CHAPTER VI
THE POLICY CHALLENGE

There have been significant changes in the role of TNCs in the extractive industries since the 1960s, some of them triggered by policy shifts in host countries.[1] These firms operate in most of the mineral-rich countries today, under different contractual arrangements and to varying degrees (chapter IV). Many low-income countries have to rely on TNCs' capital, know-how and management skills for the extraction of their mineral deposits, but there are concerns related to some of the economic consequences of this reliance; a major issue has to do with the sharing of the revenues generated. There is also growing awareness of the need to address the environmental and social impacts of extractive activities, with or without the involvement of TNCs. Indeed, after decades of resource extraction, the transformation of dormant mineral deposits into sustainable development gains remains a demanding undertaking in many countries (chapter V).

This chapter takes stock of recent policy developments, at national and international levels, and considers policy options available to host developing countries to enhance their gains from TNC involvement. Section A discusses some of the government policies and actions needed to meet the governance challenge. They are not necessarily directly related to TNCs per se, but rather to the overall governance framework and to policies and institutions for the extractive industries in particular. Section B examines how countries regulate the entry and operations of TNCs in different extractive industries. Section C discusses ways in which countries might increase their share of the rents from the extractive industries by changes in their relevant policies and institutional frameworks, particularly their fiscal regimes; it also examines the implications of regulatory changes. Section D looks at ways of promoting linkages, skills development and technology transfer. Policies to address potential environmental, social and political costs are explored in sections E and F, and section G concludes.

A. The broader government policy and institutional framework

Government policies and institutions pertaining to extractive industries are a critical factor for ensuring sustainable development gains from mineral extraction, with or without TNC involvement (chapters III and V). Efficient management of a mineral-based economy requires well-developed capacities for governance and a commitment to the objective of sustainable development on the part of a country's leaders and policymakers (Auty, 2001b; Bergesen, Haugland and Lunde, 2000). However, in a number of mineral-rich countries, government policies may be aimed at short-term gains rather than long-term development objectives. Furthermore, the distribution and use of the host country's share of mineral revenues may pay little attention to development considerations. In the worst-case scenario, easy access to revenues from mineral resources can make governments less accountable to their constituents (Moore, 2000) and their actions more likely to be aimed at preserving the interests of a small governing elite.[2] The entry of TNCs in such countries can enable ruling elites to prolong their stay in power and misuse a country's assets, with limited benefits for the people at large.

As with other economic activities, it is important to develop and maintain a governance framework based on the rule of law, and supporting institutions that provide an environment in which companies have incentives to invest in productive activities. Beyond the overall governance framework, countries need institutions and policies geared specifically to the extractive industries. Key elements should include (ECA, 2004; Otto, 2006):

- A knowledge base of a country's mineral endowments through geological surveys. This is a prerequisite for mineral exploration (see for example Otto, 1995). Many African countries possess vast mineral reserves that have not yet been properly surveyed.[3] Governments also need an understanding of the relevant mineral industries and their importance in the national and global context. The better the knowledge base, the stronger the bargaining position of a government vis-à-vis private enterprises in general and TNCs in particular.
- A legal framework governing the exploration and exploitation of mineral resources that establishes mineral ownership rights. In most countries, the State is the owner of the minerals, in others the rights go with land ownership, and in yet others there are different ownership regimes depending on the mineral (ECA, 2004: 80).
- An administrative framework for the extraction of mineral resources. This involves the issuing of licences, defining under what conditions exploration or extraction may take place and developing mining-right cadastres (i.e. compilations of current exploration and mining activities in the country and their ownership) (Otto, 2006).
- Policies relating to the production of minerals that regulate the activities of industrial and artisanal mining, State-owned and privately owned domestic enterprises and TNCs.
- A system of revenue management. This concerns the sharing and distribution of the rents from mineral extraction. Depending on how they are managed, such rents can have both positive and negative consequences for an economy.
- Policies related to the health and safety of workers, protection of the environment and the rights of local communities.

There is no single formula to apply. Countries need to integrate their specific policies for the extractive industries into an overall development strategy, specifying the role they can play in national economic development. Given that mineral deposits will one day be exhausted, economic benefits from extractive activities need to be sustainable. To this end, an appropriate portion of the revenues from mineral extraction should be channelled into education, health, infrastructure and other forms of human capital formation and social infrastructure. The distribution of revenues needs to be in line with broader macroeconomic, industrial, trade, social and other policies and their underpinning institutions.

To avoid unequitable solutions, it is also important to engage all relevant stakeholders – governments, civil society, affected communities, labour unions, industry and international organizations – in the process of policy discussion and formulation. The distribution of revenues is a common source of social conflict, which can be mitigated by allocating a share of the revenues to provincial and other lower levels of government, especially in the local areas most directly affected. However, this requires that adequate governance systems and capabilities be developed at the level of local government as well.

The quality of the overall and sectoral policy and institutional framework affects the relative bargaining power of a host country vis-à-vis prospective investors, domestic as well as foreign. The willingness of companies to invest in a project depends on the risk-reward relationship (chapter IV). When risks are perceived to be high, TNCs may only be willing to invest in minerals they expect will generate large rents. A government can influence these risks and at the same time improve its bargaining positions. By providing better information on its mineral endowments it can lower exploration costs; through its regulatory and fiscal policies, it can reduce the financial risk; and by providing greater political stability, it can mitigate the political risk. Moreover, by developing its knowledge, information and negotiating capabilities, it can seek to eliminate the asymmetry that often prevails in these respects between TNCs and host developing-country governments.

B. Regulating the entry and operations of TNCs in extractive industries

Policies towards foreign involvement in extractive industries have changed over time and still vary considerably between countries and minerals. Approaches range from total prohibition of foreign investment to almost complete reliance on TNCs, with notable differences between the oil and gas industry on the one hand and the metal mining industry on the other, and also between different segments of their respective value chains. For those countries that are open to FDI or other forms of TNC

participation in extractive industries, the challenge is to regulate the entry and operations of TNCs in a way that maximizes development gains. TNC involvement is governed by various national laws, regulations, contracts and more informal institutions. Many countries have also entered into international investment agreements (IIAs) of relevance to TNC operations in extractive industries.

In the oil and gas industry, TNCs operate under arrangements which range from concessions to service contracts with State-owned oil companies. In the metal mining industry, TNCs mainly operate under concessions granted through exploration and mining licences. In both industries, the arrangements reflect an ongoing process through which governments seek to find the appropriate balance between the rights and obligations of the State on the one hand, and TNCs on the other.

1. Oil and gas: from "old-style" concessions to partnership agreements

National legislation governing the oil and gas industry defines which forms of TNC participation are permissible. Sometimes, different forms of participation are allowed for different types of TNC activities. Such legislation, which in certain countries has been written into the national constitution, typically authorizes the making of contracts to govern the operations of TNCs on terms consistent with the legislation.

As noted, until the early 1970s a small number of TNCs dominated global oil production, mainly on the basis of concessions. Against a relatively small cost, it gave TNCs the exclusive right to explore, produce and market the resources: a highly uneven financial bargain between a host government and a foreign company (Smith, 1991; Omorogbe, 1997). Moreover, the foreign company was granted rights for periods ranging from 40 to 75 years, and it had secure rights over large tracts of land, sometimes even extending throughout the country (Omorogbe, 1997: 58).[4] Many of these concession agreements ended with decolonization, the creation of OPEC and the widespread nationalizations that took place in the oil industry during the 1970s (box IV.4).

Nowadays, TNC activities in oil and gas extraction are regulated by different types of partnership agreements most often with State-owned oil or gas companies of host developing countries (Likosky, 2006). While there are similarities among these types of agreements, they also differ in important respects. The most relevant contractual arrangements today are modern concessions, joint ventures, production-sharing agreements (PSAs) and service agreements (box VI.1). As noted (table IV.1), among the main oil-producing developing countries, more than half of all known contracts with TNCs that were in force in June 2007 were PSAs. Joint venture and concessions accounted for another 41%, services agreements for 2% and other contractual forms made up the balance.

There is a qualitative difference between concessions, PSAs, joint ventures, and risk sharing agreements, on the one hand, and pure service contracts on the other. Under the former, the TNC assumes a greater risk and also has a share in the revenue, as set out in contractual clauses and legislation. Under pure service contracts, the company is remunerated by the host government for the specific services it provides.

It is difficult to generalize as to which contractual forms are the most beneficial for a country. Since countries vary in the quality of their resources and in their level of domestic expertise, one contractual form may be more appropriate than another for different projects within the same country. The effect of a given contract is determined by its content, which is based on negotiations between the State (often represented by a national oil or gas company) and the investor (or consortia of investors). For example, royalty and taxation rates will be contractually determined. The same often applies to issues such as local content, training, host government control over key decisions, the State-owned corporation's participation, and, more recently, human rights and environmental considerations.

All this implies the need for considerable negotiating skills on the part of governments to ensure a satisfactory outcome. In the oil and gas industry, it is typically the national oil or gas company in a developing country that is responsible for such negotiations. There are often significant imbalances between the skills of major TNCs and developing-country governments. A recent study of the Niger Delta illustrates the asymmetrical relationship with regard to environmental protection (UNDP, 2006b: 188):

> "The companies have several advantages over and above all the government regulating agencies. They have better quality and up-to-date maps, as well as satellite images and other remote sensing techniques, and sophisticated computer hardware and software for environmental data gathering, analysis and display."

The extent to which TNCs are involved in oil and gas extraction varies considerably by country (chapter IV). According to one estimate, in 2005 TNCs from developed countries had

unrestricted access to only 10% of the world's known oil reserves, mainly in developed countries and to another 7% through joint ventures with State-owned national oil companies (chapter IV). The remaining reserves were basically off limits to TNCs. Downstream activities including refining, petrochemicals, transportation and distribution are generally more open to foreign investments in many countries.[5]

In *West Asia*, most countries ban FDI in the exploration and extraction of oil and gas.[6] While the constitution of the Islamic Republic of Iran prohibits the granting of petroleum rights to foreign companies, it permits foreign investment in the form of buy-back contracts.[7]

In *Latin America and the Caribbean*, institutional reforms in the 1990s opened parts of the industry to private (and foreign) investment; they focused on exploration and production in new regions and deep waters or involved extraction from marginal or extra-heavy crude oilfields at high cost. The richest and most profitable oil deposits have remained in the hands of State-owned companies, but sometimes developed with the involvement of foreign TNCs.[8] Mexico, however, maintains its monopoly of the State-owned company, PEMEX in oil exploration and extraction (ECLAC, 2002: 143). In natural gas, countries in this region have opened to FDI to a greater extent, often offering incentives to foreign investors. In Argentina, Bolivia, Peru and Trinidad and Tobago, TNCs have been permitted to operate large gas fields alongside State-owned enterprises, while in Colombia and Venezuela they have been required to enter into agreements with State-owned enterprises.

African oil producing countries as well as *China* and *Indonesia* have involved TNCs in their oil industry through various PSAs,

Box VI.1. Common forms of contractual arrangements with TNCs in the oil and gas industry

Under *modern concessions,* foreign firms are granted the right to explore, produce, and market resources from a specific geographic area. Thereby they assume all the risks in case of failure and reap the rewards in case of a commercial find. The rewards are a function of the level of production, price, taxes and other fees. Foreign firms usually have the right to choose applicable laws and forums for dispute resolution. Concessions are long-term and may be renewed.

Under a *joint-venture* arrangement, the foreign company does business jointly with a State-owned company. Partners share the exploration and production costs in proportion to their equity stakes. Usually the State-owned oil company has a majority interest. As in the cases of concessions and PSAs, the specific legal arrangement determines the extent of foreign control. However, the joint venture provides a corporate, structured means for technology transfer and shared decision-making. It may enable a host country to put a premium on technology transfer and thereby pursue the aim of reducing the reliance on foreign companies. Inevitably, the prospect of such independence runs counter to the interests of TNCs. As a result, the extent of technology transfer built into the joint venture is negotiated, and varies depending upon the bargaining strength of the national government.

In *production-sharing agreements*, foreign firms bear all the exploration costs and risks. If resources are not found, the company is the loser. However, if commercially exploitable resources are discovered, it has the right to recoup sunk costs and an agreed share of the profits. The arrangement may be useful if a host government needs a company to undertake the risk of exploration. For instance, a TNC might find such an arrangement more useful than a modern concession if it is uncertain about its ability to recoup its sunk costs within the strictly definite time period provided for by the modern concession. The first PSA was signed by Indonesia in 1961 with Asamera Oil Corporation (Canada).[a]

Risk service contracts resemble PSAs and address situations in which a host government seeks to utilize TNCs to bear the risk of exploration. If commercially exploitable resources are discovered, the TNC receives cash remuneration for its efforts in addition to a possible stake in the subsequent enterprise. If no discovery is made, it incurs all the losses. Under *pure service agreements* foreign firms supply the host country with services and know-how related to exploration and/or development. In return, they receive remuneration in accordance with the terms and conditions of the contract, regardless of whether there is a commercial find or not. Hence, in this case the government bears the risk. To rely on such a service contract and assume the principal responsibility for a project, a host government must have sufficient technological know-how and access to capital.

The distinction between these various types of arrangements may not always be obvious. The parties may use different names for contracts with similar terms and conditions, or conversely, use the same name for contracts with different terms and conditions (Bindemann, 1999). What form is the most appropriate for a given country or extraction project depends on a number of parameters, including the maturity of the oil industry, the fiscal regime, import or export dependency, geological aspects, costs and the regulatory framework.

Source: UNCTAD, based on Smith, 1991; Bindemann, 1999; and Omorogbe, 1997.

[a] See, for example, Fabrikant, 1975; and Machmud, 2000.

accompanied often by joint ventures or other types of capital participation (chapter IV). In the *Russian Federation*, the State-owned enterprises – Rosneft in oil and Gazprom in gas – have occasionally partnered with TNCs when finance or the latest technology have been needed to develop difficult or remote fields.

Recent policy changes in a number of oil-producing countries have tended to further limit the extent to which TNCs can engage in oil and gas exploration and extraction (see section C below). Meanwhile, the noted rise of new oil and gas TNCs from emerging economies (chapter IV) implies greater competition for those oil and gas projects that are still open to TNC participation.

2. Codes and mining agreements governing FDI in metal mining

National legislation governing the mining industry defines which organizational forms TNC participation may take in metal mining. In contrast to the situation in the oil and gas industry, concessions are the predominant form of TNC participation in metal mining in developing countries. Mining companies obtain licences to explore for and produce minerals and have the right to exploit the mineral deposits by virtue of such licences. Many mining laws allow TNC operations to be governed by mining agreements on terms consistent with the legislation, especially in the case of large mining projects (Barberis, 1999). In some countries, a mix of national and sub-national laws governs the mining industry.[9]

As in oil and gas, regulatory frameworks have changed over time, and are still evolving. In Africa, for example, after a period when State ownership was dominant, a process of deregulation and privatization started in the 1980s. Increased liberalization, deregulation and privatization were promoted in African economies in general, including by international financial institutions, as a means of correcting macroeconomic imbalances, stimulating economic recovery and establishing a more sustainable growth path. Promotion of FDI was an integral part of this strategy and often involved the offer of tax incentives. Among the main reasons advanced in support of the institutional reforms was the under-performance of the mining industry in many developing countries, the absence of interest in or capabilities for exploration and investment, and rising external debts (UNCTAD, 2005b). A common feature in the 1990s was the enactment of new mining codes, or revisions of the existing ones,[10] specifically designed to provide assurances and better conditions for investors (box VI.2).

As part of mining code reforms, restrictions on foreign ownership of metal mining operations were eased or entirely abolished in most developing countries. Most countries in Latin America and the Caribbean introduced substantial changes in their mining legislation in the 1990s (Albavera, Ortiz and Moussa, 2001).[11] In Peru, State dominance was reversed in 1991-1992 through new legislation which made the promotion of investments into the mining industry, and the privatization of State-owned mining as well as oil companies a matter of national interest.[12] The Argentinean mining code was radically changed for similar reasons. In Brazil, Indonesia, Papua New Guinea and the Philippines, TNCs were allowed a 100% equity ownership in mining ventures (Otto, 2000; Barberis, 1999). Chile also opened up to FDI, but retained State ownership of Codelco.

