## Sustainable Development, Natural Resources, and Research

Luke J. Danielson

atural resource industries operate in the most rural parts of some of the world's poorer countries. More than other industries, mining, oil and gas, and timber companies have direct contact with relatively undisturbed ecosystems, tribal and indigenous peoples, or traditional and often poor communities highly dependent on natural resources for their livelihoods. Whether they choose this role or not, natural resource companies are extremely important agents of development in much of the world. This creates great risks and great opportunities for communities, companies, and societies. Some are uncomfortable with this role, and the responsibilities it implies. But that discomfort does not diminish the truth of this observation.

This is why all the talk about sustainable development is more than blather. Natural resource companies are the only visible agents of development for many poor people and countries. If they are effective and useful in this role, they will be increasingly welcomed. If instead they are seen as blind elephants, knocking down the fences, trampling the crops, and endangering all in their path, they will be resisted.

The business propositions are fairly simple.

First, being seen as an effective agent of a positive kind of development opens opportunities for the company, and others. Second, companies that consciously manage this aspect of their business get better results than those that leave the outcome to accidents and blundering. Third, the leaders in this business are consciously looking for ways to create a highly visible difference between themselves and the slow learners.

Understanding and managing this aspect of a company's operations requires some background on sustainable development. It is very hard to find broad agreement on the most important risks and opportunities facing the world's six billion people let alone how we should together manage those challenges.

For some people, the higgest risk to our common future is environmental degradation. This may continue to reduce the annual yield of free "ecosystem goods" so important to our well-heing—clean, water, rish, clean air, timber, grass,

Mr. Danielson is a principal with DOMANI LLC. He may be reached at Idanielson@domani-llc.com or almont@frontier.net.

and many others. Thus, some people fear the consequences of a world economic agenda based on endless stimulation of growth in industrial output and consumption.

The World Bank has "estimated that in 1999 1.2 billion people worldwide had consumption levels below \$1 a day—23 percent of the population of the developing world—and 2.8 billion lived on less than \$2 a day." www.worldbank.org/poverty/mission/up2.htm. If continued economic growth is necessary to reduce poverty, some suggest a choice between maintaining healthy and productive ecosystems and reducing the suffering of the very poor.

In trying to resolve this seeming contradiction, governments and leading thinkers have settled on giving equal weight to economic improvement of the lives of the poor and protecting the productivity of the earth's natural capital. This "sustainable development" formulation was accepted by virtually all governments at the Rio Conference in 1992, and endorsed again by world governments at the 2002 Johannesburg Summit. It is as close as we have to a shared agenda for our future.

While it is a political compromise, the core idea of sustainable development unlocks some great insights. The more research helps us understand the problem, the clearer it is that the suggested choice between economic hope and environmental quality is a false one. We need environmental quality to solve the problem of poverty, and we need to address the problem of poverty to protect the environment. The poor are more directly dependent on ecosystem goods and the first to suffer when ecosystems are degraded. Conversely, even military force will not protect a park full of wildlife and trees from tens of thousands of desperate people with no fuel and nothing to eat.

This basic insight has undergone refinements. We have added the social dimension. To take simple examples, the poor are not necessarily better off if the growth that gives them a slight boost in income so destabilizes their community that they can no longer leave their homes in safety, or if half the population is now infected with HIV. There is value in our social networks of family, voluntary associations, religious and cultural organizations, in freedom to make our www decisions. Taga, von Familia, voluntary characteristics, and social networks of the familiar to the family of the content of the family of the familiar to the family of the family

higher cash receipts. More recently, we have come to understand that the sustainable development agenda cannot be advanced without attacking the problem of poor governance. Clear rules, competently administered and enforced, are necessary for markets to work. "Wild West" economic conditions deter all but the hardiest investors; indeed, the law came to much of the West because mining investors in places like London would not put their capital into the Comstock Lode or Leadville without some understood legal rules. The conditions of collapse in the "failed states" of the developing world, or ongoing unresolved conflict, are destructive of healthy economies, environment, and social networks.

