MNCs and Sustainable Business Practice: The Case of the Colombian and Peruvian Petroleum Industries

TITUS MOSER *
Shell International, London and University of Cambridge, UK

Summary. — Multinational corporations (MNCs) play an increasingly important role in the economic development strategies of many less developed countries (LDCs). At the same time the sustainable development of LDCs requires economic growth to be accompanied by environmental protection and greater social equity. This paper contributes to the literature concerned with MNCs’ contribution to the sustainable development of LDCs. The concept of sustainable business practice (SBP) is proposed as relevant to understanding MNCs’ contribution, and an analytical framework incorporating the content, context, and process of SBP is used to examine what SBP might consist of, as well as those conditions important for its widespread adoption. Results from a study examining the Colombian and Peruvian petroleum industries show that despite important contributions by MNCs to sustainable development, SBP is not yet widespread. The study also shows the importance of external institutional pressures—principally in the form of local legislation—for MNCs’ contribution to the sustainable development of LDCs. Finally the paper shows how the process of change toward more SBP is closely linked to the external context in which MNCs operate, the characteristics of their internal context, and the internal and external processes linking these contexts. © 2001 Published by Elsevier Science Ltd.

Key words — MNCs, environmental and social policy, Latin America, Colombia and Peru, sustainable business practice

1. INTRODUCTION

The private sector and multinational corporations (MNCs) in particular, play an increasingly important role in the economic development strategies of less developed countries (LDCs). This growing importance can be attributed to a shift in the predominant economic development paradigm adopted by LDC governments, and the globalization of international business. The failure of import substitution policies and the demise of central planning accompanying the collapse of communism, have led many LDC governments to adopt more liberal economic development policies that emphasize export-led growth, the attraction of foreign direct investment (FDI) and the use of markets to determine resource allocation (Agosin & French-Davis, 1993; Hermann, 1995; Khan & Reinhart, 1990; Krueger, 1985; Ozawa, 1992). At the same time, MNCs are increasingly attracted to LDCs due to the presence of some of the world’s fastest-growing consumer markets, the potential for lower production costs, and the presence of some of the world’s most important unexplored natural resources. These concurrent trends have resulted in record levels of FDI to LDCs.

During 1981–96, foreign private capital flows to LDCs grew from $13 to $244 billion, and in 1996 accounted for 84% of all international capital flows to LDCs. They increased five-fold during 1986–93, and grew at over 30% per annum in the first half of the 1990s (Economist, 1997, p. 152; IIF, 1997; UNCTAD, 1995). Of this investment, the most important is foreign direct investment (FDI) by MNCs, which in

* This research was undertaken with financial support from the United Kingdom Economic Social Research Council, Environmental Resources Management and the Robert Monks Donation for Corporate Governance, Judge Institute of Management Studies, University of Cambridge. The author is grateful to Ingrid Fossgard, Chris Hope, Caroline Moser, John Roberts and Peter Sollis for their helpful comments in drafting this paper. The views expressed in this paper represent those of the author and should not be attributed to Shell International. Final revision accepted: 7 August 2000.
1996 accounted for 40% of all foreign private capital flows to LDCs (French, 1997; UNCTAD, 1997). The World Bank further estimates that FDI will grow at 7–10% per annum over the next decade. The importance of MNCs for the development of LDCs comes at a time when the parameters and policy mechanisms of development are themselves under question. In particular there is recognition that for the sustainable development of LDCs, economic growth needs to be accompanied by greater environmental protection and social equity. The failure of traditional economic growth paradigms to incorporate environmental and social externalities, and the inadequacy of “top down” development strategies to solve the long term development problems of LDCs provide the background to recognition of the need for more sustainable development (Daly & Cobb, 1994; Gore, 1992; Korten, 1995; WCED, 1987). Against this backdrop of changing public and private sector development roles and concern for more environmentally sensitive and socially equitable growth, the role of MNCs is of considerable importance. This paper presents a conceptual framework, along with empirical evidence, to further understanding of the nature and scope of MNC contribution to the sustainable development of LDCs. The case studies analyzed are the petroleum industries in Colombia and Peru.

2. CONCEPTUAL FRAMEWORK

The conceptual framework applied in this paper first develops the concept of sustainable business practice, and then presents a framework through which the conditions and consequences of MNC policies and practices can be analyzed and evaluated with respect to this concept.

(a) Sustainable business practice

Conventionally the three central objectives of sustainable development are social, economic and environmental in nature (Cernea, 1993; Khan, 1995; Munasinghe, 1993; Serageldin, 1996; WCED, 1987). A triangular nexus, as illustrated in Figure 1 shows these different objectives. The different types of capital associated with sustainable development can be summarized as follows (Serageldin, 1996):

—Productive capital comprises a country’s stock of financial resources, plant, equipment, infrastructure and other productive resources.

—Human capital comprises a country’s stock of investment in the education, health, and nutrition of individuals.

—Social capital comprises a country’s stock of social institutions, both formal and informal, that facilitate the functioning of society.

—Natural capital comprises a country’s stock of environmentally provided assets, notably its stock of physical, biophysical and natural reserves.

The objective of sustainable development can be seen as one of balancing gains or losses in these different types of capital such that there is a net overall increase (Munasinghe, 1993). In terms of the contribution of MNCs and other private sector companies to the development of LDCs, the concept of sustainable development implies that their impact, both

![Figure 1. The sustainable development nexus. (Source: Adapted from Khan, 1995, Munasinghe, 1993, and Serageldin & Steer, 1994.)](image-url)
positive and negative, needs to be assessed not simply in economic, but also environmental and social terms. From this perspective, it is possible to define *sustainable business practice* as business behavior that leads to a net overall increase in the different forms of capital associated with sustainable development.

