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THE NATURAL RESOURCES SECTOR AS AN ANCHOR FOR SUSTAINABLE DEVELOPMENT

LINKING SUSTAINABILITY TO DEVELOPMENT IN THE EXTRACTIVE SECTOR

This article identifies four key sustainability challenges facing governments in the extractive industries (EI) sector today and examines the development challenge in particular.[1] The four main challenges are as follows:

1. How does a government meet the challenge of identifying and implementing policies to ensure that EI sector investments lead to positive and sustainable impacts on growth and development? (The "development" question)

2. How can policies be developed to minimise and mitigate the environmental costs and/or risks that accompany a decision to develop a mining and/or hydrocarbons industry? (The "environment" question)

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3. How are the social costs and risks of developing a mining and/or hydrocarbons industry to be managed? (The "social" question)

4. How are the sustainability benefits accrued, leveraged and distributed? (The "accountability" or "governance" question).

THE DEVELOPMENT QUESTION

EI sector development can generate further benefits to the economy beyond the direct contribution of revenues, through its links to other sectors. It can act as a catalyst for job creation, poverty reduction, an end to aid dependence and the establishment of forward and backward linkages.[2] The former can entail support for local or national small and medium-sized enterprises (SMEs) in building a role in the investors' supply chains and developing non-resource dependent clusters of industrial activity. The latter entail measures to process the resources or to use the resources to build local industry. In particular, as a lever for infrastructure development (such as roads, railways, water and power) in settings where it is seriously deficient, the EI sector can open up opportunities in new industries, including agricultural exports and tourism. If one were to seek a single justification for supporting the EI sector in low- and middle-income countries, this would be the most highly persuasive. It is arguably the question that has attracted the most attention from commentators today.

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THE ENVIRONMENT QUESTION

The development of either the mining or hydrocarbons industries entails risks but also benefits to the environment and there are invariably some costs. The importance of planning ahead to maximise the benefits, mitigate these risks and manage the impact of EI activity on the environment is much better understood in the 21st century. The abundance of toolkits, guidance and standards shows both an appreciation of the problems and a confidence that pre-project preparation can bring benefits. Poverty reduction, for example, can have positive environmental implications. However, in spite of greater knowledge, the environment question remains an enormously challenging subject, particularly when extractive activity occurs in sensitive or protected environments such as the rainforest or coral reefs (or ecologically vulnerable environments, such as regions increasingly affected by climate change, prone to drought and flood, or already depleted from previous exploration or extraction). Evidence of oil spills from tankers, pipelines or wells, of gas leaks and mineral excavation is all too abundant, even with important advances in technology and significant efforts by the respective industries. Damage may be long term and possibly irreversible.

THE SOCIAL QUESTION

The impacts of EI development on local communities, indigenous peoples and on women and children are much better understood than before, but still require determined action by policy-makers – and enforcers – to be translated into preventive and remedial measures. There is a risk that EI policies will work against vulnerable and disadvantaged groups in society who, by definition, are likely to have little impact on the design of the policies themselves. There is a growing body of research into the above issues. In these areas companies and investors generally often take the lead through the promulgation of guidelines, toolkits and standards through industry associations or other groupings. They may not have the force of law but will tend to be adopted as best practice.

THE GOVERNANCE QUESTION

In most cases a strengthening of governance, institutions, laws and regulatory policies will be critical if sustainable development policies are to be effective. Management and oversight are critical activities without which policies and plans will have no real meaning. Securing the consent of communities in this process requires the establishment of mechanisms for consultation and cooperation. This is where a "social licence to operate" is likely to be most acute.

For an ambitious government then, extractive industries sector activities can be leveraged to generate economic development that may be wider and longer lasting than the extractive industries sector activities themselves.