## Criticisms of Natural Resource Industries

Critics portray natural resource industries as destructive to sustainable development. Environmentally, they claim these industries deplete nonrenewable resources and leave

the environment degraded, often over the very long term. This reduces the environment's ability to provide the subsistence resources on which the poor are dependent. Industry brings roads and people into previously undisturbed areas, affecting biodiversity. Industry has problems of disposal of large quantities of waste, potentially hazardous trace contaminants, and greenhouse emissions.

Economically, countries dependent on natural resource exports are said to have a slower than average rate of growth. Few of the poorest developing countries have been able to manage their mineral revenues effectively, especially through the "boom and bust" cycles typical of commodity prices. Any increased income may accrue to a few who get rich indeed, while real incomes of

the vast majority are stagnant, or fall. Even if a developing economy somehow benefits at the national level, resource-producing regions may suffer maladies ranging from rapid increase in the price of staples during the construction phase to heavy unemployment and the collapse of the tax base at project closure.

Socially, rapid change can undermine family stability (as where compensation payments are made in cash to men as head of household and there is no corresponding benefit to women). It may displace indigenous people from the land with which they are closely connected. Some claim that development undermines distinct culture and language, and leaves those trying to maintain tradition increasingly demoralized and marginalized.

Critics claim that industry's impacts on governance are pernicious. In a very poor country, revenue streams from projects are so much bigger than any other game in town that all institutions tend to be warped toward the opportunity to capture some of the revenues. Any meaningful at-

tempt to maintain environmental standards or human right can be lost in a sea of corruption and inefficiency.

This is an ugly picture. But rather than rejecting the criticisms in anger, perhaps people in the natural resource industries should study and learn from them. While there are exaggerations and occasional untruths told, the criticisms in general are a pretty good guide to potential problems. It is worth reflecting that those who say sustainable development is "none of industry's business" or "irrelevant to shareholder value" may be leaving the field to those who believe and promote the negative view of mining. Worldwide, the negative picture probably has gained rather than lost adherents over the last decade. The negative view may well be spreading from private advocacy organizations largely headquartered in the rich countries an those in the poorer countries who have always considered

the terms of resource extraction inherently unfair, to much broader publics

Companies are sometimes accused of being "exploiters" who export natural wealth without leaving a fair share of benefits behind. These politics led to the widespread nationalization of re source properties from the late 1950s ( the early 1970s, requirements for employment of nationals, domestic content legislation, restrictions on foreigr ownership, higher royalties and taxes, and mandatory joint ventures with local firms. If those who believe in th "exploitation" concept join forces wit those who share environmental concems, are preoccupied by injury to indigenous peoples and cultures, or ang at obvious and growing disparities in wealth and frustration at corruption ( government, a powerful coalition wil emerge. This can quickly create ad-

verse conditions for investment. Recent developments in number of countries are consistent with this view.

Much has been made of the effort in recent years, ofter supported by the World Bank, to "reform" mining and investment laws or "modernize" oil and gas laws. As excitin as this trend has been to industry, no trend goes on forever and the pendulum may be about to swing back. How far is swings, and how much difficulty this creates for foreign in vestment, depends very much on the battle of public opin ion in rich and poor countries alike. This leads back to the question of how to manage the risks and take advantage of the opportunities in natural resource development.

## New Research

The sustainable

development agenda

cannot be advanced

without attacking

the problem

of poor governance.

The combination of risks and opportunities associated with natural resource projects has spurred a boom in research designed to understand the relationship between these projects and sustainable development, to guide both

NI.... Dana anala

public and private policy. A two-and-a-half year worldwide study of the impact of the mining and minerals industries on sustainable development, the Mining Minerals and Sustainable Development (MMSD) Project, ended with the publication of its final report, Breaking New Ground (International Institute for Environment and Development 2002. See www.iied.org/mmsd). The project was managed by the International Institute for Environment and Development (IIED) in London under contract to the World Business Council on Sustainable Development. This extensive effort led to a significant body of recommendations. IIED has also published Maryanne Grieg-Gran et al., Towards a Sustainable Paper Cycle (1996).

