Natural Resource Governance Institute

Precept 10: Private Sector Development

The government should facilitate private sector investments to diversify the economy and to engage in the extractive sector.

–Precept 10, Natural Resource Charter

In order to foster development beyond the life cycle of extraction, the Natural Resource Charter encourages governments to use resource wealth to diversify the economy. Diversification requires the development of the private sector of the economy. The four questions in this precept address four areas in which resource extraction can help this development.

First, to achieve diversification, a government essentially has two options: 1) pick specific industries to support, or 2) create a business environment that provides the basic foundations for any business to prosper. Different governments have chosen different options. The Natural Resource Charter argues that because neither governments nor individual businesses can predict the future well, it is typically better to choose the second option–i.e., governments should create an enabling environment that supports business activity. Whichever option a government chooses, the government has an essential role to play in facilitating private sector investment.

If the economy is relatively small, the process of making quick and large public investments may create a second challenge as high public spending can cause inflation or an exchange rate appreciation. This precept considers how governments can increase the capacity of the economy to absorb higher rates of spending by funding general purpose investments and removing bottlenecks for growth. This links to question 7.2 of this framework which covers the macro-fiscal policies that a government can implement to control the rate of public spending in an economy. Precept 9 covers reforms of public financial management to increase the efficiency of public spending.

The next three aspects relate to how the resource sector links to non-resource sectors. The resource sector can benefit the private sector by creating jobs and buying local goods and services (Q10.2), building resource sector-related infrastructure that can be shared with other users (Q10.3), and processing commodities that can provide cheaper energy, petrochemicals or mineral inputs to industry (Q10.4). If well managed, the knowledge and resource inputs by the extractive sector to support development in other sectors can strengthen the private sector, sometimes sufficiently to diversify the economy. While this section focuses its analysis on the impact on the national economy, the important effects of extraction on the local economy of producing communities are addressed in precept 5.

PRIMARY QUESTIONS

10.1 | Private sector enabling environment

Does the government make general purpose investments and remove bottlenecks to non-resource sector growth?

10.2 | Local content

Does the government ensure that domestic businesses and workers have the opportunity and capacity to operate in the extractive sector?

10.3 | Sharing infrastructure

Does the government ensure that extractive industry infrastructure is open to third parties wherever economically feasible?

10.4 | Domestic value addition and consumption

Does the government take the opportunity to use oil, gas and mineral resources domestically, when the opportunity costs of doing so are less than the benefits?

10.1 | Private sector enabling environment

Does the government make general purpose investments and remove bottlenecks to non-resource sector growth?

Fostering a healthy and diversified economy requires an enabling environment of laws and policies, and massive investment in infrastructure, health and education. For instance, the fastest growing economies in recent times have invested at least 30 percent of their gross domestic product each year (Commission on Growth and Development 2008). Governments of resource-rich countries have an opportunity to fund this investment using the potentially large revenues earned from resource extraction. However, it can be challenging to transform these revenues into private sector growth. As such, this question considers the key policy areas that governments should consider to address these challenges.

Secondary question	Guidance
10.1.1 **Industrial policy** Does the government engage with the private sector in a manner that ensures the best interest of the country as a whole, on grounds of economic rationale rather than patronage?	In addition to recommending a focus on developing an enabling environment for economic diversity, the Natural Resource Charter encourages consulting with the private sector on how to best foster growth (Rodrik 2004). However, in doing so, there must be mechanisms to ensure that such collaboration does not allow personal gain over national development. If a government does decide to support specific industries—Such as agriculture, tourism or manufacturing—it should avoid the riskiest aspects of this policy choice. Industries should be selected only if there is a credible expectation that support can be withdrawn after a few years, and support to specific companies should be avoided. Industrial policy of this kind is more likely to result in a viable business sector rather than becoming a continual drain on public finances. *Researchers should consider:* • Does the government consult widely with both private sector and other stakeholders in the process of formulating industrial policies? • If the government provides specific support to industries, is this support time-bound? • Does this support reward success rather than protect failures? • Are failing support programs wound-down and are any exemptions clearly justified? • Does the government avoid supporting individual companies? • Are there any ties between industries or companies that receive public support and political gains, such as campaign contributions or family connections?