Common features of current mining laws include increased security of tenure, open access to historical exploration reports, streamlined and transparent exploration application procedures, geographically defined exploration areas, provision for dispute resolution and methods to resolve conflicting land uses (Otto, 2006: 113). A number of countries stipulate conditions related to the employment of domestic or foreign employees in the metal mining industry (Law Business Research, 2005).[13]

Moreover, with a view to providing additional certainty to investors, many developing and transition economies went beyond opening up to foreign investment in extractive industries by locking policy changes into fiscal stability clauses[14] as well as by signing various international investment agreements (IIAs). The most important IIAs in this context were bilateral investment treaties (BITs) on the promotion and protection of foreign investment.[15] In many mineral-rich countries, the number of BITs has increased rapidly during the past decade (table VI.1).[16]

It is important to place these regulatory changes in perspective. The liberalization efforts of the 1980s and 1990s were undertaken against the backdrop of historically low mineral prices, and in many countries with large external debts, which saw a need to attract foreign investment as a means of increasing exports and earning more foreign currency.[17] Countries that had previously nationalized the mining industry had to convince foreign companies that new investments would not meet the same fate. In hindsight, and in view of current high mineral prices, some of the mining codes then adopted and some mining agreements negotiated may have been overgenerous to foreign investors. It has been argued that liberalization

Box VI.2. Three generations of mining code reforms in Africa in the 1980s and 1990s

The reform of regulatory and legal frameworks in the mining industry in Africa since the 1980s has contributed to a more welcoming institutional environment for FDI. Three generations of mining code revisions in African countries have been identified (Campbell, 2004).

The first generation in the 1980s involved a number of variants of State withdrawal or privatization, which were deemed necessary to attract FDI. In Ghana, for example, an active policy to divest the Government's shares in State-owned mines and attract FDI into the mining sector involved the streamlining of the legal and institutional framework. Policy changes initiated in 1986 included the establishment of the Minerals Commission to act as a one-stop investment centre for mining, the enactment of the first comprehensive mining code – the Minerals and Mining Law – and the promulgation of the Mineral (Royalties) Regulations, as well as the Additional Profit Tax Law. These laws formed the basis for providing generous tax incentives to investors in mining. While the generally applicable corporate tax rate was 55% in the mid-1980s, the mining industry rate was fixed at 45%. Front-end charges, which had previously amounted to 12% of the total value of profits from minerals extracted, were reduced to 3%-12% (depending on profitability).

The second generation of reforms (in the early to mid-1990s) involved an increasing recognition of the need for certain forms of regulation, notably with respect to the environment, with responsibility for this assigned mainly to private actors. In Guinea, for example, among the various aspects of increased liberalization (as illustrated in Article 16 of the country's 1995 Mining Code), protection of the environment and the responsibility for the monitoring and enforcement of environmental laws were assigned to the operating companies. In addition, its new mining policy aimed at restoring competitiveness through a mining industry tax system and it provided a stable tax regime through the duration of the assigned mining rights.

The third generation of institutional change dates from the end of the 1990s. It explicitly recognized the role of States in facilitating as well as regulating FDI and was largely encouraged by the World Bank. Examples of this generation of code revisions can be found in Mali, Madagascar and the United Republic of Tanzania. The 1999 Mining Codes of Mali and Madagascar included special provisions for the protection of the environment. However, neither country was well equipped to enforce the observance of the environmental standards by private operators.[a] Following a five-year sectoral reform project financed by the World Bank, a new mining code was also introduced in the United Republic of Tanzania in 1998. It allowed 100% foreign ownership, introduced guarantees against nationalization and expropriation, and permitted unrestricted repatriation of profits and capital. As in Mali and Guinea, the revised mining code offered a royalty rate of 3% of the value of exports, and a variety of incentives such as tax exemptions and a waiver on import duties.

Many of the mining code reforms took place at a time when metal prices were thought to be in secular decline and countries struggled to attract mining FDI. In view of the often disappointing performance of State-owned mining companies and the need to repay the external debt, the reforms sought to reduce the role of the State as operator of mining activities and to create an environment favourable to FDI. And FDI did increase. In the United Republic of Tanzania, for example, annual FDI inflows surged from virtually zero in 1990 to more than $500 million in 2000, mainly related to gold mining. In Ghana, annual inflows were about 10 times higher at the end of the 1990s than they had been in 1990.

Source: UNCTAD, based on Campbell, 2004 and 2006.

[a] See "African mining codes questioned", *Mining Journal*, London, 14 February 2003.

of fiscal and regulatory frameworks of extractive industries was introduced without the necessary safeguards for securing long-term development objectives (Campbell, 2004; UNCTAD, 2005b). Another contentious issue arises from the fact that the tax conditions were locked in through stabilization clauses and investors were provided enhanced protection in IIAs at a time when the bargaining position of countries was particularly weak.

In response, several countries have recently made their regulatory frameworks governing TNC participation more stringent. This may be seen partly as a counter-reaction to the liberalization efforts of the 1990s, partly as a reflection of the increased bargaining power of countries in the current period of high mineral prices. Already a decade ago, some experts were predicting that such a counter-reaction to liberalization would occur. To quote from one expert: "When conditions change, it is reasonable to assume that the developing countries, will again make efforts to assert 'permanent sovereignty' over their natural resources in whatever way possible and that since it is their second time around, they will achieve more success. Any supposed 'incentives' or stabilization measures which have come into existence during this period and which appear to run counter to nationalistic ideals are likely to prove problematic in the long run" (Omorogbe, 1997: 30). Recent legislative changes in a number of countries seem to confirm the validity of that prediction.

Table VI.1. Number of BITs concluded by developing and transition economies in which oil, gas and other minerals account for a significant share of total exports,[a] 1995 and 2006

Countries most dependent on fuel exports			Countries most dependent on exports of non-fuel minerals		
Economy	1995	2006	Economy	1995	2006
Algeria	5	36	Guinea	3	18
Nigeria	5	19	Botswana	0	9
Libyan Arab Jamahiriya	2	18	Suriname	1	3
Yemen	5	34	Zambia	2	12
Kuwait	16	46	Jamaica	9	16
Angola	0	5	Niger	3	5
Qatar	0	34	Chile	24	52
Saudi Arabia	2	16	Mozambique	1	21
Brunei Darussalam	0	5	Papua New Guinea	5	5
Azerbaijan	4	27	Congo	5	9
Iran, Islamic Rep. of	8	55	Ghana	8	26
Venezuela	13	26	Cuba	12	60
Turkmenistan	12	19	Peru	23	31
Oman	8	26	Rwanda	3	34
Gabon	4	12	Uzbekistan	16	41
Sudan	4	25	Georgia	12	27
Syrian Arab Republic	6	33	South Africa	8	36
Bahrain	1	19	Bolivia	16	22
Trinidad and Tobago	4	10	Kazakhstan	15	35
Kazakhstan	15	35	Bahrain	1	19

Source: UNCTAD (www.unctad.org/iia) and table III.5.

[a] Countries were ranked according to the share of fuel and non-fuel minerals in their exports during 2000 and 2004. See note "a" to table III.5.

C. Arrangements for rent-sharing

The diversity of arrangements adopted by different host countries with respect to the sharing of rent between governments and TNCs in extractive industries indicates that there is no one-size-fits-all formula. Finding the right balance is not easy, as witnessed by the many changes that have taken place over time. This section looks at recent trends concerning changes in the ownership and fiscal regimes adopted by host countries aimed at reaping greater benefits from TNC-driven mineral extraction. The implications of unilateral government action are discussed, and the use of progressive taxation is highlighted as a possible way of reducing vulnerability to price volatility.

As government revenue is among the most important benefits from mineral extraction (chapter V), it is not surprising that policymakers devote much attention to finding an institutional framework that ensures the government a satisfactory share in the profits from this activity. Optimizing a fiscal system for the extractive industries is difficult: if taxation is too low, it can result in foregone tax revenue for the host country; if it is too high, it may suffocate the industry and provide little incentive for companies to invest. Every country has followed its own path, depending on various factors. As a result, the share of resource rents captured by host governments varies considerably from country to country and also between different industries (box VI.3; chapter V).

1. Recent policy changes

As a result of higher mineral prices, a number of governments have taken steps to increase their share of the profits generated by extractive activities, including those with TNC participation, amending the fiscal system or contractual relations. For example:

- *Algeria* promulgated regulations imposing a windfall tax on production values at prices exceeding $30/barrel of oil in December 2006. The tax rate ranges from 5% to 50% depending on the total output.[18]
- In *Bolivia*, the Government passed the new Hydrocarbon Law 3058 in 2006, repealing the law that had privatized the sector a decade earlier. As a result, control over oil resources was transferred to the State agency, Yacimientos Petroliferos Fiscales Bolivianos (YPFB). The new law cancelled contracts and required the negotiation of new ones on terms more favourable to the Government including higher tax and royalty rates.[19] The Minister of Mining has also proposed that the tax rate be raised from the current level of about 5% to at least 30%.[20]
- In *Chile*, the Chamber of Deputies has approved a 4%-5% special tax on gross operating profits of mining companies (box VI.4).
- *China* imposed a special upstream tax levy in 2006 on oil companies at rates between 20% and 40% for oil prices in excess of $40/barrel of oil. This action prompted ConocoPhillips to invoke the international arbitration clause in its PSA.[21]
- *The Democratic Republic of the Congo* is to review 60 mining contracts that were signed over the past decade and that may result in contract renegotiations with the aim of reaping greater development gains from mining.[22]
- In *Ecuador*, a new hydrocarbons law of 2006 increased the share of revenue accruing to the Government from oil and gas projects, prompting a series of contract renegotiations and disputes (*WIR06*).[23]
- In *Mongolia*, a windfall profit tax was introduced in May 2006 on key commodities. The new tax rate was set at 68% on profits from copper and gold, after deduction of extraction costs, and only if global prices exceeded a specified level.[24] Royalty rates for all metallic minerals were also doubled from 2.5% to 5% in 2006. Moreover, the Minerals Law was amended in July the same year, so as to give the national Government the

Box VI.3. Different ways of sharing the rent

Revenue for the government from *oil and gas* extraction by TNCs can be obtained in different ways. The fiscal terms may be regulated by legislation and through specific contracts. Fiscal provisions may comprise pre-production as well as post-production payments. The former may include bidding fees, signature bonuses and various rental fees, which allow a host country to earn some revenue even before any discovery has been made.[a] Post-production payments include taxes, royalties, profits from the sale of oil and dividends from State participation in joint ventures (Omorogbe, 2005). The precise composition of the fiscal package varies by country and project. For example, in Nigeria, the royalty tax rate is the highest (20%) for onshore activities, with a gradual reduction depending on the depth of an offshore project (Ibid.). In Peru, the royalty rate for oil varies by contract, between 20% and 25% of the gross revenue, and it is 37.2% of gross revenue on natural gas and liquified natural gas of the Camisea project (Perupetro, 2005).

The fiscal regimes governing *metal mining* activity similarly vary considerably (Otto et al., 2006). The main distinction is between taxes based on the mineral deposit, or on the inputs or actions needed to exploit the deposit (*in rem* taxes), and taxes that are related to the net revenue generated by the resource extraction (*in personam* taxes). The most common among the former taxes are royalties, property tax, withholding tax and various fees, while for the latter, they include income tax, capital gains tax and withholding profit tax.

Each tax has its merits and drawbacks, depending on what policymakers are seeking to achieve. For example, a royalty tax offers stability and predictability in government revenues, it is easy to administer, less prone to corruption and involves little risk of tax evasion. On the other hand, it adds to production cost, and thereby reduces the attractiveness of a given project at the same time as it, by adding to the variable costs may make marginal reserves sub-economic. A tax on income or profits generates revenues only if and when production becomes profitable, and in principle does not distort resource allocation or investment decisions. On the other hand, such taxes are more challenging to administer and monitor. They can also induce companies to report low profits and to make use of transfer pricing (Otto et al., 2006). Countries with relatively underdeveloped institutions and weak administrative capabilities may be more inclined to rely on royalties or various fees. Profit-based systems may be more suitable in countries with more sophisticated tax regimes. For similar reasons, developing countries may also find it convenient to avoid systems that require burdensome negotiations with the foreign investor. This point is particularly relevant in the case of mining, where the negotiations, unlike for the oil and gas industry, are handled by a ministry rather than by a State-owned company.[b]

Source: UNCTAD.

[a] Such pre-production payments can be significant. For example, a new record signature bonus was reached when Sinopec (China), in 2006 announced that it would pay a $2.2 billion signature bonus to get the right to explore for oil in two Angolan blocks (see www.globalinsight.com/SDA/SDADetail5873.htm).

[b] State-owned oil or gas companies may have an advantage over ministries in negotiations with TNCs since they often have a cadre of trained personnel with more effective negotiating skills (Land, 2007).

right to acquire a stake of up to 50% in a strategic asset discovered with State funding, and up to 34% interest in a deposit if the exploration was funded privately.[25]

- *Peru* in 2004 introduced a 1%-3% royalty tax based on mining companies' annual sales. There is a political debate in the country as to whether the tax terms granted by previous governments should be renegotiated.[26]
- In *the Russian Federation*, the Government is in the process of introducing new limitations on foreign participation in the share capital of strategic companies and in the exploration and extraction of strategic deposits (especially large oil and gas fields). The new subsoil law, submitted to parliament in 2005, is expected to enter into force in late 2007 (RIA Novosti, 2007a and b; Liuhto, 2007).[27] Similarly, since 2003, the Government has renegotiated the terms of almost all TNC-related oil and gas contracts (OECD, 2006), resulting in an increase in the Government's share in the returns from projects, and higher taxes and royalties.[28]
- *South Africa* was revising its mining legislation in June 2007 with a view to increasing its revenues and development benefits from mining. The draft legislation proposes a royalty rate between 1% and 6%, depending on the type of mineral.[29]
- *Venezuela* has decided to entirely re-write the rules on equity participation and taxation to reduce foreign oil company interests and increase the taxes imposed on them. In 2001, the Government passed a new Hydrocarbons Law, which raised royalty rates and required that future investments would be limited to 49% ownership of a joint project, while a 51% controlling share was reserved for the State-owned oil company, PDVSA.[30] In 2006, risk service contracts with 17 foreign companies in Venezuela were transformed into joint ventures with PDVSA. A Presidential Decree in February 2007 expropriated projects in the Orinoco River Belt.[31] In doing so, it

Box VI.4. Chile's new mining tax

Fiscal revenues from the copper mining industry have been a source of intense debate in Chile over the past several years. For the period 1985-2002, only one of the large private mining enterprises had paid any significant income taxes (chapter V). Comparative fiscal studies have shown that Chile offered a tax system that was among the most attractive for investments in mining.[a] It did not impose any royalty fees. Furthermore, it allowed accelerated depreciation, the possibility to accumulate indefinitely all losses as fiscal credits, extremely high loan-to-equity ratios while taxing interest payments at a much lower rate than profits.[b] The fact that the contributions by the State-owned Codelco to fiscal revenues in the period 1991-2003 were 3.4 times higher than those of the 10 major foreign mining companies together (while its production volume in tons was lower) evoked a strong debate.

In response, the Government introduced a specific mining tax. It was approved in a year when the price of copper had increased substantially and revenues had grown. The new tax came into effect in February 2006 with a progressive tax rate determined by the taxpayer's gross sales of minerals. Enterprises that were covered by tax stability in the legal framework that applied before December 2004 did not have to pay this tax. However, they were given the option to switch to another tax stability scheme contained in the new legislation.[c]

Source: UNCTAD.

[a] See Albavera, Ortiz and Moussa, 2001 and Otto, Batarseh and Cordes, 2000.

[b] In 2001 the Government introduced a rule that if the debt-to-equity ratio was higher than 3, the excess amount of loans would be subject to the tax rate applied on profits.

[c] A new article in Chile's Foreign Investment Statute (DL 600) states that mining investments of $50 million or more may, for 15 years from the start of commercial production, claim stability of (a) the specific mining tax, including its rate and tax base and the future imposition of any other tax assessed on income from mining activities, including royalties or similar charges; and (b) the mining licence rate and method of determination.

formed mixed corporate entities charged with exploiting resources, and in which PDVSA is to hold majority equity. The decree also provided that any disputes regarding the Orinoco projects would be heard in Venezuelan courts according to Venezuelan law (Dugan and Profaizer, 2007).