(b) *Framework for examining sustainable business practice*

While the concept of sustainable business practice (SBP) provides a potentially rich basis for understanding MNCs' impact on the sustainable development of LDCs, there is currently a paucity of conceptual frameworks through which to explore and evaluate what such practice might consist of, as well as what is required to promote its adoption. This paper draws upon work within organization theory and specifically Pettigrew's work on the management of change (Pettigrew, 1987a,b, 1985) to pursue these questions.

Pettigrew offers a three-fold framework for analyzing organizational change processes and the deliberate management of these processes. He suggests that organizational change can be understood in terms of the three interlinked dimensions of content, context and process. Pettigrew proposes that the content of change—attempts to introduce new strategies, systems and practices into organizations—is only one aspect of understanding the change process. Understanding also requires consideration of context and process. The context dimension is concerned with how an organization's internal context and aspects of its external environment promote (and inhibit) the change process, as well as ways in which different aspects of context can be mobilized to promote change. The process dimension refers to how change within an organization is effected over time.

The adoption of SBP can also be understood in terms of the three interrelated dimensions of content, context and process, as next considered with reference to Figure 2.

The first dimension—content—refers to the economic, social and environmental impacts, both positive and negative of current MNC practices and operations, as well as the ways in which MNCs seek to mitigate or enhance these impacts.

The second dimension concerns the ways in which different aspects of context act as drivers or obstacles to change. Context is necessarily multifaceted; it can be understood in terms of the characteristics of the internal organization; its structure, culture and politics, and how these have shaped and continue to shape operational practices. Within MNCs these characteristics are not necessarily homogenous since the organization itself has to work across many geographic and cultural boundaries; corporate policies do not necessarily translate into uniform practices across all operations.

A similar complexity characterizes MNCs' external context. At both the headquarters and subsidiary level, it is possible to distinguish between a "formal" institutional component of context and an "informal" socio-political component. The formal institutional component consists of such factors as host country legislation, shareholder and investor pressure, and industry codes of conduct. The informal socio-political component comprises noninstitutional factors, such as public and local community pressure, and demands from nongovernmental organizations (NGOs) and other forms of agency. For the subsidiaries of MNCs, the external context is defined both by the local context, and the context of the MNC as a whole. This includes headquarter policies (Gladwin, 1977; Rosenzweig & Singh, 1991), host and home country regulatory frameworks, international regulations and codes of conduct (see E&P Forum, 1991; Hagg, 1984; ILO, 1989; OECD, 1992), local and international NGO demands, and media comment.

The final dimension of the framework—process—is concerned with how and under what conditions ideas and values relating to SBP are introduced and integrated into MNCs' routine operational practices. These processes represent the very fabric of social and organizational life and concern the complex inter-
weaving of intentions, actions and consequences in relationships between individuals and groups within and beyond the MNC. Any analysis is thus necessarily partial and selective. The framework presented here focuses on three areas of process as shown in Figure 3.

The first area, referred to as External–Internal relates to the process by which MNC decision-makers define those aspects of external context that are relevant to their organization and its operations. The manner in which these boundary relationships are defined influences which external actors and organizations are judged to be important (e.g., environmental authorities, NGOs, contractors and communities), and hence, how their interests are taken account of within the organization (Daft & Weick, 1984; Dutton & Dukerich, 1991; Isabella, 1990).

The second area, referred to as Internal–Internal concerns the internal process by which environmental and social issues are attributed importance and integrated into the operations of MNCs. Organizations differ in the extent to which corporate financial objectives are supplemented by formal policies relating to environmental and social impacts. Furthermore there is considerable variation in the extent to which such policies are adopted at an operational level, or instead remain no more than a component of corporate public relations. Finally there is potential for substantial variation in precisely how policies are translated into new structures, systems and practices at an operational level.

The third area of process Internal–External refers to how a MNC conceives and manages its boundary relationships and the occurrence of SBP. At the operational level it concerns the extent to which MNCs engage in activities—notably consultation and participation—enabling the interests and concerns of other stakeholders to be incorporated into the design and management of the relevant development. At the level of the national subsidiary and MNC headquarters, it relates to the ability of MNCs to influence and change their external context, particularly in relation to environmental and social issues (for example the weakening or strengthening of legislation) (Choucri, 1993).

Finally it is important to note that while analysis of the individual dimensions of content, context and process is important, the investigation and analysis of the dynamic relationship among these dimensions is also necessary for understanding the adoption of SBP. As Pettigrew states: “Practically useful research on strategic change should involve the continuous interplay among ideas about the context, the process and the content of change” Pettigrew (1987a, p. 6).