10.1.2 **Infrastructure** Does the government identify and address gaps between the country's existing physical infrastructure and the needs of the private sector?	A lack of physical infrastructure—transport, power, water, sewage, and housing for workers—is often a bottleneck to an expansion in public sector spending and private sector growth. (Commission for Growth 2008 and Foster and Briceño-Garmendia 2011). Governments play a critical role in both directing and funding infrastructure investment. Infrastructure development typically requires coordination among many actors and creates positive and negative spill-overs that are not fully taken into account by private sector businesses. A government can help by developing an infrastructure plan to deliver projects across many different areas that are coordinated and prioritized. *Researchers should consider:* • What is the current state of infrastructure provision in the country? See Global Competitiveness Report Pillar 2 Infrastructure (World Economic Forum 2015), and Ibrahim Index – Infrastructure (for Africa only). • Has the government published a plan to address infrastructure deficiencies? • Does the government's plan prioritize infrastructure investments that will enable economic growth? • Does the government have a mechanism to track private infrastructure developments and dovetail these investments into their wider plans?
10.1.3 **Construction sector** Does the government identify and address bottlenecks in the construction sector supply?	An expansion in a country's physical infrastructure will increase the demand for construction services. However, construction is predominantly a local service and much of it cannot be imported. This means that in economic expansions the local construction sector may not be able to grow fast enough to meet demand without causing inflation. *Researchers should consider:* • What is the contribution of the construction sector to GDP? • Does the size of the construction sector suggest that there are sufficient construction services to respond to an increase in demand? • Is the construction sector competitive (not dominated by monopoly suppliers) so that higher demand will more likely lead to higher supply rather than higher prices? • Is construction sector-related regulation (e.g., the time to obtain building permits.) suitable? See the "dealing with construction permits" Doing Business indicator (http://www.doingbusiness.org/) • Has the government attempted to address any construction bottlenecks?
10.1.4 **Financial sector** Does the government identify and address bottlenecks in the financial system?	To flourish in the booms and busts of extractive cycles, businesses in resource-rich countries will require access to affordable credit. During a boom, businesses will require working capital to finance a rising level of purchases. In busts, businesses may need short-term financing to cover shortfalls until conditions improve. Similarly to construction services, financial services cannot be easily imported. Financial services are best supplied by businesses with a local presence, as bankers and other providers need to have a local understanding of the clients they work with. A lack of local financial expertise represents a bottleneck to providing credit, insurance and other services to businesses. *Researchers should consider:* • Do indicators suggest the country has a sufficiently robust financial sector? See the getting credit Doing Business indicator and Global Competitiveness Report Pillar 8 Financial Market Development. In addition, the presence of international banks can be used as an indicator of the degree of sophistication of the banking system. • Does the government have a plan as to how to develop the financial sector?