- In *Zambia*, the annual budget announced in February 2007 increased mining royalties and tax rates and curtailed the provision of tax holidays (Land, 2007).[32]

The introduction of new taxes, royalties or price ceilings has also been discussed in Argentina, Chad, Mauritania and other countries.[33] Regulatory changes have similarly been observed in developed countries. Western Australia, for example, has introduced a royalty on gold production, and in the United States there have been calls for Federal royalties in the mining industry (Otto et al., 2006). In 2006, the United Kingdom introduced a windfall tax on North Sea oil profits to reflect the structural shift towards higher oil prices, and the supplementary charge to corporation tax was increased from 10% to 20%.[34]

2. Implications of recent policy changes

Changes by governments to laws and contracts governing foreign investment in extractive industries are not a new phenomenon. In the 1970s and 1980s, the shift from traditional concessions to modern partnership-based agreements often involved the renegotiations of contracts and/or nationalizations.[35] Some of the changes led to legal disputes, and the setting up of special *ad hoc* arbitral tribunals by the parties concerned. However, the host country that had nationalized in a number of cases refused to appear before the tribunal. This had the effect of undermining the legitimacy of the subsequent decision, which would be made on the basis of the submissions of the investor alone (Muchlinski, 2007).[36]

Experts disagree over the advisability and legitimacy of renegotiations, and also whether these advance a country's developmental goals. Some argue that the renegotiation demands are likely to run counter to the interests of developing countries and should therefore only be pursued in exceptional circumstances (Kolo and Wälde, 2004). Others believe that the renegotiations can be justified, as in Bolivia, as an "attempt to represent the interests of the poor people of this country",[37] and that the privatizations which recent renegotiations sought to overturn in that country were themselves not legally valid, as they had not passed through that country's Congress as required by law.

The tension in international law arises essentially from the conflicting needs for contractual stability (sanctity of contract) and contractual evolution (responding to a "fundamental change in circumstances").[38] Contracts that include stabilization clauses freeze the law governing the contract to the one in force at the time of

its formation. The inclusion of such clauses serves to ensure that the wishes of the parties as embodied in the terms of the agreement continue to govern.[39] Moving along the spectrum, the law of the Russian Federation governing PSAs provides investor protection against changes in legislation, but specified certain exceptions under which the Government is able to change conditions without safeguarding the commercial interests of the investor.[40] In other cases parties may voluntarily have incorporated a renegotiation clause into the contract.

Compared with earlier waves of unilateral government actions and nationalizations, an added dimension in recent renegotiations is the wider use of IIAs, of which BITs are the most relevant instruments. While potentially enhancing the chances of attracting FDI, entering into IIAs implies that governments surrender some freedom to adjust their institutional frameworks in response to changed circumstances. The Energy Charter Treaty (ECT) is also of importance, especially for investments in the transition economies of South-East Europe and the CIS, as it aims at strengthening the rule of law by creating common rules to be observed by all participating governments.[41] It is the only example of a specialized international instrument covering the promotion and protection of investors and their investments in the energy industry, from exploration to end-use.

What are the implications for countries and investors of the proliferation of BITs and other IIAs in the context of the recent trend towards increased unilateral government actions in some countries? If a State is determined to put an end to a contractual relationship prevailing under existing terms, an IIA cannot prevent this, but it may grant the foreign investor the right to claim compensation through international arbitration in the case of a dispute. Protection under IIAs therefore mainly becomes relevant in the context of an "exit strategy" for foreign investors (i.e. in situations where it is perceived that there is no possibility to continue their investment activities because of the renegotiation demands). Furthermore, as recent experience has shown, the scope of protection granted by an IIA depends on the way a treaty has been formulated, and its interpretations by arbitration tribunals, which has not always been consistent.

The outcome of unilateral action on the part of governments often depends on the bargaining power of the two parties. For those countries that possess proven and high-value mineral and petroleum deposits, this may be a viable approach to capturing a share of the benefits from extractive activities. However, other countries may find this course of action more difficult to follow. The response will vary; some companies will accept a negotiated settlement, while others may defend their interests through legal remedies to obtain economic compensation; yet others may pull out of negotiations altogether. In Venezuela, most companies operating under risk service contracts opted to continue under the less favourable conditions imposed by the Government in 2006, whereas at least one – the State-owned ENI (Italy) – chose to take the Government to international arbitration.[42] In addition, the Government reached a deal with Petrobras (Brazil) to renationalize the country's only two oil refineries acquired by the company in 1999 as part of a broad privatization programme (see chapter II). In Bolivia, all foreign oil TNCs agreed to convert their PSAs into operating contracts, and to turn control over sales to the State-run oil company.

3. Is progressive taxation a solution?

The regulatory changes noted above suggest that a number of governments have considered their previous regulations to have been overly generous vis-à-vis foreign investors. It can be argued that under an appropriately designed fiscal regime, it should be possible for a government to adjust its share progressively according to changes in economic circumstances, such as an increase in mineral prices, particularly since there are ways of doing this without distorting investment decisions.[43] In principle, progressive taxation offers the flexibility to induce investment in high-risk ventures yet still assures governments a significant share of high profits, if and when they occur (box VI.5).

However, cross-country studies repeatedly show that many fiscal regimes for the extractive industries are *regressive* rather than *progressive*, implying that the government's share falls as profitability improves (Land, 2007).[44] One explanation may be related to weaknesses in governments' capacity to negotiate effectively with TNCs, partly due to the lack of specialized skills needed to understand the fiscal options available; or there may be weaknesses in the tax administrations. In addition, some governments may have limited capacity to implement more sophisticated forms of taxation. This is especially true of taxes the administration of which requires robust reporting and auditing, and where vigilance is needed to safeguard against tax avoidance measures, such as underreporting of revenues and over-statement of costs.[45] The risk profile of the projects may also influence the choice of tax.

Moreover, the inclusion of a progressive tax in a fiscal regime is not a sufficient condition for the entire fiscal regime to be progressive. The interaction with other parts of the fiscal system may offset the progressive elements. The fiscal policy for mining is often weakened (from a government perspective) by the provision of incentives for investors, such as tax holidays, or offering them the possibility to qualify for pioneer or export industry status under general investment legislation.[46] Where there is a lack of fiscal policy coherence in government, this may lead to "cherry picking" among different taxation schemes by companies (Land, 2007).

Box VI.5. Progressive taxes and the extractive industries

A progressive tax is structured to adjust the fiscal burden, either directly or indirectly, according to the profits earned on a predetermined basis. There is a wide spectrum of fiscal and other instruments that purport to achieve this, though in practice many have limitations. They include taxes on production, business revenues or profits, State equity participation and production sharing, as employed in the oil and gas industry.

Progressive profit taxes. Many profit taxes are applied at escalating rates. In its simplest form, the tax rate escalates with increases in taxable income. A difficulty is how to determine a scale of tax rates that does not merely discriminate between small and large companies. One way of resolving this could be to base the thresholds at which the higher tax rates are applied on profit ratios rather than absolute levels of profits. An early arrangement of this kind was used in Papua New Guinea for the Bougainville copper project.[a] An adaptation of the same principle is the use of a variable rate, as employed in the mining industries of Botswana, Namibia, South Africa and Uganda. In these cases, a profit-to-sales ratio is used to define the tax rate in a formula that also includes start and top tax rates.[b]

The principal characteristic of these examples of profit taxes is that the applicable tax rate depends on the profit performance of companies on an annual tax accounting basis. There are other profit taxes where the applicable tax rate depends on the profitability of an investment achieved on a cumulative basis. For example, in some cases, the applicable tax rate is linked to the rates of return achieved over the project's life to that point. Several countries have employed this approach, in both the oil and mining industries, usually by establishing a separate tax to supplement an ordinary flat-rate corporate income tax.[c] Its advantage is the ability to target resource rent at the project level. In practice, however, it is difficult to determine the minimum required rate of return of an investor.

Price-based windfall taxes. Another way of taxing profits is to impose higher tax rates using a proxy for profitability. A typical example is a price-based windfall tax on profits, as introduced in Algeria and China. These target the windfall profits that are expected to flow from periods of unusually high prices. The advantage of such taxes is that they are relatively simple to administer. A limitation is that product prices alone do not determine the level of profitability.

Sliding scale royalties. Royalties can be structured on a progressive basis. Under this approach the rates imposed escalate on the basis of a chosen threshold. Many of the characteristics of this type of royalty are the same as those of progressive profit taxes, except that the fiscal imposition is on revenues and not profits, unless the royalty is structured as a royalty on net profits.[d]

Carried interest participation. State equity participation can be structured in a progressive way to operate as if it were a progressive tax. A carried equity option enables a government to fund its share of the costs of a project out of net project earnings without imposing a liability for any shortfall in net earnings. The investor effectively provides an interest-bearing loan to the government, secured against future project profits. This participation operates like an additional profits tax.

Profit oil sharing under PSAs. Under this type of arrangement, the balance of production that is not allocated to the recovery of project costs is divided between the investor and the government according to an agreed formula. Some PSAs include an oil price element or a cost indicator (e.g. the depth of water in which an offshore project is located). Although some degree of correlation with profitability can be expected under such arrangements, the correlation is unlikely to be exact. An increasing number of PSAs feature sliding scales that are based on direct measures of profitability. Others employ the rate of return on particular projects.

Source: UNCTAD, based on Land, 2007.

[a] Under the renegotiated Bougainville Mining Agreement a higher profits tax rate was applied in any year in which taxable profits exceeded a defined percentage of the capital base of the project (Land, 1995).

[b] The formula used to derive the applicable tax rate in Botswana, for example, is 70-1500/x, where x (%) = taxable income/gross income subject to a minimum tax rate of 25%.

[c] Prominent examples include the Petroleum Revenue Tax introduced by the Government of the United Kingdom in 1976 to capture a higher share of profits from its North Sea oil and the Additional Profits Tax first adopted in Australia, Canada and Papua New Guinea in the 1970s and subsequently contained in mining legislation in Ghana and in several mining and petroleum agreements (Land, 2007).

[d] Ghana employs a sliding scale mineral royalty with a starting rate of 3% and rising to 12% in line with gold prices.

D. Policies for broader economic benefits

When designing policies related to the participation of TNCs in extractive industries, policymakers should initially consider how the activities of TNCs could be best made to serve long-term development goals. This may be achieved by promoting backward and forward linkages both within the extractive industries and with related industries, in addition to negotiating an optimal share of revenues. In order to reap broader economic benefits from TNC involvement in extractive industries, it is also essential that any revenue generated from mineral extraction be invested in sustainable activities, including human resource and technology development. The success of host-country initiatives in this respect can be influenced by the actions of home countries and foreign investors.

1. Promoting linkages

All forms of linkages – backward, forward and horizontal – may contribute to learning processes and increased local value added in the host economy and ultimately contribute to broader development objectives. However, there are few positive examples of "mineral clusters" that have emerged around TNC-based mineral extraction in developing countries (chapter V). Most policy initiatives launched in African countries to remedy this situation have had only limited success (Pedro, 2004: 13).[47]

In general, extractive industries are characterized by a relatively low incidence of *backward linkages* (chapter V). Nevertheless, host countries can attempt such linkages through various instruments. For example, a number of developed- and developing-country governments have imposed import restrictions or other requirements on TNC affiliates in order to increase local procurement. This practice appears to be more common in the oil and gas industry than in the metal mining industry (Heum et al., 2003; Otto, 2006). In the former case, the levels of local content that have to be achieved are often specified in the contracts regulating the extractive activity. Alternatively, affiliates may be required to state how they plan to increase local content.

For example, for a long time Nigeria has unsuccessfully sought to raise the level of local value added from its largely TNC-operated oil and gas industry (Heum et al., 2003). As of 2005, the local content produced by domestic companies remained basically the same as it had been in the 1960s – at around 5% (Omorogbe, 2005).[48] The country recently embarked on a new programme to increase and deepen the participation of its domestic investors and contractors in the oil and gas industry and to foster linkages between foreign affiliates and various downstream processes. The National Petroleum Investment Management Services have been mandated to raise local content requirements from 40% in 2005 to 45% in 2006, and further to 70% by 2010 (UNCTAD, 2006b: 11).[49] In other countries, contracts may specify that local supply should be preferred if it can compete on quality and price. For example, one agreement provides that the operator and its contractors shall "[g]ive priority to local contractors as long as their prices and performance are comparable with international prices and performance".[50] Similar clauses can be found in contracts concluded in Latin America and the Caribbean. Brazil, for example, requires oil firms to use 40% of their investments to purchase goods and services supplied by domestic firms.[51] It also imposes a minimum local content requirement of 30% for offshore projects and 70% for onshore projects.[52] Similar requirements are sometimes applied in the *metal mining* industry.[53]

When formulating their policies and objectives related to promoting greater local value added, countries need to take into account commitments made in various international agreements. For example, in some cases, local content requirements may be inconsistent with provisions in certain IIAs. The WTO Agreement on Trade-related Investment Measures (the TRIMs Agreement) prohibits TRIMs that are inconsistent with the obligations of national treatment (Article III GATT 1994) and of general elimination of quantitative restrictions (Article XI GATT 1994).[54] Corresponding provisions exist in the ECT (Articles 5 and 29). To date there have been no cases before the WTO Dispute Settlement Body that specifically concern performance requirements in the extractive industries. While local content requirements related to trade in services fall outside the TRIMs Agreement, some BITs – notably some Canadian and United States BITs – prohibit the use of such requirements.[55]

While some performance requirements have helped catalyse a change in corporate strategies in the automotive and electronic industries (UNCTAD, 2003a), there is little evidence of significant positive impacts in the extractive industries (Nordås, Vatne and Heum, 2003). As noted in one study (Heum et al., 2003: 22): "Local content which can add value to the economy will only develop when local industrial capacity is sufficiently developed and open to interaction with leading international companies. Value addition does not develop by decree". In other words, to promote efficient and sustainable

backward linkages, there should be greater attention to strengthening domestic productive capabilities and to providing an environment conducive to productive investments by both local and foreign firms.

In extractive industries, as in other industries, a strategy to encourage backward linkages may start out by identifying specific areas offering the greatest potential for such linkages (*WIR01*).[56] As part of efforts to foster stronger supplier capabilities, governments may have to address various bottlenecks in the general business environment (such as skills shortages, high costs of capital and corruption) as well as offering targeted support programmes. In some countries and industries, the involvement of foreign affiliates in such targeted programmes has been useful (for illustrations, see *WIR01*).

TNCs can assist in developing local linkages and improving productive capabilities in a host country. While many inputs (such as technologically sophisticated equipment or knowledge-intensive services) are difficult to obtain or to develop locally, there are likely to be a number of goods and services that could potentially be sourced from within the host economy. Often, foreign affiliates may find it advantageous to use local suppliers when the quality and price of the goods and services they offer meet the stipulated standards. TNCs can play an active role in identifying areas with the greatest potential for local linkages, supporting local suppliers in their training, procedures and quality control; sharing technology and market information with local suppliers; extending financial support (for example, by offering guarantees for bank loans), and assisting government agencies involved in enterprise and supplier development programmes (*WIR01*: 214, see also box VI.6).

A similar approach could be taken to promote *forward linkages* and downstream activities. The aim may be to develop the ability to refine locally and add value to raw materials before they are exported. Processing may involve large-scale, capital-intensive activities, such as smelting and refining, or labour-intensive operations such as handcrafted jewellery and metal fabrication. While successful promotion of downstream processing can bring significant benefits to an economy (chapter V), downstream activities should not be promoted at any cost. A country should have an existing comparative advantage in the activity being fostered, or at least be able to develop such an advantage.[57] In addition, the value of downstream processing may differ by mineral. As highlighted in chapter III, a relatively small share of the total value chain is generated at the mining stage in the case of bauxite, whereas the converse relationship applies in the case of gold.

