Harnessing natural resources for sustainable development: challenges and solutions

Report of the SDSN Thematic Group 10 on the Good Governance of Extractive and Land Resources

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Introduction

Harnessing natural resource wealth is a great transformative opportunity for many developing nations. Natural resources, which are raw materials occurring in nature, serve as the foundation for economic production and consumption. By managing natural resource wealth carefully, governments can achieve sustainable development and growth. Indeed, extraction of oil, gas and solid minerals generates the largest source of exports, inward investment and potential for government revenues for over 60 low-income countries. However, history teaches that mismanagement can carry a high cost, with the potential to fuel corruption; economic, environmental, and social damage; and even conflict. As stewards of their natural resources, governments have the responsibility to manage and regulate their use, transforming natural assets into sustained prosperity for both current and future generations. Associated extractive industries also need to commit to the effective and transparent management of minerals, hydrocarbon resources, and agricultural land or forest holdings in order to support inclusive and sustainable economic development.

The window of opportunity for many resource-rich developing countries is open now. Historically high and sustained commodity prices, increased competition for extractive and land resources, improvements in governance, and increased policy space all create the chance to ensure that history does not repeat itself. But this window may not remain open for long. As an example of the scale of the opportunity, between 2000 and 2008, annual overseas development assistance flows to sub-Saharan Africa increased from US$12bn to $36bn. In contrast, the value of extractive resource rents—or surplus profits—rose from $39.2bn to $240bn. If governments could increase the share of rents captured by extracting or using natural resources, and invest those revenues effectively, they could dramatically reduce aid dependence in a single generation.

This paper highlights key opportunities and solutions for harnessing natural resources, in particular extractive (oil, gas and solid minerals) and land resources, for sustained economic development and explains how such approaches should be incorporated into the post-2015 development agenda. The history of resource plunder in developing countries tells us that this is not easy. Countries face difficult challenges, but much more is known today about what strategies resource-rich countries have used successfully. Sustainable development improvements have to originate within each country, but external trigger points can be important. This paper describes some of the best practices and available solutions to catalyze improved governance of natural resources and promote resource-driven growth and development. It concludes with a recommendation on how the processes currently underway to define a set of internationally agreed development goals for the post-Millennium Development Goal period from 2016 to 2030 can support the sustainable and transparent management of resources for sustainable development.

The economic decision chain for turning natural resources into sustained prosperity

Successful resource management requires consideration of a broad range of issues when transforming natural assets into sustainable financial, physical and human assets. These issues create a decision chain that governments must carefully navigate. This chain roughly follows the value chain of extractive and land-based industries, from the deal, to development, extraction or use, to downstream value-added activities, and through to project closure and rehabilitation: all points at which governments must act to capture and maximize value as well as to regulate on behalf of their citizens. The responsibility of governments, however, extends beyond the industry value chain into how those resource revenues are managed, distributed and used: where they are invested, and ultimately how revenues are transformed into physical, social, and human capital for the sustained prosperity of current and future generations.

1. Resource-based development planning

Resource governance and development is challenging across all the links in the decision chain, and one weak link can undermine a country's ability to benefit from its natural resources. For example, in the extractive industry, if exploration is limited, perhaps due to misallocation of exploration rights, a country may never know the extent of its resource wealth. Even if abundant wealth has been discovered, poorly structured concessions may yield little revenue. Similarly, governments may raise large amounts of revenue but then squander it on poorly selected projects or by subsidizing uncompetitive industries. Governments should thus carefully consider all stages of the decision chain.

Good governance of natural resources starts with the development of a shared national strategy or vision, with clear and realistic goals, timelines and indicators of achievement. Long-term planning is particularly relevant in countries rich in oil, gas and solid minerals, since extractive industry activities often span several decades with each stage of the project life-cycle—exploration, construction, production, beneficiation, closure—having distinct implications for the host country and community, both in terms of impact (environmental, economic, and otherwise) and opportunities for spillover benefits (including infrastructure expansion and training).

A national strategy is more likely to be successful if it is the product of inclusive planning processes that are transparent and participatory. A plan forged in open public debate will expose policy errors sooner, constrain self-dealing and corruption, and make inevitable course corrections less disruptive. Furthermore, a clear understanding of the challenges and opportunities assists governments in transcending politically driven short-termism and planning for legacy for the next generation.

These comprehensive plans should:

1. Cross sectors, extending beyond resource issues alone. They should lay out the broad objectives for natural resource use, including how revenues will be captured, managed and used, and who are the intended beneficiaries.

2. Be embedded in the broader planning and budgeting tools of the government.
3. Create an institutional framework for engaging and coordinating line ministries, donors, and the private sector.
4. Include a public investment program to identify and cost strategic public investment projects and align them with financing options (including through linkages with the industry or anticipated revenue flows).
5. Seek to utilize transparent budgeting and financial management tools that are: based on financial modeling of anticipated revenue flows over the medium and long term; tied to a strong medium-term expenditure framework; and driven by development needs and costed investment programs, as well as tools to improve budget execution.

Available tools:

- **Coordinating agency:** A likely solution is to create within the presidency, and chaired by the president, a managing political authority consisting of the key institutions, including, for instance, the ministers of energy/mines, finance and transport, the governor of the central bank, and the head of the tax authority. The decisions of this managing authority would guide (or bind) individual entities of government, including line ministries. One of the key mandates of this authority would be to ensure the good governance and strategic use of the resource revenues for sustainable development.
- **African Country Mining Visions:** The continent-level Africa Mining Vision (AMV) sets out an aspiration for mining to catalyze broader sustainable development. However, if this vision is to effectively support the contribution of mining to growth and development, it needs to be implemented at the country level. Working with the African Minerals Development Centre, countries can seek support to mobilize their vision across nine key clusters.
- **Natural Resource Charter country benchmarking:** Countries can utilize the Natural Resource Charter as a benchmarking and diagnostic tool to help build a coherent and comprehensive national strategy. This approach is currently being deployed in Sierra Leone and Tanzania. When applied to solid minerals in Africa, such as in Sierra Leone, the process can be used for the formulation of a Country Mining Vision, in collaboration with the African Minerals Development Centre.
- **Capacity building:** Capacity building at all levels can assist governments in undertaking resource-based development planning and implementing relevant policies. There are various capacity-building initiatives and training programs for civil servants, many of which could usefully be expanded (including those organized by Revenue Watch, the Natural Resource Charter, the Vale Columbia Center on Sustainable International Investment, IM4DC, UNDP, Adam Smith International, and the University of Dundee, among others). The newly formed African Minerals Skills Initiative is supporting such capacity-building initiatives. In addition, selected universities in developing countries should be supported in providing new undergraduate and Master's courses in resource-based development and related fields.

Further reading:

- African Mining Skills Initiative Country Mining Vision. (June 2013). Available at: http://www.africanmineralskills.org/wp-content/uploads/2013/06/AMSI_CMV.pdf
- Natural Resource Charter Benchmarking Framework. (July 2013). Available at: http://naturalresourcecharter.org/content/assessment-framework
- Vale Columbia Center on Sustainable International Investment. (June 2011) Resource-Based Sustainable Development in the Lower Zambezi Basin. Available at: http://www.vcc.columbia.edu/files/vale/content/Zambezi_Resource_Based_Development-_Final_Consultative_Draft.pdf

2. Accountability structures and transparency

Effective management of resources and resource revenues depends critically on decision-making by governments. Good decisions are encouraged and sustained in an environment of accountability and scrutiny, supported by transparency and availability of information.