10.1.5 **Health and education** Does the government identify and address weaknesses in the country's health and education levels?	Decent health and education services are both established human rights and a necessary ingredient for growth. A lack of skilled and healthy workers is a common bottleneck for private sector growth in developing countries. *Researchers should consider:* • What is the current quality of education in the country? See World Bank – Educational Attainment measures; Ibrahim Index – Education (for Africa only). • How are government reforms affecting the quality of the workforce? • What percentage of the government budget is allocated towards health and education? • Are education initiatives linked towards emerging needs in the economy?
10.1.6. **Gender investment** Does the government identify and address weaknesses in how women are able to fully contribute to the economy?	In almost every country, women are under-represented and under used in the economy. The problem is particularly stark in resource-rich countries where industries that are usual gateways into the workforce for women—such as manufacturing—are more expensive to run because of Dutch disease. Numerous development studies have shown that investments in women and their financial independence have stronger ripples in the economy than non-gender specific investments. Natural resource revenues are an opportunity for governments to identify the potential gap in the workforce and invest in fostering the contribution of women. *Researchers should consider:* • Does the government conduct a gender analysis of its budgets and plans? • What is the gap in the percentage of women in the workforce compared to men? • Does the government have a plan to address the gender gap? • Does the government have policies to foster female participation in the workforce, such as maternity leave?
10.1.7 **Business regulation** Does the government identify and address weaknesses in business regulations?	Private sector growth is facilitated by an economic environment in which resources are able to move from low return or declining sectors to a high rate of return or growing sectors. This is particularly important during a period of structural change or in an environment with a high degree of volatility. There are many elements to creating a responsive and flexible economic environment. One is that firms are not impeded by excessive regulation (Collier and Goderis 2009). Another is flexibility in the labor market, so that barriers to hiring and firing workers are not excessive. A well-functioning capital market is also important as a means of channeling funds to new activities (Van der Ploeg and Poelhekke 2009). Resource wealth can provide the means for ensuring flexibility. For instance, resource revenues may be used to finance social protection schemes, which can then provide political cover to remove ad hoc and inefficient measures such as price controls, subsidies, and job protection measures. Business regulation is important to protect workers and citizens, as well as ensure that markets work effectively for society. However, too much regulation can stifle enterprise. Common regulatory bottlenecks include rules concerning title to land, mandatory certification for certain types of businesses, and permits and customs regulations. *Researchers should consider:* • What is the quality of business regulations? Use measures such as: Doing Business indicators; Ibrahim Index – Business Environment (for Africa only); thematic reports by accounting firms. • Does the government attempt to reform business regulation by reducing excessive burdens?

10.2 | Local content

Does the government ensure that domestic businesses and workers have the opportunity and capacity to operate in the extractive sector?

Resource projects create jobs, as well as procure goods and services and contract business from the domestic economy. By working with sophisticated resource companies, local workers and businesses can also be exposed to globally competitive working practices. Workers and managers with this experience can then go on to start their own businesses in other sectors of the economy. If local workers and businesses develop sufficiently, companies can: reduce their costs by eliminating the need to import goods; avoid paying expensive expatriate workers; reduce supply chain complexity; and develop a social license to operate with the local community.

However, realizing these opportunities is difficult. The resource sector is capital intensive and employs technologically advanced processes resulting in few opportunities for low-skilled employment or for businesses that provide basic goods and services. This is particularly problematic in the oil and gas sector. There are three specific problems for local businesses and workers: 1) in order to keep costs as low as possible the extractive industry uses tightly integrated supply chains dominated by a few global services companies; 2) the size of contracts are often too large for local companies to manage alone; and 3) domestic companies may lack the enabling environment (finance, infrastructure and a skilled workforce) to support them. Even when local personnel and services can be incorporated into the extractive sector, it takes strategic planning to convert these resources to long-term economic diversification.

Secondary question	Guidance
10.2.1 **Supply side** Does the government remove barriers to local participation?	Local businesses need the capacity and operating environment to be able to engage in the extractive supply chain. Access to information can help local businesses plan their development to meet the needs of the industry. Organizing structures that allow for cooperatives can pool the resources of small businesses to meet the demands of a contract. Tax structures must also be analyzed to make sure that foreign firms do not have an economic advantage over local firms. *Researchers should consider:* • Has the government made information available to local businesses on procurement opportunities and the skill needs of resource companies (using skill inventories)? • Has the government reformed regulations on local businesses so that they can acquire the land and capital required to respond to resource company demand? • Has the government encouraged resource companies to unbundle contracts to allow local firms the opportunity to work within the supply chain? • Has the government ensured that the tax regime does not discriminate against local firms (e.g., by requiring VAT payment, while exempting foreign companies from VAT on imports)?