In the oil and gas industry, some countries have bargained with TNCs to develop downstream activities. The success of CNOOC, CNPC and Sinopec in bidding rounds in Nigeria has partly been attributed to their willingness to invest in downstream activities, such as refining and power plants (chapter V; Accenture, 2006). West Asian countries are increasingly recognizing the need to diversify their extractive-industry-based economies, and are also promoting the development of their oil refining and petrochemicals industries. Saudi Aramco (Saudi Arabia), for example, has entered into partnerships with TNCs in gas development and refinery expansion and the petrochemicals group Saudi Basic Industries Corporation has been involving foreign investors in private petrochemical projects.[58]

The scope for downstream processing may sometimes be limited by the trade policies of other countries. Importing countries have on occasion subsidized the refining of minerals, making it difficult for the producer countries to compete at the refining stage without also subsidizing that activity (see, for example, Jha, Nedumpara and Endow, 2006). Tariff escalation is another potential barrier (UNCTAD, 2003b: tables 9 and 10).[59] Thus, in order to assist developing countries to add more value to their mineral deposits and to encourage industrialization, importing countries may have to consider revising their trade policies.

2. Promoting skills and technology development

The lack of skills, productive and technological capabilities and institutional support remains a critical bottleneck in many developing countries, which prevents them from reaping greater benefits from their extractive industries. Addressing this challenge is essential for increasing local value added and for enabling domestic companies and institutions to learn, interact and compete with foreign affiliates. Investments in human resources are similarly important for countries to diversify into non-resource-based activities. Higher commodity prices and government revenues present an opportunity for mineral-rich countries to invest in human resource development. In order to address basic skills shortages it is important to strengthen the educational system so that it delivers the kind of skills most needed for the particular development stage of a country.

With a view to upgrading domestic skills, a number of countries require foreign investors to make a commitment to training of staff and to transferring management skills functions and other

Box VI.6. Promotion of technology transfer in the oil industry: the case of Norway

In the early stages of the development of Norway's oil and gas industry, there was limited knowledge and expertise in the country about offshore exploration. Concerned about the need for Norwegian participation, the Government placed strong emphasis on developing capabilities in the local enterprise sector as well as in universities. This was partly done by requiring foreign oil companies to set up fully operating affiliates in Norway, and partly by encouraging them to recruit Norwegian nationals.

Various policies were used to facilitate the entry of domestic firms into the supply chains controlled by foreign TNCs. Foreign firms were not excluded, but measures were enacted to enhance the competitiveness of domestic firms. All the policy measures mentioned below were in place until the mid- and late 1980s:

- Norwegian companies had to be included on the list of bidders, and the Government had to be informed about the firms listed on the bidders list before a tender was opened. It could require that specific Norwegian firms be included, but it could not exclude foreign firms from the list. The appropriate Ministry also had to be informed as to which company the job would be awarded before the contract was signed. Only once, however, did a decision change after Ministry intervention.
- As part of the concessionary process, oil companies had to present plans on how the local content would be increased on a competitive basis.
- When negotiating concessions, foreign oil companies were also encouraged to enter into R&D projects with Norwegian universities and research institutions, which resulted in both enlarging and deepening the Norwegian knowledge base on offshore oil and gas. It was enlarged in the sense that the education system was included, and it was deepened by including not only development projects but also scientific research. This is attributed to having boosted the ability of Norwegian oil companies to adjust better to new challenges, such as price fluctuations, field development in deeper water and smaller petroleum fields.
- Foreign oil companies were encouraged to offer technical assistance to local companies so that they could learn the business from experienced organizations and personnel. Joint ventures or cooperative agreements in engineering were also fostered. Associated transfers of technology were probably an important element in improving the country's industrial position.
- Statoil and other Norwegian oil companies started a practice of informing the domestic industry about plans and solutions for future field developments, which helped domestic firms prepare future business opportunities. Foreign oil companies also adopted this approach, thus giving domestic suppliers a competitive edge vis-à-vis their foreign competitors.
- The Government had a deliberate strategy to "Norwegianize" the domestic oil business through contracts and labour relations. This worked in favour of domestic firms relative to foreign firms, without jeopardizing economic efficiency.

Source: UNCTAD, based on Heum, 2002.

responsibilities to local personnel.[60] For example, in competitive biddings for new oil and gas fields in Brazil, one of the criteria for winning a licence was an undertaking to train local staff (Heum et al., 2003); in Equatorial Guinea, the Hydrocarbons Law stipulates that oil TNCs should not only train their workers but also contribute to the training of ministry personnel and to maintaining oil related institutes and training centres;[61] Botswana requires all mining investors to have a localization and training plan that will enable local personnel to take over skilled positions over time.[62] The experience of some developed countries may also be relevant. When Norway first discovered oil in the North Sea, it lacked the technological capabilities to exploit the offshore deposits. A combination of policy measures promoted technology transfer by foreign affiliates to domestic firms (box VI.6).

A basic problem in many developing countries is the lack of adequate educational facilities. Worse still, the increased global demand for mining engineers (that has emerged on the back of the commodity boom) combined with the closure of some mining schools in developed countries, has increased the risk of a brain drain from African countries.[63] In Africa, high quality mining schools exist mainly in Algeria and South Africa.[64] It has recently been proposed that existing centres of excellence in Africa should be strengthened and new ones created (ECA, 2007a). Some home countries encourage their companies to support skills development when investing abroad. For example, through its Industrial Cooperation Program, the Canadian International Development Agency provides a cash contribution to Canadian companies that start a business and provide training in developing or transition economies.[65]

Another challenge facing developing countries is that the skills required for setting up training and R&D facilities in metal mining are typically located in developed countries. One way to support the development of indigenous skills in this area is to set up local R&D institutes in mining and mineral processing. Important research is being done at many of the traditional schools of mines around Europe, the United States and in some developing

countries (such as Chile), but only a handful of organizations are emerging as global leaders in the relevant fields of science and research, mostly in developed countries such as Australia (CSIRO and Amira), Canada (Camiro), Sweden (Bergforsk and Minmet), and the United Kingdom (Miro), but also in South Africa (Mintek and CSIR Miningtek).[66]

E. Coping with environmental challenges

More and more countries are introducing environmental legislation, often with specific regulations for extractive industries. At the same time, a growing number of companies are adopting industry standards. Nevertheless, the work is unfinished. Many countries lack the willingness or capability to implement and enforce their environmental laws; and while many environmental challenges associated with extractive industries relate to artisanal and small-scale mining, rather than to large-scale mining activities (chapter V), more junior companies as well as large TNCs need to improve their environmental performance. At the national level, a number of actors, such as host-country governments, TNCs and institutional investors or lenders, home-country governments, civil society and local communities, share the responsibility to mitigate environmental impacts.

Host-country governments apply different environmental standards. In many developed countries, it has become increasingly difficult to obtain rights to explore or extract minerals (Otto, 2006: 109). In addition to an increasing number of environmental regulations (often simultaneously issued at the central, regional and local levels), ever larger areas are being protected. Many areas have been zoned in ways that essentially render them off-limits to extractive industry operations.[67] This is leading TNCs to pursue exploration in countries that do not have similar restrictions.

Environmental protection is mostly addressed through two forms of legislation: general legislation that concerns all industries, and specific regulations for the extractive industries (section VI.B). In the past decade or so more than a hundred countries have reviewed and reformed their mining codes. Many of them have introduced new provisions to address environmental issues (Otto, 2006).[68] Mining laws that contain provisions on the environment usually require one or all of the following: an environmental (and social) impact assessment, an environmental management plan, and measures which aim to ensure sustainability after the closure of the operations (MMSD, 2002: 338).

An environmental impact assessment (EIA) is the most significant and commonly used environmental tool in both the mining and oil industries alike.[69] But to be fully effective, it has been proposed that such assessments include a participatory approach and be integrated with other tools, such as a social impact assessment (MMSD, 2002: 248). The results of an environmental impact assessment should also be situated within a broader environmental management strategy, that incorporates environmental responsibilities in everyday management practices. In South Africa for example, according to the Minerals Act, all operating mines must have an environmental management plan that has been approved by the Department of Minerals and Energy (OECD, 2002: 8). Mining laws should also explicitly include mine closure plans, which should be drawn up at the inception of a project and revised as needed.[70] The goal of such a programme is typically to restore the natural environment to its original state as far as possible. Since such restoration might be quite costly it may be advisable to set up a rehabilitation or restoration fund at the inception of the extractive industry project (MMSD, 2002: 243).[71] But even if a law or a contract addresses environmental issues and contains such instruments, host developing-country governments may lack the capacity, technical expertise and/or political will to implement and enforce the provisions.[72]

An important factor related to the implementation of environmental protection is public participation. The process of obtaining a mining license is often government-centred and outcomes are not sufficiently reflecting a representative and participatory process (ECA, 2007b: 217). While recent environmental legislation has attempted to take the concerns of other stakeholders into consideration, local people still often lack influence over whether or not a project should be undertaken (MMSD, 2002: 233). In the context of facilitating and encouraging public awareness and participation, the Aarhus Convention of the Economic Commission for Europe (ECE) may serve as an interesting model.[73] The establishment of tripartite governance structures that include governments, civil society and private companies has also been proposed, for example at the 2007 Big Table (box VI.7).

Many *TNCs* in the extractive industries have incorporated environmental standards into their corporate policies and strategies. In addition to individual companies, international industry associations – at least in the mining industry – have addressed environmental concerns and developed international standards. The International Council on Mining and Metals (box VI.8), UNCTAD, the

Box VI.7. The 2007 Big Table

The Big Table is an initiative of the United Nations Economic Commission for Africa (ECA) to promote a constructive dialogue between senior African policymakers and their developed-country counterparts. The Big Table 2007, co-organized by the ECA and the African Development Bank, set out the challenges of effectively managing Africa's natural resources for growth and poverty reduction, and proposed an agenda for future action. Key issues included natural resource governance; ownership, participation and intergenerational equity; bargaining power and the role of emerging global actors; environmental stewardship; and capacity-building, partnerships and regional integration.

Acknowledging that the continent's natural resources are important assets for Africa and the world, it was recognized that they can contribute to growth and development if properly managed. For this to happen, Africa must own its development process, its governance systems and institutional capacity should be strengthened, and the wealth from natural resources must be invested in the creation of knowledge for economic innovation, and in the building of social and physical capital. The meeting agreed on the following (see also ECA, 2007a):

- The NEPAD Heads of State and Government Implementation Committee should consider expanding the scope of the African Peer Review Mechanism to include governance of natural resources.
- A peer-learning group on natural resources management will be established.
- Natural resources should be mainstreamed in the next round of poverty reduction strategy papers.
- Local parliaments and independent committees should be involved in the monitoring of natural resources projects.
- Africa's mining codes need to be reviewed to provide better options for Africa to extract benefits from mineral resource exploitation. A study group will be established to that effect.
- A grant facility should be established to help Africa's mineral producers in contract negotiations.
- The international community should support Africa's efforts to map and create inventories of its mineral resources, not least for African countries to obtain better terms in negotiations with external partners.

Source: United Nations Economic Commission for Africa.

[a] It was attended by 52 participants including Ministers and senior officials from 11 African countries, and by high-level representatives from developed countries, regional and international organizations, research centres, the private sector and NGOs.

United Nations Environment Programme, and the United Kingdom Department for International Development have jointly developed a website to provide access to a library of good practice guidelines, standards, case studies, legislation and other relevant material (annex to this chapter).[74] However, "particularly in fragile states some natural resource companies were not observing the highest corporate standards" (ECA, 2007a: 2), and a number of TNCs still do not abide by high environmental standards (chapter V).[75] The record of compliance by junior mining companies with environmental standards set, for example, by industry associations is generally not very good (ECA, 2007b: 222).

The influence of lenders and home States is also important. A number of international financial institutions now take environmental impacts into account before providing finance to extractive-industry investment projects. In 2001, the World Bank launched an extensive review of its mandate aimed at producing a set of recommendations that would guide the future involvement of the World Bank Group in the oil, gas and mining industries. One of its conclusions was that in countries with weak macro and sectoral governance, the Bank should focus its support on strengthening governance and the management of environmental and social risks rather than on promoting more investment (Liebenthal, Michelitsch and Tarazona, 2005: 95). The International Finance Corporation (IFC) also emphasizes the importance of public participation in its lending decisions and its existing policies require the submission of a Public Consultation and Disclosure Plan for any project with potentially significant environmental and social impacts.[76]

A major initiative, designed for application in all sectors, was the creation of the Equator Principles, a voluntary set of guidelines for managing environmental and social issues in project finance lending, developed by leading private financial institutions with IFC advice and guidance (*WIR06*: 236).[77] It is too early to assess their impact on the lending behaviour of the large commercial banks that have committed to the principles.[78] Nonetheless, one of the main contributions of the Equator Principles is that they lay the groundwork for further action by providing a set of broad policy guidelines. The effectiveness of the Principles may be undermined by the emergence of other sources of financing that do not abide by the same standards. While additional sources of financing must be welcomed from a developmental perspective, such funding also needs to pay sufficient attention to potential environmental and social implications.

Box VI.8. The International Council on Mining and Metals

The International Council on Mining and Metals (ICMM) was founded in 2001 by some of the major mining companies. Its declared vision is to create a "viable mining, minerals and metals industry that is widely recognized as essential for modern living and a key contributor to sustainable development." The Council is made up of 15 companies,[a] and 24 national mining and global commodity associations.[b] The 15 companies account for just over 25% of global mining production. All member companies are required to implement the ICMM Sustainable Development Framework – which consists of a set of 10 principles, public reporting and independent assurance guidelines – and comply with policy commitments made by the ICMM Council.

Source: ICMM (www.icmm.com).

[a] Alcoa, Anglo American, AngloGold Ashanti, BHP Billiton, CVRD, Freeport-McMoRan Copper & Gold, Lonmin, Mitsubishi Materials, Newmont, Nippon Mining & Metals, Rio Tinto, Sumitomo Metal Mining, Teck Cominco, Xstrata and Zinifex.

[b] Camara Minera de Mexico, the Chamber of Mines of South Africa, the Cobalt Development Institute, Consejo Minero de Chile, Eurometaux, Euromines, the Federation of Indian Mineral Industries, the Indonesian Mining Association, Instituto Brasileiro de Mineraçao, the International Aluminium Institute, the International Copper Association, the International Wrought Copper Council, the International Zinc Association, the Japan Mining Industry Association, the Lead Development Association, the International Minerals Council of Australia, the Mining Association of Canada, the Mining Industry Associations of Southern Africa, the Nickel Institute, the Prospectors and Developers Association of Canada, Sociedad Nacional de Minería, Sociedad Nacional de Minería, Petróleo y Energía, the World Coal Institute, and the World Gold Council.

F. Addressing social and political concerns

More than in other areas, investments in extractive activities may have far-reaching social and political implications for a host country (chapter V). Their impacts can range from the national level (e.g. relating to human rights or corruption) to the local level (e.g. concerning local communities or company employees). The protection of the interests and rights of people that might be affected is first and foremost a government obligation – in both host and home countries. In the case of investments in weakly governed or authoritarian States, it is also important to consider the responsibilities of TNCs. Particular attention should be paid to the protection of human rights, including those of labour and the local community.

1. Labour-related concerns

Workers' health and safety are among the major concerns in the extractive industries. In most mineral-rich countries, mining remains the most hazardous occupation in terms of the number of people exposed to risk, despite considerable efforts to reduce the toll of death, injury and disease among mineworkers (chapter V). Most mining-related accidents occur in hazardous artisanal mines. But even if extraction activities by TNCs may be less exposed to hazards, health and safety issues remain important concerns.

The International Labour Organization (ILO) has been dealing with labour and social problems of the mining industry since its early days.[79] For over 50 years, tripartite meetings on mining have addressed a variety of issues ranging from employment, working conditions and training to occupational safety and health and industrial relations in coal and non-coal mining. As a result over 140 conclusions and resolutions have been agreed, including the Mining Convention. Some of these agreements and resolutions have been implemented at the national level, while the ILO has provided assistance for others, such as training programmes and the development of codes of safety practice. The ILO's objective is to ensure decent and safe work for all mineworkers, and that the industry contributes to sustainable development.

The most common obstacle to the implementation of international norms is the lack of domestic capacity in a country, sometimes combined with a lack of political will. However, host-country governments are responsible for the implementation of internationally accepted conventions. A lack of capacity in the host country is no excuse for non-implementation, as this can also be addressed by the participation of home countries, international organization and/or other competent organizations through technical assistance programmes (see the annex to this chapter).