Transparency throughout the decision chain facilitates government accountability to stakeholders. For transparency to lead to effective accountability, citizens—the ultimate beneficial owners of a country's natural assets—must have the opportunity to use available information to monitor their government's actions. Governments should therefore create mechanisms for meaningful engagement with stakeholders, monitoring of resource use, and for bringing claims regarding any negative impacts of large-scale resource projects. Strengthening relations with communities and civil society can have the added benefit of managing expectations more effectively.

Access to information throughout project life cycles can ensure that governments remain accountable to their citizens and investors, and companies to their shareholders and other stakeholders. Improved information structures also assist all stakeholders in 'following the money', helping to ensure that resources are used efficiently.

For transparency to be effective, information must be provided across the whole chain of decisions, with a complete complementary set of information (for instance, revenue data might be accompanied by information on the appropriate tax rates, production volumes and taxable income), and at appropriate levels of disaggregation (such as location, project and product type).

There is increasing evidence that disclosing contracts, particularly biddable contracts, creates a race to the top instead of a race to the bottom. For example, since Peru adopted a transparent, public bidding system requiring disclosure of winning hydrocarbon contracts, there has been a consistent increase in royalty rates bid by the companies.

Keeping the contracts confidential exacerbates the asymmetry of information between companies and government since companies have access to contracts and fiscal regimes around the world through their

network of experts, databases, consultants and law firms, and use those agreements as templates for negotiations. Keeping the contracts opaque generates mistrust, increased conflicts at the local level and pressure to renegotiate deals at the national level.

Both host and home states should implement policies requiring transparency. Except in limited situations, host governments should require and provide transparency for all contracts, licensing processes, payments made by companies, budgets, and investment of revenues. Home governments should require complete disclosure of payments and other important information by resource companies listed on national stock exchanges.

Available tools:

- **Contract databases on extractives and for land:** The Vale Columbia Center on Sustainable International Investment, the World Bank Institute, and Revenue Watch Institute have been developing an online, searchable, user-friendly database of publicly available oil, gas and mining contracts from around the world (www.resourcecontract.org). Users can search contracts by country, by natural resource or by type of contract; view summaries of the key provisions of each contract; and download full contract documents. The database is regularly updated with additional publicly available contracts and improved user tools and features. A similar contract database is also being developed for land contracts.
- **Global transparency standards:** These standard can help inform and bolster reform efforts at the country level: examples include global standards for company disclosures, aligning listing requirements (such as Section 1504 of the Dodd-Frank Consumer Protection Act and the new Accounting and Transparency Directives in the European Union (EU)) across jurisdictions and harmonizing with the new reporting obligations under the Extractive Industries Transparency Initiative (EITI). Further, those standards should require transparency of contracts, payments, beneficial ownership, and the environmental and social obligations of investors and other stakeholders, among other information. Harmonization of data standards with common, interoperable and machine-readable reporting formats will help maximize usefulness as well as minimize the reporting burden. The universal implementation of the EITI in resource-rich developing countries and in home countries would create a complementary, voluntary standard that promotes dialogue among stakeholders at the national and international levels.
- **Digitized mining and land cadastres**: These can help limit asymmetric information, allowing governments to make better decisions when allocating contracts for exploration, production, or large-scale acquisitions. In addition, publicly available geological and land cadastres can assist companies in reducing their uncertainties and can help oversight actors in monitoring the contracting process, including local impacts and payments made to governments. The use of mutually agreed interoperable standards, particularly on geocoding, can facilitate monitoring efforts.
- **Strengthening the capacity of civil society and oversight actors:** Accountability to a critical mass of informed citizens can be supported by strengthening of capacity of civil society, journalists and legislators. Further, the increasing availability of open data and harmonized transparency

standards creates important opportunities for these actors to 'follow the money'. The Publish What You Pay coalition, Revenue Watch Institute and others provide capacity building via workshops, training and grant making, which can be scaled up to meet the emerging challenges.

Further reading:

- Extractive Industries Transparency Initiative, online at: http://www.eiti.org
- Oil and Mining Contracts online database, online at: http://www.resourcecontracts.org
- Rosenblum, P. and Maples, S. (September 2009). Contracts Confidential: Ending Secret Deals in the Extractive Industries. New York: Revenue Watch. Available online at: http://www.revenuewatch.org/publications/contracts-confidential-ending-secret-deals-extractive-industries
- Vale Columbia Center on Sustainable International Investment. (June 2012). The Business Case for Transparency. New York: Columbia UP. Available at http://www.vcc.columbia.edu/files/vale/content/Business_case_for_transparency_-_VCC.pdf

3. Good governance of land resources

Land is both a natural resource that attracts investment itself and one that is significantly affected by other natural resource projects, such as those in the extractive industries. In many developing countries, land poses complex problems. It is integral to the livelihoods of hundreds of millions of people, including smallholder farmers, pastoralists, and individuals who depend on forest resources. Yet highly insecure tenure rights, coupled with the fact that some governments own the majority of land within their territories, means that many individuals who depend on land have no legal claim to it, and are thus vulnerable to dispossession at any time.

Governments should work proactively to ensure that the governance of land resources is aligned with national SDGs. To this end, transparency in the land tenure system is essential, including transparency over what types of large-scale tenure rights transactions are permitted, and transparency in the decision-making processes regarding extractives or land investments that will affect tenure rights. Government decision processes related to investments and their impact on land tenure should incorporate opportunities for citizen consultation and participation.

Displacement from land can devastate livelihoods, so governments must take steps to protect tenure right holders that may be affected by investments. Given the outsized risks posed by large-scale land transactions, including for extractive projects, governments should consider implementing explicit safeguards to protect land users whose interests may be affected. Among other measures, governments should require robust due diligence by investors, while also permitting independent assessments of a proposed project's potential impact on existing access to land. Governments should use this information in determining whether to grant concessions, and in planning how to minimize or avoid displacement from land when concessions are granted.

When displacement is necessary, governments must compensate those affected. According to accepted international human rights norms, cash is not an acceptable form of compensation for forced eviction. Rather, individuals should be provided with land that is equal to or better than the land taken in terms of quality, size and value.

Land is a particularly important natural resource, serving as the foundation of many individuals' livelihood strategies and food security. Good governance of land resources thus requires more than avoiding eviction; it also requires proactive efforts to improve tenure security.

Available tools:

- **The *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests*:** In the context of national food security, these provide guidance on improving the governance of tenure. They were developed through a robust consultative process, are based on sustainable development principles, and aim to assist governments in achieving food security through better land governance. The Guidelines offer detailed suggestions on, among other issues, legal frameworks, changes to tenure rights, and administration of tenure. They also provide explicit recommendations on addressing investments in land, fisheries and forests, and are generally aligned with best practice in the extractive industries.
- To ensure that land governance is equitable for women, governments can refer to the Food and Agriculture Organization of the United Nations' technical guide on ***Governing land for women and men: A technical guide to support the achievement of responsible gender-equitable governance of land tenure***. The technical guide provides detailed information on how to implement the Voluntary Guidelines (above) in a gender-sensitive manner.
- The World Bank has developed a **Land Governance Assessment Framework**, which governments and other actors can use to conduct country-specific assessments of land governance. The framework also assists governments in determining their priorities for improving governance of land resources.
- The EU and the United Nations Interagency Framework Team for Preventive Action have issued a joint ***Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict***. A comprehensive guidance note is supplemented by online training modules that assist governments, international staff, and other stakeholders in understanding how to anticipate, prevent and mitigate potential conflicts over land and other natural resources.