10.2.2 **Local content rules** If the government does employ local content rules, are they consistent with local capacity, do they avoid excessive protection, and guard against corruption?	The Natural Resource Charter generally disfavors strict local content rules or quotas. When they are employed, they are most successful if they are consistent with local capacity, prioritize integrity, and do not add unreasonable costs to the corporation. Researchers should consider whether the government has assessed the costs and benefits of local content rules. Costs can include the increased cost to the company, reduced tax revenue to the government, administrative costs of implementation and resource drain on other sectors, and opportunities for patronage, favoritism and corruption. Benefits can include skills and knowledge transfer, employment and tax revenues. If the government has used local content targets on resource companies, researchers should consider whether they are: • Grounded in a realistic assessment of local capacity. (See Q10.2.1). • Maximizing value to the country—rather than merely maximizing local content—proportion of companies' cost bases. • Well-defined and clear to resource companies, rather than just a percentage target. • Accompanied with time frame clauses, to allow time for local capacity to grow. • Accompanied with a sunset clause, to allow for local companies to become competitive. • Consistent with international trade and investment rules. (See Tordo et al, 2013 and Ramdoo, 2015.) • Protected from corruption risks, including through clear prequalification and procurement systems that prioritize competition and meritocratic selection, due diligence procedures, and transparency on which companies benefit over time.
10.2.3 **Local content implementation, monitoring and enforcement** Does the government monitor and enforce companies' adherence to local content rules, and the government's own support measures?	Successful local content policies require a dedicated institution, staff and funds to implement monitor and enforce policies. *Researchers should consider:* • Is there a dedicated institution to implement, monitor and enforce local content policies? • Has sufficient staff been assigned to monitor local content regulations? • Are companies obligated to report on local content compliance, and is the government able to analyze and audit these reports? • Are penalties for non-compliance well defined? Enforcement that consists of imposing fines is likely to be perceived by the companies as simply another tax.

10.3 | Sharing infrastructure

Does the government ensure that extractive industry infrastructure is open to third parties wherever economically feasible?

The extractive industry has invested billions of dollars in infrastructure to support their operations. One estimate suggests the majority of extractive infrastructure around the world has the potential to be shared with other operators in the industry (known as multi-user infrastructure), and about a third is suitable for sharing with users outside the extractive industry (known as multi-purpose infrastructure). (See McKinsey 2014.) Such large spending can be a significant contribution to closing the infrastructure gap in many countries.

Typically, extractive companies prefer to have sole use of their infrastructure to avoid disruptions by other users. However, government intervention can help to get the most out of infrastructure by balancing the needs of extractive companies to operate efficiently, with identifying opportunities for infrastructure to benefit other users. (See Toledano 2012a, 2012b, 2014a and 2014b.)

Secondary question	Guidance
10.3.1 **Shared infrastructure coordination** Does the government help the coordination of extractive companies with other potential infrastructure users?	Optimizing the use of infrastructure begins with understanding the needs of different parties. In some cases, a government can help match these needs to opportunities that businesses might not be able to arrange on their own. The government is in a good position to understand where demand for infrastructure does not currently exist, but is likely to develop in the future. Managing the terms of use and ownership over time can be complicated. Governments can be well placed to broker an agreement that will ensure the efficient use of resources. As the regulator in some sectors, such as power or water, the government can also play a key role in reducing costs. *Researchers should consider:* • Is existing extractive-related infrastructure used by multiple users? For instance, ports, railways and communication lines. • Does the government consult with resource companies before a final investment decision and before making demands to share infrastructure? • Does the government understand the needs of the economy in areas in which infrastructure will be built? (See also Q10.1.2) • Does the government require resource companies to report their infrastructure needs and plans in initial assessments? • Does the government help potential users of infrastructure to register their interest to be incorporated into building plans? • Does the government have a mechanism to review the impact of its regulatory bodies on the price or efficiency of the power and water sector?
10.3.2 **Shared extractive industry-infrastructure regulation** Does the government assess the costs and benefits of facilitating shared use of infrastructure?	There can be significant public revenue costs to imposing third-party use of infrastructure in situations when it is not suitable. For instance: higher operational costs for companies, tax incentives the government gives to encourage companies to share their infrastructure, and direct public investment in the infrastructure itself. See Toledano et al, 2013 on what conditions are most likely to make sharing arrangements beneficial for a country. *Researchers should consider whether the government:* • Has a process to identify and evaluate potential added value of resource company infrastructure projects. • Considers best practices in evaluating resource projects. (See CCSI.) • Projects the maintenance costs of the infrastructure and realistically projects any potential income from sharing infrastructure.

