Natural Resource Charter

Second Edition

Natural Resource Governance Institute

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The Natural Resource Charter Decision Chain

DOMESTIC FOUNDATIONS FOR RESOURCE GOVERNANCE

PRECEPT 1
Strategy, consultation and institutions

PRECEPT 2
Accountability and transparency

Discovery and deciding to extract

PRECEPT 3
Exploration and license allocation

Getting a good deal

PRECEPT 4
Taxation

PRECEPT 5
Local effects

PRECEPT 6
Nationally owned resource companies

Managing revenues

PRECEPT 7
Revenue distribution

PRECEPT 8
Revenue volatility

Investing for sustainable development

PRECEPT 9
Government spending

PRECEPT 10
Private sector development

INTERNATIONAL FOUNDATIONS FOR RESOURCE GOVERNANCE

PRECEPT 11
Roles of multinational companies

PRECEPT 12
Role of international community

INTRODUCTION

Countries with non-renewable resource wealth face both an opportunity and a challenge. When used well, these resources can create greater prosperity for current and future generations; used poorly, or squandered, they can cause economic instability, social conflict, and lasting environmental damage.

The Natural Resource Charter offers policy options and practical advice for governments, societies and the international community on how best to manage resource wealth. Such guidance can ensure that resource-rich countries are not alone in facing these challenges, but rather that they can draw on accumulated experience to learn from history and avoid the mistakes of the past. The charter is not a precise prescription, but instead explores approaches that successful countries have used, in different contexts and combinations, to realize the development potential of natural resource wealth.

For countries to benefit from resource wealth, citizens and their governments must make a broad range of decisions. Each decision requires governments to consider complex options and trade-offs and devise strategies to implement these policy choices. To help governments make decisions, the charter contains 12 precepts. The first 10 precepts elaborate guidance on how a country and its government might manage natural resources. The last two precepts speak to international actors—extractive companies and those responsible for international governance.

The charter includes all 12 precepts because transforming extractive wealth into sustained prosperity involves the government making and implementing a chain of good policy decisions with support and oversight from citizens and the international community. All the links in this chain need to be strong if a country is to truly benefit from extracted resource wealth.

The structure of the charter

The precepts of the charter are separated into three groups: domestic foundations for resource governance; the chain of economic decisions required to manage resources for prosperity; and the international foundations for resource governance.

> The previous record of resource management is poor but some countries have nevertheless performed well. From 1970 to 1998, of 65 resource-rich developing countries only four managed to achieve long-term investment exceeding 25 percent of GDP and an average GDP growth exceeding four per cent, namely Botswana, Indonesia, Malaysia and Thailand.
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> *Thorvaldur Gylfason, 2001*

Ensuring that government action in each area is coordinated and effective requires addressing two overarching issues, the subjects of the first two precepts of the charter. First, the charter advocates establishing a strategy and guiding policies that cover all the necessary processes of resource management, along with a comprehensive framework of rules and institutions directed by this strategy. This is the concern of Precept 1. Second, there is no guarantee that rules will be followed or capable institutions will work for the country's benefit. Therefore strong accountability is required. This is often problematic in resource extraction situations, where actions are easily concealed. Failure to hold those within government to account is too often the missing link in otherwise well-organized systems of resource management. Precept 2 considers this.

After addressing these overarching issues, the charter turns to the question of extraction and use of revenues for sustainable development. Precepts 3 to 10 each address a key decision area for a country. They are organized into the "economic decision chain," a series of decisions that the government must make to ensure value from extractive resource wealth is transformed into sustained prosperity for citizens. They are presented in a linear fashion beginning with exploration and discovery; then getting a good deal for the country from extraction; followed by managing revenues; and ending with sustainable investment of revenue for the long term. However, the issues in each precept should be thought of with respect to all of them, taking account of the challenges of sequencing, trade-offs and other relationships across each of these policy areas. To guide the reader through these linkages, there are italicized signposts to other relevant parts of the charter document.

The first step in this economic decision chain involves allocating the rights to exploration and production, and promoting exploration. This involves deciding whether extraction is the best course for the country; in some cases it might not be. The government should carefully consider the whole chain of decisions, taking measure of all environmental, social and economic factors, before making a decision on extraction.

The next step is ensuring that extraction truly benefits the country. This entails securing value for the country through tax revenues and other benefits. It also involves mitigating the potentially significant damage to the country's other forms of natural wealth: its ecosystems, including forests, rivers and land, as well as its social fabric. This challenge is called "getting a good deal" and it is covered by Precepts 4, 5 and 6.

Addressing only extractive sector issues is not enough, however, since sustainable economic development cannot come of merely extracting a resource. Authorities must invest revenues so that current *and* future generations enjoy the bounty. Further, the government should protect against volatile flows of revenue that can damage the economy and lead to wasteful spending. The charter calls this challenge "managing revenue" and addresses it in Precepts 7 and 8.

> Botswana has managed much of the decision chain well. Its GDP per person has increased from US$3,500 in 1980 to US$12,500 in 2010 (in constant 2005 dollars). However Botswana is also one of the most unequal countries in the world and suffers from one of the highest HIV/AIDS prevalence rates, while its economy is still left undiversified. Resource management challenges remain.
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> *International Monetary Fund, 2012*

Finally, authorities should invest revenues from extraction in a way that promotes economic growth and prosperity that can be sustained once extractive resources are depleted. The charter calls this final challenge "investing for sustainable development" and considers it in Precepts 9 and 10.

A country can take all these steps correctly, but without the cooperation of the international community, sustained, inclusive prosperity from resource extraction may not materialize. The final two precepts of the charter consider how international companies, foreign governments and other actors responsible for international governance should work together to help citizens of resource-rich countries. The best efforts of a resource-rich country may not be enough if the international community does not meet these responsibilities.

The Natural Resource Charter was written by an independent group of practitioners and academics, under the governance of an oversight board composed of distinguished international figures with first-hand experience of the challenges faced by resource-rich countries. The charter does not represent any institution or special interest. It was created in the belief that natural resource wealth can be a powerful tool for social and economic advancement, but only if countries are able to tackle the challenges. It aims to offer advice that is useful and clearly expressed.

Domestic foundations for resource governance

PRECEPT 1

Resource management should secure the greatest benefit for citizens through an inclusive and comprehensive national strategy, clear legal framework and competent institutions.

Resource-rich countries have a great opportunity to harness their natural wealth for transformative and sustained prosperity. But if mismanaged, resource extraction can impose severe costs on a country. As stewards of their extractive resources, it is typically the responsibility of governments to manage those resources for current *and* future generations.

Effective and sustainable resource management requires an inclusive and comprehensive national strategy. To achieve this, the government must make a series of key decisions that will affect different groups and set choices extending far into the future. To avoid making decisions in a piecemeal fashion and to build a shared sense of direction, governments should, in dialogue with stakeholders, use a national strategy process to guide extractive resource management decisions.

Consider the long term

The national strategy should take a long-term approach, recognizing the fact that the transformation from wealth in the ground to wider societal benefits can take many years, and present many challenges and surprises along the way. If citizens are concerned about the welfare of their children and future generations, they should recognize that these future generations have a right to benefit from resource extraction and to be shielded from its inevitable impacts.

Include the public

A national strategy is more likely to be successful if it is the product of inclusive processes that are open and participatory. A plan debated in public will expose policy conflicts and inconsistencies sooner, constrain self-dealing and corruption, and render inevitable course corrections less disruptive. Decision makers should seek to incorporate the inputs of other stakeholders, ranging from government departments, parliament, and citizens directly affected by extraction, to civil society more broadly, as well as the extractive companies and private sector businesses in general. These groups provide the necessary understanding of issues that must be addressed in the planning process.

Because the extraction process can last many generations, decisions made in the present must be robust to the cycles of governments. This calls for building understanding and consensus from a critical mass of informed citizens. Actors outside the executive, including legislators, journalists, and civil society groups are guardians of the strategy, playing a scrutinizing role by holding decision-makers to account. *{See also Precept 2 on the role of civil society in holding government to account.}*

Ensure strategy is comprehensive

Taking a comprehensive approach provides governments with a framework to understand and better implement initiatives in the extractive sector. This should involve linking upstream and downstream industry decisions, environmental and community issues, the management of government revenues, and wider economic concerns.

Within the government this requires coordination and an authorizing environment across ministries of mines, energy, finance, planning and beyond. Given the intrinsically linked and overlapping challenges, inter-ministerial coordination is necessary. Strategic direction may best come straight from the executive office; alternatively, an overarching body representing each ministry may be useful in coordination and implementation.

> Good governance is required across the entire decision chain. Angola has managed the first parts well, capturing substantial revenues from extraction. But these revenues have not been managed effectively or equitably. Between 2007 and 2010, US$32 billion of revenues in Angola had been reported as missing—equivalent to a quarter of Angola's GDP.
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> *International Monetary Fund, 2011*

Too often the transformation of resource wealth into prosperity fails not because of a lack of the correct economic policies, but because of a weak underlying system of governance. A successful strategy therefore not only requires an understanding of the economics, but also an appreciation for accountability, the structure and capability of government institutions, and the relationship with civil society.

Decide whether to open areas for exploration

Opening up a country or a specific region within the country to exploration and extraction may not always be the best course of action. Negative impacts may outweigh the overall positive impact on the region home to production and the country more broadly. The potential economic benefits of extraction however are often very large when viewed at the level of all citizens in the country. Governments can use tools such as strategic environmental assessments to help account for environmental impacts within the wider strategy-making process before irreversible decisions are enacted at project sites. If the costs are too high, it may not be feasible to replace the environmental value that is lost, or adequately compensate those adversely affected. In such cases countries may opt not to extract.