Further reading:

- De Schutter, O. (June 2009). Large-scale land acquisitions and leases: A set of core principles and measures to address the human rights challenge. Available online at: http://www.srfood.org/images/stories/pdf/otherdocuments/20090611_large-scale-land-acquisitions_en.pdf
- U.N. Special Rapporteur on Adequate Housing. (2007). Basic Principles and Guidelines on Development-Based Evictions and Displacement. Available online at: http://www.ohchr.org/Documents/Issues/Housing/Guidelines_en.pdf

4. Getting a good deal: negotiation and taxation

To gain the most from resource use, governments must maximize the amount of value, including resource rents, that they capture. As a starting point, countries should take clear steps to identify their objectives. Governments should determine what they want to gain from a deal, aligning their expectations with development goals; understand the investors with whom they will negotiate; and develop a strategic roadmap for achieving these goals. After making these strategic policy decisions, governments can procure the services of lawyers, fiscal experts, and other advisors to support their bidding or negotiation processes. Without such clarity, they will not attain optimal outcomes, even with strong internal capacity and outside support.

A sound, competitive, and predictable legal regime is a prerequisite for optimal revenue capture. Strong legislation and regulatory frameworks create a more transparent process and set the parameters for negotiation between government and companies. As far as possible, governments should enact overarching legislation or regulations *prior to* negotiations in order to mitigate the power asymmetries that can arise in dealing with investors.

Governments can also maximize revenue gains by creating structured competition and providing transparent award processes. Competitive bidding mechanisms can help increase public revenues by overcoming informational asymmetries. Governments can also use these transparent processes to mitigate corruption risks, particularly by allowing external monitors and independent auditors. First-come, first-served systems also minimize the potential for corruption, but at the risk of a reduced share of the rents.

In some developing-country contexts, efficient taxation and revenue management is so daunting that governments may find it more expedient to receive payment in kind. Competition between bidders can enhance the benefits of this approach; if a government wants infrastructure, bidders can compete in terms of how much infrastructure they will provide. Yet governments should specify their priority infrastructure investments in advance of the bidding; ensure that projects meet international building and safety standards, verified by an independent third party; and identify the funds that will be used for operating and maintaining infrastructure after it has been completed.

A consistent tax regime can optimize revenue capture by increasing investors' willingness to invest. Consistent tax regimes address investors' 'time-consistency' problem and its associated 'obsolescing bargain' issue: once an investor makes an irreversible investment based on the promise of low taxation, the government then has an incentive to renege on its commitment. Thus, a tax regime is more credible when it builds in contingencies such as changes in global commodity prices. Designing a robust tax system is complex; there is no single 'best practice' and mixed systems are typically preferred as a means of capturing value in the face of uncertainty. Whether profits or gross revenues are the main object of taxation depends on the capacity of the tax authorities to scrutinize what companies are reporting.

A well-designed fiscal regime should eliminate the need to take equity stakes in projects. Governments are often tempted to take free minority equity stakes to capture additional value beyond typical corporate incomes taxes, but a minority equity stake confers very weak rights. Indeed, anything that can be achieved through a minority equity stake can be done through tax instruments, but not vice versa.

Host governments can consider imposing double-/cross-listing on both international and local stock markets as a means of providing an opportunity for increasing local ownership.

Contracting

Poorly designed and negotiated contracts lead to entrenched poverty, corruption and even conflicts, in addition to preventing the country from enjoying the full long-term benefits of its resources. From a company perspective, poor deals lead to instability and calls for renegotiation. The chief cause of poor deals stems from asymmetries of information exacerbated by limited financial, technical and human resources on the part of developing country governments. This problem is compounded by high staff turnover in key agencies as well as difficulties in attracting and retaining experienced staff.

Evidence shows that unbalanced and poorly drafted contracts that cannot respond to changing economic circumstances lead to a significantly greater frequency of renegotiations. Those renegotiations are costly to all parties, even in cases in which they redress an unequivocally unbalanced deal. The host country may harm its reputation as an investment destination, incur short-term revenue losses, or may be sued by investors in investor–State arbitration proceedings.

Host country governments may therefore be advised to: a) regulate and not negotiate; b) adopt competitive bidding whenever it is appropriate; and c) build capacity to implement flexible fiscal regimes that are robust to changing circumstances.

a) Regulate and not negotiate

Given the pervasive institutional challenges in many resource-rich countries, governments should be encouraged to 'regulate and not negotiate'. This reduces exposure to the dual risks of asymmetrical bargaining power in negotiations and the misuse of excessive discretionary power of the negotiators. To regulate extractive industries, once there is sufficient geological information countries should legislate a mining or petroleum code before conducting company-level bidding or negotiations. Mining and petroleum codes provide a transparent level playing field for all investors, reducing the range and factors for negotiation. Leveling the playing field also reduces tax administration and the regulation of the sector since all companies are operating under the same rules for submission of key documents for government approval, such as annual work programs, environmental impact assessments, and local content plans. The alternative is that each project is governed by a distinct set of rules, requirements, deadlines, obligations and auditing requirements. In addition, legislated regimes save time and costs spent on lengthy negotiations, and allow the allocation of the limited resources to other important activities, such as tax collection, developing more geological knowledge, or building technical expertise

in the sector. Finally, legislated regimes allow the participation of the legislature and, ideally, the public in the policy-making, which in turn promotes greater long-term security.

Of course, not all variables can be legislated, as many are project-specific, such as those related to infrastructure, downstream processing, and the threshold internal rate of return for certain fiscal regimes, among others. For those variables, minimum requirements could be codified into law but the absolute values would be obtained through competitive bidding.

b) Competitive bids on selected variables

With sufficient competition, competitive bidding may be an effective method of overcoming information asymmetries by revealing the market value of a host country's assets, resulting in better terms for that country. For example, in Iraq the government allocated its service contracts for oil extraction through highly successful open and competitive auctions. The winning consortium at the Rumaila oil field will be taking $2 per barrel less than demanded by the next-best bidder, which could result in a difference of $1.8bn per annum to the Iraqi treasury by 2017.

Competitive bids may also help to make transparent the criteria on which projects will be evaluated, reducing the risk of corruption. However, competitive bidding systems may still be more vulnerable to corruption than a first-come, first-served system, which essentially eliminates subjective selection; Chile, for example, has a strictly first-come, first-served system in assignment of concessions. Because the process is highly regulated and clearly articulated in legislation, less discretion is left to state officials, providing fewer opportunities for allocation to be based on cronyism and bribes.

Neither of these benefits is exclusive to competitive bidding—both can be elements of a robust regulatory framework even in non-competitive bidding regimes—but well-designed competitive bidding regimes can help to address these important elements.

However, a well-designed and administered competitive bidding system is both difficult to implement (Iraq and Afghanistan both relied extensively on external assistance) and is not without its risks (for instance, of overbidding, renegotiation, and corruption). In general, competitive bidding systems should be transparent, publicly debated, and informed by the lessons learned by other resource-rich countries.

c) Build capacity to implement flexible and self-adapting fiscal regimes

Whether profits or gross revenues should be the main objective of taxation regimes depends on the capacity of the tax authorities to scrutinize what companies are reporting. Taxable profits are more difficult to audit than royalty payments, for instance, which are based on gross revenues.