10.4 | Domestic value addition and consumption

Does the government take the opportunity to use oil, gas and mineral resources domestically, when the opportunity costs of doing so are less than the benefits?

Resources can be exported in an unprocessed form (such as copper ore or crude oil), processed within the country for subsequent export, or processed and consumed within the country. Companies often prefer to export resources in an unprocessed form and sell them in a foreign market where there is stronger and more consistent demand than on the domestic market. Many governments have tried to encourage or require domestic processing in the hopes of generating more revenues and jobs (known as *value addition*). Governments have also encouraged or required that resource companies sell a certain portion of resources to the domestic market to provide cheaper supply than imports (using a *domestic market obligation* provision for example).

Whether the government should encourage domestic value addition, impose a domestic market obligation or let resource companies decide for themselves depends on the balance of costs and benefits within each country context. Doing a full analysis often requires separating government policy from popular reasoning.

Secondary question	Guidance
10.4.1 **Domestic value addition** If the government intends to intervene in domestic processing decisions, has it published an independent and robust assessment of the market failures, costs and benefits?	Understanding whether requiring domestic value addition is appropriate for the country depends on balancing the potential costs and benefits. *Potential costs include:* • Company costs can increase as they are forced to develop and use processing plants that are less efficient than foreign suppliers. • The opportunity costs of inputs (e.g., processing often requires significant amounts of energy). • Cost of public investments or incentives to private companies to provide the processing infrastructure. • Change in quality and reliability of domestic product compared with foreign version. *Potential benefits include:* • Government revenue, employment and derived demand created along the value chain. • Capturing value from associated minerals in ores that might otherwise be exported undeclared. *Researchers should consider:* • Has the government produced reports covering the costs and benefits outlined above? • Are there political connections to refining business ventures that may sway government decisions away from what is economically efficient?

<table>
<tr>
<td>10.4.2
Domestic market obligation

If the government requires domestic marketing of the resource, has it published an independent and robust assessment of the market failures, costs and benefits?</td>
<td>Understanding whether a government should impose domestic market obligations requires assessment of the potential costs and benefits.

Potential costs include:
• Opportunity cost: companies and the government miss out on selling the resource for a potentially higher price.
• Domestic energy consumers benefit from lower energy costs, but may use energy less efficiently.

Potential benefits include:
• Domestic consumers get cheaper energy.

Researchers should consider:
• Has the government estimated the net impact on domestic consumer benefits (the difference in the prices for the domestically refined and sourced commodity, and the imported commodity)?
• Has the government estimated the net impact on extractive companies (the difference in the export and domestic prices received by the producer) and the resulting difference in payments to the government?</td>
</tr>
</table>

REFERENCES AND FURTHER READING

Collier, Paul and Benedikt Goderis. "Commodity Prices, Growth, and the Natural Resource Curse: Reconciling a Conundrum", *MPRA Working Paper, Centre for the Study of African Economies, University of Oxford*. 2007. Accessed 17 May 2016. http://www.csae.ox.ac.uk/workingpapers/pdfs/2007-15text.pdf

Commission on Growth and Development. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. The International Bank for Reconstruction and Development / The World Bank, 2008. Accessed 17 May 2016. https://openknowledge.worldbank.org/bitstream/handle/10986/6507/449860PUB0Box3101OFFICIAL0USE0ONLY1.pdf?sequence=1&isAllowed=y

