade and the free flow of international capital beginning in the late 1980s, commonly associated with the so-called "Washington Consensus" of the International Monetary Fund, the World Bank, and the

US Treasury Department.¹ The lowering of trade and investment barriers has generally fostered increased GDP growth in the low- and middle-income countries, but also rapidly growing income inequality as globalization has penetrated the world's remote primary forests, mineral deposits, and previously untamed rivers.

In the past several years, two more factors have also driven demand for natural resources and related industrial commodities. China's preparations for the 2008 Beijing Olympics, which began in 2003, created a major spike in global prices for construction-related commodities, such as timber, plywood, steel, and cement. The natural resource-based construction materials that China imported constituted a significant part of the US\$50 to 60 billion cost of preparing for the Olympics.

The speculative international financial bubble that began in about 2000 (and is now rapidly deflating) also created unsustainable levels of demand for natural resources. From 2002 to 2007, prices of natural resource-based commodities, such as metal and energy, grew by as much as 350 percent. As of late 2008, prices of energy and other industrial inputs have begun to fall, but global financial markets have lost 40 to 60 percent of their pre-crisis value, and most countries are struggling with a serious banking crisis and taking measures to stave off a deep economic recession. If there is any silver lining to the dark financial clouds, a short- to medium-term slowdown in the global demand for energy and natural resources could provide a breathing spell for the adoption of more sustainable resource policies.

Threat to Regional Stability

Particularly because of its effect on the changing fortunes of nations, globalization is also a geopolitical phenomenon that poses a long-term challenge to interstate relations, and hence to peace and stability. Laurent Cohen-Tanugi, for example, argues that "economic globalization exists in a complex dialectic with the traditional geopolitics it has, ironically, helped to revive."^[1] More simply put, globalization creates an ambivalent international environment that, on the one hand, encompasses both economic integration and regionalism, and on the other, fragmentation, conflict, and shifting centers of power. As a consequence, more traditional forms of power competition are carried out against a backdrop of emerging nontraditional security threats, such as terrorism, nuclear proliferation, and civil wars

¹ As it evolved, the Washington Consensus went beyond the 10-point plan drawn up by John Williamson, a leading international economist, especially in regard to capital account liberalization. The plan originally responded to a series of financial crises in Latin America during the 1980s. The most widely adopted features include fiscal restraint, financial and trade liberalization, the elimination of restrictions on foreign direct investment, privatization of state-owned industries, and deregulation (Harvard University, Center for International Development, Global Trade Negotiations Home Page, www.cid.harvard.edu/cidtrade/issues/washington.html, last updated April 2008).

at the national, regional, and global levels.^[2] Resource scarcity can be a cause of conflict and the cause of further resource depletion.

Cross-Regional Comparisons

The Middle East, South Asia, and Southeast Asia have radically different resource endowments. The Middle East, rich in oil and gas, is poor in coal and metallic minerals. Its oil-exporting countries, including Iran and Iraq, still account for nearly 30 percent of global crude oil production and hold about 55 percent of proven petroleum reserves.^[3] Less favorably, almost the entire Middle East has a serious water deficit and little exploitable forest land. The Arabian Peninsula is one of the driest regions on earth. In some countries, energy resources are increasingly used for desalination, a process that includes huge capital investment and is causing degradation of shared water resources.

The natural resource picture for South Asia is mixed. Much of the region, dependent on highly variable monsoon rains to replenish groundwater, frequently suffers both drought and severe flooding. An ever-burgeoning population strains water supplies. The subcontinent has some of the world's largest rivers, including the Indus, Ganges, and Brahmaputra, which all originate in the Himalayas and Tibetan Plateau. All have been tapped for hydroelectricity production and irrigation. While minerals are an important resource, the region has few remaining stands of primary forest.

India and other South Asian countries are net importers of natural resources and related commodities, including timber, metals, coal, petroleum, and petroleum products. From 1999 to 2005, India's imports of wood products nearly doubled to about US\$1 billion. Logs—primarily from Myanmar (Burma) and Malaysia—make up 88 percent of India's wood imports.^[4] Despite their own significant domestic output, South Asian countries, including India, generally have emerged as major net importers of copper and other metallic minerals, as well as coal and coke (hard coal baked under high temperature to remove impurities and used in steel making).

Southeast Asia is rich in forest, mineral, and water resources, but all are under severe pressure from population growth, the destruction of watersheds, and river pollution resulting from rapid urbanization, mining, and hydropower development. Despite an alarming rate of deforestation, Southeast Asia still has some of the largest remaining stands of primary forest. Indonesia, Malaysia, and Myanmar (Burma) are all major log exporters. Strikingly, as of 2000, some 33 percent of Indonesia's land mass was in the hands of timber concessions.^[5] The region also has some of the world's largest deposits of coal, tin, nickel, copper, and gold. Indonesia's exports of coal and metal ores grew by about 18 percent per year from 2000 to 2007, and accounted for close to 8 percent of government revenues and 4 percent of the GDP.^[6] The vast and highly controversial operations of subsidiaries of Freeport-

McMoRan Copper & Gold (a US company) in Indonesia's province of West Papua (formerly Irian Jaya) include the world's largest gold mine and third largest copper mine.