As part of this assessment, the government should consider the structure and capacity of the institutions and sectors that are expected to manage the processes along the decision chain, and may conclude that a country's economy or governance system is not yet ready to effectively manage large windfalls. Staggering the timing of exploration and extraction may be one option in this case; it allows the staff of government institutions to learn from experience while managing their workload.

Form strategy early, cognizant of future uncertainty

The government must make many decisions, such as the pace of licensing, taxation and what legal framework to create, before it signs contracts with companies. In addition, the government will have to make these decisions in an environment of uncertainty. Therefore, countries ought to initiate a strategy process as early as possible; the process should guide decision making yet remain adaptable to changing circumstances.

Translate strategy into a clear and coherent institutional framework

The rules, responsibilities and institutions governing the behavior of actors are central to optimal resource management. The challenge is to translate the guiding policies of a strategy into a clear and coherent framework of rules, along with competent institutions that can design, administer and enforce them. The government should build this framework in response to the specific and changing context of the extractive sector, and operate in a manner appropriate to the country's economic and institutional context.

Governments ought to establish as much of the legal and regulatory framework as possible before allocating rights to companies. This helps to provide strong governance over decisions made with companies and provides some assurance to companies of the rules under which they will operate. Setting terms in law limits opportunities for discretionary action and increases transparency, but may restrict the ability to change rules in response to changing circumstances as the sector develops. An alternative to both legislation and contracts is to empower government agencies to regulate the extractive sector. Regulators properly capacitated and monitored can provide rules that respond to changing circumstances, filling in necessary details that legislation may lack.

Create competent institutions with a unified objective

For each institution, the government must assign coherent objectives in support of the country's strategic plan. Further, the government must ensure that the public, the executive and the auditor general can monitor the actions of these institutions. The role of each institution must be well defined to avoid conflict of interest and gaps in responsibilities. Clarity concerning who makes the rules, who administers them, and who enforces them is very important. *{See also Precept 6 on assignment of roles to national companies.}*

Building and retaining capacity in government institutions is vital but challenging, particularly in the extractive sector, since the counterparts to the government are generally technically sophisticated companies. Part of this challenge is delegating roles to institutions in a manner that reflects integrity and transparency, rather than, for example, as a reward or mark of prestige. Ideally, human resource decisions made by government executives and within the institutions themselves should be independent and resistant to political interference in order to develop truly professional capacity. A meritocratic promotion system and a thoughtful human resource policy can instill efficiency and a professional civil service culture.

Finally, one of the major challenges for government institutions is to retain the best and most qualified staff. Employment in the private sector, or even state-owned extractive enterprises, can be particularly attractive for talented staff, whose departure for more attractive opportunities can constitute a continual drain on government institutions. Targeted salary and reward packages, opportunities for former government employees to return at a later date, and the fostering of professional working cultures in government institutions can help in this regard.

> Transparency is poor in extractive sectors worldwide. Only 10 of the 58 countries examined in the Revenue Governance Index publish most of their oil, gas and mineral contracts and licenses, though this group is growing with the recent disclosures by Afghanistan, Ghana and Guinea.
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> *Revenue Watch Institute, 2013*

PRECEPT 2

Resource governance requires decision makers to be accountable to an informed public.

Where resource wealth is managed on behalf of citizens, it can lead to sustained prosperity only if the government is publicly accountable. Ongoing scrutiny of behavior provides a strong deterrent against corruption and an incentive for improved performance across all levels of government. Furthermore, a national strategy of managing resource wealth will remain effective into the future only if this scrutiny ties present and future governments to the objectives they set themselves.

Provide transparency of information along the entire chain of decisions

Unlike many forms of economic activity, resource extraction and the management of revenues is often distant from the lives of the majority of citizens. The chain of decisions can be difficult to monitor, providing opportunities for corruption and a screen for poor management.

An essential prerequisite for accountability is transparency. However, piecemeal information is not sufficient. The government should disclose information about the whole chain of decisions, with a complete, complementary set of information. For instance, revenue data might be accompanied by information on the applicable tax rates and taxable income. Such information should be disclosed at an appropriate level of disaggregation such as location, project and product type. In addition, "machine-readable data" (data combined with descriptions of these data to enable automatic use by computers), with mutually agreed inter-operable standards can facilitate monitoring efforts. Further, publishing the names of companies operating, bidding for and investing in extractive assets, as well as the identities of their beneficial owners, can facilitate monitoring and enforcement of the applicable fiscal regime.

The operations of nationally owned resource companies should be subject to at least the same level of disclosure as private companies. National resource companies should also be transparent in their strategies and spending outlook, and public interest may even demand higher levels of openness.

Authorities should make available data and reports on licenses, geological surveys, cadastres and reserves, as well as economic, environmental and social impact assessments. Critically, authorities should also publish contracts and make them readily available online.

Disclosing information that allows for national accounting and monitoring of sector management, revenue management and expenditures is also necessary. This information can be compared against any fiscal rule the government sets itself. Further, savings funds must have high levels of disclosure requirements, particularly considering the potential for off-budget activity. In particular, fund management ought to publish information on the balance sheet and cash flows, recipients of payments, and audits.

The government should disclose not only payments and spending, but also the relevant rules across the whole decision chain. In many cases, governments write large parts of these rules into complex contracts hidden from public inquiry. As far as possible, governments should write terms within legislation, which observers can scrutinize more easily than a contract. Any remaining concessions given in contracts which depart from standard legislated terms should be submitted to and approved by the legislature. Above all, confidentiality clauses in contracts should be avoided and contracts should be made public.

The public's right to information is enshrined in many national and international conventions, and an increasing number of countries have freedom of information laws stipulating that all government information is public unless disclosure is specifically proscribed by law. Governments should adopt such rules to mitigate the risk of rights over resource extraction being signed away before members of the public can scrutinize agreements that affect them.

Government and business can also benefit from greater transparency. Disclosure requirements create the incentive to maintain effective systems of information management, which lowers the cost of collecting and maintaining good data and improves their accuracy.

This is essential for efficient government operations: it informs management decisions, improves the quality of service provision to companies and citizens, and supports strong lines of accountability within government. Additionally, companies face the challenge of managing public expectations in the areas in which they operate: effective transparency allows them to alleviate distrust and strengthen the "social license to operate."

Provide clear roles to institutions

Roles and standards of behavior should be clearly defined and understood by all so that the public can monitor government action. A set of values and ethical standards, reflective of society's expectations for those in positions of authority and codified in laws and regulations, ought to guide decision-making.

The government functions better if clear lines of responsibility are drawn, and the executive and bodies such as an independent auditor can monitor and bring to account those institutions that fail in their duties. Furthermore, to respond appropriately to the demand for better performance, government institutions should be able to make effective decisions—better accountability requires better capacity if governance is to improve. *{See also Precept 1 on the framework of roles and responsibilities, and the capacities of institutions.}*

Support a critical mass of informed citizens to demand good governance

The provision of information must be paired with the ability use it to monitor and judge the actions of the government. Civil society, including religious, academic, professional and social organizations, as well as the media, has an important role in this regard. For these organizations to be effective, they must be independent of the government and open about sources of funding and the interests they represent. The government in turn must establish and protect the rights of civil society, including the media, and allow it to operate without harassment.

> Legislative oversight has been found to be poor across the decision chain. In 31 countries in the Resource Governance Index, such as Botswana and Timor-Leste, the legislature exerts negligible oversight of contracting and licensing processes, while in 29 countries the legislature has very limited oversight of resource revenues.
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> *Revenue Watch Institute, 2013*

The legislature is essential in its oversight of the executive. It can audit the activity of the government and other institutions, and act as a conduit for public concerns. For the legislature to perform this role it requires an enhanced capacity and understanding of extractive issues, as well as access to reliable advice on the nuances of extractive resource management.

An informed citizenry is also better able discuss with the government the nation's strategic direction. Also, given the transformational importance of resource governance for citizens, managing public expectations is critical. An effective communication strategy and relationship between government and civil society is essential in this regard.

Enforce the rules

Finally, along with the means to monitor actions, the government must commit to enforcing penalties, which requires political will and capacity to punish offenders. A credible and independent judiciary is paramount in this regard. Without a strong possibility of judicial action there is increased potential for corrupt or criminal activity.

Discovery and deciding to extract

PRECEPT 3

The government should encourage efficient exploration and production operations, and allocate rights transparently.

The government's challenge is to ensure exploration and production operations are carried out efficiently within a comprehensive national strategy and to establish a legal and regulatory framework as far in advance as possible. *{See also Precept 1 on forming the national resource strategy, legal and regulatory framework.}*

Verify jurisdiction over areas to be licensed for exploration

The national government should verify that it has uncontested jurisdiction over the areas it intends to open for exploration. This applies both domestically and with neighboring countries including provisions for joint development of discoveries that straddle national borders.

Build and maintain a good understanding of the resource base

Government officials must build a thorough understanding of their country's resource base—both the quantum of resource and its geographic distribution. The quantum of the resource base informs key decisions on the rate of exploitation and potential future revenues. Information on the geographic location guides the establishment of property rights and exploration licenses within the country and future social and environmental impacts.