In all cases, however, building the tax authority capacity to implement progressive taxation regimes can help ensure that governments reap the benefits of higher prices. Progressive taxation instruments are different from fixed royalties and taxes, which tend to limit the government's ability to share in times of high commodity prices or extraordinary profitability of a particular project. These progressive tools allow the government's share of resource rents to increase along with the companies' profits. They can build flexibility into the tax system so that it can accommodate changes to economic circumstances that fiscal

rigidity could not cope with. By reducing the likelihood that a change of fiscal terms would be imposed unilaterally, such flexibility would reduce the perception of risk. Among these progressive tools, a resource rent tax (RRT) is considered the most efficient. This RRT kicks in only once the investor has achieved a specified rate of return. It is said to be 'neutral' due to the fact that a company calculates project profitability (which in turn influences the decision of whether to invest), based on discounted future cash payments, and these are discounted more heavily than early payments. Thus since RRT payments would be made many years after the initial investment, they have only a minimal impact on calculations of profitability, and thus do not alter investment decisions. The disadvantage of the RRT is its complexity in terms of assessment, monitoring and account auditing, requiring strengthened capacity of tax administrations in many resource-rich countries.

Available tools:

- **Increasing geological information:** In 2011, the World Bank launched a new facility to finance public geological information. In addition, governments in Africa can make use of the African Minerals Geoscience Initiative (AMGI) and other public geosciences efforts, including the World Bank US$1 billion map.
- **Strengthen the availability of negotiation assistance for developing countries:** A limited number of initiatives are currently providing support to developing countries in their negotiations of extractive industry contracts and legal codes, including the African Legal Support Facility in the African Development Bank, the World Bank's Extractive Industries Technical Assistance Facility, and the International Senior Lawyers Project, among others. But the availability of support does not meet the need or the demand for such assistance. The Vale Columbia Center on Sustainable International Investment and the Humboldt-Viadrina School of Governance have been exploring options for increasing the scope and availability of comprehensive assistance for developing countries in the negotiation of contracts and the preparation of robust legal frameworks. In coordination with many partners, this collaborative effort is developing tools and resources[1] to support the negotiation and legislative processes, and exploring the desirability of a new facility to provide negotiation assistance.
- **Expert commissions and peer-review analysis:** Expert commissions that include a peer-review analysis of the legal and fiscal regimes in peer countries may contribute to a mutually beneficial outcome for negotiating parties. In Tanzania, the 'Bomani Commission', including diverse representatives from within Tanzania and a PricewaterhouseCoopers (PwC) expert, conducted wide stakeholder consultations to seek input into the design of Tanzania's regulatory framework. In Alberta, Canada, reforms in 2007 and 2010 were preceded by a report from a commission set up to undertake a review of Alberta's competitiveness, first compared with a number of countries worldwide, and second compared with peers in the region. A study published in January 2011 that led to a reform of Israel's fiscal regime and the renegotiation of gas contracts analyzed Israel's level of government take relative to a peer group, based on similar market, geological, and risk characteristics, among others.

[1] Including matrix of existing facilities, roadmap of negotiation process, and collection of all existing resources and tools.

- To allow governments to compare their fiscal regimes with those of their peers, it would be useful to produce a **benchmarking of government take and internal rates of return** for different minerals in various countries. To date, this has been done only for hydrocarbons (Van Meurs) and Copper (Otto).
- **Regional or global cooperation**: Regional bodies (e.g. SADC, ECOWAS, UEMOA, EAC, ASEAN) can counter the 'race to the bottom' with policy alignment and harmonization through relevant regional frameworks. While there is no one-size-fits-all, and governments require policy/fiscal space to pursue their respective development priorities, there are several areas in which harmonization, economies of scale, information-sharing and common approaches can strengthen the negotiation capacity and/or the economic benefits of a project for individual countries. (e.g. increased factor flows, regional centers of excellence, etc). Regional and global efforts are also needed to address the challenges of transfer pricing, treaty shopping, tax havens, and other illicit financial flows. The UN and OECD have recently released guidance on transfer pricing, and the G20 has reaffirmed the importance of global cooperation to stem illicit financial flows.

Further reading:

- Breaking the Curse: How Transparent Taxation and Fair Taxes Can Turn Africa's Mineral Wealth into Development. (March 2009). Published by Open Society Institute of Southern Africa, Third World Network Africa, Tax Justice Network Africa, Action Aid International, Christian Aid. Available online at: http://www.christianaid.org.uk/Images/breaking-the-curse.pdf
- Cotula, L. (2010). Investment Contracts and Sustainable Development: How to Make Contracts for Fairer and more Sustainable Natural Resource Investments. *Natural Resources Issues*, No. 20. London: International Institute for Environment and Development. Available online at: http://pubs.iied.org/pdfs/17507IIED.pdf
- ICMM. (February 2009). *Minerals Taxation Regimes, A Review of Issues and Challenges in their Design and Application.* London: ICMM. Available at http://www.icmm.com/document/520
- Vale Columbia Center on Sustainable International Investment and HUMBOLDT-VIADRINA School of Governance. (July 2012). Second Workshop on Contract Negotiation Support for Developing Host Countries: Background Paper. Available online at: http://www.vcc.columbia.edu/files/vale/content/Background_Paper_for_July_18-19_Negotiation_Assistance_Workshop.pdf

5. Challenges at the local level: towards better environmental stewardship

Resource projects can have significant environmental, social and economic effects at the local level. Governments, industry and civil society all have important roles to play to help avoid, mitigate or offset negative impacts and enhance opportunities. Where potential negative impacts are significant relative to expected benefits, governments should carefully consider whether extraction rights (in the case of mining or oil) or other licenses should be granted.

Project-level impact assessment (such as ESIAs) is an important tool for identifying and understanding the potential effects of resource-based investments. It provides essential information to assist governments in deciding whether and, if so, how, projects proceed. IA also can promote transparency if opportunities are provided for public involvement. In many jurisdictions IA has transcended its original formulation as a technique for predicting impacts, and now also emphasizes processes for monitoring and adaptive management of impacts over the life cycle of projects—for example, by requiring resource developers to prepare environmental and social impact management plans and systems. IA has also grown in scope to ensure equal consideration of the social (including human rights and health), economic and environmental domains. Some experienced resource companies and international financial institutions (see, for example, the IFC Performance Standards and the Equator Principles) have now committed publicly to comprehensive and ongoing processes of impact assessment and management, even in the absence of government requirements. This creates an opportunity for governments to set standards consistent with international best practice without risking loss of competitive advantage. Governments have also moved to task separate agencies with responsibility for environmental oversight, investment promotion, and the issue of tenure and leases, to ensure the effective oversight of development.

The cumulative impacts arising from overlapping development have stretched regulatory systems that have traditionally been geared toward the regulation and management of individual resource developments. Cumulative impacts have presented challenges for policy makers, resource developers and civil society actors. Such impacts can be identified and managed during project-level IA processes; however, strategic assessment is an effective tool that can be utilized by governments to address impact management on the scale of a resource region or for a defined level of development. Strategic assessment is well placed to identify the broader regional implications of development, define acceptable standards across an industry, and potentially to simplify project-level IA requirements.

Environmental bonds are financial arrangements between a resource developer and a regulator to provide financial surety against the potential environmental impacts of development. Bonds help to reduce the risk to governments, and society, should companies fail to meet their obligations. In many jurisdictions the level of financial surety collected is insufficient to cover the true costs of rehabilitation and is not commensurate with project risks. An additional instrument used by both governments and resource sector companies is the preparation of a closure plan. Closure plans help to clarify expectations and responsibilities and ensure that rehabilitation is performed progressively to minimize future liabilities.