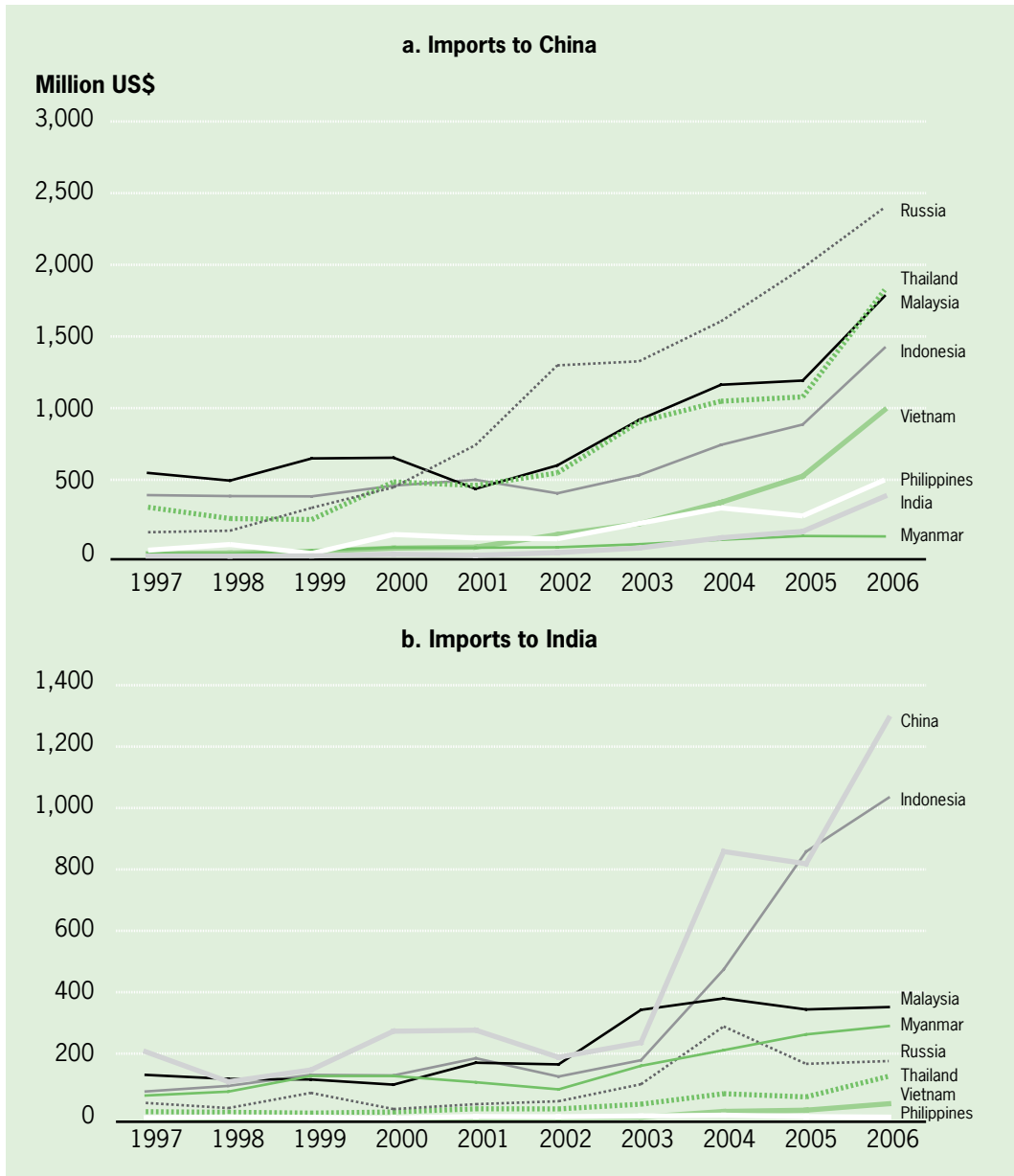
Since major policy reforms in the 1990s, both China, and to a lesser extent India, have become voracious consumers of raw materials from Southeast Asia. Both are major importers of timber and wood products from the neighboring region. Despite their own significant production of coal and minerals, China and India together are the most important markets for coal, coke, copper, and other minerals, as well as rubber and edible oils from Southeast Asia. Figures 1a and 1b show, respectively, the value of imports by China and India of selected natural resource-based commodities, as well as the most important source countries, mainly in Southeast Asia. They both have also tapped into the hydroelectric potential of their less developed neighbors.