Pre-licensing investment in geological and geophysical surveys, funded by the government or external donors, can provide a high return on investment for the government if the resulting information increases the attractiveness of the geology to investors, thereby attracting higher bids. However, more knowledge can also make the geology appear less attractive if it demonstrates the geology is less favorable for discoveries.

The government has a duty to collect, store and analyze technical information arising from all exploration operations carried out under its jurisdiction. This information is key to building the government's geological understanding, which will serve to strengthen its negotiating position with investors and better enable it to optimize the licensing regime. To this end, the government should ensure that investors provide all technical information in an understandable format.

Secure property rights and decide on areas to open for exploration

Before licensing exploration activity, the government should establish property rights under national law for both the resources to be extracted and the surface resources such as pasture land and water in areas to be opened for exploration. *{See also Precept 5 on environmental analysis and ongoing regulation.}*

Authorities should carefully consider the size and boundaries of exploration licenses, taking into account the underlying geology and size and location of potential exploitable deposits. At the early stages of exploration, licenses are usually very large as the location of prospective geology is not well defined. The license regime needs to allow for the reduction in the size of licenses as exploration progresses in order to prevent too much of the resource base being located in any one license. Licensing authorities must take care with regards to the sequencing of license awards to ensure that the government can benefit from land value increases resulting from discoveries.

Finally, the government should consider whether the environmental risks, from pollution, for example, are worth the potential reward. The government should either decide to prevent exploration in

> Recent discoveries are potentially transformational. The Simandou iron ore project in Guinea and iron ore and petroleum projects in Liberia could generate average annual revenues of US$1.6 billion in each country, respectively representing 31 percent and 147 percent of 2011 GDP.
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> *Africa Progress Panel, 2013*

environmentally and socially sensitive areas or take steps to mitigate these risks.

Select an appropriate method to allocate rights

The government must decide who should undertake exploration and production operations and under what terms. If the government allows private sector companies to participate, it can use either direct negotiations on a license-by-license basis, or licensing rounds where one or more licenses are awarded by a competitive process. *{See also Precept 6 on the operational roles nationally owned companies might have.}*

Well-designed auctions are preferable since competitive bidding should secure greater value for the country and auctions can also help overcome information deficits that the government may have relative to international companies. Auctions are also inherently more transparent than direct negotiations, helping to mitigate the risk of inappropriate companies or individuals receiving exploration and extraction rights.

Auctions' success typically depends on a minimum of three bidders. Without sufficient interest from bidders, opting for a competitive allocation process is not likely to be a suitable choice by the government. This may be the case if there is insufficient geological information—more likely in mineral than petroleum licensing. Where there is insufficient competition for auctions, the government should use a licensing round with strict minimum technical criteria instead.

Regardless of the method used, there are a number of principles that can strengthen the position of the government in the allocation process. The government should disclose information on allocation procedures; the contracts awarded, including fiscal and tax terms; the beneficial ownership of all license holders; the agreed work program; and financial commitments and any fiscal terms particular to the license.

The government should pre-qualify bidding companies to ensure that potential license-holders have sufficient technical and financial capacity to execute a resource development program, and sufficient experience in managing the environmental risks associated with the project and related infrastructure. The government should also decide whether to encourage joint bids and whether to reserve the right to allocate equity interests within licenses.

Third, the government should limit bidding to a small number of terms to allow clear comparison across bids. These might be terms on the work program, signature bonuses, and local content provisions. Competition or negotiation need not solely concern the price of the extraction right, but on the other hand too many variables increase complexity, erode the transparency of evaluation, and increase administrative costs.

Fourth, the government should try to ensure there is no need to negotiate terms after companies have bid. This is helped by clear and transparent bid terms, and model contracts.

Finally, the government should undertake careful assessments of the value of services or infrastructure given as part of barter deals in exchange for extraction rights. Where there is significant uncertainty, the government should consider avoiding such deals. Barter deals are often inherently opaque and may provide opportunities for corruption.

Ensure development plans conform to government objectives and approve them in a timely manner

After commercial discovery and appraisal work, license holders will draw up development plans for the exploitation of the discovery for approval by the government and its agencies, and in some cases, the legislature. The government should ensure that development plans are cost effective, consistent with its policy objectives regarding resource depletion; use of infrastructure, health, safety and environment; and local content and employment provisions. In addition, plans should provide for the eventual abandonment of the project site, including clean-up and restoration.

The government should review plans thoroughly, in a manner that is timely and consistent with any contractual obligations. This requires sufficient technical expertise at the right time, and an efficient approval process characterized by coordination between the relevant ministries and agencies.

{See also Precept 5 on environmental and social aspects of the project development plan, and Precept 10 on local content and infrastructure.}

Maintain accounts of the physical resource

Maintaining accounts of the physical resource base—in terms of production volumes, proven reserves and uncertainty ranges, discovered resources and remaining exploration potential—is an important foundation for policy-making and regulation of the industry. Such accounts, along with information on revenues and costs of extraction, can show how much revenue the government might expect in the future, how much should be saved, and the pace of exploration activity. Ultimately this can help the government to maximize the benefits from the exploitation of the resource base.

Getting a good deal

PRECEPT 4

Tax regimes and contractual terms should enable the government to realize the full value of its resources consistent with attracting necessary investment, and should be robust to changing circumstances.

Natural resource development may provide employment and other returns, but its principal benefit is the generation of government revenue to support development and the wellbeing of citizens. Realizing these revenues requires a well-designed fiscal system that takes into account the nature of extractive resources, the considerable uncertainties inherent in their exploitation, and the capacities of the government.

Important characteristics of the sector include:

- The existence of substantial "rents," which are returns beyond those which would be required to recover costs and to give an investor the minimum rate of return required to invest
- Exhaustibility of resource deposits
- Asymmetry of information between the government and potential investors
- High upfront costs and significant periods of exploitation, requiring a long-term investment in the presence of significant market, geological, and political uncertainties
- Challenging accounting and audit environment for fiscal control (regardless of whether investors are private or state actors)

Against this background, governments should design fiscal systems that provide strong returns for their resources and a reasonable timeline for receipts, and take account of uncertainty and the trade-off of risk and reward—while at the same time attracting the necessary capital and investment for development of the resource when such development is warranted. In addition, countries must account for individual legal traditions and constitutional constraints that may dictate a particular pattern of ownership and taxation.

Consider the function, not the form, of the tax regime

These imperatives suggest that the development of a good fiscal regime in developing countries should exhibit the following two basic components: a royalty or other production-based charge that provides a minimum flow of revenue to the state whenever production occurs; and a mechanism for capturing a share of profits and remaining rents.

While fiscal regimes may vary in terminology and legal form, most include these two elements. In "tax-and-royalty" systems used in both mining and petroleum, the investor makes a royalty payment to the government based on output and is subject to ordinary income taxation on its profits. Under "production-sharing" arrangements—principally used in petroleum but potentially applicable to mining—a portion of the output is reserved for the investor or contractor for recovery of its costs ("cost oil") and the remainder ("profit oil") is split between the investor and the government. Service contracts are a further alternative to tax-and-royalty and production-sharing systems. Here governments may grant exploitation rights to state-owned firms, which in turn may contract for services from third parties. Systems may also be mixed.

Despite the various contract forms and nomenclature, each of these structures may incorporate profit- and production-based elements, and each can be designed to achieve similar returns. The government's task is to therefore ensure that the risks and timing of revenue receipts are shared between the state and investor(s) in a way that is consistent with the government's development strategy and maximizes overall value to citizens.

Use royalties

A royalty, or its production-sharing equivalent, assures the government of a revenue stream from the beginning of production, and also ensures that the country receives some minimum payment for the resource and to cover the social costs of extracting it. If a project cannot sustain a reasonable royalty to cover these costs, it is highly unlikely that the project is a good deal as the country would be giving up a non-renewable resource without any assurance of payment.

Royalties require accurate measurement of output, well-defined timing rules, and good measures of market value. Royalties that allow production cost deductions are profit taxes by another name. The measurement of market value is greatly facilitated by tying the royalty to some international and publicly quoted price when such prices are available, rather than more traditional computations which "net back" the value to the point of production.

Consider how to tax income and rent

Another kind of charge is a tax on income ("profits tax"). In a tax-and-royalty system this is typically the generally applicable corporate income tax—a tax on the return to equity. It is usually modified to take account of specific characteristics of the sector and to minimize abuse. Sometimes regimes use a higher tax rate in an effort to tax rents. If the government uses production-sharing arrangements, the government can achieve the same result as a tax-and-royalty system by choosing a particular share of "profit oil" or "profit gas" and a recovery rate of costs ("cost oil" or "cost gas") that would provide an equivalent government take.

The profits tax provides for significant risk-sharing between the government and the investor, with the government having the opportunity to share in the upside of a highly profitable investment while the investor has some downside protection from losses or low returns.

Unlike a royalty, a profits tax or its equivalent does require the measurement of costs. The costs as disclosed by companies are frequently susceptible to manipulation because they can be incurred in transactions for goods and services acquired from related parties. Moreover, the form of financing affects the returns to the government, with excessive debt capitalization leading to the loss of revenues. Thus, in the absence of careful auditing and controls and well-written statutes or regulations, there is considerably less certainty that a government will actually collect what is due under a profits tax. In addition, the large upfront investments characteristic of the extractive industries, when combined with the expensing or accelerated depreciation of investment, will produce large deductions against taxable income which, when carried forward, can significantly delay the receipt of income taxes.