The internal Operations Evaluation branches that evaluare acrivities of the three principal members of the World Bank Group, International Bank for Reconstruction and Development/Industrial Development Association, International Finance Corporation (IFC), and Multilateral Investment Guarantee Agency (MIGA), have completed a coordinated study with numerous conclusions and recommendations. Andres Liebenthal et AL., EXTRACTIVE INDUSTRIES AND SUSTAINABLE DEVELOPMENT: AN EVALUATION OF THE WORLD BANK EX-PERIENCE (2003). In addition, the independent compliance advisor/ombudsman of IFC has reviewed the results of recent IFC and MIGA extractive industries projects. COMPLIANCE ADVISOR/OMBUDSMAN, EXTRACTING SUSTAINABLE ADVAN-TAGE! A REVIEW OF HOW SUSTAIN-

٠,

ABILITY ISSUES HAVE BEEN DEALT WITH IN RECENT IFC AND MIGA EXTRACTIVE INDUSTRIES PROJECTS (2003). This report builds on another study by the same Office of Compliance Advisor/Ombudsman, A Review of IFC's Safeguard Policies (2003). Although the recent World Bank Extractive Industries Review principally was focused on consultation, its website, www.eireview.org, has numerous links to research reports from a wide variety of perspectives. These are only a few examples. Universities, research institutes, industry organizations, and nongovernmental organizations all over the world have started a major publishing boom on questions of the industry role in sustainable development. See MICHAEL KLEIN AND BITA HADJIMICHAEL, THE PRIVATE SECTOR IN DEVELOPMENT (2003).

Although any project has unique wrinkles, the new research shows that natural resource companies undertaking projects in developing countries face a number of recurring issues that pose risks to their projects. This article discusses those issues, and what the research results tell us about managing these risks. Identifying these issues does not always

make them easy to resolve.

Managing Natural Resource Wealth. Research shows that simply generating economic activity, export earnings, or tax revenues does not automatically generate benefits for the national economy of the host country. While countries like Chile or Botswana seem to have derived clear benefits from their mineral endowments, there are other countries where the stream of revenues from resource production so overwhelms relatively weak national systems of governance that it creates a sea of mismanagement or corruption that is an impediment, rather than a boon, to the development process. Nigerian oil revenues are an example.

Developing countries have other problems with resource revenues. In some cases, most or even all of the revenue ac-

crues to a small elite who invest it abroad. Few development benefits accrue to the broader population. Mineral revenues can lead to a harder currency, effectively increasing the price of nonmineral exports and causing nonmineral economic sectors to atrophy. Fluctuations in commodity prices can cause government receipts to fluctuate wildly, making it very difficult to manage development spending successfully over time.

These concerns do not exist everywhere. Acknowledging them does not mean that individual companies are responsible for solving them. But they clearly are risk factors that lawyers and companies should evaluate in connection with proposed mineral development projects.

Some ideas as to how to evaluate and manage these risks are emerging.

First, there is probably no greater risk to a company's long-term social license to operate than government resource revenues being diverted, wasted, stolen, or not spent for the benefit of development. Even if today's government officials are happy with the arrangements, that may simply guarantee that the next government will make the "missing" revenues—and the company's connection with those politicians—a political football.

The principal guarantee that government revenues will be spent in ways that benefit the public is an informed citizenry. There should be agreement that the financial terms of contractual agreements with the host country will be public, and companies ideally should be willing to disclose all payments in any form to government or government officials. Lawyers should be familiar with the principles of the "Extractive Industries Transparency Initiative," an effort initiated by U.K. Prime Minister Tony Blair and designed according to its Statement of Principles "to increase transparency over payments and revenues in the extractive sector in countries heavily dependent on these resources." Achieving public disclosure of financial arrangements re-

The principal gnarantee that government revenues will be spent in ways that benefit the public is an informed citizenry.

quires discussion and cooperation with host governments. Sam Laidlaw, executive vice president of Chevron Texaco, has said: "Host government participation in the process is essential. We cannot—and we will not—act unilaterally without the full consent and participation of our partners n government." See www.chevrontexaco.com/news/speeches/2003/17jun2003\_laidlaw.asp. Lawyers also need to be aware of the Publish What You Pay NGO initiative, for which information can be found at www.publishwhat youpay.org.