On a cross-regional basis, the *causes* and *problems* of inadequate and/or unsustainably developed natural resources tend to be more similar than different. The main differences stem from the different resource endowments and/or stages of development. Historically, resource-rich countries exploit those resources as the foundation for development and to strengthen the state.

Forms of government and ideology have remarkably little influence on natural resource exploitation, except in the few countries with functioning democratic institutions and well-developed civil societies. Regardless of professed ideology, most political systems have pursued the same policies toward resource exploitation: reducing direct costs by creating economies of scale. While the locus of resource policy formulation varies from country to country, long-entrenched bureaucracies dominate the execution phase. In remote areas, where natural resources are found, career officials of relevant ministries and police are the primary face of government. The most important differences in outcomes have to do with governmental competence and capacity, the means of valuating resources, the extent of corruption—which is commonly widespread—and the political balance between vested interests (both state and private) and the interest of those who occupy the land whose resources are to be exploited.

Somewhat ironically, countries dominated or strongly influenced by the military often appear the least alert to the national security implications of their natural resource policies. The worst case is Myanmar (Burma), whose military regime is all but a kleptocracy. Natural resources also tend not to be well managed in countries where the armed forces have a widespread role in maintaining political order or are substantially supported by allocations of natural resource tracts rather than by the national budget. These include Pakistan, Indonesia (but less so since the withdrawal of the military from politics after the fall of Suharto), Laos, Cambodia, and Vietnam. In Laos, three military-run companies control the allocation of timber rights to commercial loggers, many of whom are from China,

Figure 1: Value of Nonpetroleum Mineral and Select Resource Imports to China and India, by Exporting Country



Source: UN Comtrade Database (www.comtrade.un.org/db).

Thailand, and Vietnam. By falsifying chain of custody certifications that the timber has been cut sustainably, corrupt military and civilian officials engage in wholesale cutting of assigned tracts, carry out illegal cutting in adjacent forests, and illegally export logs to neighboring countries.^[7]

Resource Exploitation in Southeast Asia: The Unanticipated Costs

Timothy Hamlin

Southeast Asian exports of wood, minerals, and other natural resources have risen dramatically on a year-on-year basis since the end of the 1997 Asian financial crisis, largely to serve fast-growing demand from China and India. Until very recently, Chinese demand for construction materials and industrial inputs has seemed insatiable. India's accelerated growth is attributable to the major policy reforms of the early 1990s, and how these changes further boosted demand for Southeast Asian resources and resource-based commodities.

In their rush to capitalize on rising demand and prices, a number of Southeast Asian governments made dubious choices between exploiting their resources and the needs of environmentally sustainable development. Short-term thinking in resource-rich developing countries has created long-term damage to the environment, the sustainability of their resources, and the human security of some of their poorest citizens who depend on traditional access to forests, fisheries, and agricultural land for their food and livelihoods. The already doubtful economic logic of this breakneck pace of resource exploitation is now being brought into further question by the fast-spreading global financial crisis, which has begun to sharply reduce demand and prices for many natural resources. Additionally, the sharp downturn in demand for a number of key natural resources and resource-based commodities may make a number of environmentally unsustainable projects *financially* unsustainable. The negative consequences for the economic and financial stability of a number of countries could be significant.

As the “world’s factory,” China’s economy requires vast inputs of commodities and raw materials. In addition to the rapid growth of inputs to meet fast-rising demand for Chinese-manufactured exports, a boom in infrastructure development and construction related to the 2008 Beijing Olympic Games also contributed to the skyrocketing of Chinese natural resource imports since about 2003. For

Four Systemic Obstacles to Reducing the Transboundary Impacts of Natural Resource Development in the Middle East, South Asia, and Southeast Asia

Hard science and social science experts from all of the regions have identified four important systemic problems:

1. *Globalization and regional economic integration are outpacing domestic and regional governance capacity.* At least until the current global financial meltdown, the Asian financial crisis that struck Southeast Asia and South Korea in 1997 was one of the most dramatic examples of the failure of governance to keep up with the forces of globalization. Under the combined pressure of the US Treasury Department, the International Monetary Fund, and the World Bank—the so-called “Washington Consensus”—countries opened themselves to the free flow of “footloose”

instance, imports of rough wood grew from US\$1.69 billion in 2001 to US\$3.93 billion in 2006, while copper imports grew from US\$4.89 billion to US\$17.19 billion during the same period.

Southeast Asia has served as a bountiful and convenient source for the lumber, plywood, industrial minerals, coal, and other inputs required to sustain China's extraordinary GDP growth, which has averaged 10 percent per year for the past 30 years.