As for TNCs, it is their responsibility to observe the requirements of local labour laws and practices. They should also adhere to fundamental labour standards as set out in ILO Conventions and reemphasized by the ILO Declaration on Fundamental Principles and Rights at Work (1998).[80] In countries where governments restrict the exercise of fundamental labour rights, such as the freedom of association and collective bargaining, TNCs face a dilemma. Should they observe the ban and prohibit the establishment of worker representation, thereby aiding the government in infringing the human rights of the workers,[81] or should they oppose it and risk government censure that may adversely affect their investment? A corporate code of conduct or

an international framework agreement laying down the basic rights of workers is therefore important.[82] The recently concluded agreements between the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) and TNCs are one such example (box VI.9).

2. Local community concerns

Given their exposure to extractive-industry projects, it is important for policymakers to address the concerns of local communities when developing the regulatory framework for related activities. This may involve designing appropriate mechanisms for the sharing of revenue, undertaking needs assessments, offering adequate compensation, and ensuring that communities have a say in decisions related to extraction activities. It is also important to link community development programmes of TNCs with the development planning processes of local governments (chapter V). Particular attention needs to be paid to indigenous minorities (box VI.10).

As might be expected, country-specific practices with regard to the distribution of fiscal revenue from extractive activities between central and local governments and local communities in areas where extractive activities are located vary a great deal. For example:

- In Ecuador, an average of 90% of available oil rents during the period 1995-2000 were assigned to the central Government (Liebenthal, Michelitsch and Tarazona, 2005: 86).
- In Peru, the law establishes diverse mechanisms for the distribution of the benefits generated from mining and oil and gas activities to the State treasury and the producing regions. The latter receive 50% of the income taxes paid by mining companies to the State, 10% of the gross value of all oil production and 50% of the income generated from royalties on natural gas production.[83]
- In Equatorial Guinea, all oil revenues accrue to the central Government (Liebenthal, Michelitsch and Tarazona, 2005: 86).
- In Nigeria, the share of mineral proceeds paid by the Federal Government to the producing region fell from around 50% in the 1960s to zero in 1979-1981, after which it increased to about 13% by the end of the 1990s (UNDP, 2006b).
- In Indonesia, after the introduction of a regional autonomy law in 2001, provincial and district governments competed against each other to increase their share of the revenues.[84] The mechanism for revenue distribution remains unclear (Erman and Aminullah, 2007).

In order for local people to benefit from such revenues, it is important that the funds be managed in a way that promotes the community's welfare and development. This is particularly important, given the recent commodity price boom.[85] Without the adequate skills to manage these funds, they risk contributing to the development of a local version of the "resource curse" (chapter III).[86] South Africa's Mineral and Petroleum Resources Development Act

Box VI.9. ICEM and Global Framework Agreements

Global framework agreements are signed between partners on basic, shared principles, and are not unilateral, voluntary guidelines or codes set by companies. The agreements of the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) have been the outcome of a process involving ICEM and its affiliates in the home countries of TNCs. So far, ICEM has concluded four global framework agreements with TNCs in extractive industries: Lukoil (Russian Federation), Statoil (Norway), AngloGold Ashanti (South Africa) and RAG (Germany).

The basic standards include: the right for every employee to be represented by a union of his/her own choice; basic trade union rights (ILO Conventions number 87 and 98); employ no forced or bonded labour (ILO 29, 105); employ no child labour (ILO 138, 182); exercise equality of opportunity and treatment in employment (ILO 100, 111); pay fair wages and benefits according to good industry standards; provide a safe work environment; deploy common "best practice" standards; and commit to sustainable social and environmental development. These standards also extend to contractors.

Additionally the ICEM agreements specify that they cover all activities and operations over which the company has direct control, and that the company will exercise its best efforts to encourage and secure compliance with the standards and principles by its subcontractors, licensees and suppliers. The agreements have been used both to discuss issues fundamental to both parties, and to solve problems. Representatives of ICEM and the respective company meet regularly to review the agreement's application and experiences in implementing the agreed principles. Some of the framework agreements facilitate meetings of union representatives of their worldwide organizations and develop a social dialogue with management at all levels.

Source: UNCTAD, based on information from ICEM (www.icem.org).

Box VI.10. Protecting the rights of indigenous peoples in the context of FDI in extractive industries

A number of international norms and guidelines have been adopted in recent years containing procedural safeguards relating to the exploration and exploitation of natural resources in areas where indigenous people live.[a] These instruments affirm the collective rights of indigenous peoples to ownership and control of their lands and natural resources, and to be consulted prior to the development of projects that may affect them. They also affirm their right to adequate compensation, and to refuse their relocation, other than exceptional cases, and on the basis of prescribed procedures. In addition, a number of States now give legal recognition to indigenous peoples' collective rights over land and natural resources based on traditional use and occupation.[b]

The role of TNCs. Experience suggests that grassroots cooperation between extractive-industry TNCs and indigenous peoples can reduce the risks of misunderstandings and conflicts, protect the company's brand image and improve its profitability. In the past, lack of consultation with indigenous communities and denial of their rights resulted in civil protests and mobilizations that compelled some companies to cancel their projects or withdraw from operations (e.g. in Bolivia, Colombia, Guyana and Peru). A growing number of extractive-industry TNCs (e.g. Alcan, Rio Tinto and Placer Dome) are now acknowledging the rights of indigenous peoples, and have developed their own related policies and guidelines. In addition, a few impact assessment plans and benefit-sharing agreements have been negotiated between companies and indigenous peoples.[c]

The role of financial institutions and development agencies. The protection and promotion of indigenous peoples' rights have become a concern of financial institutions and development agencies. Various private banks, international institutions (including the World Bank Group), multilateral development banks, as well as some national development agencies have established policies and guidelines on projects affecting indigenous peoples. The World Bank Operational Policy Bank Procedure on Indigenous Peoples (OP/BP 4.10) applies to all projects taking place on lands occupied by them.[d] Signatory banks of the Equator Principles have also committed to adhering to the IFC Performance Standard 7 relating to indigenous peoples.[e]

Despite these initiatives, challenges remain, notably on substantive policies which fall short of meeting international human rights standards. Moreover, in many countries, policy implementation and enforcement mechanisms are either absent or fail to offer sufficient guarantees and independence. It is important to give priority to concrete measures and affirmative action that contribute to closing the existing gap between corporate policies and their practical implementation.

Source: UNCTAD, based on information provided by the United Nations Office of the High Commissioner for Human Rights (OHCHR).

[a] These include the ILO Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries, the United Nations Declaration on the Rights of Indigenous Peoples, and the Proposed Inter-American Declaration on the Rights of Indigenous Peoples.

[b] For more information, see the 2002 Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People to the Commission on Human Rights (UN doc E/CN.4/2002/97).

[c] For example, the Raglan Agreement (1995) between Nunavimmiut and Falconbridge (Canada) for a nickel mining project, and the Voisay Bay Agreement signed in 2002 between the Innu Nation and Inco (Canada).

[d] The policy requires the borrower to engage in a process of free, prior, and informed consultation at each stage of the project to ascertain the support of the community affected by the project, and to provide it with all relevant information about the potential adverse impact of the project.

[e] It calls for measures to protect the rights of indigenous peoples. It requires borrowers, for example, to formulate social and environmental assessment plans, ensure indigenous peoples free, prior and informed consultation, provide a grievance mechanism, ensure good faith negotiations with representative bodies of indigenous peoples, and formulate measures with regard to relocation and compensation.

of 2002 seeks to ensure that local communities share in the benefits from minerals extracted from their lands while at the same time helping promoting capacity-building at the community level (box VI.11).

Community concerns are not only related to the amount of money that is awarded to them, but also to the social and environmental effects of the extractive activities. There are growing expectations on TNCs to both protect existing livelihoods and maximize the positive development impact through community-development assistance (Idemudia, 2007). TNC contributions to community-development projects, such as local schools and hospitals, the creation of microcredit schemes for local people and employment assistance (chapter V), can be valuable to the local economy.[87]

However, such contributions can also raise sensitive policy issues. Where local government is weak and/or poorly financed, there is often a tendency for both the community and the State to rely on the TNCs to assume many of the "governmental" roles around the operation. When the company has on-site resources, capacities and skills, communities are likely to expect regular services from it (Banks, 2007). Such an approach does nothing to build local capacity and it may pose problems for communities once a project is completed. In situations where the presence of the corporation and its resources is many times larger

Box VI.11. The introduction of community "preferent rights" in South Africa

Section 104 of the South African Mineral and Petroleum Resources Development Act of 2002 (MPRDA) introduced preferent rights as an option for communities who wish to participate in mineral development on their land. When a preferent right is granted to a community, a mining company is obliged to obtain the consent of that community before it can secure any mineral development rights. It is hoped that this new feature will make a difference to the livelihoods of people in rural communities. Preferent rights also provide for ongoing benefit-sharing that is made possible by royalties payable directly to communities.

Requirements for a preferent right are that: (i) only the community that owns the land may apply for such a right; (ii) it may not be granted over other rights already issued under the MPRDA; and (iii) the community has to submit proof that it has access to technical and financial resources. It is anticipated that access to such resources will be in some form of a joint-venture relationship with exploration and mining companies. The preferent right must be used to contribute to community development and social uplift. As part of the application process, the community has to submit a (community) development plan demonstrating that the benefits from the right will accrue directly to them. The duration of a preferent right is five years initially, renewable for further periods of five years at a time, upon proof of compliance with the community development plan.

TNCs and other mining companies that form partnerships in the context of preferent rights are likely to benefit from security and continuity of tenure afforded by the rights granted. Because of the potential benefit for companies, communities have been advised to consider the credentials of different applicant mining companies before making a decision. Consideration may be given to a company's technical competence for extracting a specific mineral, its financial strength and any history of its relationships with other communities. The decision may also be influenced by the company's commitments to the social plan, labour plan and other requirements.

Regardless of whether or not a community holds a preferent right, the law requires the involvement of communities in decisions that affect them, and the integration of their development plans with those of local municipalities. Community assistance includes any contribution to skills development, sharing of infrastructure, provision of social (government) services through social plans and provision of business opportunities to communities through procurement.

Source: UNCTAD, based on Cawood, 2007.

than a government presence, the key is to facilitate and improve capacity for service delivery rather than to assume the responsibilities of the government (Banks, 2007). Similar observations have been made by TNCs themselves, as illustrated by the following comment by a manager of Chevron (United States) (Armstrong, 2001, cited in Omorogbe, 2002: 585):

> "We should be very careful about stepping in government's shoes by directly providing some kinds of benefits to local communities. If we aren't cautious, we will not only encourage communities to treat companies as if they are government; we will also destroy government's incentive to do the job it should be doing for local communities to assume their share of ownership and responsibility for their own welfare and improvement".

An assessment of community-development projects by oil TNCs in the Niger Delta concluded, among other things, that partnership-based projects are more likely to succeed if there is an enabling environment for such partnerships; that bottom-up corporate partnerships are more efficient means than top-down approaches to promote community development; and that lack of tangible effects from partnership-based corporate community development assistance is sometimes linked to government failure (Idemudia, 2007).

3. Human rights

Human rights – civil and political as well as economic and social – are essential for welfare-enhancing development (UNDP, 2000: iii). As noted in chapter V, the involvement of TNCs in extractive industries has sometimes resulted in alleged human rights violations in host countries. The main obligation for protecting human rights rests with States (United Nations, 2007, para. 10); it includes preventing corporations (State-owned and privately owned) from breaching rights, and if they do so, taking steps to holding them to account and provide reparation to the victims.

Host countries have a duty to protect their citizens against human rights abuses. This duty extends to protection against unacceptable behaviour by business entities (United Nations, 2007, para. 10). For a host-country government to be able to meet its obligations, an effective institutional framework, providing for participatory decision-making processes, is therefore needed. Certain minimum capabilities of the various stakeholders are required to enable them to influence decisions (ECA, 2004). One way to achieve a better balance between a favourable investment environment and the interests of local populations is to strengthen human rights standards in the regulatory regime of the host country, and to provide for external

monitoring and enforcement of that regime. In addition, human rights standards can be adopted by corporations by mutual contractual agreement.[88]

As a significant proportion of the world's natural resources are located in poor, weakly governed or authoritarian States, the responsibility of extractive-industry TNCs themselves becomes a pertinent issue. The Special Representative of the Secretary-General (SRSG) of the United Nations, appointed to examine the issue of human rights and TNCs and other business enterprises, noted that there had been a gradual extension of corporate liability for international crimes (e.g. war crimes, crimes against peace, crimes against humanity) (United Nations, 2007). This trend derived from two developments: the expansion and clarification of individual responsibility by international ad hoc tribunals and the Statute of the International Criminal Court, and the extension of responsibility for international crimes to corporations under domestic law. Those combined developments suggest that the legal risk for companies (as well as the remedial options for victims) will increase with the expansion in the number of jurisdictions that allow charges to be made for international crimes.[89]

Regarding human rights violations other than international crimes, no comparable legal developments were identified. International human rights instruments do not seem to impose *direct* legal responsibilities on corporations (United Nations, 2007, para. 44). This protection gap for victims is partly filled by mechanisms that do not themselves create legally binding obligations. Examples of such "soft law" arrangements are the standards set by international organizations such as the ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy, the OECD Guidelines for Multinational Enterprises,[90] the United Nations Global Compact (box VI.12), and the Equator Principles.[91]

Various corporate codes address human rights issues, such as the ICMM principles (box VI.8). Pre-investment human rights assessments have been identified as the measure that would yield the most immediate results in the human rights performance of firms (United Nations, 2007, para. 77). A number of policy tools are already available to help TNCs assess the potential human rights impacts of their operations. These include the compliance assessment developed by the Danish Institute for

Box VI.12. Extractive industries and the United Nations Global Compact

More than 160 oil and gas and metal mining companies are participating in the United Nations Global Compact. A significant (and growing) number of these companies are headquartered in developing countries, including Oil India (India), Petrobras (Brazil) and Sinopec (China). Participating companies are expected to integrate the Global Compact's 10 principles into their operations and throughout their supply chains.[a] To fulfil the "Communication on Progress" requirement, companies are asked to report their progress in annual reports, sustainability reports and other forms of public communication, which helps to substantiate their participation in the Global Compact. For example, Statoil (Norway) has embedded the Global Compact principles throughout its business, and in its training and operational procedures. It also includes the principles in commercial contracts and uses the initiative as a platform in specific business contexts with other companies, including with Petrobras in Nigeria.[b]

The Global Compact Policy Dialogue on *The Role of the Private Sector in Zones of Conflict* explores how best to promote the beneficial aspects of trade and investment while reducing the negative effects that can lead to or sustain conflict. Such dialogues seek to sensitize companies to the need to anticipate possible security risks posed by their operations and to adopt conflict-sensitive business practices.

The Global Compact has also begun to engage companies in the oil and gas industry in a series of peer-to-peer industry forums for national and international companies. These enable companies to share experiences related to the challenges and opportunities they face in implementing the Global Compact principles. The first workshop, for companies across Latin America, took place in Mexico in July 2006 and focused on human rights practices. In March 2007, the Global Compact and the World Petroleum Council convened a second workshop for the Asia region, which dealt with all 10 Global Compact principles. These meetings are designed to be hands-on with practical case studies of positive and negative experiences faced by the oil and gas sector. Engaging newcomers from developing countries in the process is considered to be very important.

Source: UNCTAD, based on information obtained from the United Nations Global Compact.

[a] The ten principles concern the areas of human rights, labour, the environment and anti-corruption and are derived from the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption (www.globalcompact.org).

[b] Should a participant fail to submit a communication on progress for two years, it is labeled "inactive" on the Global Compact website (www.globalcompact.org/CommunicatingProgress/index.html).

Human Rights, and the risk and impact assessments and screening tools produced by International Alert (United Nations, 2007).[92] A new guide to human rights impact assessments is also being developed jointly by the International Business Leaders Forum, the IFC, and the United Nations Global Compact.[93] However, very few firms in the extractive industries actually conduct human rights impact assessments prior to their foreign investments (United Nations, 2006, para. 31): only one firm in the oil sector – BP – is known to have made public the results of such an assessment.[94]

For corporate standards to be effective, all companies must abide by them. Thus, a second challenge is to engage those major TNCs that have yet to abide by international standards, as well as junior companies and new TNCs from emerging economies, in dialogues about the implications of their investments on human rights. The fact that many TNCs from emerging economies are State-owned raises potential issues related to corporate governance and transparency (*WIR06*: 233). As many of these companies have only recently started to expand abroad, they have limited international experience and exposure to such issues. To the extent that legislation and the development of business standards in some key areas are at a nascent stage in their home countries, they will also have had little opportunity to learn before going overseas. The "new players", whether State-owned or not, should derive long-term operational benefits from complying with basic human rights standards as part of wider policies for responsible investment. Attention to human rights compliance may be needed to defend themselves against accusations of complicity with various abuses. It may also help them obtain access to finance through the public offer of shares, while also lowering the risk of exposure to foreign direct liability litigation (*WIR06*: 235-237).