3. INVESTIGATING SBP: THE CASE OF THE COLOMBIAN AND PERUVIAN PETROLEUM INDUSTRIES

This section illustrates the potential of the conceptual framework for illuminating the conditions that might enable the widespread adoption of SBP, by using it to compare and contrast the management of environmental and social impacts caused by different types of petroleum companies operating in Colombia and Peru.2

(a) Characteristics of the Colombian and Peruvian petroleum industries

The petroleum industry is one of the most important in the world and is dominated by a number of large multinational oil companies (MNOCs).3 For many of the earlier identified reasons, there is extensive expansion by MNOCs in LDCs. They are attracted both by the potential existence of undiscovered hydrocarbon reserves and the policies of LDC governments emphasizing the role of MNOCs in the development of under-exploited and

Figure 3. The process of sustainable business practice. (Source: Moser, 1998.)
unexplored petroleum resources (Brown & Daniel, 1991; Mayorga-Alba, 1992). Concurrent with this expansion, there is growing awareness of the negative environmental and social impacts that can accompany hydrocarbon activity. This is particularly the case for hydrocarbon activities in remote, frontier regions of LDCs that are frequently characterized by extreme environmental and social sensitivity, as well as an absence of basic services, infrastructure and formal government presence (de Angulo & Chelela, 1994; Thomson & Dudley, 1989).

The Colombian and Peruvian petroleum industries exemplify the above trends, while also embodying a number of differences in relation to each other, relevant to the study of SBP. Key characteristics of these industries, as illustrated in Table 1, can be summarized as follows.

First, the structure of the oil industry in both countries is similar, with oil exploration and production undertaken in both cases by a combination of multinational corporations, overseas independent, and local companies. Second, in both Colombia and Peru the majority of hydrocarbon activity occurs onshore in remote, rural, and environmentally, as well as socially, sensitive areas. In Colombia, oil production occurs predominantly (71%) in the eastern flat land llanos regions; whereas in Peru, the majority of production (85%) and exploration (97%) activity takes place in Peru’s eastern jungle areas. In both countries, although particularly Peru, these regions are of significant environmental and cultural importance (Dallmeier & Alonso, 1998; ERM, 1994; USAID, 1995) and are characterized by a limited and precarious institutional presence of national, regional and local government. In Colombia, left-wing guerrilla and right-wing paramilitary groups also have a strong presence in many areas of hydrocarbon activity.

Third, although both countries emphasize the importance of the private sector and especially MNCs for the development and exploitation of their respective oil and gas sectors, the mode of private sector participation is distinct (Forsyth, 1997; Oil and Gas Journal, April 19, 1993, pp. 30–31). In Colombia, the government through the State Owned Enterprise, Ecopetrol, adopts a 50% equity position in all commercially viable hydrocarbon projects. As a consequence between 85% and 90% of all hydrocarbon revenues are returned to the Colombian State. In Peru, private companies are granted exclusive exploration and production rights, and are required to pay a royalty on the value of any produced hydrocarbons—typically between 15% and 40%.

### Table 1. Characteristics of the Colombian and Peruvian petroleum industries

<table>
<thead>
<tr>
<th></th>
<th>Colombia</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil industry structure</strong></td>
<td>Combination of multinational corporations, overseas independent companies and local companies</td>
<td>Combination of multinational corporations, overseas independent companies and local companies</td>
</tr>
<tr>
<td><strong>Location of hydrocarbon resources</strong></td>
<td>Predominantly onshore in remote and rural eastern regions of Colombia</td>
<td>Predominantly onshore in remote eastern jungle areas of Peru</td>
</tr>
<tr>
<td><strong>1995 oil production</strong></td>
<td>585,000 bpd</td>
<td>120,000 bpd</td>
</tr>
<tr>
<td><strong>Oil development policy</strong></td>
<td>Emphasis on FDI Association contracts: Government 50% equity position</td>
<td>Emphasis on FDI Concession Contracts</td>
</tr>
<tr>
<td><strong>Oil revenue distribution policy</strong></td>
<td>12% of all oil revenues returned to region of production</td>
<td>No specific policy</td>
</tr>
<tr>
<td><strong>Constitution</strong></td>
<td>1991 Constitution emphasizing decentralization</td>
<td>Centralization of power</td>
</tr>
<tr>
<td><strong>Institutional framework for environmental management</strong></td>
<td>Ministry of Environment</td>
<td>Managed through Ministry of Energy and Mines</td>
</tr>
<tr>
<td><strong>Legislative approach</strong></td>
<td>Command and Control NGO and communities with participatory power</td>
<td>Market Based Formal power of NGOs and communities weak</td>
</tr>
<tr>
<td><strong>Informal context</strong></td>
<td>Strong guerrilla presence</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Moser (1998).*
Finally, Colombia and Peru have adopted distinct approaches to the management of the environmental and social impacts caused by hydrocarbon companies. Colombia has constructed a more rigorous institutional and legislative framework—including an autonomous Ministry of Environment, legislation that emphasizes the use of command and control regulatory instruments (Drummond & Marsden, 1995), and policies that encourage the decentralization of decision-making processes. Importantly, as part of Colombia’s 1991 Constitution, there are formal mechanisms by which local communities and NGOs can participate in decision-making processes related to the environmental and social impacts of hydrocarbon developments. In addition, 12% of government-generated hydrocarbon revenues are by law returned to the region of production to both compensate for the negative impacts of hydrocarbon activity, as well as bring benefits.

In contrast the Ministry of Energy Mines in Peru has a small unit (12 people in 1995) that manages environmental and social issues primarily through auto-regulatory instruments that emphasize trust and reciprocity (Fukuyama, 1995) between industry and government. Government power remains largely centralized and there are few formal mechanisms by which local communities and NGOs can participate in decision-making processes. In principle, up to 10% of hydrocarbon revenues are returned to the region of production; however, in reality revenue redistribution remains at the discretion of Central Government.