Perhaps the largest potential environmental impact associated with extractive industry projects is related to the management of solid and liquid wastes. Mineral wastes, in particular, can become a perpetual source of pollution should they be managed ineffectively. Tailings and waste rock generated from mineral extraction processes require careful geochemical characterization and handling. Failure of tailings storage facilities, direct disposal of mining wastes into waterways, and seepage from tailings or waste rock dumps have led to cases of major environmental contamination. The mismanagement of mineral wastes is also compounded by a decline in ore grades whereby a greater amount of waste is

produced for each given volume of ore. New technologies such as paste and thickened tailings offer significant opportunities for improved management of mineral wastes, but are yet to be adopted widely in the mining industry.

Keeping track of water and energy use and emissions, such as greenhouse gases, is crucial in managing impacts effectively. The implementation of standardized accounting frameworks can assist industry and government to compare performance across multiple operations. Emissions standards and limits on resource use should be clearly defined, scientifically based, and accompanied by a monitoring and enforcement regime.

Artisanal and Small Scale Mining (ASM) has the potential to be harnessed as a means of development for many of the world's poorest people. When conducted in a safe, sustainable and well-regulated fashion, ASM can make significant contributions to livelihoods. However, there are many challenges associated with ASM that can prevent it from realizing this potential, and it can sometimes be associated with health and safety concerns, environmental degradation, social upheaval and even conflict. In many of the world's developing countries ASM is hampered by inadequate policy and regulatory frameworks; limited technical and financial capacity; and inadequate access to appropriate technology and accessible ore. To ensure that the governance framework deals with these key challenges, formalization of ASM should be pursued. Formalization should comprise several important measures; including decentralization of licensing of ASM concessions; setting aside areas and conducting geological investigations of those ASM-designated zones; formation of cooperatives of ASMs as well as management of ASM activities at the local level; and the involvement of broad stakeholder committees, which can contribute significantly to the sustainable management of ASM operations. In addition, government should legislate and act to ensure that child labor is not used in ASM. There are opportunities for formalizing and regulating ASM through cooperatives and other community-based solutions, while encouraging diversification of the economy to reduce dependence on mining.

The involvement of a diverse set of stakeholders in the management of environmental issues can help to build trust and public support for projects. Participatory water monitoring, for example, has been effectively employed in a number of resource regions to monitor the environmental impacts of projects. For impacts that are generated by multiple contributors, multi-stakeholder collaborative governance may be the best form of management. Collaborative management often requires significant long-term commitment and capacity-building support, but can promote more transparent and inclusive processes and improve social as well as environmental outcomes.

Further reading:

- Dudley, N., and Stolton, S. (January 2002). To Dig or Not To Dig: Criteria for Determining the Suitability or Acceptability of Mineral Exploration, Extraction and Transport from Ecological and Social Perspectives. Gland, Switzerland: WWF. Available online at: http://www.oecd.org/env/1830332.pdf
- Franks, D., Brereton, D., Moran, C., Sarker, T., and Cohen, T. (2010). Cumulative Impacts: A Good Practice Guide for the Australian Mining Industry. Brisbane: Center for Social Responsibility in

Mining Centre for Water in the Minerals Industry, Sustainable Minerals Institute, The University of Queensland. Available online at: http://www.csrm.uq.edu.au/publications/37-cumulative-impacts-guide

- Fundingsland Tetlow, M. and Hanusch, M. (2012) Strategic Environmental Assessment: The State of the Art. *Impact Assessment and Project Appraisal*, 30.1, 15–24. Available online at: http://www.tandfonline.com/doi/pdf/10.1080/14615517.2012.666400

6. Challenges at the local level: towards human and social development

Resource-based investments have not always led to improvements in human and social development. Too often, these large-scale projects have been associated with negative experiences at the local level. Resource revenues, if wisely invested, can be utilized by governments to generate broader human and social development outcomes, but the site-level practices of investors can have an even greater influence on development outcomes for local communities.

In the extractive industry, companies have conventionally focused their corporate social responsibility (CSR) agenda on community-development activities such as the building of schools and clinics in the vicinity of resource projects. Companies should be mindful, however, not to act or be seen to act as a substitute for the state. Delivery of social programs should, as far as possible, be carried out by the state, the visibility of which can strengthen lines of accountability between citizens and their government. In cases where capacity is particularly poor, provision of services by companies may be warranted in the short-to-medium term. Yet companies should also move beyond traditional approaches to community development. Community development should instead aim to foster independence and the participation of the recipients in the design and delivery of programs; have a strategic focus, using participatory planning processes or Community Development Agreements; and make a measurable difference by coordinating activities to achieve outcomes in areas of greatest need, and for greatest benefit. Companies should ensure that funds are available for these commitments throughout the life cycle of their investments, planning ahead for foreseeable cycles of low or non-existent revenues, such as project closure.

Governments can require investors and major international contractors to develop a package of local sourcing and knowledge-transfer commitments as a part of their bid for concessions or services to concessionaires, or in post-award negotiation. Local capacity should be boosted by, for instance, training facilities and investment in R&D, which may involve collaboration with resource investors. Governments should also provide an enabling environment for local content. In addition, they can enact minimum local employment requirements at the manager and employee levels. Such requirements should be strengthened with a robust system of monitoring and reporting, alongside penalties or incentives.

Local communities, local government, and the wider public should be engaged prior to, and during, development. Efforts to inform and involve the public in decisions about the overall vision for a nation's resources must ensure that a diversity of voices are heard. Meaningful involvement enables

communities to understand how they will be affected, plan for the pending changes, and contribute local knowledge to the design of mitigation and enhancement strategies. Not doing so risks antagonism and possibly conflict. Clearly, there may be differences between the interests of the local population and the citizens of the country as a whole. If a decision is made to undertake a resource-based project that will negatively affect some individuals or groups, measures must be taken to ensure that the effect of the change does not lead to a deterioration in livelihoods. Ongoing community engagement through community consultative committees or reference groups is required of resource developers in some jurisdictions.

Enhancing the capacity of local government can help to ensure that the benefits of resource-based projects are captured. Good local governance also requires strong communication with other government entities. Companies engaging with local government should ensure that the local government represents community perspectives and is congruent to culturally acceptable governance systems. At the same time, countries should be cautious in devolving powers to the local level where capacity will typically be more limited and opportunities for abuse, corruption and waste may be evident.

There are significant risks associated with involuntary resettlement and the practice has attracted controversy at resource projects in multiple jurisdictions. While it should be avoided wherever possible, when it is necessary, it should be accompanied by careful planning and a concerted effort to ensure the protection of livelihoods, and must accord with internationally accepted human rights norms.

International law has evolved to recognize the right of indigenous peoples to exercise free, prior and informed consent (FPIC) regarding development activities that may significantly affect them. The UN Declaration on the Rights of Indigenous Peoples and the International Labor Organization Convention 169 offer guidance on indigenous people's rights relating to development activities. Indeed the International Finance Corporation's Performance Standards and the International Council on Mining and Metals Position Statement on Indigenous Peoples and Mining now support FPIC. Governments should ensure that improved processes for decision-making are complemented by a foundation for agreement making. Impact and Benefit Agreements and Indigenous Land Use Agreements have been successfully used by resource developers and indigenous peoples to outline responsibilities and expectations and strengthen relationships for mutual benefit.