Profits may include a significant amount of rent in a high-value project. The government may consider a supplemental rent tax, or a tax surcharge on cash flow, that transfers a higher share of profits to the government than the ordinary income tax when profit rates are high. The government can design a production-sharing system to provide the same result by increasing the government's share of profit oil based on some measure of the project's overall profitability.

The government may supplement any of these systems with certain discrete payments. For instance, in a competitive license allocation process an up-front bonus payment may be the bid element, while all other fiscal terms are kept fixed.

Avoid tax incentives and simplify tax regimes

Investors often request that governments with potential or newly discovered resources provide special incentives in the form of tax holidays, accelerated recovery of capital expenses, or reduced royalty or profit rates. A government should resist offering such incentives. If a project cannot bear the royalty or a normal tax on equity investment, the investment is unlikely to be a good deal for the country. Changing circumstances—higher commodities prices or new technology, for example—frequently result in projects that were once deemed uneconomical becoming feasible without the benefit of government subsidies. Not all resources have to be developed at any given time, and some resources may never warrant development.

Provided that the basic elements are in place—a royalty, a profits tax, and some sort of rent tax—the government can benefit from simplifying or eliminating many of the other charges that are sometimes imposed. Value-added tax (VAT) should work as intended, as a tax on the domestic consumption of a good, not as a tax on investment. As such extractive companies should not pay VAT on the product that they export. In addition, duties on imports should not be at a level that deters investment. Fiscal systems that rely too heavily on such charges, or on other fixed fees and charges on inputs, can be unwieldy and have unanticipated negative outcomes that outweigh the tempting promise of up-front revenues. Government authorities must also pay attention to international tax systems in order to prevent non-resident corporations from evading taxes on revenue attributable to resource development. Governments should have reasonable and preferably uniform rates of withholding on payments such as dividends, interest, service fees, and royalties to non-residents. In the absence of robust mechanisms for collecting income taxes from foreign entities, withholding taxes is often the surest way of securing extractive profits in a host country. Tax treaties may limit withholding and other taxation of non-residents, and governments need to carefully review existing treaties and avoid or tailor such obligations in proposed treaties.

An important emerging issue of political and economic significance is the taxation of capital gains attributable to the sale of rights to the host country's resources. Reaching those gains—particularly where a transfer of rights is achieved through transactions at the level of a foreign holding company—requires careful tax legislation and reporting requirements, and consideration of how the payments that create those gains are later treated for tax purposes.

Avoid using state equity to increase government returns

The fiscal regime already provides the government with a return on its resources, but governments frequently seek to take further equity interest in a project which can, depending on its form, increase the fiscal burden on the state as equity investor. The government may consider state equity participation for other purposes, however: as a second-best means of rent capture (especially where informational asymmetries are severe, or monitoring capacity constrained); as a means to invest state assets (although this may conflict with an objective of economic diversification); as a way of potentially influencing corporate decision-making (although regulation may be more appropriate); or as a means to transfer knowledge of business practices. *{See also Precept 6 on national resource companies.}*

Establish transparency, stability, and robustness

Transparent and uniform rules reassure investors, reduce opportunities for corruption, and may reduce the demand by individual investors for special treatment. Uniformity also facilitates administration. Uniformity does not mean that new projects must be subject to the same rules or contractual provisions as existing projects, or that governments should forgo the flexibility to change tax rates, even for older projects. Countries often change corporate and personal income tax rates. Auctions can also capture for governments part of the differences in expected value among deposits. Uniformity should extend to the taxation of nationally owned resource companies: they should face the same tax terms as private companies.

Investors may seek contractual assurances regarding stability. Many countries do not provide contractual assurances, but if the government does consider them, it should limit provisions so that the state remains free to regulate other areas of concern such as labor, health and safety, environment, security, and human rights. Furthermore, the government should avoid an asymmetric situation in which, on the one hand, the company can subsequently seek concessions through threat of closure, but on the other hand, the government does not have the opportunity to realize a greater share of the benefits if the project becomes highly profitable. *{See also Precept 1 on legal frameworks, and Precept 2 on transparency.}*

Ensure competent tax administration and implement tax avoidance rules

All governments face tax administration challenges. Some of these challenges are the result of poorly designed systems that may not provide the tax agency with adequate authority to contest or prevent abusive tax-avoidance practices. Implementing tax rules to address common causes of tax avoidance can help. Such rules might provide for ring-fencing and limitations on the deductibility of certain related-party payments—for example, management fees, excessive interest charges or hedging losses. But the problem is in part organizational, and in part relates to general capacity constraints. Contract negotiation processes that result in bespoke fiscal arrangements may place added burdens on administrators as well as negotiators. The following can all help tax authorities: integrated information and filing systems; centralization of collection functions for royalties, other taxes, and revenues from production shares; a requirement for companies to pay into a single, transparent, central account; integration of physical monitoring with revenue collection; and elimination of "in-kind" payments. Governments can import foreign expertise to address some of the common capacity gaps while domestic capacity is built—for example, by contracting with international financial accounting entities to assure compliance and full collections. *{See also Precept 3 on contract negotiation and allocation.}*

PRECEPT 5

The government should pursue opportunities for local benefits, and account for, mitigate and offset the environmental and social costs of resource extraction projects.

Resource projects can incur significant environmental and social costs that are often borne disproportionately by those in the vicinity of the extraction. However, extractive projects also have the potential to generate benefits for local communities through employment and the demand for goods and services, at least while operations continue.

Resource management requires minimizing the costs for affected communities, while enhancing the benefits. Where these costs cannot be eliminated, the government should arrange adequate compensation for those affected. As a general rule, the aim of compensation should be to improve the livelihoods of those most adversely affected by extraction.

Involve the local community in decision making and assessment

Local communities, local governments and the wider public should be involved in project processes prior to project development. Efforts taken to inform and involve the public in decisions about the overall vision for a nation's resources must be presented objectively by independent researchers. Involving members of the public helps them 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 possible conflict.

However, it is important to recognize that there may be differences between the interests of the local population and the country as a whole. Where a decision is made to realize greater benefits for the rest of the country to the detriment of local groups, government should ensure these groups are remediated. *{See also Precept 1 on making the decision to extract part of the national strategy.}*

Establish and define ownership rights

The government, in agreement with citizens at both the local and national levels, should clearly establish ownership rights to sub-soil wealth, and assign the rights to subsequent revenues. While sub-soil wealth is usually, but not always, owned by the state on behalf of all the citizens of a country, local communities may own, or at least rely upon, land, water and other natural assets affected by extraction. This includes communities that are not necessarily local to the project site but that rely on affected natural settings such as rivers and coastlines. The government should appropriately remediate impacted areas in a swift, credible and transparent manner compatible with accepted human rights standards.

Government failure to provide reasonable compensation as well as equitable participation in national benefits can give rise to citizens' frustration, disruption of extractive projects, or even conflict. It can also increase budgetary costs in the form of later welfare support for vulnerable people within affected communities. However, the government should avoid awarding a greater proportion of state revenues (beyond that required to compensate for adverse impacts) to resource-rich regions than to other regions, unless there are specific national legacy commitments such as those to indigenous peoples or historically neglected areas. *{See also Precept 7 on revenue allocation.}*

Measure and mitigate the negative effects of extraction

The government should identify potential negative effects before granting specific extraction rights, so as to ascertain whether the country will get a good deal from extraction. In some cases it may be appropriate to defer operations until governance or technology improves, or until the impact can be better assessed. *{See also Precept 1 on public participation in decision making, and Precept 3 on allocating rights.}*

If the government does grant rights, it should plan to mitigate the adverse consequences of extraction. In particular, the government should require companies to present, and obtain approval for, contingency plans in cases of emergency. These contingencies should include the availability of equipment and expertise to manage accidents, such as oil spills. This should be accompanied by the means to monitor a project throughout its life cycle to ensure that all parties follow the plan and to identify future, unexpected impacts of the project. As it is impossible to predict all the potential costs, requiring developers to have systems in place to monitor and manage environmental and social impacts on an ongoing basis is just as important as the assessments conducted in project planning.

The government is responsible for setting and enforcing environmental standards (preferably in compliance with international standards such as the Equator Principles), while the extractive company is usually in the best position to mitigate environmental damage. Companies may have only weak incentives to consider the environmental consequences of operations, unless the government makes it a condition of awarding the concession, with penalties attached. The government should ensure that either it or the company sets aside funds for remediation, as the company may leave or sell to another party when projects become unprofitable, which may be long before the official project period ends. Independent contractors, acquired on a competitive basis, can be hired to undertake environmental operations such as reclamation.

The security arrangements around projects can give rise to human rights concerns when private or state security forces use excessive force. Operations should include strong safeguards and legal recourse mechanisms in cases of human rights violations.

Artisanal mining has a poor reputation for health and safety, and for the impact it has on the local environment. However, the informal industry also generates income for those living in poverty. The government should seek to formalize and regulate the industry, to mitigate the negatives of artisanal mining while preserving or improving the poverty-alleviating benefits. To achieve this, the government may consider cooperatives and other community-based solutions, while also encouraging the overall diversification of the economy in order create larger opportunities for poverty reduction.

Finally, the government should separately and explicitly identify and factor into the decision-making process the social impact of extraction on vulnerable or marginalized groups of resource extraction since these groups are often omitted from broader consideration.