(b) Research findings

(i) The “content” of sustainable business practice

The study indicated that the “content” of sustainable business practice in the hydrocarbon industry is concerned with:
— the identification and mitigation/minimization of potential negative environmental, economic and social impacts directly associated with hydrocarbon activity;
— the identification and optimization of potential positive environmental, economic and social impacts directly associated with hydrocarbon activity;
— the undertaking of “social investments” that more broadly contribute to the economic, environmental and social development of a region of hydrocarbon activity, but that are not necessarily related to the activity itself.

The research indicated that the first two areas are most important for the contribution of MNOCs to the sustainable development of LDCs. Illustrative examples from the Colombian and Peruvian petroleum of contributions by MNOCs and other company types to the different objectives of sustainable development include the following.

**Contributing to the economic objective of sustainable development:** One overseas independent company in Colombia constructed over 600 km of roads (accounting for half the region’s roads) and frequently changed the routing of these roads to include local community interests. It also established a road maintenance scheme managed by local communities; thereby maximizing community involvement, reducing costs (road maintenance costs dropped by 75% compared with management by the company and local government) and building local capacity. In the area of electrification, this company frequently installed overcapacity generators within its production facilities, and in collaboration with local government worked to provide electricity to local communities. Finally the company constructed a number of schools, and implemented an innovative transportation system to ensure that children are not required to spend long periods of time walking to school.

To maximize local employment opportunities and reduce migratory pressures, petroleum companies in Colombia frequently assisted in the creation of local workers co-operatives to manage the allocation of work to local people. The “unemployed co-operative” was an example of such a co-operative. This organization was informed by the relevant MNOC of any vacancies and selection of workers was then left to the co-operative, which had a strict policy of restricting membership to people with at least three years residency in the region and distributing work equitably among members.

**Contributing to the environmental objective of sustainable development:** One MNOC operating in Colombia adopted various approaches aimed at reducing its negative environmental impacts. These included the drilling of multiple wells from a single site, the re-injection of produced waters and gas, and an environmentally friendly approach to the disposal of drill cuttings. Rather than the norm of disposing of cuttings in lined pits, the company experimented with using biodegradation to make the
cuttings inert, followed by combination with cement to make bricks suitable for construction. This strategy not only reduced the negative environmental impact of drilling wells, but also created the foundations for a new industry, including considerable local employment opportunities.

**Contributing to the social objective of sustainable development:** Recognizing the negative social and environmental impacts that could accompany migration to its area of operation in the Peruvian jungle, the relevant MNOC chose to manage its project as an offshore operation. This included a commitment to build no access roads to the region and instead transport all necessary infrastructure using barges, hovercrafts, helicopters and airplanes. To diminish the negative social effects of contact between oil workers and indigenous peoples living in the region, the company also adopted a strict policy restricting contact between workers and communities. In addition, local communities were offered inoculations against "foreign" diseases and a medical passport system introduced whereby all workers and visitors to the region received a full set of vaccinations. Finally, the MNOC introduced a policy for third-party monitoring whereby local communities and NGOs were invited to monitor the company's compliance with its environmental and social commitments.

Despite such "pockets" of best practice, SBP is not yet widespread and the activities of MNOCs remain largely focused towards fulfilling short-term financial objectives. As one MNOC manager summarized:

"We're conscious that environmental matters are important, but at the end of the day we're in this business to make money.... Consequently managers tend to adopt an approach towards environmental issues of 'I'll sort out what has to be sorted out today, and someone else can sort out tomorrow's problems'."

The research also found important variations in the priority attached to environmental and social issues, as well as differences in environmental and social practices of different company types, and between Colombia and Peru. Figures 4 and 5 and Table 2, summarize a number of representative research results.

Figure 4 shows the percentage of companies with environment and community affairs departments, as well as the percentage of companies employing environmental and community affairs specialists. The data are presented according to all companies, by company type, and country of operation. In a similar format, Figure 5 shows the percentage of companies providing training on environ-

![Figure 4](image-url)
The data allow a number of conclusions to be drawn. First, cross-issue comparison shows that petroleum companies consider the mitigation of environmental impacts to be more important than social impacts. As shown in Figure 4, a greater number of companies have environment departments than community affairs departments and employ more environmental specialists. There is also more training on environmental issues, as well as financial incentives for environmentally compliant behavior (cf. Figure 5). Finally there is around five times as much investment in environmental impact mitigation compared with social impact mitigation. As one Health Safety and Environment (HSE) manager summarized:

HSE is a core aspect of (company name)'s business throughout the world. Community relations does a lot, but it is very specific to Colombia, so there isn’t the headquarters support or follow-up in community relations in the way there is in HSE.

Second, cross-company analysis shows that MNOCs are overall more environmentally and social issues, as well as the percentage of companies providing financial incentives to all employees for environmentally and socially responsible behavior. Finally Table 2 shows the spending of petroleum companies on environmental and social issues, as a percentage of total capital expenditure.

The data allow a number of conclusions to be drawn. First, cross-issue comparison shows that petroleum companies consider the mitigation of environmental impacts to be more important than social impacts. As shown in Figure 4, a greater number of companies have environment departments than community affairs departments and employ more environmental specialists. There is also more training on environmental issues, as well as financial incentives for environmentally compliant behavior (cf. Figure 5). Finally there is around five times as much investment in environmental impact mitigation compared with social impact mitigation. As one Health Safety and Environment (HSE) manager summarized:

HSE is a core aspect of (company name)'s business throughout the world. Community relations does a lot, but it is very specific to Colombia, so there isn’t the headquarters support or follow-up in community relations in the way there is in HSE.