DISTINCTIONS WITHIN EXTRACTIVE INDUSTRIES

Within the EI sector, distinctions need to be made to understand how sustainable development issues arise and how they can be addressed. The three main distinctions are: between hydrocarbons and mining activities; between social and environmental impacts; and, where appropriate, between the stages in the lifecycle of the particular activity. Oil, gas and mining can be vastly different in terms of their potential social and environmental impacts and in terms of their management processes. With respect to the former, pollution from oil spills can be important, while for mining the issues associated with artisanal and small-scale mining are equally important but are without parallel in the oil and gas sector. Environmental and social issues arising from EI development can also differ, sometimes very significantly. On some issues they involve a different set of actors, tools, regulations, guidelines and analyses. These and other differences also arise according to the lifecycle of the extractive project.

WHY THE DEVELOPMENT QUESTION HAS BECOME IMPORTANT

There is increasing appreciation among established and prospective resource-rich countries, civil society and donors, that EI sector development can generate further benefits to the economy beyond the direct contribution of revenues, through its links to other sectors. Although the idea that governments should intervene to support broad-based economic growth is not new, the extent and type of intervention has evolved into policies designed to establish these linkages. The guiding idea is that, in the long run, a diversified economy can do better than one locked into resources exports.

There are *three kinds of initiative* for harnessing a growing EI sector to development goals that are important in current debates on law and policy:

LOCAL CONTENT

These policies and the use of law to implement them are now seen as one way to create favourable linkages and build economic capital at the national and sub-national levels.[3] Large EI companies with millions of dollars of annual procurement can provide a significant business opportunity to stimulate the local economy if they are prepared or encouraged to include local SMEs in their supply chain. In many respects, the EI sector is a very small contributor to employment creation but through indirect and induced employment in the supply chain and through the provision of support services, a specialised labour force may be built up. This is a window of opportunity which nonetheless requires attention in terms of its long-term sustainability (for example, when facilities close down).

HOW?

In principle it is possible for governments to use primary legislation to implement local content policies. In practice, this is done in the oil and gas industry but much less so in mining, where the contract instrument is preferred. An example in the oil and gas industry is the Nigerian Oil and Gas Industry Content Development Act 2010 which applies to all transactions or operations carried out in Nigeria's oil and gas sector, and to all operators in it. There are four main objectives in Nigeria's legislation:

- development of indigenous skills across the oil and gas value chain
- promotion of indigenous ownership of assets and use of indigenous assets in oil and gas operations
- enhancement of the multiplier effect to promote the establishment of support industries
- creation of customised training and sustainable employment opportunities.

Countries that have broad local content provisions for mining set out in their national legislation are Indonesia, South Africa and Zimbabwe. Under Indonesia's Mining Law (2009) companies are required to give priority to local employees and to domestic goods and services, and to divestment of foreign shareholdings in local companies after five years of production. Regulations clarify the provisions in the Law. Further, there are provisions to encourage the development of processing and refining of mining products in Indonesia, with the promise that "the extent of the required local processing and refining are to be specified in the implementing regulations" (Articles 95-112 and 128-133).

By leveraging investments as well as developing new initiatives, the extractive industries large infrastructure projects can create or expand critical infrastructure and unlock regional development potential.

RESOURCES FOR INFRASTRUCTURE

In seeking multiplier effects in the local economy from EI development, infrastructure development plays a key role. It can open up opportunities in other industries, including agricultural exports and tourism. Yet gaps in infrastructure – from Mongolia to Mozambique – are one of the main bottlenecks to growth in developing countries and emerging markets. By leveraging investments as well as developing new initiatives, the EI large infrastructure projects can create or expand critical infrastructure and unlock regional development potential.[4] This can include power, roads, rail, ports and information and communication grids. In practical terms, financing is a key issue. In Africa this has been a particularly acute problem with a shortage of infrastructure and a lack of financing. Some new investors have been willing to finance infrastructure (mostly hydropower projects, railways) in return for rights to natural resource exploitation and contracts in "resource for infrastructure" transactions, and for diplomatic ties with the host government concerned. Some of the major transactions have been government-to-government ones between the China Export-Import Bank and countries in Africa such as the Democratic Republic of the Congo (DRC) that are unable to provide adequate financial guarantees to back their loan commitments. The thrust of such transactions is that the country's resources act as collateral to expand production, to rationalise transport and to make exports more efficient through finance.