Second, it is important to ensure than an agreement works for both sides. A host country government, trying to attract investment, may offer a thirty-year "no new taxes" pledge, or forever forswear royalties.

A local governance

vacuum may prevent

effective assessment of

economic, social, and

environmental opportunities

presented by the project.

But governments are sovereign.

When a future government gets into financial trouble, or commodity prices go up, these promises are likely to fade. Companies should not undertake projects whose health is dependent on literal adherence to one-sided agreements, and lawyers might consider whether an approach that moderates, rather than prohibits, future increases in government royalties or taxes is likely to be more durable. If the host country gets in financial trouble and the IMF insists that it cut health care benefits or pensions for the elderly, special tax privileges for foreign multinationals will rankle.

Dealing with revenue fluctuation is a special case of making sure that an agreement works for both sides. If the country's overall economy is highly

dependent on natural resource exports, companies should beware of any clause that would have the effect of drastically reducing government revenues in a time of overall downturn. A royalty or tax formula that moderates both the ups and the downs of the commodity price cycle is much better than one that leaves the host country with revenues of zero just as unemployment skyrockets and the need for social spending balloons. If a company successfully enforces a clause that is detrimental to the host country during a downturn, it is likely to pay a very high price in goodwill. That loss of goodwill almost certainly will be paid in cash somehow, somewhere down the road.

Where the country's capacity to manage and successfully invest natural resource revenues at the level envisioned by an agreement is highly questionable, there are a number of possibilities. One that should probably be discarded at the outset is for the company itself to take on significant functions that clearly belong to government. That almost certainly will lead to bad results. A better approach is to encourage involvement of international public and private organizations to help build government capacity. The United Nations Conference on Trade and Development,

www.unctad.org, is a good place to look. Research is showing that the most effective time to build government capacity is before, rather than after, the revenues start flowing. It is tempting to think that capacity can be built as and when revenues start, because this may mean quicker project startup and a source of funds to pay for capacity building. At least in the poorest countries, this is often if not always the siren's song, and those who listen to it are likely to wind up on the rocks.

Finally, there may be cases where adequate government cooperation is missing, and the likelihood of revenues being diverted, spent unaccountably, or not spent for the public good is very high, and beyond the ability of good lawyering

to solve. This is a red flag for project success and company reputation. In those cases, lawyers should look hard at whether the company really wants to risk undertaking the project.

Impact on Local Communities. Even if the project is a clear winner in its impact on the national economy, it will be subject to significant risk if it does not have positive development impacts on the local community. The research indicates that projects get in deep trouble when few or no benefits accrue to the local level, and when there is no effective local government counterpart. Where there is no effective local government, many positive opportunities that a project could bring for cooperation between companies and government will be lost. It is at the local level after all that the opportunities like rural electrification.

schools, or malaria eradication exist, not in some far distan

A local governance vacuum may prevent effective assessment of economic, social, and environmental opportunities presented by the project, or result in no local planning to mitigate adverse impacts or seize positive ones. It may result in government inability to resolve the grievances and disputes that are an unavoidable part of large resource projects. Lack of accepted and fair local courts or other dispute resolution mechanisms is a key indicator of project risk.

Lawyers need to assess the community-level dispute resolution mechanisms with just as much care as they treat mechanisms for resolution of disputes between host country and foreign investors. Lawyers are accustomed thinking about what forum is available if government nationalizes the property or treats the investor unfairly. Research shows they need to start thinking also about where a person whose cow is run over by a company truck can bring a claim. Those who think it is good for the company if such complainants lack a forum are putting investors very much at risk.

It is a problem when few or no benefits accrue to the local level, but there is no universal formula for what share should reach local people or in what form. See Breaking New Ground at 182–83. The ideal result may be something like Papua New Guinea's "Development Forum"—a dialogue convened among the company, local communities, and the national government to discuss these issues and try to reach a mutually satisfactory agreement.