Second, cross-company analysis shows that MNOCs are overall more environmentally and
socially responsive than other company types. Figure 4 illustrates that environment and community affairs departments, as well as relevant specialists are most prevalent in MNOCs. The same pattern exists with respect to training and financial incentives, as illustrated in Figure 5. Despite these overall findings, the most innovative social practice was observed in overseas independent and local companies operating in Colombia—as supported by Table 2—which shows that these company types spend more on social issues than MNOCs. Qualitative research further supported this finding as illustrated by the following quotes contrasting the different priorities given by a MNOC, and an Overseas Independent company towards the importance of good community relations.

Within (company name), community relations is usually seen as something undertaken by women on maternity leave. (TNOC representative)

The situation with local communities is such that if you don’t have a good relationship with them, you cannot operate (Overseas Independent company representative).

Finally Figures 4 and 5 and Table 2 show that there is greater environmental and social responsiveness by companies operating in Colombia compared with Peru. This finding suggests that corporate response to environmental and social issues—even in the case of MNOCs—is context dependent and in particular driven by local legislative demands. As one MNOC manager acknowledged:

There is a minimum standard that they [referring to subsidiaries] will adopt, but we cannot afford to have a uniform standard across the whole group, because it costs too much money. We have to identify what the risks are in each country and also, taking account of the local regulations, spend the appropriate amount of money.

The variability in the environmental and social responsiveness of MNOCs and other company types highlights the complexity of research concerned with analyzing the private sector’s contribution to the sustainable development of LDCs. But as illustrated in the next two sections, consideration of the “context” and “process” dimensions presented in the conceptual framework enables a more precise understanding of this contribution.

(ii) The “context” of sustainable business practice

The research shows that pressure associated with the formal institutional component of MNOCs’ external context is the most important driver of MNOC response to environmental and social issues. Most importantly in this respect are local legislation and MNOC headquarter policies, as shown in Figure 6.

![Figure 6. Explanation for MNOC response to environmental and social impacts. (Source: Moser, 1998.)](image)
The presence of formalized legislation for environmental issues, but not social issues, provides the principal explanation for the greater emphasis of petroleum companies on environmental issues. Similarly the fact that compared to other company types, MNOCs face headquarter institutional pressures, in addition to local legislative pressures, explains their greater environmental responsiveness. Finally the key to understanding the greater environmental and social responsiveness of companies operating in Colombia compared with Peru, is found in Colombia’s more comprehensive approach to managing the environmental and social impacts caused by petroleum companies.  

Case study research indicates that local legislation, rather than MNOC headquarter policies, is most important for determining the environmental and social responsiveness of MNOC subsidiaries. This finding corresponds to the different operational consequences of noncompliant behavior. Failure to comply with local legislation can lead to closure of MNOC facilities, fines and reputation damage, both nationally and internationally. In contrast, failure to comply with internal headquarter policies does not convey similar consequences. Indeed there was evidence that MNOC subsidiaries are on occasion left to interpret headquarter policies as they see appropriate. As the environment manager from one MNOC’s headquarters pointed out:

All our overseas subsidiaries are provided with environmental guide-lines. It is up to them to apply these as they see appropriate, but local legislation is most important . . . We have so many businesses and are involved in so many activities, that it would be impossible to govern them all.

Even in those MNOC subsidiaries where there was evidence of a commitment toward applying global operating standards, the geographic separation between headquarters and the subsidiary, as well as an underlying prioritization of financial operating criteria, appeared to result in a compromise of environmental and social performance objectives. As one MNOC environment manager summarized:

Headquarters can have the strongest environmental policy imaginable.... But unless that gets translated into an expectation in every single operation that you have in the world, it means absolutely nothing. There is a tendency in big bureaucratic corporations to send a mission out... To make the tacit assumption that all these policies and procedures and expectations that I hold dear to my heart in (the company’s headquarters), will be carried to (name of a LDC), and not to realize that when I make phone calls to (name of LDC) and when I go and see them and my question is always: “Have you found oil? Can you drill the next well for 10 million less? Is it possible to drill the next well in 6 months instead of a year.” The conversation tends to be about those things that enable the business to succeed.

What happens when you deliver those sorts of messages, without realizing it, you are subverting all the other messages. You are saying production, costs and schedule are most important. That is not what you mean to say, but that is what gets heard because the boss on the ground is saying: ‘If I don’t produce and save money, I’m a gonna’. So inevitably judgments will be made in the field a long way from home which wouldn’t necessarily be consistent with what you would want to have done under your HSE policy.

Corporate MNOC policies on environmental and social issues do not in themselves translate into uniform policies across the organization. The operationalization of these policies requires complementary measures—in such areas as training and performance targets— which cause environmental and social objectives to be accorded equal priority as financial operating objectives. As one MNOC subsidiary manager commented with respect to the impact of a policy whereby all departmental bonuses varied by up to 50% according to their HSE performance: “Oh mercy! That was an attention getter. It galvanized the whole organization”. The study, however, showed that measures such as this remain uncommon (see Figure 5).

The research further highlighted a number of points concerned with the importance of petroleum companies’ internal context for the adoption of SBP. It first showed that the influence of the inner context is subordinate in the presence of strong institutional forces. Under such circumstances, the institutional context establishes the overall expectations of MNOCs, and factors related to their internal context are important for determining the exact type of response (for example, a proactive versus reactive response to environmental legislation).

In the absence of strong institutional pressures—notably the case of social issues—the importance of the inner context is, however, more apparent. Organizational responsiveness becomes influenced by the priority organizations and decision-makers inside them accord
to socially responsible behavior for the success of their operations.