1. The article draws on research done as part of the EI Source Book project (www.eisourcebook.org) managed by the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee, with a grant from the World Bank. The hard copy, book-length version of that project, authored by Peter Cameron, will become available in mid-2016.
2. A. Liebenthal et al. (2005), Extractive Industries and Sustainable Development: An Evaluation of the World Bank Group Experience, Washington, DC, World Bank Publications, page 1.
3. "Local Content in the Oil and Gas Sector" (2013), World Bank, Washington, DC; "A Practical Guide to Increasing Mining Local Procurement in West Africa" (2015), World Bank, Washington, DC; A.M. Esteves, B. Coyne, A. Moreno, "Local Content Initiatives: Enhancing the Subnational Benefits of the Oil, Gas and Mining Sectors" (2013), Natural Resource Governance Institute, New York: http://www.resourcegovernance.org/publications/fact_sheets/local-content-initiatives-enhancing-subnational-benefits-oil-gas-and-mining

RESOURCE CORRIDORS

The catalytic effect of investment opportunities in infrastructure can be both long term and regional in character, creating multi-state zones and so-called “resource corridors”. The idea behind this spatial development initiative is to counter the enclave (small-scale, local, geographically limited) impact that is typical of hydrocarbons and mining projects by using large, commercial oil, gas and mineral investments (and their need for infrastructure and goods and services) to anchor opportunities for broader economic growth and diversification within the immediately impacted communities. The policy goal is a viable and diversified economic space, *which would not occur through market forces alone*.[5] This involves two key elements: the establishment of a viable financial framework based on the expected increase of government revenues as a result of EI activity; and capacity-building among the government, private sector and civil society to develop and implement agreed development plans. This approach would be inclusive with respect to the impacted communities.

The core of the “resource corridor” concept is that port, rail and road investments can catalyse supporting and ancillary economic activity, creating “resource corridors”, alongside mining- or hydrocarbons-related infrastructure.[6] Linked to this is a requirement that third-party access to such infrastructure be facilitated. Such shared infrastructure can benefit sustainable economic growth.[7]

It is important to note the differences in opportunity between various minerals. For example, a bulk commodity such as coal or iron ore will require the development of railways, while gold extraction will require only roads but correspondingly more access to water resources. Similar differences will arise with respect to energy demands. This will impact on demand patterns for third-party access to infrastructure.

CONCLUSION

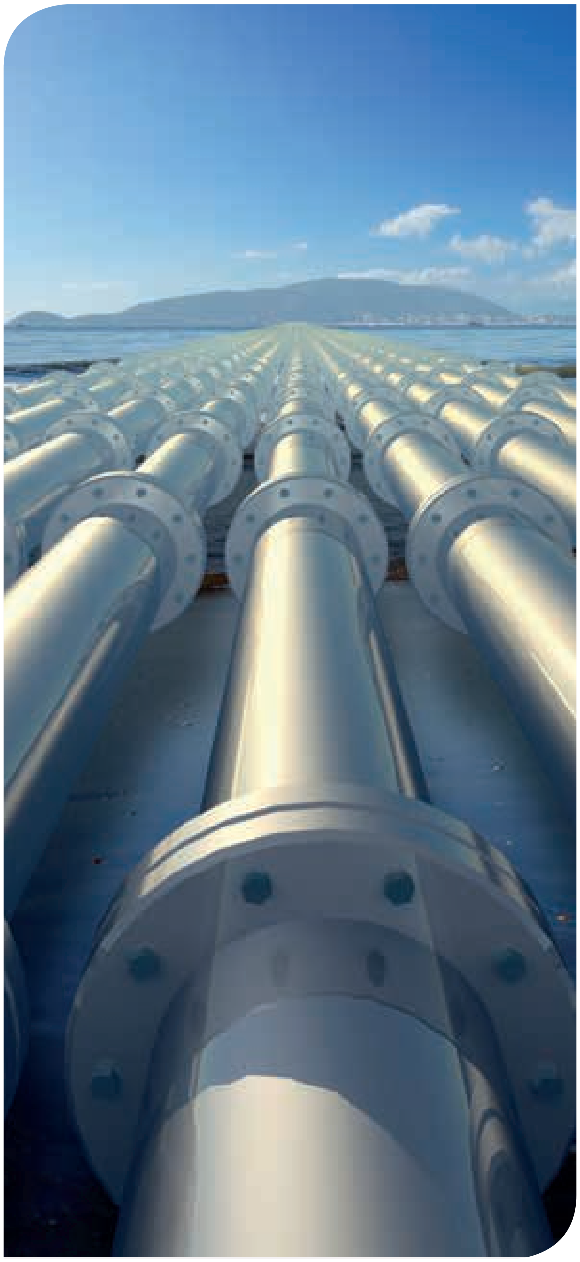
For an ambitious government then, EI sector activities can be leveraged to generate economic development that may be wider and longer lasting than the EI sector activities themselves. This includes beneficial impacts that may well be regional as well as national in character. In combination, they provide an important justification for supporting the EI sector in spite of the challenges which this presents to many governments.

Grounds for optimism about the likely success of these linkages to development policy are provided by the changing attitudes of investors. There has been growing participation of private and other corporate investors in promoting integrated sustainable development at local, regional levels, placing their transformative investments within a development context. An early lead role was taken by Chinese companies in Africa. However, industry associations in the oil, gas and mining sectors remain very active in developing guidelines, toolkits and manuals for (and with) their members to raise the level of best practice in their operations, especially in terms of their social and environmental impacts.

4. Initiatives have been undertaken to foster infrastructure development such as the African Union Commission and United Nations Commission for Africa joint initiative: “Exploiting Natural Resources for Financing Infrastructure Development”; the OECD Development Centre’s “Perspectives on Global Development” and the “Guiding Principles” issued by the World Bank, which touch on the subject of mine-related infrastructure. A contribution has also been made by the International Finance Corporation and Public-Private Infrastructure Advisory Facility: “Fostering the Development of Greenfield Mining-Related Transport Infrastructure through Project Financing” (2013), Washington, DC, World Bank, PPIAF.

5. This subject is considered in an Extractives Industry Source Book paper: H. Mtegha, P. Leeuw, S. Naicker and M. Molepo (2012), “Resources Corridors: Experiences, Economics and Engagement: A Typology of Sub-Saharan African Corridors”, http://www.eisourcebook.org/cms/files/EISB%20Resources%20 Corridors.pdf”. It considers in depth the cases of resource corridors in Mozambique, Tanzania and the DRC.

6. For a discussion of the resource corridor concept and analysis of several case studies, see H. Mtegha, P. Leeuw, S. Naicker and M Molepo (2012), “Resources Corridors: Experiences, Economics and Engagement: A Typology of Sub-Saharan African Corridors”, http://www.eisourcebook.org/cms/files/EISB%20Resources%20Corridors.pdf



A failure to engage is increasingly perceived by investors as creating a risk to their "social licence to operate". The synergies between public and private investment lie in ensuring that EI projects in poor regions contribute to optimising the development potential of the affected local, national and regional communities. This requires industry as well as government to engage in avoidance, mitigation and amelioration of environmental and social damage, and community consultations at the very least.[8] Oil, gas and mining companies can also demonstrate good corporate citizenship through policies of local sourcing and other pro-development initiatives.

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7 For a discussion of this see the paper by Columbia Center on Sustainable Investment, Columbia University: P. Toledano, S. Thomashausen, N. Maenning and A. Shah (2014), "A Framework to Approach Shared Use of Mining-Related Infrastructure": http://www.eisourcebook.org/cms/A%20Framework%20for%20Shared%20use_March%202014_with%20CCSI%20logo.pdf

8 An example of this is the dialogue involving the World Gold Council and the World Bank and civil society partners: 'Gold for Development' (2012), conference proceedings. The focus was on the contribution of large-scale gold mining to economic and social development, with case studies from Tanzania, Peru and Ghana; the ICMM has produced a number of reports summarizing its activities in this respect such as the Minerals and Metals Management 2020 Report (2012).