Thai and Malaysian rubber exports to China increased 4- and 10-fold respectively between 2001 and 2006, with annual exports from both reaching well over US\$1 billion. Tropical hardwood forests are being clear-cut and burned to make way for plantations of palm oil and rubber and the monoculture of other export crops. Vietnam has increased coal production exponentially in the last five years, but is already preparing to cut back exports due to falling market prices and anticipated increases in domestic demand. Indonesia is blessed with immense mineral wealth, but the exploitation of its coal and copper deposits by both small-scale local and multinational companies has had severe environmental and socioeconomic costs.

In addition to the environmental impact of the rapid and environmentally unsustainable exploitation of natural resources, the hidden economic costs may also be high. Some extensive investments made prior to the global financial crisis or during the construction bonanza that preceded the Beijing Olympics may have been based upon now-faulty expectations of ever-rising demand and prices. As the global market corrects, much of the investment in establishing plantations or expanding capital-intensive mining operations may be not recoupable for several years, at least. Unfortunately, this object lesson will come too late for the environment and the traditional livelihoods of millions of Southeast Asians, not to mention lost capital.

Source: UN Comtrade Database (www.comtrade.un.org/db/).

capital before they had put in place adequate financial regulatory and supervisory capacity. The rapid development of new transportation links has taken place without a parallel increase in governmental capacity to protect natural resources such as forests. Improved roads into forested areas significantly increase opportunities for increased legal and illegal logging and mining.

The growing popularity of public-private partnerships, build-operate-transfer (BOT), and related commercial approaches to development has also overwhelmed the ability of governments to adopt long-term planning strategies. Poor countries' governments tend to view privately funded commercial projects in terms of short-term financial benefits, such as earning hard-currency royalties and taxes on both domestically used and exported electricity, rather than long-term development needs. Although the electricity may be badly needed for development, the companies see the projects purely as commercial opportunities. Their offers are often

take-it-or-leave-it proposals that cause governments with low capacity to ignore the environmental and socioeconomic costs, or to exclude alternative options that would be more financially or environmentally sound in the long run but would require near-term outlays from financially weak governments.

2. *Governments are ignoring the inseparable relationship between forests, water, and mining.* Many hydropower dams are built specifically to provide power for mining or industry. The dams destroy forests and watersheds, and both the dams and the mines pollute rivers. Shrinking supplies of water and land subsidence in many cities in South and Southeast Asia are largely the result of allowing the destruction of forested watersheds. The prospect for a more holistic approach to exploiting these three resources is fading fast. Some after-the-fact efforts are being made in some countries, such as replanting forests in import watersheds and adjacent to dam reservoirs, but few governments thus far have managed to stop development in one resource sector for the sake of the others.

The fragmented distribution of bureaucratic responsibility, and in many cases weak control over cabinet ministers, are two major reasons for the lack of an integrated approach to resource development. In the case of Pakistan, for instance, the institutional structure of forest management dates from the British colonial era and operates with considerable autonomy.^[8] In Indonesia, directly elected President Susilo Bambang Yudhoyono heads a minor party in a multiparty government. Cabinet ministers and other party leaders often have stronger political bases than the President, including close ties with commercial operators, investors, and powerful local politicians and business interests.

3. *Decisions about resource development projects tend to overestimate benefits and underestimate costs.* In hydropower dam projects, for example, governments seldom conduct credible environmental impact assessments, estimate the full value of lost fisheries and livelihoods, or accurately judge the useful life of the project or the cost of demobilization. Hydropower and mining projects seldom consider the full cost of mitigation measures, and mine approvals almost never require companies to even minimally restore the land to its previous condition once the mines exhaust the minerals.
4. *Meaningful regional cooperation on transboundary resources has yet to materialize.* Most regional organizations have failed to achieve significant cooperation on transboundary and nontraditional security (NTS) issues, whether in regard to natural resources and the environment, or other issues such as transboundary crime and the spread of diseases with pandemic potential. Several regional organizations remain more outward looking than focused on cooperation in economics, security,

or transboundary issues. For example, the Gulf Cooperation Council (GCC) has had very limited success in coordinating economic policy, and still depends on extra-regional relationships for most trade, investment, and security support. The adoption of a common market, which occurred in January 2008, will likely not produce much change, as regional cooperation depends on state-owned companies and slow-moving bureaucracies.

The South Asian Association for Regional Cooperation (SAARC) tends to be paralyzed by mutual suspicions of domination by India on the part of the smaller countries, and Indian concerns about the smaller countries uniting against India. With a few exceptions, intra-regional trade and cooperation on transboundary issues remain low. Although India has bilateral cooperation with Nepal, Bangladesh, and Sri Lanka, it is largely on New Delhi's terms.