Among the different dimensions of MNOCs’ inner context, Figure 6 shows that senior management support, as well as previous company experience are particularly influential. One environment manager summarized the importance of senior management support as follows:

The personality of the person leading the conscience of the organization makes a big difference... It is less a function of my leadership, will-power and force of personality, than it is of the people who sit at the top of the organization... How he (referring to the President) feels, what he is willing to stand up for and demand of everyone else has a far bigger impact. On a relative scale, if I have an impact of five, he has an impact of nine and a half.

In terms of previous experience and the accompanying organizational learning (Fiol & Lyles, 1985; Levitt & March, 1988), MNOCs and their subsidiaries appear to learn from their own local and international experiences, as well as those of other companies. Various MNOC representatives cited the importance of the 1988 Piper Alpha oil rig disaster (in which a production rig exploded with fatal consequences) (Patecornell, 1993) in the North Sea for raising health, but most importantly safety standards within the oil industry. Similarly the Exxon Valdez oil spill (Clarke, 1991), as well as the experiences of Shell in Nigeria and the United Kingdom (Danler & Brunner, 1996; Fentiman, 1998; Financial Times, June 21, 1995, p. 1), were highlighted as important for changes in the environmental and social practices of petroleum companies.

Finally, the research showed how factors related to MNOCs’ informal socio-political-context also act as drivers of change. Although of lower overall ranking, the importance of MNOCs’ local and international profile is evident in Figure 6. As one MNOC environment manager stated:

It [referring to the company’s environmental policy] is not altruistically motivated. I think that we truly believe that our ability to operate in the world depends on our reputation all over the world. Everything that happens in (name of LDC) affects what we do in (the company’s other countries of operation).

Notwithstanding the relatively high importance of factors linked to MNOC subsidiaries’ reputation, other aspects of the informal external context, such as community pressure, local and international NGO pressure are considered less important. This is the case despite the fact that local communities directly suffer the impacts of hydrocarbon activity, and NGOs frequently are those that best understand the social and environmental characteristics of areas of hydrocarbon activity.

(iii) The “process” of sustainable business practice

The process of SBP is considered through reference to the three areas of process identified in Figure 3. In relation to the first area, the research shows an important relationship exists between the occurrence of SBP and how MNOC decision-makers establish the boundaries defining those entities or stakeholders considered important and those not considered important for the organization’s ability to operate. Of particular significance is the relative importance attributed to the interests of formal and informal stakeholders. The tendency is for MNOCs to prioritize those entities that compose the formal component of their external context—notably Central Government. As one manager summarized:

We define the community as first comprising all those entities related to government, next those entities that include our contractors and sub-contractors, and then some public relations entities. Finally at a local level, the government sometimes obliges us to talk with local organizations.

An important consequence of prioritizing alignment with Central Government expectations is that these MNOCs perceived themselves as operating largely in isolation from their local context, notably local communities living in the project area. They overemphasized their own importance, while underplaying the significance of the broader local social context of which they formed only a part. They frequently failed to acknowledge the indirect impacts of their activities upon parallel social processes—with the “content” of their environmental and social strategies largely restricted to what was legally mandated, as well as impacts considered to be directly related to the MNOC’s operations. As one MNOC environment manager acknowledged in this respect:

We will bring a hundred thousand trucks through this area delivering materials. This will tear the hell out of the road. So what we will do is take over maintenance of this road and when we have finished, we are going to pave it. That’s an example of a direct impact and a
solution. Now the fact that people will migrate to the area and somebody will set up a whorehouse. That is not an issue we are going to have to solve. It is an issue and it is one that will require some attention, but these sort of remote impacts are not things we can be held directly responsible for.

In Colombia and in response to the serious security threat posed by the guerrilla, such MNOCs also looked toward Central Government in the form of the army, for protection of their facilities. While this strategy of protection from the local external context reduced the threat of attack, it also created isolation from the communities located within the relevant region of operation. The construction of heavily fortified and defended production facilities, physically isolated MNOCs from their immediate context, while their association with the army accentuated any perceptions local communities had of MNOCs acting as an extension of Central Government interests. Moreover, the close links between Colombia’s army, paramilitary groups and human rights abuses, further deepened community distrust.

The research also identified examples of petroleum company decision-makers according equal and sometimes greater importance to the alignment of corporate interests with local and informal stakeholder interests. In these cases MNOCs and other company types acknowledged their participation in a broader social framework and showed greater sensitivity in understanding how their activities might directly and indirectly affect other actors within their local context of operation. Specifically, and as discussed in the final section, these companies engaged in activities that seeks to promote the longer term collective goals of their regions of operation.

Although the motivation for attributing significance to the interests of local stakeholders varied according to the context of operation, overall it appeared related to the importance of good community relations for organizational legitimacy. As one manager in Colombia summarized:

The company after so much time working and seeing what has happened to other companies has learnt that if the community is not with us, we don’t have a business... It might be that our spending on community relations is high, but I can also say that spending on insurance policies and security is low.

In Colombia the security benefits that accompanied good community relations often provided the primary motivation for close collaboration between MNOCs and local communities. As another manager stated:

We focus most on community affairs. Why, because if we can keep the communities happy, this will also affect our environmental policies, because they (referring to the guerrilla) won’t blow up our pipe lines, they’ll (referring to the communities) look after them, they themselves will look after our infrastructure, they will help us with any spills.