Home-country governments also have a duty to protect against human rights abuses committed abroad by their nationals and TNCs (see, for example, United Nations, 2007, para. 16).[95] However, only a few States surveyed by the Special Representative reported having policies, programmes or tools in place to deal with corporate human rights challenges, and only a small number had introduced human rights considerations into their investment promotion policies, export credit and investment insurance schemes, or bilateral trade and investment treaties (Ibid., para. 17). Indeed, the behaviour of both developed and developing countries in support of firms – in particular oil companies – has repeatedly raised concerns by civil society.[96]

Some States take human rights into account in their policies to support exports and outward FDI. For instance, the United Kingdom Export Credit Guarantees Department takes into account the contribution of an investment to sustainable development and to the promotion of human rights and good governance,[97] and the Swiss export credit insurance scheme considers the human rights issue when assessing projects. Human rights clauses have also systematically been included in trade agreements between the European Union and third countries since 1995.[98]

Various *investment institutions* are starting to exert more pressure on TNCs to behave responsibly when investing in weakly governed States. Most notably, the Equator Principles feature several human rights elements (*WIR06*).[99] The Principles for Responsible Investment, an institutional-investor initiative in collaboration with other stakeholders and the United Nations, also offer guidance, by providing a framework for institutional investors – asset owners and investment managers – to incorporate environmental, social and governance issues into investment decision-making and ownership practices.[100] The work done by United Nations organizations in the area of investment promotion could also incorporate a human rights perspective. Finally, *civil society* can, and frequently does, act as a catalyst for further development of human rights awareness in extractive projects.

4. Enhancing transparency

In many countries there is a serious lack of information about the allocation of the revenue from extractive activities between TNCs and governments, and how governments spend this revenue (chapter V). Opaque revenue streams and associated corruption will reduce the resources available for investment in development. On the other hand, making the appropriate information available can enable a proper assessment of the impact of investments in these activities. Moreover, greater transparency can help reduce wasteful use of resources and corruption, improve macroeconomic management and enhance access to development finance. But it requires serious commitment not only on the part of host countries and TNCs, but also of home countries, civil society and international organizations.

An important first step for a *host country* is to remove legal obstacles to transparency. In many countries that value governmental accountability, information on revenue from extractive industries, like other revenues, is subject to rules regarding disclosure and revenues are included in the State

budget, which is published and audited. In several other countries, however, revenue is still treated as a State secret and foreign investors may be required to sign confidentiality or non-disclosure agreements. Such practices curtail the public's right to know what the government receives in revenue and can breed corruption. Adoption of rules and measures that ensure transparency regarding the accrual and use of revenues is critical for such host countries if they are to ensure maximum development gains from TNC activities in extractive industries.

TNCs can mitigate the problem of corruption by publishing what they pay to governments on a country-by-country basis, using international accounting standards. The information should include all net taxes, fees, royalties and other payments made to governments, at any level, or to local communities, including compensation payments and community development funding in the short term. TNCs that disclose their payments may face problems in the short term if their competitors do not adhere to the same standards. This may be used as an excuse to lower the standards of transparency, and provide an opportunity to continue opaque practices. Consequently, common standards agreed by all companies are needed to develop a more "level playing field" for revenue disclosure.

Home countries also need to be vigilant with regard to transparency, and should take action to curb bribery. Some countries have already undertaken investigations into corrupt practices by TNCs in foreign countries. But more needs to be done to curb these practices. Various *civil society organizations* are also contributing to raising awareness of the need for transparency. One of their most important initiatives is the *Publish What You Pay* campaign involving a coalition of over 300 non-governmental organizations (NGOs) worldwide. It calls for the mandatory disclosure of payments made by oil, gas and mining companies to all governments for the extraction of natural resources. The coalition also launched a campaign calling on resource-rich developing-country governments to publish full details of the revenues they earn.[101] A further important step was taken in 2002 with the establishment of the Extractive Industries Transparency Initiative (EITI), which aims to improve transparency and accountability of both firms and authorities through the publication and verification of company payments and government revenues in the oil, gas and mining industries. Although the participation of countries is voluntary, when countries do commit to the initiative, the transparency provisions apply to all companies in the country – foreign and domestic, large and small, private and State-owned (box VI.13).

5. Dealing with extractive-industry TNC investments in conflict situations

In a number of low-income countries, mineral wealth has contributed to political instability and even to armed conflicts (chapters III and V).[102] Such situations pose a particular challenge to government policies as well as to corporate responsibility. Firms (including TNCs) may find themselves implicated in the domestic or international conflicts generated by competition for the control over resources. By operating in such countries, they may end up directly or indirectly providing assistance to some of the parties to conflicts.[103]

Home countries and *the international community* can offer technical assistance to assist host countries in developing their institutional and legal capabilities. They can also help clarify under what conditions it would be appropriate for a company to enter, stay or abstain from investing/divesting. By implementing conflict-related human rights considerations into their FDI policies, they can either encourage foreign investors to adhere to certain standards when they invest, or discourage them from investing. In that respect, one of the most pressing issues that the international community has to tackle is the legitimate use of sanctions. A number of suggestions have emerged, in particular from the Stockholm Process, organized by the Government of Sweden, which merits further consideration by the United Nations Security Council and United Nations Member States.[104]

Several multi-stakeholder initiatives have been established with the goal of reducing the risk of conflicts related to resource extraction and to set standards for corporate behaviour in conflict situations. Some of the most prominent ones are the Kimberley Process Certification Scheme (box VI.14) and the Voluntary Principles on Security and Human Rights. The Kimberley Process had its origin in the efforts to combat the use of "conflict diamonds" to fund the civil wars in Sierra Leone and Angola in the late 1990s. The Voluntary Principles provide guidance to companies on how to conduct comprehensive risk assessments with regard to security and human rights issues, and how to engage with public security forces (military and police), and with private security forces. These Principles are being increasingly embedded in company contracts, thereby also becoming part of the macro-legal framework.[105] These initiatives have been

Box VI.13. The EITI five years on: progress and prospects

The multi-stakeholder Extractive Industries Transparency Initiative (EITI) was first launched by the then British Prime Minister Tony Blair at the World Summit on Sustainable Development at Johannesburg in 2002. It was the outcome of lobbying by NGOs and the civil society campaign, *Publish What You Pay*. The international anti-corruption movement, Transparency International, also played an important role.

Its underlying concept is straightforward; it requires companies to publish what they spend and governments to publish what they receive, thus making taxes, royalties and signature bonuses public. The resulting transparency between companies and governments leads to greater accountability of governments to their citizens. When countries do commit to the initiative, the transparency provisions apply to all companies in the country – foreign and domestic, private and State-owned, large and small.

Since its inception, universal principles and the content of EITI have been agreed upon, and, as of May 2007, 22 developing countries[a] had committed to implementing its principles and 27 oil, gas and mining companies had agreed to support the initiative. A process for quality assurance has also been put in place. Countries have agreed to have their implementation independently validated once every two years. An extensive technical support organization, financed in large part by a World Bank multi-donor trust fund, is available to aid the national implementation of the EITI principles.

Countries that sign up have to make a public declaration of commitment to the EITI, establish a multi-stakeholder working group (including civil society), and develop a work plan for national implementation. Subsequently, an implementing country will go through a preparatory, a disclosure and a dissemination process. A group of independent validators will also visit implementing countries once every two years and review progress made. To date, Azerbaijan, Ghana and Nigeria have made the most progress in implementing the EITI. In March 2007, Nigeria became the first country to adopt a law making revenue disclosure mandatory. Other countries have made commitments and are still in the early stages of implementation. Unless rapid progress is made, some countries are unlikely to be considered as implementing countries when they undergo validation procedures.

There are a number of ways in which the impact of the EITI could be further enhanced:

- More resource-rich host countries should endorse and commit to the process. To set a good example, key developed host countries should endorse and commit to the process.
- In June 2007, the EITI was formally endorsed by the G-8 at its summit in Heiligendamm, Germany. Endorsement by a larger number of individual home countries should also be encouraged, including by China, India, Malaysia and the Russian Federation, which are emerging as important sources of foreign investment in extractive industries.
- More companies should also sign up and commit to the EITI.
- Ways should be found of making institutional investors conform to the EITI criteria.

The coalition of countries, organizations and companies behind the EITI has made progress in devising principles and criteria, integrity measures and an institutional structure to oversee the initiative. These are now being put to the test and it remains to be seen whether the initiative will contribute significantly to greater development benefits from resource extraction.

Source: UNCTAD and the EITI secretariat.

[a] The following countries have endorsed the EITI: Azerbaijan, Bolivia, Cameroon, Chad, Congo, the Democratic Republic of the Congo, Timor-Leste, Equatorial Guinea, Gabon, Ghana, Guinea, Kazakhstan, Kyrgyzstan, Mali, Mauritania, Mongolia, Niger, Nigeria, Peru, Sao Tome and Principe, Sierra Leone and Trinidad and Tobago.

described as "expressions of an emerging practice of voluntary global administrative rulemaking and implementation…in a number of areas where the intergovernmental system has not kept pace" (United Nations, 2007, para. 56). However, while voluntary initiatives are a welcome development, they need also to be backed by legislation. Guidance from governments and the international community is also clearly important.

TNCs, for their part, need to consider if it is appropriate to invest or stay in a country, or if they should abstain from investing in or divest from an existing project. In some cases, FDI into a conflict zone can ignite or further fuel a conflict. In such cases, it may be desirable for TNCs to forego their investment intentions. Exact criteria for such cases need further analysis.

More TNCs in extractive industries need to participate in existing international initiatives. A review of the top TNCs in mining, oil and gas shows that only some of them are explicitly committed to the EITI, the United Nations Global Compact, the Voluntary Principles of Security and Human Rights and the Global Reporting Initiative (tables VI.2 and VI.3). TNCs from developing and transition economies have a particularly

Box VI.14. Conflict diamonds and the Kimberley Process

The Kimberley Process Certification Scheme (KPCS) has been operational since 2003, and now covers virtually all countries with diamond producing, trading and polishing activities.[a] It has been endorsed by several United Nations General Assembly and Security Council resolutions, and compliance with its requirements has been used by the Security Council as a benchmark for the lifting of diamond sanctions imposed on countries such as Liberia and Côte d'Ivoire.

The KPCS requires that Kimberley Process certificates accompany all rough diamonds traded internationally. Such certificates are issued with the authority of participating governments to guarantee that diamonds in a given shipment are not of "conflict origin". Crucially, the scheme has to be implemented through binding legislation in participating countries, and supported by appropriate penalties for any infringements by individuals or companies. The national legislation of all countries that wish to participate in the scheme is examined to determine whether it in fact implements the necessary requirements. The KPCS is backed by a comprehensive statistical reporting and monitoring system.

The KPCS has developed mechanisms for dealing with non-compliance, with exclusion from the list of participants being the ultimate sanction.[b] The starkest example of non-compliance has been that of the Democratic Republic of the Congo, which was expelled from the KPCS in July 2004 after it was found to have acted as a conduit for illicit diamonds from major diamond producers in the region. There have also been compliance issues in Brazil and in some West African countries. The link between participation and compliance has had a positive impact on the implementation of its core requirements. Following a plenary meeting in 2006 and the three-year review of the scheme, the KPCS started a second round of reviews. Large mining companies – especially De Beers – have played an active role, from lobbying governments to participate to themselves participating in peer reviews.[c]

KPCS participants account for some 99.8% of global rough diamond production, and conflict diamonds now make up less than 0.2% of the international trade in these commodities.[d] The Scheme has enabled previously war-torn diamond-producing countries, such as Sierra Leone or the Democratic Republic of the Congo, to increase their volume of legally exported rough diamonds.

But there are still loopholes in the system. In northern Côte d'Ivoire, for example, the small-scale production of conflict diamonds continues. There is also a need to bring the small-scale, artisanal diamond production, which is characteristic of many diamond-producing countries, fully into the legitimate "pipeline". Related social and environmental issues, such as conditions in artisanal diamond mines, which go beyond the KPCS's mandate, are being addressed, for example, by the Diamond Development Initiative[e] and the World Bank's Communities and Small-Scale Mining initiative.

Remaining challenges notwithstanding, the KPCS stands as the first, and for the most part, successful, attempt to deal comprehensively with a resource-curse-related issue by imposing strict certification and regulatory requirements on an entire industry. Some of its technical provisions are applicable only to rough diamonds. Nevertheless, the KPCS could well prove to be a useful template for addressing similar issues in other high-value commodity sectors jeopardized by issues of conflict or weak governance.[f] It is currently chaired by the European Community, with India due to take over as Chair in 2008.

Source: UNCTAD, based on information from the KPCS.

a. The KPCS has some 50 participants, including the European Community as a single participant on behalf of its 27 member States.

b. When it was launched in 2003, around one third of the countries that had initially signed up to the KPCS were expelled when they were found not to have implemented its provisions. Many of them rejoined after having adopted the necessary legislation.

c The peer review teams are composed of about three government representatives, one industry representative and one NGO representative. Industry representatives have come from big mining companies, and NGOs have been represented mainly by Global Witness and Partnership Africa Canada.

d The production of two diamond producing countries has been barred from entering the legitimate trade through the KPCS: Côte d'Ivoire, where there is still a conflict diamond situation, and Liberia.

e See: www.pacweb.org.

f Discussions on commodity certification have been part of the agenda of the Great Lakes Conference, and the issue of certifying exports of valuable minerals has also been taken up by the United Nations Security Council's expert panel on the arms embargo against the Democratic Republic of the Congo. In the forestry sector, a bilateral form of commodity certification has been launched by the EU.

low rate of participation in these initiatives. For example, judging from data published on the respective websites, none of the top oil and gas or metal mining TNCs from the Russian Federation participate in any of the listed initiatives, and the only Chinese oil TNC in table VI.3 is Sinopec (a Global Compact participant). Petrobras (Brazil), on the other hand, is committed to the EITI, the Global Compact and the Global Reporting Initiative. Other TNCs from developing and transition economies should be encouraged to follow this example. Also, once a company commits to different standards and principles, it is important that it abides by them.

Table VI.2. Top mining TNCs participating in selected international initiatives, June 2007

Company[b]	Home country	EITI[a]	Global Compact	Voluntary Principles	Global Reporting Initiative
Developed home economies					
BHP Billiton Group	Australia	√	√	√	√
Barrick Gold	Canada	√	√		
Teck Cominco	Canada		√		
Glencore International	Switzerland				
Xstrata	Switzerland	√	√		
Anglo American	United Kingdom	√	√	√	√
Antofagasta	United Kingdom				
Rio Tinto	United Kingdom	√	√	√	
Newmont Mining	United States	√	√	√	√
Phelps Dodge	United States				
Developing and transition home economies					
Grupo México	Mexico				
Alrosa	Russian Federation				
Norilsk Nickel	Russian Federation				
Anglogold Ashanti	South Africa	√	√		√
Gold Fields	South Africa	√	√		
Harmony Gold Mining	South Africa				
Impala Platinum	South Africa				

Source: UNCTAD, based on information from websites of the EITI, Global Compact, Voluntary Principles and Global Reporting Initiative.

[a] Freeport-McMoRan Cooper & Gold and Gold Fields are not listed on the EITI webpage. As members of the ICMM, however, they also support the EITI, according to information from the ICMM Secretariat.

[b] Falconbridge, Inco and Placer Dome – which are included in table IV.7 – are not shown here as they have been taken over since 2005.