The Association of Southeast Asian Nations (ASEAN) has yet to achieve meaningful regional cooperation on transboundary natural resource issues. For instance, ASEAN has an agreement on haze that is caused by the burning of trees and peat, but Indonesia has thus far refused to join. In the Mekong Basin, none of the four members of the Mekong River Commission (MRC) has yet agreed to compromise its sovereignty for the sake of cooperative water management, and the upstream countries, China and Myanmar (Burma), have declined to join the organization. For the foreseeable future, the best that can be hoped for is that countries will achieve bilateral or trilateral solutions to issues that become sufficiently serious to require resolution.

Natural Resources and Development

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.

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.

Natural Resource Exploitation and Widening Income Gaps

The assumption 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.

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.

Urban Winners and Rural Losers

The inescapable reality is that economic development in poor but resource-rich countries involves the exploitation of rural-based resources, such as timber, minerals, and water, to serve the interests of the politically important urban areas. Pinkaew Laungaramsri underscores the inevitability of this process when he says, “Commodifying nature goes hand in hand with the growth of urban middle-class society and its increasingly intense lifestyle in big cities.”^[9] Despite the rationale that the exploitation of natural resources will give governments more money for anti-poverty programs, rural villagers displaced by hydropower projects and other large-scale uses of natural resources are inevitably net losers. However poor their existing subsistence livelihoods, they almost always end up with insufficient compensation and lands that are less productive than those from which they were evicted. Fishermen are relocated to areas without fisheries, forest people must leave entirely or take insecure jobs as plantation workers, and farmers often have to learn to grow new crops on less fertile land.

Rural dwellers in South and Southeast Asia, as in other less developed regions, bear the brunt of natural resource-based development. Because of the failure of most environmental mitigation and relocation efforts to date, displaced people who already live a subsistence existence more likely than not will become part of the swelling ranks of the urban

poor, often homeless and jobless. The 60 to 80 percent of the population in developing countries that live in poor rural areas is effectively subsidizing the lifestyles of the 20 to 40 percent that live in cities.

This is a global phenomenon, but the tragedy in South and Southeast Asia, as in Latin America, is that most countries are not failed states in which competition for control of valuable resources is a source of civil war and external conflict. Not yet, at least. Rather, these destructive decisions about resource exploitation are made by at least nominally responsible political leaders and bureaucracies.

Development Failures and Their Causes

In theory, developing countries should be making a transition from commodities production to higher value added production, as has occurred in the more advanced developing countries such as Thailand, Malaysia, and China, but those countries remain the exceptions. In fact, for a variety of reasons, the poorest countries have done little to reduce their dependence on natural resource exports, whether legal or illegal, and instead have traded forests for oil palm, rubber, and acacia plantations that provide comparatively little employment. In general, the poorest and most politically marginalized citizens are the primary victims.

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. In tropical Southeast Asia, only Thailand, Malaysia, and Singapore thus far have made the transition to middle-income status. As shown by the Asian financial crisis, even these gains tend to be subject to reversals, especially since only tiny Singapore, which has no significant natural resources, has made the necessary investments in human capital to sustain its gains in the face of rising competition from China.

One obstacle to balanced and sustainable development is that the industrializing countries of South and Southeast Asia often become the exploiters of resources in neighboring countries with poor governance and systemic corruption. Laws against timber cutting in natural forests that were enacted in China, India, Thailand, Malaysia, Pakistan, and other countries with few remaining primary forest resources have not stopped deforestation. Instead, companies from these countries have moved into neighboring countries that are weakly or corruptly governed and still have exploitable timber. Chinese timber and plantation companies appear to operate with impunity in Cambodia, Laos, and Myanmar (Burma). Malaysian companies are particularly active in Myanmar (Burma) and Indonesia. Pakistan imports timber from Afghanistan.

As the process of deforestation proceeds, Western and Asian companies are looking further afield, to formerly remote parts of the islands of Borneo (Indonesia, Brunei, and Malaysia) and New Guinea (Indonesia and Papua New Guinea) that are the “new frontier” for timber and extractive industries in Asia and Australasia.

Freshwater and ocean fisheries are likewise under relentless pressure from soaring demand and diminishing supplies. Even water becomes a global commodity when the dry countries of the Gulf invest in the production of wheat, rice, and other food crops in developing countries with water and irrigable land. For instance, Saudi Arabian investment in wheat production in Pakistan and imports of rice from South and Southeast Asia represent a transfer of water from water-rich areas to dry regions.^[10]

Sadly, resentment at what is seen as Western arrogance and a perceived double standard regarding environmental concerns has caused some countries, especially in Southeast Asia, to reject opportunities to leapfrog over the most environmentally destructive forms of resource-based development. The argument is frequently heard and read that Western admonitions regarding unsustainable development are self-serving and in conflict with their rich countries’ own early development phases. Many also argue that the West is ignoring the pull factor in natural resource exploitation, i.e., that the very developed countries that are most concerned about climate change and other aspects of natural resource degradation are the main customers for these resources and products.