In Peru, there were also examples of MNOCs emphasizing the importance of alignment with informal stakeholder interests. In this context, the concern was primarily with the consequence that poor community relations might have for the respective MNOC’s international reputation.

With respect to the second area of process, the research found that the internal process of responding to and internalizing environmental and social issues is part of a broader trend that encompasses these issues, with health and safety regulation. While the latter have been largely internalized by MNOCs, external pressures remain most critical for the ongoing process of internalizing environmental and in particular social issues. As one HSE manager acknowledged: “We’ve managed safety from within. Environment was driven by legislation.”

The research further showed that there are distinct organizational and strategic approaches to the management of environmental and social issues by MNOCs according to the level of legitimization and integration of these issues, as summarized in Table 3.

While most MNOCs manage social issues through strategies emphasizing “Reaction” or “Accommodation,” a more integrated approach is evident towards the management of environmental (as well as more traditional health and safety) issues. Furthermore the internal process of legitimizing and integrating environmental and social issues is closely linked to a number of interrelated external and internal factors. The stronger external pressures—principally local legislation, but also headquarter pressure—the more likely integration. In addition external “jolts” (Meyer, 1982), such as new regulatory demands, negative media coverage, or a specific crisis (for example, a road blockage by communities) act as important catalysts for change in the environmental and social practices of MNOCs. For example, one senior MNOC
executive described the impact of a documentary film criticizing the company’s activities in the following manner:

The film criticizing (company name) was perhaps the best thing that could have happened. Our CEO has considerably changed his opinion on the importance of good community relations and what the company’s approach to these issues should be.

The research also showed that successful legitimization and integration of environmental and social issues depends on the ability of relevant managers to both manage their internal context, as well as exploit pressures related to their external context for SBP. For example, in Colombia a number of community affairs managers actively exploited the country’s 1991 Constitution, and the accompanying threat to petroleum company activities from related legislation, to internally justify the importance of a priori consultation with communities and NGOs. In a different instance in Peru, an environment manager used considerable criticism of the company’s previous activities in Peru and elsewhere to first justify widespread consultation with a wide range of stakeholders, and then used the outcome of these meetings to promote internally a more socially and environmentally responsible approach.

This final section presents the research findings concerned with the third identified area of process; how MNCs manage their boundary relationships and the occurrence of SBP, as well as the ability of MNCs to influence and change the characteristics of their context of operation. Managing boundary relationships is concerned with whether MNCs engage in activities that enable them to understand and respond to the interests and concerns of those affected by their activities. Most important in this respect is widespread and ongoing consultation with primary and secondary stakeholders (Affonso & Machado, 1997; Johnson, 1992; Jones, 1998; World Bank, 1991). Voluntary consultation is far from universal and instead most MNCs comply with legal requirements—usually consulting with national government (and relevant ministries) and only where required, local communities (e.g., MNCs operating in indigenous or Afro-Colombian territories in Colombia). As one community affairs manager acknowledged: “Consultation, in reality we consult only when the law states that it is obligatory; but at the moment it is only obligatory when there are indigenous peoples.”

Commenting on another occasion:

It depends on how you define consultation. It is not to ask communities if they want a project and if they say “no”, then not undertake the activity. Instead it is to say ‘we have this project that we are going to undertake, since we have a contract with National Government’.

In those rarer instances where MNCs and other company types perceived their organizational legitimacy enhanced through a good relationship with local stakeholders there was greater evidence of more widespread voluntary consultation. The benefits of consultation to MNCs and local communities were apparent in a number of areas. From the community perspective, relevant MNCs were more likely to engage in activities that integrated local interests, customs and concerns into the design and management of the relevant project. For example, one MNC with operations in the Peruvian rainforest chose to construct its work camp facilities largely using local materials. On a different occasion, an employee from another MNC described how it resolved a potential crosscultural conflict at one of its overseas operations:
We wanted to employ the locals on the rigs. The only thing was, they didn’t mind wearing hard hats, but they didn’t like wearing boots because they’re used to walking on the ground the whole time.... There was a large meeting one day and we said: “All you guys are off the rig unless you come up with a solution.” They went away and the next day they all returned wearing boots. It took a week to realize what they had done. Now that was great. Everybody was happy with that. They were wearing boots, but they were still in touch with the ground...

That is compromise as I see it. It is not quite following the (company name) rules but we followed them enough for people to be happy. Nobody lost and everybody won.

Those MNOCs that undertook widespread consultation were also more likely to emphasize: local employment in activities related to the relevant operation; involvement of communities and civil society organizations in the monitoring of environmentally and socially compliant behavior; and the conversion of hydrocarbon facilities into an important resource for local communities. Finally in the design and implementation of community projects, MNOCs that emphasized consultation were more likely to implement community development projects that both targeted their region of operation as a whole, as well as genuine and locally defined needs. In contrast, less inclusive MNOCs implemented community projects primarily focused toward achieving short-term operating objectives—working only with communities living in the direct vicinity of their activity and providing support in the form of nonsustainable interventions (referred to locally as “caramellos”).

The benefits of consultation to MNOCs were also apparent in a number of areas. Most importantly the trust and mutual respect established through consultation frequently facilitated the construction and operation of the relevant hydrocarbon project. At the local level, community-related obstacles typically present during the different phases of a hydrocarbon project, but in particular the construction phase, such as strikes, protests and road blockages were absent. To the contrary, there were examples of communities facilitating the implementation and operation of hydrocarbon projects. For example, in one case after a sizable oil spill by an overseas independent company, local indigenous communities lobbied the relevant environment authority not to punish the company on the basis of the considerable support this company had provided to these communities. At the international level, MNOCs were similarly often able to mobilize local community support to offset negative media and NGO criticism.