Sutton, John, *The Enterprise Map Project*. Accessed 17 May 2016. http://personal.lse.ac.uk/sutton/

Ibrahim Index of African Governance. Accessed 17 May 2016. http://www.moibrahimfoundation.org/iiag/data-portal/

McKinsey Global Institute, *Reversing the Curse: Maximizing the potential of Resource Driven Economies*. 2013. Accessed on 25 April 2016. http://www.mckinsey.com/industries/metals-and-mining/our-insights/reverse-the-curse-maximizing-the-potential-of-resource-driven-economies

Poelhekke, Steven and Rick van der Ploeg. "Volatility and the Natural Resource Curse." *Oxford Economic Papers*. 61 no. 4 (2009): 727–760. 2009. Accessed on 25 April 2016. https://www.researchgate.net/publication/227358625_Volatility_And_The_Natural_Resource_Curse

Rodrik, Dani. *Industrial Policy for the Twenty-First Century*. Centre for Economic Policy Research, 2004. Accessed on 17 May 2016. https://www.sss.ias.edu/files/pdfs/Rodrik/Research/industrial-policy-twenty-first-century.pdf

Toledano, Perrine and Clara Roorda. *Leveraging Mining Demand for Internet and Telecommunications Infrastructure for Broad Economic Development: Models, Opportunities and Challenges*. Colombia Centre for Sustainable Investment, 2014. Accessed on 17 May 2016. http://academiccommons.columbia.edu/catalog/ac:181323

Toledano, Perrine and Clara Roorda. *Leveraging Mining Demand for Water Infrastructure for Broad Economic Development: Models, Opportunities and Challenges*. Colombia Centre for Sustainable Investment, 2014. Accessed on 17 May 2016. http://ccsi.columbia.edu/files/2014/05/CCSI-Policy-Paper-Leveraging-Mining-Related-Water-Infrastructure-for-Development-March-20141.pdf

Toledano, Perrine et al., *A Framework to Approach Share Use of Mining-Related Infrastructure*. Colombia Center on Sustainable Investment, 2014. Accessed on 17 May 2016. http://ccsi.columbia.edu/files/2014/05/A-Framework-for-Shared-use_March-2014.pdf

Toledano, Perrine. *Leveraging Extractive Industry Infrastructure Investments for Broad Economic Development: Regulatory, Commercial and Operational Models for Railways and Ports*. Colombia Centre for Sustainable Investment, 2012. Accessed on 17 May 2016. http://academiccommons.columbia.edu/catalog/ac%3A154081

Toledano, Perrine. *Leveraging the Mining Industry's Energy Demand to Improve Host Countries' Power Infrastructure*. Colombia Centre for Sustainable Investment, 2012. Accessed on 17 May 2016. http://academiccommons.columbia.edu/catalog/ac%3A156324

Tordo, Silvano et al. *Local Content Policies in the Oil and Gas Sector*. World Bank, 2013. Accessed on 17 May 2016. http://documents.worldbank.org/curated/en/549241468326687019/Local-content-in-the-oil-and-gas-sector

World Economic Forum. *Global Competitiveness Report 2015-2016*. 2016. Accessed on 17 May 2016. http://reports.weforum.org/global-competitiveness-report-2015-2016/

ACKNOWLEDGEMENTS

Written by David Manley and Rob Pitman, and based on work produced by Oxford Policy Management's Natural Resources and Energy Portfolio. The authors wish to thank Joseph Bell, Jim Cust, Alexandra Gillies, Rebecca Iwerks, Nicolas Maennling, Perrine Toledano and Nicola Woodroffe for their substantive edits and comments.

Edition: 2016

The Natural Resource Governance Institute, an independent, non-profit organization, helps people to realize the benefits of their countries' oil, gas and mineral wealth through applied research, and innovative approaches to capacity development, technical advice and advocacy.
Learn more at www.resourcegovernance.org

Natural Resource Governance Institute
Oil, gas and mining for development