This gives rise to considerable self-defeating cynicism. For instance, some political leaders and opinion makers in resource-rich developing countries argue that it is the Western countries that overconsume the world’s resources and have the biggest carbon footprint. The developed countries, the argument continues, should cut back their own CO₂ emissions and be willing to compensate the developing countries for practicing sustainability. Others talk about a related but different kind of developed country “footprint,” that of the multinational companies that lay claim to natural resources, both financing and otherwise carrying out mining, for example, as well as transporting and marketing the resultant ore or coal.

This perspective is understandable but counterproductive. Moreover, some of the argument ignores important differences in the development experiences of the rich countries compared to the less developed ones. Some of the biggest per capita carbon consumers, such as the United States, Canada, and Australia, are lightly populated in comparison with the developing countries of the Middle East and Asia, which have little or no room for expansion into new frontiers. Water in most of the three regions is already oversubscribed and polluted. Forests in the northern and southern latitudes regenerate more quickly and easily than tropical forests. In other words, once the finite natural resources of the three regions are depleted, the adjustment will be especially wrenching.

Questionable Role of the MDBs and ODA Donor Countries

Arguably, MDBs and major sources of bilateral official development assistance (ODA) have been more a part of the problem than the solution. While reducing poverty has become the mantra for the World Bank, the Asian Development Bank, and other MDBs, their programs are still based largely on the trickle-down theory. Traditionally, their main purpose has been the development of infrastructure designed to integrate poor resource-rich countries into the global economy. Their priorities are apparent in their budgets, which overwhelmingly favor infrastructure development.

Although the MDBs and major donors do not finance development projects without environmental impact assessments and mitigation measures, these tend to be applied after projects are so far along that refusing to fund them or supply risk guarantees for private developers would create major political problems. It was a wrenching decision for the World Bank to pull out of India's Narmada Dam project and China's Three Gorges dam.

Even when the MDBs adhere to strict environmental criteria, they are being marginalized by the increasing ability of developing countries to obtain alternative funding for environmentally damaging projects. China and Thailand have emerged as the primary sources of funding for large-scale hydropower projects in the Lower Mekong River basin, and for the development of monoculture plantations of rubber. Most of these projects could not pass muster with the Bank's environmental and socioeconomic criteria.

In 1995, the World Bank and the Asian Development Bank decided not to finance Laos's highly controversial 1,075-megawatt Nam Theun 2 dam. Ten years later, in 2005, the banks agreed to provide financial risk guarantees to the developers, including Thailand's electrical generating authority (EGAT), and to provide tens of millions of dollars for environmental mitigation and an expanded relocation and livelihoods program. The banks portrayed their role as a means to set a new standard for future dam projects in Laos. Instead, Laos, which has signed memorandums of understanding with Chinese, Thai, and Malaysian companies for feasibility studies on nine environmentally destructive dams on the Mekong's main-stream, has indicated that the Nam Theun 2 standard will simply be an ideal goal that will not be met in other projects.

The Chimera of Sustainable Development

The MDBs, major aid donor countries, environmentalists, and civil society advocates have long championed the cause of sustainable development. The term has a variety of interpretations, but the most basic definition is the use of resources in a way that allows them to continue to be available for future generations. At best, this is an ideal to be aimed at. The reality is that the development of natural resources inevitably involves trade-offs. In South

and Southeast Asia, most of the costs tend to be borne by impoverished and politically marginalized groups who had a claim to the resources before the state or developers preempted them. How the benefits and costs should be estimated, and who should bear them, are the central challenges of the political economy of natural resources. Reducing the environmental and socioeconomic costs of resource development remains the most attractive solution, but is very difficult to achieve in the face of the economic and political forces arrayed on the side of short-term benefits.

Unsustainable development policies tend to be rooted in short-term thinking, and inadequate understanding of the consequences at the decision-making level. Other important causes can include the lack of ministerial and center-provincial coordination, inadequate rule of law, dysfunctional relationships between policy and enforcement, weak civil society institutions, and corruption. Until they are nearly depleted, governments in all three regions tend to favor the present value of resources over the longer-term benefits of environmentally sustainable development.

Policies that deal with resource scarcity, such as water in the Gulf countries or in huge conurbations such as Jakarta, have a somewhat more urgent short-term focus than the exploitation of resources for development and export purposes. That is, policy having to do with scarce resources is oriented toward trying to catch up with a widening supply-demand gap, mainly through efforts to expand supply by measures such as drilling deeper to reach underground aquifers that will eventually run dry. One reason for this approach, identified in Waleed Zubari's paper in this volume, is that water authorities have no control over the factors driving consumption, including population growth, development policies, weakness in governance, social attitudes and expectations, and the false assumption that nature is sufficiently "robust" to accommodate endlessly growing demands. The only practical approach for the long term is to "mainstream" water and other environmental policies into a broader socioeconomic approach to development, including improved planning, governance, and education to change societal expectations. The best scenario does not rely on market forces or other demand-based approaches, but rather focuses more comprehensively on the welfare of the entire population.