Take opportunities to develop local benefits from extraction

Extractive projects can present substantial economic and social opportunities for nearby communities. Authorities should take these into account alongside the costs when deciding whether to allow exploration and when approving companies' development plans. *{See also Precept 10 on developing businesses and the workforce across the whole economy to supply the extractive industry.}*

Mining projects in particular present potential training and direct employment opportunities for local workers. Even in cases in which the local labor force lacks the skills to effectively participate directly, there is likely to be demand from extractive industry workers for local goods and services, particularly in catering, hotels and other service industries. The government should consider how to support local efforts and encourage extractive companies to use such services.

Extraction projects may also require substantial infrastructure which can provide significant benefits in regions where the infrastructure is built. To enhance these benefits, the government, in discussion with companies, should consider making infrastructure open to multiple users. It is important, however, to make this decision before the design stage, and with the participation of the private sector. *{See also Precept 9 on infrastructure development.}*

Communicate with members of local government and strengthen their capacity

Local governments often play an important role in managing the impacts of the extractive industries. Weak local government can be a bottleneck to service provision and the mitigation of damaged from extractive projects. If communities are poorly served by their governments this may create tensions which threaten resource projects.

Enhancing the capacity of local government is a useful way for companies (as well as donors and civil society) to promote engagement with local communities, understand the vision communities have for their future, and deliver projects that are mindful of this vision. In cases where capacity is particularly poor, provision of services by companies may be warranted in the short-to-medium term. *{See also Precept 1 on assigning roles to government institutions including local government, and see Precepts 7 and 8 on impact of resource revenues on local government.}*

PRECEPT 6

Nationally owned companies should be accountable, with well-defined mandates and an objective of commercial efficiency.

The creation of nationally owned resource companies can be a key component in a country's strategy to harness the development potential of its sub-soil assets. Such entities may appeal for a number of reasons: to capture rent for the state in cases where taxation of private companies is considered insufficient; to facilitate transfer of technology and business practices to local companies; and to influence operational decision-making, such as support to the development of domestic linkages between the extractive sector and other industries. Each of these objectives can be appropriate in different country contexts—but not necessarily at the same time—and may involve trade-offs. Furthermore, the appropriate roles for a national resource company may change as the extractive sector and government institutions develop.

Despite these opportunities, national companies can pose a risk to a country if assigned inappropriate roles and governed poorly. At the extreme these companies can destroy rather than create value for citizens, a phenomenon of which there are many historical examples.

Decide on an operational role for the national company

Creating a national company to undertake these operational roles (such as exploration, development and production either by itself or within a joint venture partnership) can be beneficial if there is sufficient capability and good governance within a country. However, where either of these is lacking, national companies, through inefficiency or the self-interest of executives, may limit or even drain government revenues. Furthermore, there are opportunity costs when investing state capital in a national company, at the expense of other national objectives such as economic diversification. *{See also Precept 1 on structuring rules and institutions.}*

In cases where a national company cannot offer sufficient risk capital and expertise for certain roles, authorities should consider foreign extractive companies facing shareholder and/or competitive pressures. If the government aspires to build national capability, partnerships with foreign companies can enable knowledge transfer.

Many of the benefits of private sector involvement rest on the assumption that the state can reasonably tax profits and regulate the behavior of private companies. If this is not the case, national companies may help enhance government expertise, acting as "windows to the industry." A national company can channel technical insight and information to government agencies, and foster talent to supply these governance functions. *{See also Precept 4 on taxation.}*

National companies can also support the growth of domestic industry. Private and foreign extractive companies may benefit the national economy by sourcing local content and managing local social demands, but their operational decisions are based on their underlying profit motive—in this way, they may ignore the wider non-tax benefits (and costs) of extraction for the country. Regulation can address this by requiring private companies to promote local content, for instance. However, the government can direct a national company to promote these wider economic goals, by fostering domestic supply chains and pools of local talent, although such strategies may reduce the commercial efficiency of the nationally owned company. In the long run, the government should support and require the global competitiveness of local suppliers over time. Otherwise, low efficiency will reduce available revenues for the government.

Consider the governance roles of the national company

As with operational roles, the government must assign the governance roles of policymaking and regulation, such as tax collection, assignment of operating rights, monitoring, and the management of cadastres. *{See also Precept 1 on assigning roles to government institutions.}*

In making these choices the government must consider a trade-off between avoiding conflicts of interest and ensuring sufficient capacity to undertake each role. Given adequate government capacity, a national company with significant operational roles should be separate from governance roles in order to avoid conflicts of interest. In cases where a government institution lacks sufficient capacity, pooling scarce expertise and resources in one organization may be appropriate. However, the government should identify any resulting conflicts of interest and implement appropriate checks on national company behavior. This solution may be suitable in the short term, but the government should ensure that expertise gained from operational exposure is used to establish capacity in separate state institutions. Such an "exit plan" should be embedded in the make-up of any combined national organization to ensure that vested interests do not prevent a transfer of powers.

Establish checks and balances

Where a nationally owned company is assigned a combined set of governance and operational roles, a system of checks and balances helps address the inevitable conflicts of interest. On the whole, company board members should be politically autonomous and appointed through open and competitive processes based on technical expertise. In choosing the number of government representatives to sit on the board, a trade-off should be considered. On the one hand, these representatives may provide the basis for company-government relations and prevent too much concentration of power in the national company; on the other hand, they may lack the time or technical expertise to devote to rigorous oversight, and may slow decision-making in the company. *{See also Precept 2 on accountability.}*

The national company should face at least the same standards of disclosure that private companies do. The national company should maintain public accounts in accordance with international standards and subject to independent audit, and clearly identify any private ownership interests and related transactions. A particularly critical area for transparency is the sale of petroleum by national companies on behalf of the state. Disclosure should cover the amount of oil the company receives, and the price, grade, volume and date at which it is sold.

Finally, the legislature or appropriate oversight agency should conduct regular and systematic oversight of the national company. To allow the national resource company some freedom of action to pursue objectives efficiently, and to avoid the overly intrusive involvement of politicians or civil servants, the legislature or agency may oversee high-level decision-making, such as annual reviews of performance, rather than operational matters.

Manage the evolution of roles

The responsibilities of national companies may be reassigned as new challenges emerge and when companies' capacity develops—for instance, from working as a holding company of state equity to joint operations with private companies. In the long run, the government should ensure that the national company's state agent role is a means to an end—to build an effective set of government institutions, and/or promote a strong industry and operational talent. Where a national company continues to operate after this process, it should be commercially efficient.

Managing revenues

PRECEPT 7

The government should invest revenues to achieve optimal and equitable outcomes, for current and future generations.

The government must decide how to allocate the revenues from resource extraction. Possibilities include but are not limited to: allocate revenues directly into national or sub-national budgets; use them for tax reductions, or transfer payments, such as welfare payments, subsidies or "resource dividends"; contribute to pension funds or natural resource funds; capitalize lending institutions; or retain/allocate revenues to a national company.

In making these choices, the government should consider two overriding objectives: promotion of equity, both between generations, and across society; and efficient use of revenues to maximize welfare.

The nature of resource revenues complicates this problem in four ways. First, non-renewable resource extraction is intrinsically unsustainable. The country must plan for a time when commercial reserves are depleted, or at least when the available revenue streams decline. This running down of a natural asset requires actions to accumulate equivalent productive assets, typically physical or human capital. Second, resource revenues typically exhibit large booms as extraction projects produce at full capacity, followed by long declines as the reserve is depleted; so the government must make decisions about large amounts of money, relative to the overall size of the economy, in a short span of time. This means that in most years the amount that the government should consume should be less than it earns, so some form of saving is required. Third, commodity prices and therefore resource revenues are typically volatile on a year-to-year basis. This requires policy instruments that ensure that short-term revenue fluctuations do not translate into disruptive government spending fluctuations. Fourth, revenue flowing into the economy can produce adverse macroeconomic responses. Large flows of money into the economy alongside a higher demand for non-tradable goods and services can cause a deterioration of businesses that produce goods for potential export, a phenomenon called "Dutch disease." Also, a build-up of assets or expectations of future revenue streams can cause credit bubbles and similar financial issues. In addition, the economy may lack the absorptive capacity to handle a large increase in domestic investment in the short term, causing inflation. Finally, conflict may arise if citizens perceive that the benefits of resource extraction are not distributed fairly. *{See also Precept 8 on revenue volatility, and Precept 9 on enhancing the absorptive capacity of the economy.}*

Ensure equitable allocation for future generations

To achieve the first objective, promotion of equity, the government should decide how much of the revenue should benefit citizens in the present, and how much to invest for future generations. This decision rests on reasonable estimation of how much resource revenue will be available to spend or save, and on the growth prospects of the country. If high growth takes place, present-day citizens are likely to be much poorer vis-à-vis future generations; some immediate spending to improve the welfare of present-day citizens is required. However, government should weigh this consideration against the capacity of the economy to absorb potentially large increases in spending. In countries with slower expected rates of income growth, there will likely to be a smaller gap between the incomes of current and future generations. In such cases, government should ensure that less revenue is consumed in the present, and more is invested to maintain equity between generations.

In addition to more equitable distribution over time, some current expenditure of revenues may be important to demonstrate effective public spending and to cement public support for governments' long-term resource management plans. The advent of resource wealth carries the danger that public expectations will become too high, and competing interest groups demand shares of the proceeds. Managing these expectations through open and inclusive national planning, and communication of the facts, can limit the demands and subsequent over-spending. While *some* consumption may be warranted in poorer countries, often the default response from any political system is to consume as much of the revenues as possible: countries must protect the rights of younger and future generations to benefit from the country's wealth. *{See also Precept 3 on the importance of understanding the resource base, resource depletion and ensuring revenue stream to inform this savings decision.}*

An explicit fiscal rule dictating the amounts spent and saved each year by government can guide the long-term decision to save. To protect against government's temptation to renege on this rule, it is important that the rule itself and the amounts spent and saved each year are made public. Together with strong oversight from civil society and independent authorities, these governance structures can help keep government to its decision.