States have a responsibility to respect, protect and fulfill human rights, while businesses are required to comply with the law and to respect human rights. Companies should exercise robust due diligence in identifying and responding to human rights risks, and avoid complicity in human rights abuses. Furthermore, they should implement processes to respond to community grievances and ensure effective remedies in the event that rights are breached.

The impact on women and vulnerable or marginalized groups should be separately and explicitly identified, factored into the decision-making process, and appropriately addressed, since these groups are often overlooked in broader community impact consideration.

The ownership rights to land and over subsoil wealth, including the rights to resulting revenues, should be clearly established in law and agreed at the local and national level. While subsoil wealth is usually, but not always, owned by the state on behalf of all the citizens of a country, the land and other natural assets affected by resource-based activities may be owned, or at least relied on, by local communities. Other communities that are not local to the project site may also rely on areas that are negatively affected by project operations—for example, contaminated rivers or coastal areas. When a project may affect their environment or assets, communities have a right to be consulted prior to the project's commencement.

Governments should seek to act on:

a) Human rights

As explained by the UN Guiding Principles, non-host governments should clearly set out the expectation that all companies domiciled in their territory and/or jurisdiction respect human rights throughout their operations, including rights contained in the International Bill of Human Rights and the International Labor Organization's Fundamental Principles and Rights at Work. Non-host governments as well as non-governmental actors should also promote and support host states in fulfilling their duty to protect human rights and ensure that third parties do not abuse human rights. Actors that support the extractive or land sectors financially or through guarantees should require due diligence procedures that prevent potential and actual human rights abuse resulting from projects and associated activities. This due diligence should be combined with sustained community engagement, and should ensure that projects do not have excessive impacts on particular groups, such as those based on gender, race, age, or other criteria.

b) Social impacts and locally inclusive processes: Managing short-term expectations of communities helps ensure stability. This includes demystifying the job creation impacts of large-scale projects, as well as expected revenue streams of investments.

c) Displacement from land should generally be avoided. When this is not possible, individuals and communities should be compensated, not in the form of cash, but with suitable and comparable land, as well as assistance to retain livelihoods.

d) Fair and proper mitigation measures for social and environmental damage.

Available tools:

- **Community Development Agreements and Local Development Plans:** Articulating a clear CDA and LDP, and conducting regular multi-stakeholder forums, can help ensure that investors and communities understand and are equipped to address each other's concerns.
- **Lending and Export Credit Agencies:** Export credit agencies, as well as public and private lenders, should require due diligence, as well as monitoring and reporting on compliance, with international environmental and social standards. This information should be made publicly available. In addition, international law recognizes that indigenous peoples are entitled to special rights and protections, in particular FPIC when development activities may affect their lives or local environment. All lending agencies that have not yet done so should put in place

strong regulations and processes to ensure that indigenous peoples have the right to free, prior and informed consent over large-scale projects that may affect their lives or environments.

- **UN Guiding Principles and other tools that provide guidance on the Principles**

Further reading:

- Anaya, J. (2013). Report of the Special Rapporteur on the Rights of Indigenous Peoples: Extractive industries and indigenous peoples. A/HRC/24/41. Available online at: http://unsr.jamesanaya.org/annual-reports/report-to-the-human-rights-council-a-hrc-24-41-2013
- De Schutter, O., Ramasastry, A, Taylor, M. and Thompson, R. (December 2012). Human Rights Due Diligence: The Role of States. Available online at: http://accountabilityroundtable.org/wp-content/uploads/2012/12/Human-Rights-Due-Diligence-The-Role-of-States.pdf

7. Leveraging resources for development: value addition and diversification

Governments are often under great pressure to focus efforts on job creation *within* the extractive sector, often via 'value-addition' projects. Indeed, job creation is one of the benefits that host countries often seek in attracting investment. A broad-based and well-understood national vision or strategy can help shape the government's objectives in respect of overall job creation and economic development, and will also assist citizens in understanding how resource-based projects can contribute to sustainable-development goals.

A common mistake that governments make is focusing too heavily on imagined value addition opportunities in the resource-extraction sector. Investing heavily in adding value in this sector increases dependence on it, which may not be optimal: once the resources are depleted, the adjustment needed in the economy will be all the greater. Any consideration of value-addition policies that is not based on examining the resource type and country level to align expectations with reality might be self-defeating.

Domestic processing of resources is thus often seen as a priority investment for new resource-producing countries. However, governments must also consider other factors, such as the likely scale of domestic demand, the quantity and lifetime of the resources, and the comparative costs of importing processed products. If the resource is easily traded internationally (e.g. oil and high-value minerals), then the best option is likely to be to export much of the resource and use the funds to support diversification and investment into other sectors. Where the resource is less readily traded (e.g. gas or low-value minerals), or likely to have significant local demand, the case for developing downstream sectors is stronger. Gas is particularly noteworthy because of its linkages to power generation, a prerequisite for economic development. It generally has low tradability, and therefore may be available cheaply to the power sector. Gas-powered generation capacity is also lower in capital intensity compared with alternatives such as oil, coal, and nuclear, as well as hydropower and other renewables. In addition, domestic use of gas can be a valuable alternative to flaring (such flared gas is called associated gas and is a by-product of oil fields). However, there are other potential downside factors that should be considered when

deciding whether to encourage such activities; these include high capital intensity of value-added processing (in the context of a capital-scarce economy); dependence on imported skills and equipment; and large demand for energy that can generate an opportunity cost for the domestic economy and the possibility that it may create only relatively few jobs compared with other industries.

A more promising avenue to create jobs and spur economic development is to consider that resource-based investments can be used to leverage other investment in the region as well as multi-purpose and multi-user infrastructure. To increase effectiveness, governments should plan early to ensure coherence in how these investments can fulfill long-term development goals. Problems have arisen in Mozambique, for example, where poor sequencing between mine development and infrastructure creation has hampered industry expansion.

In fact, extractive resources are often located in remote areas with little or unreliable infrastructure access (roads, rail, ports, electricity, water, telecommunications, internet access, etc). Where public infrastructure is unavailable, extractive projects have traditionally provided their own infrastructure to carry out their operations. However, this infrastructure can provide significant benefits to the region if it is made available to other actors and/or leveraged for broader grid expansion. The government should coordinate private and public investments to ensure that extractive-industry-related infrastructure is connected to existing infrastructure networks, designed efficiently and strategically in terms of location and capacity, and scaled to take into account the development potential of the surrounding region. By taking into account the public use and/or expansion of the private sector's planned investments, and how the infrastructure can be expanded or leveraged to meet future demand, the incremental cost can be reduced significantly.

Requiring third-party access to 'trunk' infrastructure could enable farmers and small and medium-sized enterprises (SMEs) to benefit from decreased transportation and logistical costs, as well as increased access to markets. This creates an infrastructure 'corridor', linked to the extractive resources, which can create opportunities for further economic development and help to attract other investors to the region. A long-term demand analysis could help identify potential future projects that could build on the corridor infrastructure. To maximize the reach of the corridor, supplemental feeder infrastructure can be built, especially in areas along the corridor with high economic potential. Governments could develop programs to support SMEs, giving them the means to provide upstream and downstream services along the corridor, from the mine to the port. While domestic firms may not be competitive in certain specialized areas, there may be opportunities to build capabilities in cooperation with external partners.

In the short and medium term, the most important sector to expand is 'non-tradables': goods and services that are neither exported, nor compete closely with imports. Precisely because they cannot be supplied by the rest of the world, they may become more expensive as aggregate spending from resource income increases. To avoid this situation, governments should focus on expanding this category of goods and services.