While companies cannot dictate to national government how to manage its spending, a government that does not share any benefits at the local level is probably subjecting the company to a form of double taxation. If local people get nothing from the taxes the company pays, they will approach the company directly for support. In most cases,

they can bring to bear enough pressure that the company will eventually pay. Whether or not it does, great ill will can be generated in the process. Particularly if information on what is being paid to the national government or how it is being invested is not public, this ill will is likely to land on the foreign investor.

Risks inherent in all revenues being absorbed at the national level are greatly increased when the local people are a racial, cultural, or ethnic group distinct from the people who dominate national government. Amy Chua, World on Fire (2004). Quarreling over control of mineral revenues can be an important cause of political breakdown and armed conflict, as in Congo or Sietta Leone. See Ian Bannon and Paul Coller, Natural Resources and Violent

7

j

ĸ.

CONFLICT (2003). When a project will be developed in a territory traditionally regarded as indigenous, it is a good idea to approach local communities with respect and seek their informed consent, regardless of whether the indigenous population has established legal rights under national law or even where national government denies their existence or indigenous status. Where national government does not permit this kind of local consultation, wise companies decide it is time to leave. Developing a grounding in the international legal regime establishing the rights of indigenous communities is useful. See Janeth Warden-Fernandez, Indigenous Communities and National Laws, in FINDING COMMON GROUND (HED 2003).

Many countries have dissatisfied ethnic minorities who feel strongly that they are unjustly treated by the ethnic majority who run the national government. There are many examples, from the Kurdish areas of Iraq, Ogoniland in Nigeria, the Mapuche in the south of Argentina or Chile, or Aceh Province in Indonesia, to the indigenous peoples of the Ecuadorian Amazon. Investing in such regions, without some consensual understanding between region and nation, can start a company down a slippery slope. It sometimes

starts with a promise by the national government to establish a military or police presence to maintain order and enforce national law. It often leads quickly to an ongoing cycle of violence and human rights abuse. Companies, often against their will, become entangled in these abuses or are accused of complicity. These problems can sometimes be overcome, but only by working with both sides, not by repressing the locals.

For the worst cases, companies should have policies defining areas where they do not want to invest, starting, but probably not ending, with conflict zones and the so-called pariah states like Myanmar. Companies already invested in such areas need very clear policies on conduct of their employees and contractors. Lawyers need to be famil-

iar with corporate practice, NGO-sponsored principles such as Amnesty International's Human Rights Guidelines for Companies, or the Australian NGO Principles of Conduct, as well as the U.S.—U.K. Voluntary Principles on Security and Human Rights, and the controversial United Nations Human Rights Commission draft rules on the human rights responsibilities of companies.

Land rights questions are contentious even in the most economically successful countries with high ratings for good governance. Poor countries with weak legal systems and many unanswered land tenure questions present high degrees of risk. Simply abiding by national law, without more, may be a recipe for conflict.

In much of the world, the majority of inhabitants lack legally recognized

rights to occupy the places they live or use the resources on which they depend for survival. See HERNANDO DE SOTO, THE MYSTERY OF CAPITAL (2003). As a result, strict application of legal doctrines of title can have consequences that are widely seen as deeply unfair, and generate resentment sufficient to put projects at risk.

The need to resettle inhabitants to make room for the project is a red flag of risk. If inhabitants are resettled without compensation because somebody concludes they lack title, a bad outcome is almost certain. The banks that follow the Equator Principles are committed not to support such projects, and a company whose project results in such a relocation may have trouble obtaining project financing. Even where the principle is accepted that people should be better off—or at least no worse off—after relocation, it often is not clear when that goal has been achieved. People who are deeply disaffected by conditions of resettlement present a very serious project risk.