Table VI.3. Top oil TNCs participating in selected international initiatives, June 2007

Company	Home country	EITI	Global Compact	Voluntary Principles	Global Reporting Initiative
Developed home economies					
A.P. Moller-Maersk	Denmark				
Total	France	√	√		
ENI	Italy	√	√		
Inpex	Japan				
Nederlandse Aardolie Mij	Netherlands				
Norsk Hydro	Norway	√	√	√	
Statoil	Norway	√	√	√	√
Repsol-YPF	Spain	√			
British Petroleum	United Kingdom	√	√	√	√
Royal Dutch Shell	United Kingdom/ Netherlands	√	√	√	√
Chevron	United States	√		√	
ConocoPhillips	United States	√		√	
ExxonMobil	United States	√		√	
Developing and transition home economies					
Sonatrach	Algeria				
Petrobras	Brazil	√	√		√
CNOOC	China				
CNPC	China				
PetroChina	China				
Sinopec	China		√		
ONGC	India		√		
Petronas	Malaysia				
Gazprom	Russian Federation				
Lukoil	Russian Federation				
Tatneft	Russian Federation				

Source: UNCTAD, based on information from websites of the EITI, Global Compact, Voluntary Principles and Global Reporting Initiative.

G. Conclusions

The commodity price boom has presented many developing and transition economies with new opportunities to use their mineral resources in a way that promotes sustainable development. For mineral-rich LDCs, it represents an opportunity to make progress towards meeting the Millennium Development Goals by reducing poverty and embarking on a path of broader based sustainable growth. As domestic resources to exploit the mineral endowments are often insufficient in these and other low-income countries, TNCs tend to predominate (chapter IV). This is especially so in the case of large-scale mineral extraction. In order to maximize economic gains from TNC involvement, and to minimize adverse environmental, social and political impacts, concerted action by all relevant stakeholders is necessary, based on a consensus on coherent and sequenced policies. A number of recommendations for host- and home-country governments, the international community, civil society and TNCs emerge from the analysis in this chapter.

Host-country governments should assume the main responsibility for ensuring that tangible development benefits are derived from the extraction of mineral deposits by providing an appropriate regulatory and institutional framework.

- Governments should formulate a clear vision of how and in what ways the country's mineral resources could contribute to sustainable development. An overall development strategy is essential to ensure coherent policy formulation and implementation. A governance framework based on the rule of law is critically important for effective policy-making. It should consider all relevant stakeholders – both current and future generations. Without such a framework, there is a serious risk that extractive activities – with or without TNC involvement – will bring few gains, if any, to the local population.
- Host-country governments also need to strengthen their ability and capacity to develop appropriate policies. This should involve collecting essential information on the country's mineral endowments (e.g. through geological surveys), and acquiring an understanding of global and regional developments concerning the relevant mineral. Well-informed governments are not only better able to design an appropriate institutional and regulatory framework, but also to negotiate with TNCs if and when this is required.

- Policies towards TNCs should be placed in the context of an overall development strategy, and should address such aspects as transfers of capital, knowledge and technology and access to global markets. Governments at both central and subnational levels also need a clear strategy of how to obtain, manage and use the revenue generated from mineral extraction.
- In designing and implementing policies, governments need to bear in mind the risk-revenue relationship. If a country needs inbound FDI, its business environment should be competitive enough to attract the desired TNCs while at the same time ensuring adequate revenues for the government. As witnessed by the many regulatory changes in recent years concerning the ownership and fiscal policies governing TNCs in extractive industries, finding the right balance is not easy.[106] The volatility of mineral prices adds to the complexity of decision-taking. To reduce the need for unilateral actions, countries may seek to develop frameworks that are robust over different phases of the business cycle. For example, in the case of revenue from mineral extraction, more countries might consider introducing some form of progressive taxation.
- There should be considerable emphasis on strengthening the capabilities of the domestic private sector. A strong domestic enterprise sector that can rely on government support to help improve its competitiveness can increase the chances of TNCs creating backward and forward linkages and learning opportunities for local firms.
- Host-country governments furthermore need to consider the environmental and social impacts of mineral exploitation activities and ensure that all stakeholders are given opportunities to influence the decision-making process.

Home-country governments can also influence the potential impact of their TNCs' investments abroad. A number of developed countries and more recently, also developing countries actively support their firms' overseas expansion sometimes with a view to securing access to strategically important resources.

- Home-country governments should promote the responsible behaviour of their TNCs' activities abroad. This is equally important if the home State also owns the TNC. More home countries should become involved in existing international initiatives related to the extractive industries, notably the EITI, to promote transparency. In some cases, TNCs might also be held accountable in their home countries for their overseas activities.[107]
- Home-country governments may also assist the recipient economies in different ways by providing financial and technical assistance. Through its Oil for Development Initiative, Norway, for example, offers various forms of short- and long-term assistance to oil-rich developing countries, while South Africa provides assistance to a number of African countries in support of their extractive industries (see annex to this chapter). Home countries can share also their experiences and knowledge, for example by attending the meetings of the World Mines Ministers Forum and the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development.[108]

The *international community* can help promote greater development gains and address the adverse effects of resource extraction.

- International organizations can facilitate learning opportunities from studying and comparing the positive and negative experiences of different mineral-rich countries. This could be done at a regional context or in other forms, as illustrated by the 2007 Big Table (box VI.7). For example, it is worth exploring the scope for conducting regional geological surveys and for helping to establish regional mining schools in Africa.
- Despite ongoing efforts, there is scope for more technical assistance and capacity-building to help improve the management of mineral resources in low-income countries (see annex to chapter VI).
- The international community can be instrumental in the development of standards and guidelines and in promoting the of existing tools to help ensure a more development-friendly outcome of TNC activities in mineral-rich countries, notably in weakly governed or authoritarian States. In very serious instances, the global community may have to explore the use of sanctions as a tool to protect human rights.

The role of *Civil Society* should also not be neglected. Trade unions can play an active role in promoting greater development gains from extractive activities. Moreover, international as well as local NGOs in the countries concerned can contribute useful views and expertise on economic, environmental and human rights issues. They can play an important role in monitoring the actions of both governments and companies, and draw attention to good and bad practices by any of the players. Indeed, a number of the recent international initiatives may not have emerged, had it not been for the advocatory and active role of civil society.

When engaging in resource extraction, the role of *TNCs*, first and foremost, should be to contribute to efficient production while, as a minimum, respecting the laws of the host

country. When mineral deposits are found in weakly governed or authoritarian States, foreign companies need to decide whether to invest there or not, since they may end up – directly or indirectly, or even unwittingly – supporting or strengthening the existing order. While there are no easy choices in this respect, a number of recent private-sector initiatives can provide guidance. However, as shown above, even among the largest mineral producers, the number of companies that have signed up to relevant international initiatives is still small. While such initiatives can be considered a necessary complement in countries where appropriate legislation and its enforcement are absent, the impact will be limited unless a large number of TNCs adhere to them and subsequently abide by their commitments.

So, to make the vast mineral resources located in some of the world's poorest countries a force for development, a concerted effort by all stakeholders is necessary. In the case of low-income countries, TNCs are likely to remain active players in this process. The policy challenge is to develop the appropriate legal and regulatory frameworks that create the proper incentives for local and foreign firms to produce efficiently while at the same time addressing the environmental impacts and respecting the interests of local communities and society at large. A win-win situation can be achieved if various minerals can be produced in the most efficient and environmentally friendly manner possible, while at the same time deploying the revenues generated for growth, poverty alleviation and sustainable development.

Notes

1 For a discussion on these changes, see McKern, 1993, Part Three.

2 See, for example, Acemoglu, Robinson and Verdier, 2004; Acemoglu and Robinson 2006; Renner, 2002; Shafer, 1994.

3 See the Summary Report from the Big Table 2007 – an initiative developed by the United Nations Economic Commission for Africa in collaboration with the African Development Bank to promote dialogue between African policy makers and their developed-country counterparts (ECA, 2007a).

4 For example, in 1938, Shell D'Arcy Petroleum Development Company (United Kingdom and the Netherlands) was granted a concession over the entire mainland of Nigeria. It was the only concessionaire and was therefore able to explore at its convenience until 1962, by which time it retained 15,000 square miles of the original area (Omorogbe, 2002: 553).

5 "Western firms feel a pinch from oil nationalism", *International Herald Tribune*, 8 May 2006.

6 For example, oil and gas industries are not covered by Investment Law No. 13 of 2000 in Qatar; Saudi Arabia includes these in a list of industries into which FDI is prohibited, and in Yemen Investment Law No. 22 of 2002 prohibits FDI in the exploration and extraction of oil, gas and other minerals (ESCWA, 2006).

7 Under this arrangement, the contractor funds all investments and receives remuneration from the State-owned company, NIOC, in the form of an allocated production share, and then transfers operation of the field to NIOC after a set number of years. See Country Analysis Briefs: Iran. Energy Information Administration. August 2006, at www.eia.doe.gov.

8 For example, Venezuela concluded 32 risk service agreements with TNCs during the 1990s which were recently transformed into joint ventures with the State-owned company, PDVSA. Brazil has concluded agreements for activities in selected areas, as have Colombia, Ecuador and Trinidad and Tobago. Argentina, Bolivia and Peru have privatized their oil firms and have opened up to FDI (ECLAC, 2002).

9 In Argentina, it is regulated at both the federal and provincial levels. In China, it is regulated by national and local laws, regulations and rules. Similarly, in Indonesia, it is regulated at the central, provincial, regional and municipal levels, and mining rights or authorizations may be granted and regulated at all levels of government (with different rules for different types of minerals) pursuant to centrally enacted mining laws and regulations.

10 Between 1985 and 1995, 96 countries revised or planned to revise their mining codes (Barberis, 1999: 16).

11 Reforms had already been implemented in Chile with a new mining code in 1983, offering increased investor protection and allowing for a more effective use of foreign investment incentives.

12 See Legislative Decree 708 and Supreme Decree 014-92 of the Ministry of Energy and Mines.

13 For example, in Brazil, at least two thirds of the mining employees must be Brazilian nationals and two thirds of the payroll must serve to pay those employees. In Chile, no less than 85% of the mining workers of employers with 25 or more employees must be Chilean. Mexico's Federal Labour Law provides that 90% of all hourly and salaried workers and employees must be of Mexican nationality. Companies operating in Peru are allowed to hire only up to 20% of foreign employees, provided that their salaries do not exceed 30% of the total payroll. In India, mining concession holders are restricted from employing persons other than Indian nationals in reconnaissance, prospecting and mining operations (Law Business Research, 2005).

14 In the United Republic of Tanzania, for example, in the 1990s large-scale mining companies were guaranteed stability for their long-term mining projects with respect to the range and applicable rates of royalties, taxes, duties, fees and other fiscal taxes and the manner in which liability thereof was calculated. Similar steps were taken in Chile and Peru.

15 This was also a major motive behind the main energy-related IIA – the Energy Charter Treaty (1994) – which seeks to increase the stability of the legal environment for energy investment in the transition economies of Central and Eastern Europe and the former Soviet Union (Wälde, 1996).

16 Most countries today offer national treatment to domestic and foreign investors with regard to mining rights, with some exceptions, such as the following. For example, in Ghana, small-scale gold mining is reserved solely for Ghanaians. In China, foreign parties are prohibited from exploration or securing mining rights to certain minerals, and are required to have a Chinese domestic partner in order to acquire exploration or mining rights to certain other minerals. In India, only Indian nationals or companies that are registered in India under the Companies Act (1956) are eligible to secure mineral concessions. However, 100% foreign ownership is now permitted for mining of all non-fuel and non-atomic minerals (PricewaterhouseCoopers, 2006). Indonesia's Mining Law grants mining rights or authorizations only to Indonesian

individuals, companies and other legal entities. The deeds of establishment and articles of association of Indonesian-owned and controlled mining companies normally have prohibitions against foreign ownership (Law Business Research, 2005).

17 In Chile, for example, the economic crisis in 1982 added an urgent need to raise foreign currency, and the Constitutional Mining Law of 1982 and the Mining Code of 1983 sought to provide greatly improved rights and protection to foreign investors. However, it took time for Chile to attract FDI, as many foreign companies were reluctant to invest during the military regime, which ended in 1989.

18 See "Algeria agrees oil windfall tax", *BBC News*, 15 October 2006, at http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/6053120.stm.

19 "Bolivia: A lot of gas for partial takeover?", *The International Review,* 9(1): 6–9, 2006; Patricia I. Vasquez, "Bolivia: full steam ahead", *Energy Compass*, 2 February 2007.

20 "Bolivian official calls for 600% mining tax increase", *Resource Investor*, 8 January 2007, http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/6053120.stm.

21 See www.marketwatch.com, 5 February 2007.

22 See "DR Congo reviews 60 mining deals", *BBC News*, 11 June 2007, at http://news.bbc.co.uk/go/pr/fr/-/2/hi/africa/6739999.stm.

23 The Government entered into a dispute with Occidental (United States), which in turn brought an action against the Government in connection with demands for the payment of a value added tax. The company claimed that Ecuador had expropriated its property, a claim that the arbitration tribunal dismissed (see *Occidental Exploration and Production Company v. The Republic of Ecuador* (Case No. UN3467) (7/1/2004); *Republic of Ecuador v. Occidental Exploration and Petroleum Company* [2005] EWHC 774 (Comm)). Similarly, in a separate claim brought to an arbitration tribunal by EnCana Corp. (Canada) also over tax payments, the tribunal decided that an expropriation had not occurred (See *EnCana Corporation v. Republic of Ecuador* LCIA Case No. 3481 (2/3/06)).

24 The taxes are effective when copper exceeds $2,600 per ton on the London Metal Exchange and when the international gold price exceeds $500 per ounce. A package of tax reforms was approved by parliament in July 2006 which reduced the overall corporate income tax from 30% to 25% and the value-added tax from 15% to 10% (EIU, 2006b).

25 See "Mongolia: Legal revisions pose investment risk", *Oxford Analytica*, 12 July 2006 (www.oxan.com).

26 The mining royalty for exploiting mineral resources is to be calculated by applying a rate of 1% rate of the annual sales of concentrates of less than $60 million, 2% for sales of $60-120 million, and 3% for sales exceeding that amount.

27 According to the draft, foreign investors and Russian companies owned by them will not be admitted to bid in auctions for strategic deposits, nor are foreign-incorporated entities allowed to acquire more than a 50% stake in the strategic deposits or enterprises by any other method.

28 A recent example was the sale of Royal Dutch Shell's majority stake in the Sakhalin-2 project to State-owned Gazprom in early 2007, so as to avoid the revocation of its licence as a result of negative environmental impacts (RIA Novosti, 2007c and d).

29 Draft Mineral and Petroleum Resources Royalty Bill presented 11 October 2006 by the National Treasury of the Government of South Africa, p. 23.

30 See Hydrocarbons Law of 2001, Article 22.

31 In February 2007, a draft bill was announced that would increase the State's ownership of four Orinoco heavy oil projects from the present level of 40% to 60% (Upstream.com, 26 February 2007).

32 The budget contained an increase in the rate of ad valorem mineral royalty from 0.6% to 3%, a rise in the applicable rate of income tax from 25% to 30%, the application of 15% dividend withholding tax on previously exempt mining profit distributions and the curtailment of income tax holidays (PricewaterhouseCooper, 2007).

33 For example, Chad plans to establish a State-owned oil company and to renegotiate certain contracts and the Government of Equatorial Guinea has stated its intentions to renegotiate contracts (see "Global oil industry faces broad spectrum of political risk", *AFX International Focus,* 19 September 2006 and "Africa: resources nationalism African-style", *Energy Compass,* 12 August 2006).

34 See, for example, www.ukbudget.com/prebudget2005/northseaoiltax/pbr2005_northseaoiltaxation.cfm.

35 In addition to the OPEC renegotiations, others took place in Papua New Guinea (1967), Chile (1967-1971), Jamaica (1974), the Dominican Republic (1987, 1988), Peru (1985) and Colombia (1996) (Kolo and Wälde, 2004; Muchlinski, 1995).

36 This was the case in the major oil arbitrations involving Libyan Arab Jamahiriya in the early 1980s (Greenwood, 1982; and von Mehren and Kourides, 1981).

37 Joseph E. Stiglitz 'Who owns Bolivia?' *Daily Times,* 22 June 2006.

38 See, for example, Weiler, 2005; and Muchlinski, 2007.

39 An Egyptian contract is an example of a contract that disallows renegotiation: "(b) The rights and obligations of EGPC and ESSO under, and for the effective term of, this Agreement (as well as matters relating to the Joint Company subject to Article IV hereinabove) shall be governed by and in according to the provisions of this Agreement and can only be altered or amended by mutual agreement of the parties." Egyptian General Petroleum Corporation – Esso: Concession Agreement for Petroleum Exploration and Production (12/14/74), Article XVI *Rules and Regulations* (b), 14 International Legal Materials 915, 931 (1975).