Government should seek to provide an enabling business environment, without targeting any specific industry. This might require improving the regulatory environment and functioning of markets (for capital, land, and labor); implementing infrastructure policies that improve the provision of utilities and public goods; and making social policies that increase the numbers and productivity of workers.

Depending on the location of the corridor, the government should also take into account connections to regional trade routes. Political buy-in for this would be crucial, and integrated border and cross-border corridor management would be necessary for the corridor to function well. Such bi-national discussions should take place prior to the construction phase to determine current and future capacity needs.

Leveraging resources for development requires public–private partnerships (PPP) backed by a regulatory framework that embraces a holistic approach to addressing the challenges faced by investors. These include risk evaluation (particularly relevant for the application of capital by publicly traded companies), timeliness of process, and foreseeability of the regulatory and contractual framework in the medium and long terms.

Investments in natural resources, particularly in the extractive industries, present an important opportunity to develop backbone and feeder infrastructure in infrastructure-deficient countries. Several countries have piloted a spatial development corridor approach to leverage the transport and service corridors developed to serve the needs of the anchor projects for broader grid expansion and more integrated growth along the corridors. The goal is to ensure that the benefits of the high-rent investments translate into widespread development outcomes. The strategy relies on strong planning mechanisms, and inter-ministerial coordination to address complex development challenges and seize opportunities to coordinate public investments with private investments located along the development corridors.

In order for mining-related logistic corridors to become spatial development corridors, governments, donors, and the private sector should explore the opportunities for shared use or open access of infrastructure developed for investment projects. The plans for shared infrastructure should be backed by data surveys and transport sector statistics, and the corridor regulatory framework should include the following aspects: 1) multi-decade concession period; 2) non-discriminatory tariffs; 3) a monitoring and auditing commission comprising multi-disciplinary experts to audit concession returns and applied tariffs; 4) coding regime into PPP legislation; and 5) a strong independent regulatory body that is resistant to political interference.

These anchor investments should also be leveraged for grid expansion. The enclave model, whereby the mine develops its own power plant, often fueled by diesel and heavy fuel, to ensure that the basic infrastructure needed for its operations is reliably available, is costly for both parties. Host country governments can aim at building a more robust power generation and transmission system, as well as accelerating rural electrification through improved planning and structuring of new power generation and transmission capacity associated with the mining industry's energy demand. If sound regulations

and efficient coordination mechanisms are put in place, synergies between the power and the mining sectors will be realized and mines can benefit from considerable cost-savings.

The cost of not integrating is substantial. For the *mines,* it results in lost production and/or lower performance. For a weak *utility*, the costs of mines resorting to self-supply is the missed opportunity to use the mines as anchor customers for generation and transmission investments that exhibit economies of scale and benefit all consumers on the system. For the *country*, it is the missed opportunity to leverage mining for sustainable development.

Such arguments can all be applied to internet and telecommunications and water infrastructure. The conclusion is always the same: 'if companies and Governments consider the potential shared use through expansion of the private sector's planned investments at the design phase, then the incremental capital cost on the economy and environment could be minimized while the impact on sustainable development is optimized.'[2]

Shared use should rely on a clear understanding of the spatial distribution of current and potential economic activity, as well as of the geographic and demographic features along the corridor.

Once the spatial corridors are established, there is a need for the 'deepening' of the resource sector through upstream (resource supply/inputs sector), downstream (resource processing and beneficiation), and side-stream (human resource and infrastructure development) linkages that could form core industrialization dynamics for the host country. Over time, this deepening will lead to diversification of the economy through the increasing human resource development and skills formation.

Available tools:

- **Digital mapping:** Such an exercise will rely on digital mapping and geographical information systems (GIS), and could usefully draw on the experiences of countries that have used these tools, such as Nigeria, Kenya and Ethiopia. The Global Spatial Data Infrastructure Association (GSDI), which supports best practice and methodology sharing among its members, could support this undertaking.
- **Ten-year infrastructure map:** Such a map would help identify the potential for shared infrastructure platforms between natural resource concessionaires and other users, and help anticipate the demand for various forms of infrastructure along the corridors, by assessing the potential economic activity and its related potential infrastructure demands. Anticipating necessary infrastructure upgrades before reaching capacity gridlocks can help to ensure that capacity constraints do not block potential growth.

[2] Vale Columbia Center on Sustainable International Investment. (May 2012). Leveraging extractive industry infrastructure investments for broad economic development: regulatory, commercial and operational models for railways and ports. New York: Columbia University. Available at: http://www.vcc.columbia.edu/files/vale/content/Working_paper-_leveraging_mineral_railways_and_ports_for_development_-_VCC_-_last.pdf

- **Strong government institutions to partner with the private sector in leveraging and expanding the infrastructure:** This involves strong, independent regulatory mechanisms for surface transportation, power, information and communications technology and water supply, as well as national railways and port companies.
- **National linkage center:** The government, with its public and private donors, should take a collaborative approach to setting up a national linkage center to: 1) identify the right value chains; 2) monitor value-addition of linkage programs; 3) advise on suitable corporate policies; and 4) suggest public– private-sponsored initiatives.

Further reading:

- Africa Progress Panel. (May 2013). Equity in Extractives. Available online at: http://africaprogresspanel.org/en/publications/africa-progress-report-2013/apr-documents/
- Network of Global Agenda Councils. (2013). Natural Riches? Perspectives on Responsible Natural Resource Management in Conflict-affected Countries. Geneva, Switzerland: World Economic Forum. Available online at: http://www3.weforum.org/docs/WEF_GAC_NaturalRiches_ResponsibleNaturalResourceManagementConflictCountries_Report_2013.pdf
- UN Economic Commission for Africa. (2011). *Minerals and Africa's Development: The International Study Group Report on Africa's Mineral Regimes.* Addis Ababa: UNECA. Available online at: http://www.uneca.org/publications/minerals-and-africas-development
- Vale Columbia Center on Sustainable International Investment. (September 2012). Leveraging the mining industry's energy demand to improve host countries' power infrastructure. New York: Columbia University. Available online at: http://www.vcc.columbia.edu/files/vale/content/Working_paper-_Leveraging_the_mining_industrys_energy_demand_to_improve_host_countries_power_infrastructure_-_VCC.pdf
- World Bank. (January 2012). Increasing Local Procurement by the Mining Industry in West Africa. Washington, D.C.: The World Bank. Available online at: http://siteresources.worldbank.org/INTENERGY2/Resources/8411-West_Africa.pdf

8. The role of other stakeholders: companies, shareholders, and other concerned groups

The international community increasingly recognizes that businesses have a responsibility to respect human rights. At its core, this responsibility requires that businesses undertake due diligence in order to identify, prevent, mitigate, and account for how they address adverse human rights impacts. Due diligence efforts should be ongoing throughout the life of a project.

Companies working on resource-based projects must therefore take steps that go beyond minimum legal requirements by ensuring that they do not infringe on the rights of individuals. In addition, companies should strive to comply with high environmental, social, and human rights standards; avoid

corruption; contribute to sustainable development outcomes; and make pertinent project information public and accessible.

Companies should commit to, and be accountable for, preventing, reducing, and remediating any negative environmental, social, or human rights impacts of their activities. They should also require their partners, contractors, and subcontractors to do likewise. Best practices include forging specific plans to manage potential local and regional impacts of the project. The rights of indigenous peoples are provided special protection under international law, and must be taken fully into account by both governments and companies.