All people depend, for their livelihoods, on some combination of "free" ecosystem goods and their cash purchases in the formal economy. The poorer people are, the more their livelihoods depend on ecosystem goods produced by hunting and

Companies should have policies defining areas where they do not want to invest, starting, but probably not ending, with conflict zones.

lawyers are somewhere in the middle of it, advising that the low-risk strategy is to disclose as little as possible, when this could not be further from the truth. Or lawyers spend too much time wringing their hands over the pros and cons of whether to make information public even though delaying release of the information may do nearly as much damage as concealment. Lawyers should certainly be aware of the provisions of the Aarhus Convention. See Human Rights and Natural Resource Exploitation: Public Participation in the Sustainable Development of Mining and Energy Resources (Donald M. Zillman, et al. eds. 2002)

Almost everyone who has looked at issues of project risk has flagged the inability of government to do its part to establish the basic conditions for development as one of the greatest risk factors. Where government is so lacking in resources or capacity that it cannot do its job right, or is corrupt, or simply "absent," conditions are not conducive to investment and good business. The proof may be that businesses such as light manufacturing that have flexibili-

proof may be that businesses such as light manufacturing that have flexibility of location often tend to avoid some of the places that timber, mining, and oil and gas companies find themselves doing business. A good business climate includes things like public order, control of violence, a rule of law, and a functioning court system. Where government is bad enough, business becomes near impossible. Anarchy, overwhelming levels of corruption in all aspects of society, civil conflict, or murder of adversaries mark the kind of place that most in the business world seek to avoid.

Short of this extreme, some governance issues are red flags of concern and risk. Where there is no clear place for local people to complain about the incidents that inevitably occur in the

development of a multimillion-dollar project, and no internal system to ensure prompt response to their concerns, there is a risk of growing dissatisfaction and ill will. Where there is no transparency in government or company operations, people easily feel disrespected or misled. Where government is unable to deliver even the most basic of education, health, communication and transportation, the contrast between this failure of development and the perceived economic success of the company is likely to lead to anger and resentment. Dealing with these weaknesses of government requires companies to toe a fine line—doing their part to try to compensate for what government is not doing, and encouraging government to develop the capacity to take these issues on, while avoiding being sucked into the vacuum and becoming something like a surrogate government themselves.

A poor host country may lack the effective legal institu-

tions characteristic of richer countries. This has several dimensions of which lawyers need to be aware. First, there is often a lack of "joined up government." Each ministry may have its own power base and promote its own legislation. Where legislation is not consistent—the oil and gas law, the forestry law, and the indigenous code provide different things, for example—the mechanisms for reconciling these differences may not be strong, and there may not be a straightforward answer guiding a company's actions.

Second, in poor countries, many or even most people live outside the formal legal system. This does not mean they do not observe rules, or have a sense of justice, or settled expectations. Where their rules and the legal code are in conflict, the wise lawyer tries to find ways to meet the requirements of both.

Third, international public- and private-sector organizations are increasingly observing their own expectations, independent of national law. While these are still rough and the details are

far from worked out, the broad outlines are starting to become clear. Whether we look to the Equator Principles, the Citigroup Guidelines, the IFC Safeguard Policies, the International Council on Mining and Minerals Charter, the ICMM Declaration on exploration and mining in protected areas, the Forest Stewardship Council, the Global Reporting Initiative, or statements by IPIECA, there is a growing and increasingly consistent body of rules. There is an expanding set of consequences for those who do not know or do not follow these rules.

In the development context, a lawyer thus needs to be able to think on more than one level. Usually, there are three levels of concern: international standards—for example, the IFC Safeguard Policy on resettlement; national law—perhaps the pro-

visions of the national oil and gas or mining and real estate laws for relocation of occupants of a concession; and the informal rules—such as expectations of the squatters who are without legal title living on the land. The lawyer who can operate on these multiple levels will increasingly add value to the client's efforts, whether that client is in the private sector, government, or civil society. The lawyer who cannot, will increasingly be a menace, and perceptive clients are likely to effectively isolate such a lawyer from the real decision-making processes.

While this article has focused mainly on risks, the opportunities are also there—for enhanced reputation, increased access to capital, lower insurance costs, easier access to markets and the resource base and to the most talented potential employees. We have yet to find the limit to the advantages of being seen as part of the solution rather than part of the problem.

Success requires showing respect to indigenous communities and a willingness to take 'no' for an answer: