

CHAPTER 9 – www.eisourcebook.org

9.1 Two Key Challenges

Of the various sustainability challenges in the EI sector, two have an overriding importance. In the form of questions, these are:

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); and
2. How can policies be developed to minimize, manage and mitigate the environmental and social costs and/or risks that accompany a decision to develop a mining and/or hydrocarbons industry? (The Environment and Social Question).

The challenges are particularly stark in the case of emerging extractives producers, the countries identified as a key target group for the *Source Book*. Countries like Mongolia, Guinea, Mozambique, Afghanistan, Myanmar and Ghana may be attracting investment in their extractives sector, but they suffer from deficiencies in key areas such as transport infrastructure and a constrained pool of skilled labour. Rectifying this is a priority, but early experience suggests it will not be easy or quick. Equally, countries such as these are potential beneficiaries of integrated resource planning that takes into account environmental and social constraints and impacts.

9.1.1 The Development Challenge

The catalytic effect of EI development was introduced in **Chapter 2** of the *Source Book*. 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, ending aid dependence and the establishment of forward and backward linkages¹, meaning sectors that deliver to and take deliveries from a particular sector. The former can entail support for local or national small and medium-sized enterprises 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. The distinction is used largely to quantify the impact of changed output in the extractives sector on the rest of the economy.

¹ Liebenthal, A., et al. (2005). *Extractive Industries and Sustainable Development: An Evaluation of the World Bank Group Experience*. Washington, D.C.: World Bank Publications, p. 1.

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, in spite of the undeniable risks which have been discussed in various chapters of the *Source Book*, this would be the one which many people could agree upon as highly persuasive. It is addressed in **Section 9.2** below.

9.1.2 Environment and Social Impacts

The development of either mining or hydrocarbons industries entails risks but also benefits to the environment and always imposes costs in some measure. The importance of planning ahead to maximize 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 about benefits. Poverty reduction can have positive environmental implications.

However, in spite of greater knowledge, environmental and social questions remain enormously challenging, particularly when extractives activity occurs in sensitive or protected environments, such as rainforest or coral reefs (or ecologically vulnerable environments, or regions increasingly affected by climate change, prone to droughts and floods, 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. This is discussed in **Sections 9.3 to 9.5** below).

The impacts of EI development on local communities, indigenous peoples and on women are much better understood now than in the past, but still require determined action by policy-makers - and enforcers - to be translated into benefits and, where there are risks, to take preventive and remedial measures. In particular, there is greater appreciation of the risks to vulnerable and disadvantaged groups in society who, by definition, are likely to have little impact on the design of policies themselves.

To develop or not? Based on all the foregoing considerations, governments will have to take a decision on whether or not to allow EI sector developments. The decision normally would be guided by a comprehensive cost-benefit assessment incorporating best estimates of the social and environmental externalities of development, both positive and negative.