International norms increasingly recognize bribery of government officials as a crime. Companies should have clear internal policies relating to corruption, including procedures and controls that prevent and punish corrupt practices by employees, contractors, subcontractors or their agents. Failure to do so will not only harm the sustainable development potential of projects, but may also expose companies to criminal liability in both home and host countries.

Companies should willingly disclose a range of information relevant to their projects' potential impacts on society and development. This disclosure includes contracts between government and companies, which should clearly state the fiscal terms in a format that can be understood by the public. The only justifiable exception for time-bound confidentiality relates to business proprietary information that could directly affect the position of one of the parties in a concurrent or imminent negotiation, or in activities being undertaken. Any reports regarding potential impacts on people, their internationally protected human rights, or the environment should be made publicly available and accessible to those potentially affected, including relevant assessment data and plans for prevention, mitigation, and remediation. Governments and companies should work together to ensure that information is available in a timely, accessible, and comprehensible manner.

Relevant information is helpful only if communities have the opportunity to engage with companies and investors, and to provide feedback that helps shape decisions. This engagement should include a two-way dialogue prior to the start of a project, and sustained dialogue and engagement throughout the life of a project.

Finally, companies should re-orient their CSR agenda towards spreading economic opportunities more widely across the population according to the national or local government's overarching plan. In other words, companies should act in support of the host state's efforts to maximize potential benefits for its people from resource-based activities. Multi-stakeholder partnerships are vital for reducing discord and strengthening capacity.

Further reading:

- Natural Resource Charter. (2011). Precept 11: Role of Home Governments. Available online at: http://naturalresourcecharter.org/sites/default/files/Precept 11.pdf

- United Nations Office of the High Commissioner for Human Rights. (2012). The Corporate Responsibility to Protect Human Rights: An Interpretative Guide. Available online at: http://www.ohchr.org/Documents/Issues/Business/RtRInterpretativeGuide.pdf

9. The role of other stakeholders: international community

For resource-based projects in Africa, the majority of investment capital and necessary technology currently flows from outside the continent. Profits—and even illicit funds—flow out of the continent into international banks. In the extractive industry, international companies often play a key role in the extraction process, with some projects lasting many decades. Thus the rules, standards, and behavior of international companies, investors, capital center and home governments can play a critical role in supporting, or undermining, the actions of host governments in harnessing resource wealth for their citizens.

The governance of natural resource use/extraction and harnessing of revenues poses extra-territorial challenges—from infrastructure investments for cross-border resource transportation, to capturing capital gains taxes from non-resident entities, through to repatriation of looted assets and the enforcement of payment disclosure rules by international capital centers and minimization of transfer-pricing practices.

International voluntary standards such as the EITI have proved effective in changing practices regarding disclosure by governments and companies of payments made for resources, while governments have also moved to address this. For example, the United States and, more recently, the EU have enacted 'publish what your pay' legislation, and the Hong Kong Stock Exchange now has stronger listing requirements. The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas may also support efforts to mitigate the trade in illicit minerals and conflict minerals.

International actors and non-host states must do more to reduce these flows, curtailing transfer-pricing abuse, the use of tax havens, and other tax avoidance and evasion measures. This includes banking measures that require confirmation of ownership in all banking and securities accounting. Asset looting has been particularly prevalent in countries with large resource windfalls. When malpractice is identified, the freezing or recovery of stolen assets is necessary. International actors and non-host governments should work together to reduce corruption and bribery, ensuring strong legislation and enforcement of measures to counter such practices.

Many resource-rich developing countries are yet to accumulate the essential capacity to translate resource wealth into sustainable and inclusive development. International organizations and governments have a significant role in helping build capacity of government, the legislature, media and civil society in these countries. Efforts should be both concerted and coordinated to maximize effectiveness. Natural-resource-based industries can have significant impacts on the living standards of

local people as well as on the local and global environment. International actors should set, facilitate, incentivize or require appropriate project operating standards that limit negative effects, and should require IA as a matter of course.

Through forums such as the G8 and G20, countries can promote high standards and work to enact policies and legislation that ensure a more level playing field. Lending agencies can also use their leverage to push greater compliance with environmental, social, and human rights standards.

Further reading:

- Buxton, A. (June 2012). MMSD+10: Reflecting on a Decade of Mining and Sustainable Development. London, UK: International Institute for Environment and Development. Available online at: http://pubs.iied.org/pdfs/16041IIED.pdf?
- Natural Resource Charter Precept 12: http://naturalresourcecharter.org/content/precept-12
- Schiavi, P., and Solomon, F. (2007). Voluntary Initiatives in the Mining Industry: Do they Work? *Greener Management International*, *Spring 2006* 53: 27-41.

Conclusion: How can these issues be part of the global development agenda? What are the implications for the post-2015 processes?

Many of the world's poorest countries are facing the challenge of harnessing natural resources for sustainable development. For developing countries rich in extractive resources, the revenues or rents available from resource extraction far exceed current or likely aid flows. The extent to which countries succeed in negotiating good deals, regulating them effectively, and allocating revenues appropriately will define their ability to achieve the Sustainable Development Goals.

Governments face a complex set of interrelated decisions, from the design of legal and fiscal frameworks that ensure that the benefits of resource-based projects are realized and shared equitably, to the implementation of integrated rural development plans. Getting the politics right—the rules, the institutions and citizen accountability—can be as critical as making the right decisions. A transparent and participatory environment, including an informed citizenry and opportunities for redress of grievances, ensures that decision-makers are held accountable, policy choices are debated, and opportunities for populism or rent-seeking are mitigated.

While governments play the most critical role in assuring the good governance of natural resources, inclusive social and economic transformation depends on all stakeholders playing their part. In particular, companies must earn and retain their social license to operate at the local, national and international levels. To do so, companies must take seriously their human rights and environmental responsibilities, as well as their commitments to be partners in the development process with the countries and communities in which they are operating.

The international community also must uphold its end of the bargain by creating enabling international frameworks for good governance, including in the SDGs. Among other steps, the international community must coordinate to reduce and repatriate looted assets and illicit flows, and strengthen and institutionalize standards for transparency throughout the extractive and land sectors. Strengthened international legal frameworks are necessary for moving forward effectively on sustainable development goals.

Recommendations

We therefore underscore the importance of transparent, cooperative, equitable and sustainable policies and practices related to investments in extractive or land resources. Governments and their private sector partners need to commit to the effective and transparent management of resources in order to support inclusive economic development and the achievement of all SDGs. Such effective resource management includes consulting with affected communities; strengthening governments' regulatory and negotiation capacities to obtain fairer deals; seizing opportunities for resource-based industrialization; long-term planning for leveraging the anchor investments to support inclusive development; maximizing opportunities for skill transfer; and establishing transparent platforms for public participation, accountability, and decision-making. Strong governance of natural resources will facilitate more inclusive economic development, and will be paramount to achieving the sustainable development goals.

In line with the proposed SDGs in the SDSN's Action Agenda for Sustainable Development[3], we recommend that the sustainable and transparent management of resources be explicitly included in the SDGs, as follows:

- Goal: Natural resources are managed sustainably and transparently to support inclusive economic and human development.
    - Specific Target: All governments and businesses commit to the sustainable, integrated, and transparent management of water, agricultural land, forests, fisheries, mining, and hydrocarbon resources to support inclusive economic development and the achievement of all SDGs.

[3] Sustainable Development Solutions Network. (June 2013). *Action Agenda for Sustainable Development.* Available online at: http://unsdsn.org/resources/