Potential Silver Lining in the Impending Global Recession?

In retrospect, it seems clear that a considerable part of the fast rise of prices since 2004 for timber, plywood, minerals, and resource-based industrial inputs such as energy, steel, and cement was artificially stimulated by the international financial bubble now collapsing with such devastating effect. One consequence has been more environmental degradation, transboundary impacts, and harm to human security than warranted by longer-term demand growth. If, as widely expected, the bursting of a global financial bubble causes a

global economic recession of some years running, the falling demand could cause the postponement of some investments in natural resource development projects that have marginal cost-benefit ratios.

Implications for Human Security and Regional Stability

Two aspects of globalization and the exploitation of natural resources have significant implications for human security and regional stability. First, globalization expands the market for important natural resources and also provides much of the capital needed to develop them. Because the state, in one way or another, has taken ownership of the resources, those who formerly had traditional rights to the land, forests, and fisheries that are to be developed or exploited usually lose much more than they gain. In many countries, those who lose their rights and livelihoods are already politically marginalized ethnic minorities. Second, the transboundary effects of the unsustainable depletion and degradation of natural resources, and competition for scarce water resources, may undermine regional peace and security.

Natural Resource Exploitation and Domestic Instability

Experience to date suggests that in the three regions, the exploitation of natural resources for development, without regard for the livelihoods and human security of those most affected, often becomes a source of internal destabilization. Many governments in the least developed countries lack the ability to generate new sources of livelihood, or even to provide minimum food security. Some of the dispossessed accept their fate and hope that increased state social services will create better lives for their children. Others migrate to nearby cities to seek work in the growing manufacturing and service industries. In countries with expanding economies, some enjoy new amenities and higher incomes, while others become unemployed urban squatters and/or get caught up in illicit occupations, such as drug dealing and prostitution. Still others, perhaps those with more resources or ambition, become unwanted transborder migrants seeking a better life in larger and more dynamic cities in neighboring countries. During boom periods, these migrants may be unofficially regarded as a means of keeping labor costs down, but in periods of national or global economic recession, the foreign workers become a perceived threat to economic and social stability.

Whether the connections are causal, casual, or caused by conflicts themselves, some of the most troubled parts of the world are also areas of severe environmental degradation and water scarcity, and stand as a warning of the consequences of unsustainable resource exploitation. The most extreme current example is the Darfur region of Sudan, but examples can also be found in parts of the Middle East, South Asia, and Southeast Asia.

The lack of economic opportunity in the denuded hills of Pakistan's Northwest Frontier Province (NWFP) and adjacent areas of Afghanistan has fostered the production of opium and narcotics trafficking. In this case, the potential for natural resource-based development, which dates from long before the 1979 Soviet invasion and the subsequent decade of bitter conflict, continues to form a backdrop to ongoing instability. At this point, it is difficult to know whether resource degradation is causing, or being caused by, tribal rebellions, endless struggles to control smuggling routes, cross-border intrigue, and even the rise of the Taliban. Most likely, the interaction has become circular.

In a wide swath of eastern and central India today, a violent Maoist movement has taken hold among tribal and low-caste groups that have been displaced by mining operations or the establishment of factory sites. In Nepal, which has also been devastated by deforestation and commercial-scale agriculture, the recruitment of landless laborers by Maoist groups, and secessionist movements among politically marginalized ethnic minorities, have played a major role in ongoing political instability and conflict. Similar underlying causes of tension, strife, and ethnic nationalism can be discerned in Kurdish and other ethnic minority areas of Turkey, Iraq, and Iran.

Warlordism and highland-lowland conflict have long affected the discontinuous mountain ranges of South and Southeast Asia, from Assam and Myanmar (Burma) through Malaysia, Thailand, Laos, Vietnam, and into southwestern China. Expanding populations and economic growth, fostered in large part by globalization, have accelerated the long historical encroachment of lowland ethnic majorities in South and Southeast Asia into upland areas. Lowland majority populations continue to move deeper into the mountains to harvest decreasing stands of timber, plant crops including coffee and rubber, and build hydroelectric dams to power industrialization. The upland minorities, who tend to have even higher fertility rates than lowland ethnic majorities, find themselves increasingly pressured in their traditional lands. Historical conflicts have been reignited, in some cases under the false guise of religious conflict.²

The recent worldwide rise of fuel and food prices, also partly a feature of globalization, has generated unrest in major urban centers throughout South and Southeast Asia. The current sharp slowdown in global growth will also create more migrants, even though demand is falling and overseas workers in the Gulf, Hong Kong, and elsewhere are being sent home. The Philippines, which depends on some US\$8 billion a year in remittances from Filipino workers abroad, may face a serious economic, financial, and social crisis if the global recession continues to deepen.