Consider equity amongst today's citizens

In allocating revenues, the government should also consider equity amongst today's citizens. This may necessitate careful consideration (and intervention) to balance the distributional equity of benefits according to social group, gender and income level.

The government may wish to use resource revenues to support those living in relative or absolute poverty. The government can do so through a variety of channels (see below) and may need to balance the trade-offs between more efficient channels and those that reach a greater number of targeted groups.

Since unconditional lump-sum transfers would benefit the poor more relative to the rich, there may be some justification for these direct transfers in countries with high levels of poverty and credit constraints. Direct cash transfers to people can help relieve household spending bottlenecks, capacity constraints and individual credit constraints. They may also generate public interest in how revenue is spent, thereby strengthening the desire to hold government to account.

However, successful transfers of this kind rely on public administration systems that can distribute funds effectively, otherwise misappropriation can occur. Furthermore, cash transfers may conflict with government objectives to use resource revenues to invest if citizens do not invest the cash themselves, while in addition cash transfers reduce the funds available for public sector projects. Further, authorities ought to pay close attention to the absorptive capacity of the economy. If businesses cannot suitably respond to additional demand created by cash transfers, the transfers will merely cause domestic price inflation.

Subsidies are typically the least desirable method to distribute revenues, despite their widespread use and popularity. Fuel subsidies in particular may be demanded by members of the public as their right as citizens of a resource-rich country. However, subsidies can spur wasteful consumption, smuggling, and the development of parallel markets. When the domestic commodity price is subsidized, high world prices mean a loss of export earnings and a high burden on government finances, undoing the benefits of higher resource revenues.

The central government should consider the social returns on regional investments, which may necessitate a focus on specific regions, such as cities as engines of job creation and growth. Furthermore, the central government should link revenue distribution to the expenditure responsibilities of local governments, and be pro-active in building the capacity of local governments to manage these responsibilities.

In some cases the government may consider distributing more revenues to communities near to extraction sites than communities elsewhere in the country. Where groups disproportionately bear the costs of extraction—such as environmental damage or social disruption—the government should actively seek to prevent or

> Resources can propel economic growth, yet this has often failed to benefit the poor. Zambia's GDP per person rose over 30 percent from 2003 to 2010, yet the share of income for the bottom 20 percent fell from 6.2 percent to 3.6 percent.
>
> *Calculated from World Bank Development Indicators*

> Oil-exporting countries are among the biggest subsidizers in the world—US$137 billion in all combined, over 70 percent of all direct global oil subsidies (as of 2010). However, subsidies do little for poverty alleviation. On average, the richest 20 percent of households in low- and middle-income countries capture six times more in subsidies than the poorest 20 percent of households.
>
> *Carlo Cottarelli, Antoinette Sayeh and Masood Ahmed, 2013*

> Collecting the revenues is not enough if they are siphoned off before they can be used to drive development. In Cameroon, as in 19 other countries assessed in the Resource Governance Index, substantial revenues appear to bypass the national treasury entirely.
>
> *Revenue Watch Institute, 2013*

compensate for this. In addition, to mitigate conflicts or social tensions, the government may wish to distribute some share of revenues to communities near extraction sites. However, where resources are nationally owned, communities near to extraction sites typically have no inherent claims on a greater share of resource revenues than other communities within a country, and the government may need to balance local requests against the needs of all its citizens. {*See also Precept 5 on compensation to local communities.*}

Ensure investment is efficient

The second revenue management objective is to allocate revenues so they can provide the greatest social return. In making this decision, it is important for the government to consider not only purely financial benefits, but also economic and social benefits such as job creation and skills transfer.

A key choice is between making domestic or foreign investments. For a country with good infrastructure and public services, more domestic investment is less likely to earn returns that are as high as investing abroad. But a poorer country is typically trapped—it may lack the infrastructure and public services to attract private investment. Yet without such investment, the government cannot earn revenue to fund public infrastructure and services. If in receipt of resource revenues, the government has an opportunity to break this cycle by funding the structural changes required to attract foreign business investment. A developing country in such circumstances will realize greater benefit from government's domestic investment, particularly if paired with complementary private investment, than from the government investing abroad. {*See also Precepts 9 and 10 on using revenues to address investment constraints.*}

In this way, investing resource revenues in the domestic economy is likely to be the best course of action for many low-income countries in the long term. However, poor public project selection, delivery and cost inflation can render sharp increases in domestic investment ineffective. Especially where infrastructure is poor, government and businesses may have limited capacity to respond to the higher demand from large spending programs, so that investing resource revenues in the economy results in inflation rather than better capital goods. This lack of "absorptive capacity" may arise from low bureaucratic capacity, or bottlenecks such as congested port facilities or urban transport networks. Resource revenues provide an opportunity for governments to address these constraints in a sequenced manner. However, because these efforts take time, initially surplus revenues might be held in savings funds abroad, or used to pay down foreign-denominated debt. The latter use can be particularly beneficial for an economy. Foreign debt reduction raises no domestic absorption issues, enhances the country's credit standing and appeal to investors, and—most importantly—reduces the cost of investment for the domestic private sector via its effect on interest rates.

Using revenues to capitalize government-sponsored lending institutions (such as development banks or mortgage providers) shifts the decision about the use of revenues to an institution that may have greater knowledge and specialist expertise to make the decision than central government. If there is sufficient capacity and robust governance standards are in place, such institutions may choose investments that provide greater social returns than those that central government decision-makers might select.

In some cases, the private banking sector may have greater capacity and incentives to find the best financial returns for resource revenues. However, if the domestic investment climate is incapable of offering suitable financial returns, private banks may instead invest funds abroad, even if there are opportunities to make non-financial returns for society in general. The government might consider using resource revenues to instead enable conditions for private domestic investment in the future.

PRECEPT 8

The government should smooth domestic spending of revenues to account for revenue volatility.

Revenue volatility is often a leading concern for countries dependent on extractive industries. As future revenues are uncertain, government investment planning is difficult, with the risk of over-spending on poorly planned projects in boom times and harsh spending cuts when prices or production fall. Further, the resulting volatility of exchange rates, inflation, and government spending can cause businesses to spend in a manner that exacerbates the volatility problem.

The most reliable, long-term solution is to reduce revenue dependence on resource extraction. Diversifying the economy, particularly the tax base, away from the extractive sector can ensure a supply of government revenues that is not tied to the fortunes of one industry. Diversification is a long and difficult path that requires short-term stability. To manage this interim process, governments have a range of tools including the design of the extractive industry tax regime, managing the flow of revenues in and out of the budget, and decisions about which types of expenditure are more volatile than others. A suitable strategy may involve a combination of these, along with improvement in underlying institutions to ensure that the tools are effective in controlling government spending, and shield the economy from macro disturbances.

The government's decisions are hampered by the difficulty of knowing whether a change of commodity prices signals a temporary or enduring shift. If a price change is temporary, government application of one of these tools to manage volatility is suitable. If a price change is more permanent, the government should instead consider making an adjustment to its long-term spending plan. This is no easy task, and government decision makers should be cognizant of this uncertainty.

Consider how the extractive industry tax regime affects volatility

To some extent, the design of the tax regime can influence how price volatility affects revenue volatility. The use of fees and royalties provides somewhat more protection than corporate or excess profit taxes, for example. However, this protection is limited and may come at a cost of lower revenues on average. *{See also Precept 4 on taxation.}*

Consider using hedging contracts

In some cases, governments may be able to insure against downturns in revenues in the form of financial contracts that allow governments to insure themselves against commodity price uncertainty; these are called "hedging contracts." While this may be appropriate for insuring for short periods, longer-term protection can be expensive. There is a significant outlay associated with even short-term hedging that yields a return only in the event of falling prices. This may prove economically and politically costly for lower-income, resource-rich countries. Hedging, where used, is best deployed as part of a mixed portfolio of other strategies.

Consider accumulating foreign assets, and borrowing in the short-term

A third strategy is to form a fund with surplus revenues to accumulate foreign assets in boom times, and liquidate those assets (or borrow if these are insufficient) when revenues fall. The use of funds for stabilization differs conceptually from savings funds with longer-term goals of storing wealth for future generations, which may be a lower priority for developing countries. In practice, a single fund may perform both functions. *{See also Precept 7 on long-term savings objectives.}*

Funds for stabilization should hold foreign assets such as foreign government treasury bills, rather than domestic assets such as shares in domestic businesses, for three reasons. First, the funds should insulate the country from the harmful effects of volatile expenditure. Investing them in the domestic economy merely shifts expenditure off-budget, thus failing to reduce overall expenditure volatility in the country. Second, undertaking domestic expenditure from funds off-budget may lack the checks and scrutiny that are normally applied to the budget. Finally, holding foreign assets denominated in foreign currency helps to limit the impact on a country's exchange rate when the country experiences significant financial inflows.

It is difficult to estimate how much savings a country might need to cope with future drops in the prices of extractive commodities: since these prices are inherently unpredictable, the government may need to build up large funds. This is a challenge early in the life of a fund, and is potentially not an appropriate use of revenue. In such cases, borrowing from international capital markets might be more preferable. However, the government should be aware of the risks of over-borrowing, and ensure that borrowing occurs only on a short-term basis. Over the long term, the government should use resource wealth to reduce, not increase, its debt.