40 See: Federal Law on Production Sharing Agreements, Article 17(2), 35 *International Legal Materials* 1258, 1270 (1996).

41 Its membership includes 52 participants from Asia and Europe plus 19 observer countries from other regions. It offers protection to investment as part of the broader aim to promote open and competitive energy markets and security of energy supply, while respecting the principles of sustainable development and sovereignty over natural resources. It should be noted that Australia, Belarus, Iceland, Norway and the Russian Federation have not ratified the ECT. Belarus and the Russian Federation have, however, declared that they will apply it on a provisional basis.

42 See, for example, "ConocoPhillips draws attention in defying Venezuela over oil fields", *Dow Jones Newswires,* 27 April 2007, at www.rigzone.com/news/article.asp?a_id=44479.

43 In theory, the optimal form of progressive taxation is one that taxes only the portion of investment proceeds that exceeds the minimum rate of return required by the investor to undertake an investment. Such taxes should not, in principle, distort investment decisions insofar as they do not alter the pre-tax merits of an investment.

44 Such studies are based on cash flow modelling of the entire array of fiscal impositions on an investment in order to derive a measure of how the net proceeds of an investment over its lifetime are apportioned between the government and the investor (see, for example, Otto et al., 2006; Johnston, 1994; Kemp, 1996).

45 A risk with progressive profit taxes is that taxpayers may seek to avoid the higher rates of tax by "gold-plating", in which costs are incurred that would not otherwise have been expended.

46 Generally, the fiscal regime for the oil industry is usually more clearly defined.

47 Reasons for their failure included poor project management, lack of embeddedness in the local economy, tariff escalation and other trade barriers, weak local knowledge, lack of supporting infrastructure and lack of competition (Pedro, 2004: 13-14).

48 Local content levels are higher for onshore fields than for offshore fields (Heum et al., 2003: 18).

49 Some guidelines are very specific. For example, according to the Nigerian Content Development Policy: "From January 2006, all topsides of fixed (offshore and onshore) platforms weighing up to 5,000 tons, are to be fabricated in Nigeria" … "fabrication of all piles, decks, anchors, buoys, jackets, bridges, flare booms and storage tanks are to be done in Nigeria" … "all carbon steel pressure vessels of not more than 75mm shell thickness shall be fabricated in Nigeria" (Nigerian Content Development Short Term Directives, Rev 1 as of December 2005).

50 Egyptian General Petroleum Corporation – Esso: Concession Agreement for Petroleum Exploration and Production (12/14/74), Article XXIII (a)(1) and (2), 14 *International Legal Materials* 915, 934 (1975).

51 See www.lcrpt.com/showstory.asp?id=6057.

52 Atlantic Canada (www.neiti.org/Local%20Content%205-9-05%5B1%5D.pdf).

53 For example, under the Mining Sector Charter of South Africa, stakeholders undertake to give historically disadvantaged South Africans preferred supplier status, where possible, in the procurement of goods, services and consumables (Mintek, 2007).

54 TRIMs Agreement Article 2. This is likely to apply also to State contracts, as these agreements are legally binding instruments enforceable under domestic law or administrative rulings, and may contain advantages to investors that are made conditional upon the acceptance of those requirements. An investment contract that includes performance requirements prohibited under the TRIMs Agreement would be invalid, at least as far as the TRIMs part is concerned. This is because investors, like any private party, can only renounce their own rights.

55 For example, the United States and Canadian model BITs cover performance requirements related to both goods and services. See United States Model BIT 2004 Art. 8, and Canada Model BIT 2004, Art. 7 in UNCTAD, 2007a: 68-69. However, they permit the imposition of certain requirements as a condition of the receipt of an advantage.

56 For example, an analysis of the scope for enhanced local content development in the upstream oil and gas industry of Nigeria identified the following, among other areas: fabrication and construction; well construction and completion; modification, maintenance and operations; transportation; control systems; design and engineering; and consultancy work (Heum et al., 2003). This study considered local content development by both domestic and foreign companies.

57 For example, there may be a need to consider skills, critical mass and the overall business environment, in addition to the availability of reliable power supplies at competitive costs.

58 The Saudi Petrochemical Company, a joint venture between SABIC and Royal Dutch Shell, recently completed a $1 billion expansion programme.

59 For example, while exports of crude oil or unprocessed metal products benefit from zero tariffs in developed countries, average tariffs on processed exports vary vary between 0.87% and 2.88% for metals, and between 0.39% and 3.17% for oil. The escalation is even more pronounced in some developing countries. In South Asia, for example, the average tariffs on unprocessed and processed metal products were 18.7% and 33.1%, respectively (UNCTAD, 2003b).

60 What is stipulated in the legislation may not always reflected in actual developments, however, partly due to weak local capacity of governments to enforce laws and regulations.

61 Article 92, Hydrocarbons Law No. 8/2006, of 3 November of the Republic of Equatorial Guinea.

62 Mines and Minerals Act, 1999 (Cap 66:01).

63 See, for example, South African Migration Project at www.queensu.ca/samp/migrationnews/article.php?Mig_News_ID=3119& Mig_News_Issue=17&Mig_News_Cat=8.

64 Examples include the Ecole Nationale Polytechnique in Algeria and the School of Mining Engineering at the Witwatersrand University in Johannesburg, South Africa.

65 Communication by the Canadian International Development Agency in July 2007.

66 Information provided by the Raw Materials Group.

67 In the United States, for example, as much as 70% of the public land is off-limits to mining and oil exploration in Canada about 17% of the land is off-limits to mining, and in Australia it is about 10% (Otto, 2006: 110).

68 However, this does not mean that all new mining codes have led to an improvement in environmental standards. Some States have even downgraded their environmental provisions. In Zambia, for example, the Government passed the Mines and Minerals Act in 1995, but according to the OECD (2002: 10), it "fails to address requirements such as environmental management adequately, as it is less stringent than the 1990 Environmental Act" (see also Campbell, 2006).

69 An environmental impact assessment requires examining questions such as whether the impact of a project is within the self-correcting capacity of the ecosystem, whether impact is short- or long-term, whether it is reversible or not, and whether the cost is worth the benefit.

70 Such plans regulate the termination of a project and should be designed to ensure, among other things, that future public health and safety are not compromised; environmental resources are not subject to physical and chemical deterioration, and that the site after the end of extraction can be restored. Early steps should be taken to commence a rehabilitation programme once the mining or oil drilling stops.

71 It is important to ensure that sufficient funding is available to restore a mining area, even if mining ceases unexpectedly and in an unplanned manner. To this end, various financial mechanisms, including reclamation bonds and insurance contracts, have been devised. However, a lack of capacity in the financial sector of developing countries has often slowed down the introduction of these mechanisms, however (see, for example, www.goodpracticemining.org).

72 In Kenya, for example, the main problems of environmental protection in the extractive industry have been the "conflict or lack of coordination between the various authorities' regulation activities, lack of enforcement of existing rules and regulations due to the lack of budgetary allocation, bureaucratic inertia, lack of political will and corruption" (OECD, 2002: 18).

73 The Aarhus Convention links environmental and human rights. It establishes that sustainable development can be achieved only through the involvement of all stakeholders. It grants certain rights to the public and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice (see www.unece.org/env/pp/).

74 See www.goodpracticemining.com.

75 Some observers have described oil TNCs' environmental credentials as greatly exaggerated and their actions as "greenwash" (Utting and Ives, 2006: 15).

76 The IFC has also published a manual entitled *Doing Better Business Through Effective Public Consultation and Disclosure*. It contains, inter alia, guidelines for identifying consultation possibilities at different stages of a project, a checklist of objectives and actions for improving consultation and another checklist on techniques for public consultation and information disclosure. The checklists provide a range of tools that can be selected for application to specific situations (ECA, 2004: 14).

77 See www.equator-principles.com/. Current participants are: ABN Amro, Banco Bradesco, Banco do Brasil, Banco Espírito Santo Group, Banco Itaú, Banco Itaú BBA, Bank of America, Bank of Tokyo Mitsubishi, Barclays, BBVA, BMO Financial Group, Caja Navarra, Calyon, CIBC, Citigroup, Credit Suisse Grp, Dexia, Dresdner Bank, Eksport Kredit Fonden, FMO, HSBC, HVB Group, ING, JPMorgan Chase, KBC, Manulife Financial Corporation, Mediocredito Centrale, Millennium bcp, Mizuho Corporate Bank, Nedbank, Rabobank, Royal Bank of Canada, Royal Bank of Scotland, Scotiabank, Standard Chartered, Sumitomo Mitsui, Unibanco, Wells Fargo & Company, WestLB and Westpac.

78 In fact, some projects that were financed by banks subscribing to the Equator Principles, such as the Camisea natural gas pipeline project in Peru, have been criticized (see, for example, Amazon Watch at www.amazonwatch.org/amazon/PE/camisea/, for a detailed account of allegations related to negative impacts on biodiversity and on the local indigenous people). The greatest concern of the locals was found to be the reduction in the fish catch caused by spills. For related information, see www.oxfamamerica.org/newsandpublications/news_updates/archive2006/news_update.2006-07-25.6814983627.

79 These efforts range from the adoption of the Hours of Work (Coal Mines) Convention (No. 31) in 1931 to the Safety and Health in Mines Convention (No. 176), which was adopted in 1995 (see www.ilo.org/ilolex/cgi-lex/convde.pl?C176).

80 The ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy calls on TNCs to respect, promote and uphold the principles concerning fundamental rights, irrespective of whether a country has

ratified and implemented the ILO Declaration on Fundamental Principles and Rights at Work.

81 The right to freedom of association is recognized as a fundamental human right (see: Article 22(1) of the International Covenant on Civil and Political Rights 1966) .

82 International framework agreements might contain specific obligations.

83 UNCTAD, 2007k.

84 Prior to this arrangement, the monetary gains from TNCs' extractive operations directly accrued to the central Government.

85 In Peru, for example, the revenues allocated to mining regions increased rapidly, from less than $50 million in 2002 to more than $500 million in 2006 (Vigila Perú, 2004 and 2006).

86 One study noted that "present arrangement[s] give little confidence that these funds can be spent efficiently and with a long-term view, or that examples of a local 'resource curse' can be prevented " (Dietsche et al., 2007b: 81).

87 At the same time, they cannot compensate for failures to address duties to remedy possible social or environmental damage (Idemudia, 2007).

88 This was done, for example, by the addition of a Human Rights Undertaking in the Baku-Tiblisi-Ceyhan investment agreement between the three host countries involved (Azerbaijan, Georgia and Turkey) and the consortium of oil and gas companies charged with the construction and operation of the pipeline (Leader, 2006).

89 For example United States courts have accepted that, in principle, a corporation can aid and abet a government in committing human rights violations and that an action may be brought against it under the Alien Tort Claims Act (Joseph, 2004; Muchlinski, 2007; Clapham, 2006). Adding to the risk is the uncertainty for firms as to where action against them will be filed or what precise standards will be applied since national standards on those issues vary considerably.

90 The OECD Guidelines recommend that firms should "respect the human rights of those affected by their activities consistent with the host government's obligations and commitments" (OECD, 2000, General Policies II.2).

91 See www.equator-principles.com.

92 See https://hrca.humanrightsbusiness.org and International Alert, http://www.international-alert.org/our_work/themes/extractive_industries.php.

93 See www.ifc.org/ifcext/enviro.nsf/Content/OurStories_SocialResponsibility_HumanRights.

94 See www.humanrightsimpact.org/hria-case-studies/item/case study/32/.

95 The United Nations Committee on Economic, Social and Cultural Rights has suggested that States should take steps to "prevent their own citizens and companies" from violating rights in other countries (CESCR, general comment No. 15, para. 33 as cited in United Nations, 2007: 6).

96 Regarding civil-society concerns related to Chinese investments in Sudan, see, for example, Amnesty International, 2004 and ECOS, 2006. Regarding concerns expressed over United States diplomacy related to oil-rich African countries, see, for example, Catholic Relief Services, 2003.

97 See Department of Trade and Industry, Review of ECGD's Mission and Status, Cm 4790 (London, July 2000); and ECGD, ECGD's Business Principles (December 2000), available at: www.ecgd.gov.uk.

98 Promotion of Human Rights and Democratisation in the European Union's External Relations, at: http://ec.europa.eu/comm/external_relations/human_rights/intro/index.htm#6.

99 Fundamental labour rights, the health and safety of surrounding communities, avoidance of involuntary resettlement, the rights of indigenous peoples, and the protection of cultural heritage.

100 The Principles for Responsible Investment aim to help incorporate environmental, social and governance concerns into investment decision-making and ownership practices of institutional investors, and thereby improve long-term returns to beneficiaries. They were developed by a group of investment professionals representing 20 large institutional investors from 12 countries at the invitation of the United Nations Secretary-General, Kofi Annan in 2005. They were supported by a multi-stakeholder group of experts from the investment industry, intergovernmental and governmental organizations, civil society and academia. The process was coordinated by the United Nations Environment Programme Finance Initiative and the United Nations Global Compact (see: www.unpri.org).

101 The campaign was launched in 2002 by a coalition including Global Witness, the Catholic Agency for Overseas Development, Oxfam, Save the Children UK, Transparency International UK and George Soros, Chairman of the Open Society Institute. A number of national NGO coalitions are now associated with it, for example, in Australia, Azerbaijan, Cameroon, Chad, Congo, the Democratic Republic of the Congo, France, Georgia, Ghana, Indonesia, Kazakhstan, Kyrgyzstan, Liberia, Mauritania, the Netherlands, Nigeria, Norway, the United States and the United Kingdom.

102 The international community has recognized the link between natural resources and conflict. A number of United Nations investigations into resource-related conflicts in Angola, Sierra Leone, Liberia or the Democratic Republic of the Congo confirm this link. A report on Angola was the first in a series of reports on the topic (see United Nations documents S/2000/203, S/2005/699, S/2007/40, S/2001/1072, S/2001/357, S/2001/49, S/RES/1653, S/2001/1015 and S/2000/1195). In June 2007, the Security Council further recognized the role of natural resources in armed conflicts, and suggested that the mandates of United Nations peacekeeping operations should consider helping the governments of resource-rich countries to prevent their illegal exploitation from fuelling further violence. It also underlined the importance of commodity monitoring and certification schemes, and of strengthening contributions by existing sanctions committees and various groups and panels created by the Security Council (see www.un.org/News/Press/docs//2007/sc9060.doc.htm).

103 There is no internationally agreed instrument, either legally binding or voluntary on conducting business in unstable areas in a way that minimizes conflict risks and human right abuses.

104 See www.smartsanctions.se.

105 For example, they have been included in BP's agreements with the relevant governments in connection with the Baku-Tiblisi-Ceyhan pipeline, and in the contractual agreement with the Papuan police in Indonesia. They have also been included in training programmes for public and private security forces, for example in connection with Occidental Petroleum's activities in Colombia. The IFC incorporates them in its Performance Standards on Social and Environmental Sustainability, and the OECD in its Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones (*Source*: UNCTAD, based on information provided by the Secretariate of the Voluntary Principles on Security and Human Rights).

106 At the 2007 Big Table there was a proposal to set up a study group comprising representatives from African research centres, the Economic Commission for Africa, the African Development Bank, the ICMM, the Commonwealth Secretariat and the OECD's Development Assistance Committee to review mining codes in Africa (see www.uneca.org/thebigtable/summary-report.htm).

107 For example, a United States mining company, Drummond, has been accused of conspiring to murder three union activists in Colombia, and is facing trial in its home country. See "US mining group faces trial over dead activists", *Financial Times*, 8 July 2007.

108 The World Mines Ministries Forum was first convened in Canada in 2000 as a venue for high-level dialogue, sharing of best-practices and capacity-building. Forums have been organized in 2002, 2004 and 2006 (see www.wmmf.org). The objective of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development is to enhance and promote the contribution of the mining, minerals and metals sector to sustainable development. Its functions are consultative and advisory, based on the principles of voluntary partnership. The Intergovernmental Forum meets to share experiences and information, to provide advice and, where appropriate, make recommendations for consideration by governments, intergovernmental bodies and others (see www.globaldialogue.info).