² Some local strife in areas such as the Central Highlands of Vietnam involves conflict between politically marginalized ethnic minority hill tribes who adopted Christianity during the colonial era and a predominantly Buddhist lowland majority, but the actual causes appear to be mainly conflicts over land rather than religion.

Globalization and Geopolitics

Contemporary globalization and the related unsustainable consumption of natural resources have also reinvigorated some of the traditional causes of insecurity, power rivalries, and conflict. To the extent that the exploitation of natural resources benefits the stronger countries over the weaker, the result can destabilize societies and regions, and alter the geopolitical landscape.

One of the more arguable contentions of globalization's advocates is that global economic integration and interdependence, as well as the creation of new regional and multilateral institutions, will reduce conflict. In a number of cases, countries with state-led development models, most notably China, have been unwilling to depend on the working of markets and the mediation of multilateral organizations to maintain secure sources of energy and other critical resources.

In the case of three major Asian river basins—the Mekong, Nu/Salween, and Brahmaputra—China, the biggest and most powerful country in the region, controls the headwaters and is expanding its economic sway and geopolitical influence. None of China's southern neighbors, including India, is capable of successfully using force against China, but the reduction of the total resources available to the smaller neighbors could become a source of potential conflict. The United States has an important interest to promote sustainable development of these resources.

Prospects for Solutions

The poor record of regional cooperation is rooted in nationalism and other factors that reduce trust and provide negative incentives. There have been a few encouraging examples of constructive action, especially the development of transboundary civil society linkages based on the premise of the common good. The most obvious reason is that regional organizations, whether the GCC, SAARC, ASEAN, or the MRC, have been unable to overcome their often prickly nationalism. Even in the case of transboundary river basins, countries regard their stretch of the river as a national river, even more so when it rises in their own territory. One of the most celebrated examples of successful water cooperation in the three regions, the 1960 Indus Water Treaty between Pakistan and India, is less substantial than it seems, since it simply divided six rivers of the river basin between the two countries. Even in this case, rancor continues over water sharing. In the other shared river basins of the three regions, water must be apportioned between upstream and downstream countries, which is a far more difficult proposition, technically and politically.

Thus far, efforts toward the environmentally sustainable development of natural resources and regional cooperation on transboundary issues have been frustrated by at least four

obstacles, two relatively obvious and the other two less so. The first is the excessive dependence on natural resource exploitation as the primary basis for economic development. This ensures the continuance of domestic conflict and instability, and also raises the stakes in regard to transboundary resources. The second is the related lack of adequate incentives for regional cooperation so long as the dominant countries are unwilling to accept genuine multilateral approaches, or upstream countries or air polluters disregard the interests of their downstream or downwind neighbors.

The third obstacle has to do with the shift of the locus of development from multilateral bank financing to public-private projects in which developers promote projects on the basis of their individual profit potential rather than a broader national cost-benefit analysis. Leaving aside the possible effects of a global recession and financial crisis, this trend is likely to become worse before it becomes better because of the short-term thinking of cash-poor governments. One of the worst aspects of public-private partnerships is that they tend to privatize profits and socialize losses.

Finally, little progress toward sustainable and cooperative natural resource exploitation is likely as long as the interests of affected local communities are represented by bureaucracies charged with ascertaining their wishes and speaking for them. Even when NGOs become involved in representing local “stakeholder” interests, the process is normally perfunctory. As in many other areas of governance, democratic politics and representation produce better outcomes in domestic policy, and they better facilitate transboundary cooperation.

Democratic politics can be unruly and sometimes lead to instability, but over the long term, decisions reached by some form of democratic process tend to garner broader public support and last longer. The formulation of national policy through negotiation and consensus can create a stronger and more stable platform for transboundary and regional cooperation. Put another way, the broader representation of domestic stakeholders’ interests tends to promote internal stability and decisions that do not threaten other countries’ interests as do authoritarian and bureaucratic decision making, which typically uses nationalism to support legitimacy.

Political change of this kind is likely to be a long process in most of the three regions, if achievable at all. In the shorter term, some are hopeful that broadly shared international alarm about the near-term consequences of climate change, the rate of worldwide environmental destruction, and food insecurity may promote better decision making and cooperation. Thus far, there is little evidence of change, but it remains in the interest of both the United States and other resource-rich countries and their developed country partners to find better ways to promote it.

28. Interview conducted by the author in the Philippines, August 2008.

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