Furthermore, the government should integrate any natural resource fund with the national budget so as to prevent the creation of an institution that makes domestic spending decisions outside the national budgetary system that either complicates public financial management or weakens existing accountability measures.

Make changes to investment expenditure before recurrent expenditure

Finally, if volatility is so pervasive that government cannot smooth total expenditure, it is preferable to allow investment expenditure to change more abruptly than recurrent expenditure. Investment expenditure is inherently uneven, while recipients of recurrent expenditure, such as public sector workers, require regular, periodic payments. Abrupt reductions will not be popular, while large increases in payments may be politically difficult to reverse when prices fall. However, such measures should be a last resort: volatile, stop-start funding is still damaging to investment projects. Critically, the decision must also rest on understanding whether a fall in prices is temporary or permanent—if permanent, government should consider reducing both types of expenditure.

Establish checks to ensure appropriate use of instruments

There is no guarantee that future decision-makers will use these instruments for managing revenue volatility effectively. For instance, stabilization funds may be raided, or not replenished in boom times, while borrowing may quickly become unmanageable. The use of these instruments can be particularly opaque given their complexity and the ease with which financial transactions can be hidden or obscured from public scrutiny. Transparency measures in this area are particularly warranted. *{See also Precept 2 on the importance of accountability for good governance.}*

Monitoring government decisions requires an explicit target. Non-discretionary rules are useful to guide government's use of hedging, saving funds and borrowing instruments. Authorities ought to weigh these rules against the flexibility to respond to changing circumstances, particularly the difficulty of predicting the future course of prices. To provide some degree of flexibility, the government can employ a mechanism to regulate deviations or alterations to the rules, subject to public debate and formal oversight.

Investing in sustainable development

PRECEPT 9

The government should use revenues as an opportunity to increase the efficiency of public spending at the national and sub-national levels.

Resource revenues are an opportunity for governments to increase their capacity to undertake public spending, and to increase the capacity of the economy to absorb further investment. These efforts can clear the way for further investments that deliver high returns for the country, and allow for equitable enjoyment of these returns.

Manage spending policies to avoid economic deterioration

In countries with weak public spending bureaucracies and small economies, effective investment can be challenging. First, government bureaucracy may be too small to manage larger budgets, requiring more project selection and assessment. Second, high expenditure of resource revenues can affect the wider economy, causing inflationary pressures, and thus may reduce the value of the revenues. Third, resource extraction may increase inequality: leading to public calls for reform or, at the extreme, conflict. Finally, poor transparency and accountability can lead to high rates of leakage throughout the spending process.

Without active management, the inflow of revenues can harm rather than help a country. Fortunately, while resource revenues are a threat in this regard, they can also provide the opportunity to move countries out of a state of weak bureaucratic capability and build the absorptive capacity of the economy.

> Much cash has flowed into Chad's government treasury from resource extraction—70 percent of government revenues come from oil. However, rather than translating this into human development, money has instead been spent on security services totaling 18 percent of the budget. The result is a growing stock of debt and 184th in the ranking of countries in the Human Development Index.
>
> *Africa Progress Panel, 2013*

Improve public spending management

Improvement in public spending management can take the form of both an increase in the capacity to choose appropriate spending plans, and incentives for institutions to make decisions without political interference. In countries with low institutional capacity it may be politically easier to introduce improved, stricter management rules for new spending projects than to reform existing spending. Governments should aim for the following in their public financial management systems.

- Public, multi-year plans that allow coordination of spending projects, and greater certainty for the private sector
- Competitive, public and transparent procurement (if there is sufficient interest from bidders)
- Oversight and internal controls
- Pre-approval measurement of the costs of major expenditures against their likely social and economic benefits
- Public, independent audits of spending projects, for both oversight and to help government improve its spending processes
- Expenditures made on-budget rather than through savings funds or equivalent institutions, to ensure the official checks are applied.

Invest in public investment processes and in eliminating supply bottlenecks in the economy to reduce the cost of investment projects.

> Nigeria reformed its public procurement process in 1999. Previously, on average US$300 million was lost each year in corrupt practices. Since reform the federal government has saved an estimated US$1.5 billion between 2001 and 2007 in the form of reductions contract prices.
>
> *Ngozi Okonjo-Iweala and Philip Osafo-Kwaako, 2007*

> In most African countries, a lack of infrastructure is a major constraint on doing business, depressing firm productivity by about 40 percent.
>
> *Álvaro Escribano, J. Luis Guasch, and Jorge Pena, 2010*

Resource extraction, and the investment and spending it generates, can often have the indirect effect of driving up the costs of public investment to levels higher than global norms. Proactive public policy can reduce these costs and improve the economy's capacity to absorb increased investment.

PRECEPT 10

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

Using resource revenues to grow the domestic economy depends crucially on significant increases in private sector investment—from large-scale infrastructure to smallholder farms yet, encouraging sustained growth beyond resource extraction has been a problem for many resource-rich countries.

First, without countervailing government action, large capital inflows may lead to an appreciation in the domestic currency, resulting in reduced competitiveness and a deterioration of domestic manufacturing and export sectors—a phenomenon known as "Dutch disease." If such consequences are left unaddressed, private investment in these export sectors may shrink. Furthermore, the cost of investing in other domestic sectors may rise. This can weaken economic growth and leave the economy more exposed to commodity price volatility since the extractive industry becomes an even greater share of the economy. *{See also Precepts 7 and 8 on the impact of large revenue flows into an economy.}*

Second, to increase the growth impact of resource revenues, public investment must respond to private sector needs. This creates a key role for government to increase the domestic economy's capacity to absorb resource revenues and leverage private sector investment. Working in partnership with the private sector is essential to the provision of complementary economic inputs: for example, government spending on schools and hospitals provides a more productive supply of workers for companies.

Establish an enabling environment for private investment

The government should provide an enabling business environment without targeting any specific industry. This includes reforms to improve the regulation of capital, land and labor markets; the provision of infrastructure and public goods; and social policies to raise the productivity of workers. In particular, reducing bottlenecks in the economy can lower private investment costs and improve the capacity of the economy to absorb further investment.

Small, low-income countries are often characterized by small markets dominated by monopolies and cartels, which can systematically elevate the price of capital and equipment, deterring investment. Active policies to encourage new entrants can help to dismantle these cartels. These policies might simplify the process by which businesses are established, or enlarge the market by integrating regionally and removing non-tariff impediments to region-wide marketing of imported equipment.

Two sectors merit special attention: construction and finance. In the construction sector, buildings and other structures are likely to be an important investment for urbanizing countries. However, importing bulky construction materials such as cement is prohibitively expensive, so businesses will be eager to source from domestic suppliers where available. Small economies with previously low investment often have high unit costs of construction, and a sharp increase in a demand for construction can result in these costs rising further. Working through the construction sector value chain and addressing bottlenecks, and dismantling cartels and monopolies in construction, can help to reduce these costs.

For those construction goods that cannot reasonably be produced domestically and must be imported, a reduction of specific tariffs can be helpful. While this may lead to a loss of customs revenue and protection for domestic suppliers, decision makers should weigh this against the benefits of higher public and private infrastructure investment.

A progressive financial sector is also important. As firms grow and look to increase their investment in the domestic economy, they will encounter two financial constraints. First, investment requires upfront capital. Second, as a firm grows, planned output for the year ahead will be higher than the sales achieved in the previous year, resulting in a shortfall in the funds required to produce future output. Therefore, firms will also require greater working capital financing. For both of these reasons, demands for funds (and the associated services) from the domestic financial sector can increase rapidly in a growing economy. Policies targeted at strengthening and expanding the financial sector can help to reduce bottlenecks; injecting public revenues into the financial sector can alleviate bottlenecks in the short-to-medium term while longer-term policy measures are put in place.

Decide whether to provide targeted support to business

Resource booms create both the risk of an over-dependency on the extractive sector, and the opportunity to promote the rest of the economy, diversifying away from extractives.

Overall, the establishment of an enabling business environment, as discussed above, can support diversification by facilitating increased investment in a variety of sectors beyond resource extraction. In addition, government may directly promote specific sectors or industries, or promote domestic value addition in the extractive sector. However, such policies carry risks, such as the politicization of sector selection, and the emergence of uncompetitive, protected firms. Unwinding this protection can also be problematic if it creates powerful vested interests, and so it may be better to avoid such policies in the first place.

If the government chooses active policies despite these risks, it should consider two principles:

- There should be a credible expectation that investment will attain long-run commercial viability. Investments that fail this test are likely to destroy rather than add value, and will drain public funds.
- Government support should be linked to success, not failure. Government should avoid open-ended support packages. Support should involve credible criteria for termination in the case of continuing poor performance. Lobbying by interested parties is frequently an obstacle to reasoned termination, so government should make decisions at a high level and in consultation with a wide section of society—consumers and taxpayers as well as business interests.

Decide whether to use local content regulations

Extractive industries can provide the impetus for economic growth through demand for domestic goods and services, as well as through the transfer of international business knowledge. The government should implement policies that provide a general enabling environment for businesses and help enhance the quality of the labor force across industries to help the private sector engage with the extractive industry.

> Using revenues primarily from its diamond industry, Botswana has consistently spent over five percent of its GNP on education since the mid-1970s. The result today is universal primary education and a secondary gross enrolment ratio of 82 percent, double the African average.
>
> *United Nations Educational, Scientific, and Cultural Organization, 2012*

Where these general policies are not sufficient, government may consider enacting specific regulations on the amount of local content in extractive companies' inputs. For instance, governments can require international companies to develop a package of local sourcing and knowledge transfer as a part of their bids for concessions or to provide services to concessionaires; or the government could stipulate such a package in post-award negotiation. Government may wish to protect domestic suppliers from global competition if they are not sufficiently competitive to supply the extractive industry, however, such measures should be temporary and linked to a defined plan for domestic suppliers to eventually compete on an equal footing.

The government may also wish to facilitate the transfer of technology and skills from extractive companies and their international suppliers to local firms. Training facilities, and investment in research and development, among other schemes, can enhance local business capacity to meet company demand. Such schemes may substantially benefit from close collaboration with the extraction companies themselves. Government may also enact minimum local employment requirements at the manager and employee levels, and strengthen these requirements with a system of monitoring and reporting, alongside penalties or incentives.

However, these local content policies are unlikely to be a replacement for policies to provide an enabling environment for businesses and workers, and should instead be implemented in conjunction with general economic reform. Moreover, the long-term sustained future of a local industry based on a depleting asset lies in continued resource discoveries, or in the eventual ability of local companies to compete in foreign markets. The government must be aware of this risk. While encouraging participation in or supply to the extractive industries, government should promote diversification of the economy from the outset. In this context, authorities must consider the types of domestic capacity that will be developed from "extractive experience," so that they can then focus on those capacities that are transferable to other, more sustainable sectors.

Choose whether to encourage downstream operations

Resource-rich countries should evaluate opportunities for downstream activities, such as petroleum refining. A country may face urgent unmet needs for energy and resources vital to livelihoods and economic activity, and extracted resources can provide an opportunity to meet those needs and support economic development. Governments sometimes consider domestic processing of resources a priority investment. Whether the government should promote domestic participation in downstream industries depends principally on weighing any savings on transportation to and from a foreign refinery, and other potential benefits, against potential downsides to state support for the domestic downstream industry. These include the opportunity cost of public funds used in highly-capital intensive processing plants; dependence on imported skills and equipment; and the potentially limited job creation relative to other industries.

For bulky commodities, or where there is significant local demand for the commodity, the case for developing downstream industries is stronger. Natural gas is particularly noteworthy because of its linkages to power generation, a prerequisite for economic development. Gas generally has high transport costs, and therefore has the potential to be a competitive supplier to local power generators. Gas-powered generation is also lower in capital intensity compared with alternatives such as oil, coal, and nuclear, as well as hydropower and other renewables; use of gas can also facilitate a transition to low-carbon energy technologies. In addition, a system to feed a domestic market ensures that excess gas resulting from oil extraction is used safely, efficiently and on an environmentally sound basis.

International foundations for resource governance

PRECEPT 11

Companies should commit to the highest environmental, social and human rights standards, and to sustainable development.

Private sector companies in extractive industry projects should take steps that go beyond minimum legal requirements to respect the highest environmental, social and human rights standards; avoid corruption; contribute to sustainable development outcomes; and make public and accessible relevant project information.

Companies should commit to preventing, reducing and remediating any potential negative environmental, social or human rights impacts of their activities; and they should be accountable to the host government for these commitments. They should also require their partners, contractors and subcontractors make similar commitments. These include the assessment and management of potential local and regional impacts of the project, including impacts uniquely experienced by people of various races, ethnicities, genders, ages or other such traits. Both governments and companies should fully account for the rights of indigenous peoples in particular. Where free, prior and informed consent to extraction is required by law, companies must obtain consent ahead of any work taking place on indigenous lands, and should furthermore meaningfully engage and consult with local communities that may be significantly affected by extractive operations. Companies should ensure that funds are available for these commitments throughout the life cycle of the project, planning ahead for periods of low or no revenue, such as a when the extraction project closes.

Abstain from corrupt practices

Multinational companies should act in accordance with national law, and international agreements and norms, which 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. *{See also Precept 2 on accountability.}*

Contribute to sustainable development outcomes

Companies should support the host state's efforts to maximize potential benefits arising from extractive activities. For example, if local content development is appropriate in the country, governments may work with companies to provide the long-term commitments necessary to spur investment in local industry. Company cooperation may also come in the form of training and employment initiatives to improve the quality of local suppliers. Such partnerships are vital for reducing discord and strengthening capacity. *{See also Precept 10 on economic development from local content.}*

Where companies provide ancillary goods or services such as rail or road infrastructure, which are not directly related to the extractive activity or to mitigating its impacts, they should do so in a manner consistent with the operating standards of the extractive project and ensure the maintenance or responsible handover of such goods and services beyond the life cycle of the project.

With respect to contractual stability, government assurances to companies should be limited to non-discriminatory treatment clauses. Companies should not ask for, expect, or accept provisions for exemptions or compensation for changes in the statutory or regulatory framework related to human rights, environmental controls, health and safety, and labor.

Provide relevant project information

Companies should support and comply with public disclosure requirements. These include the contracts between government and companies, which should clearly state the financial terms in an easily understandable manner. The only justifiable exception for time-bound confidentiality relates to businesses' proprietary information, which could directly affect the position of one of the parties in a concurrent or imminent negotiation. Companies should make readily available any reports regarding potential impacts on people, their internationally protected human rights, or the environment, including relevant assessment data, and prevention, mitigation and remediation plans. Governments and companies should work together to ensure that information is available in a timely, accessible and usable manner. *{See also Precept 2 on transparency.}*

PRECEPT 12

Governments and international organizations should promote an upward harmonization of standards to support sustainable development.

Governments and international organizations that finance, or influence, the policies affecting extractive industries play a vital role in supporting the decisions made by resource-rich governments. In addition to national regulators of countries in which extractive companies are domiciled, such international organizations include, but are not limited to the World Bank and International Monetary Fund (and their respective lending agencies); aid donor governments; the Organization for Economic Co-operation and Development; United Nations agencies; export credit agencies; organizations such as the African Union, the European Union, G8 and G20; and the global finance community. International civil society also plays a key role in maintaining pressure on these actors to improve their policies as well as in the monitoring of states and companies. {*See also Precept 2 on disclosure requirements.*}

Following are the key areas in which the international community can enhance the governance of resource extraction around the world.

Promote, monitor and enforce public disclosure requirements of the extractive industry

Governments, international organizations and other actors can improve transparency by establishing and enforcing a set of international standards for financial and accounting records, as well by disclosing contractual terms. Public disclosure of information throughout an extractive project, from exploration licensing to project clean-up, is a vital mechanism for helping citizens and investors to hold governments and companies to account. In addition to legislating for global mandatory reporting requirements, these organizations should support the implementation of the Extractive Industries Transparency Initiative in resource-rich developing countries as a complementary, voluntary standard that promotes dialogue among stakeholders at the national and international levels.

Ensure that extractive industry projects comply with internationally recognized human rights standards

Governments should clearly set the expectation that all companies in their jurisdiction respect human rights—at a minimum those contained in the International Bill of Human Rights and the International Labour Organization's Fundamental Principles and Rights at Work.

Under the UN Guiding Principles for Business and Human Rights (UNGPs), international organizations should promote and support host states in fulfilling their duty to protect human rights and ensure company compliance with the obligation to respect human rights in the context of extractive industry projects.

Actors that support the extractive sector financially or through guarantees should require due diligence procedures, consistent with the UNGPs that prevent potential and actual human rights abuses resulting from extractive projects. They should pay special attention to differential effects determined by gender, race, age and other factors.

Ensure that extractive projects comply with environmental and social standards

The extractive industries can have significant negative impacts on both the living standards of local people as well as on the local and global environment. International organizations should set, facilitate, incentivize or require appropriate project operating standards that limit such effects, including the assessment of impacts. Export credit agencies, as well as public and private lenders, should require

> Illicit financial flows are estimated to cost developing countries over US$1 trillion annually—US$10 for every US$1 received in aid.
>
> *Dev Kar and Devon Cartwright-Smith, 2009*

due diligence, as well as monitoring and reporting on compliance with international environmental and social standards. Many international organizations, including the UN and the International Finance Corporation, have recognized that indigenous peoples have special rights that must be protected. {*See also Precept 5 on social and environmental concerns.*}

Reduce illicit financial flows and corruption

International organizations must do more to reduce illicit financial transactions, and to curtail transfer-pricing abuse, use of tax havens, and other tax avoidance and evasion techniques. Such measures include banking regulation, and the confirmation of ownership in all banking and securities accounting. Asset-looting has been particularly prevalent in countries with large resource windfalls; international organizations should require and facilitate the freezing or recovery of stolen assets when malpractice is identified. International organizations should furthermore work together to reduce corruption and bribery, ensuring strong legislation and enforcement of measures to counter such practices. {*See also Precept 4 on tax abuses, and Precept 7 on revenue flows.*}

Support the exchange and extension of extractive industry skills

Many resource-rich developing countries have yet to accumulate the essential capacity to translate resource wealth into sustainable and inclusive development. International organizations and governments should play a significant role in helping to build the capacity of government, the legislature, media and civil society in these countries. Efforts should be both concerted and coordinated to maximize efficacy. Normative frameworks such as the Natural Resource Charter and the Africa Mining Vision can help various actors coordinate and harmonize approaches to resource governance.

Within all the areas identified, governments and other international organizations should work together to promote an upward harmonization of standards.

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