The research shows that MNOCs have the potential to influence public policy relating to environmental and social issues. As one MNOC executive summarized:

You cannot sit back in a developing country and wait for the government to get it right. You have got to go out and mobilise your own resources and others and set the agenda and that is what we have done here.

In both Colombia and Peru, MNOCs sought to influence both their formal (e.g., legislation) and informal operating context (e.g., the power of communities and NGOs). But the extent and nature of change (i.e. to fulfill self-interests or broader interests), appeared closely linked with the relative bargaining power of counterpart institutions (such as regulatory authorities and local communities), as well as the perceived origin of MNOCs’ operational legitimacy.

In Peru, where governmental environmental expertise and bargaining power is relatively weak, strong evidence existed of MNOCs seeking to manage their external context primarily for self-interest. In this respect, the petroleum industry was highly instrumental in influencing the overall legislative and institutional approach adopted toward environmental management.16 Lobbying by one MNOC was also important for changes to Peru’s 1990 Environment and Natural Resource Code—which removed the prior condition prohibiting the undertaking of hydrocarbon activity in protected areas.

In contrast Colombia has a longer history of environmental management (Brañas, 1991; International Environment Reporter, 1994). The Ministry of Environment retains bargaining power, and consequently initiatives undertaken by MNOCs appeared to seek a better balance between corporate operating objectives and those of Colombian society as a whole. For example, MNOCs worked closely with the Ministry of Environment on a new legislative framework related to the management of the environmental and social impact of hydrocarbon activity.17

At the local and informal level, there were also examples of MNOCs seeking to influence their external context. Indeed at this level, the influence of MNOCs is considerably heightened due to the frequent absence of competent local
institutions and infrastructure necessary for development. The research provides examples of MNOCs seeking purely to manage their local context for self-interest (for instance through the co-option of problematic individuals or NGOs), as well to achieve corporate objectives and those of local stakeholders. For instance, one petroleum company operating inside indigenous territories in Colombia hired a lawyer on behalf of the Indians to pursue their land claims. In another case in Peru, a MNOC encouraged the formation of an indigenous commission and engaged in a number of activities to promote the development of the region as a whole (where the tradition is for oil companies to attempt to divide and rule local communities). In both cases the motivation for support at this level derived from the perceived importance of local stakeholders to the implementation and operation of the relevant hydrocarbon activity. This finding supports research elsewhere. For example, Chance and Andreeva, when discussing the operational importance to petroleum companies of securing land title rights for indigenous populations in the Prudhoe Bay area of Alaska:

The assistance of the petroleum companies was particularly significant in the 1971 Congressional debate over the Alaska Native Settlement Claims Act. Recalling that oil could only be extracted from Prudhoe Bay after the claim was settled, these companies eventually exerted considerable pressure on the government to pass the Act (Chance & Andreeva, 1995, p. 236).

4. CONCLUSIONS, CONTRIBUTIONS TO RESEARCH AND POLICY IMPLICATIONS

Investigation of the Colombian and Peruvian petroleum industries illustrates that despite some important contributions to the sustainable development of LDCs, SBP is not widespread and MNOCs do not accord equal priority to environmental and in particular social issues, as financial operating objectives. Moreover, greater responsiveness to environmental issues than social issues by MNOCs, as well as variations between Colombia and Peru, and compared with other company types, illustrates that the contribution of MNOCs to the sustainable development of LDCs is not uniform. Instead the paper shows the importance of external institutional pressures—principally in the form of local legislation—for determining the contribution of MNOCs to the sustainable development of LDCs.

At a theoretical level, the conceptual framework presented in this paper has potential applicability elsewhere for understanding MNOCs' role in the sustainable development of LDCs. The concept of sustainable business practice provides an effective means of comprehending MNOCs' impact on the different objectives of sustainable development. Similarly, the analytical framework presented and applied in the paper has potential application elsewhere in understanding the nature and scope of MNOC's contribution to the sustainable development of LDCs. In this regard, the paper has moved beyond existing studies that focus on the environmental and social strategies of MNOCs (Flaherty & Rappaport, 1991; Levy, 1995; McPhail & Davy, 1998; UNCTMD, 1993) and through analysis of the content, context and process of SBP has shown both what SBP might consist of, as well as important conditions for its widespread adoption.

Finally, the paper contains a number of important policy implications for LDC policymakers, as well as corporate decision-makers. The study has shown the importance of LDC governments actively managing the environmental and social impacts caused by MNOCs and other company types operating within their jurisdiction. Furthermore the study has shown the importance of policies and legislation that support decentralization, by ensuring the return of hydrocarbon-revenues to hydrocarbon-producing regions, and by providing consultation and participation rights to NGOs and other civil society organizations, as well as local communities directly affected by hydrocarbon activity.

For corporate decision-makers, the paper has shown that the management of environmental and social issues is not purely a cost, but instead that there can be important long-term strategic benefits to a proactive approach to these issues. The paper has further illustrated that the management of environmental and social issues requires more than corporate policy at the headquarters level. Complementary measures are necessary to ensure that these issues are developed and adopted at all levels of operation. Finally, the paper has shown that despite their complexity, the management of social issues is primarily
concerned with incorporating the interests and concerns of those potentially directly and indirectly affected by a development in its design, implementation and management. This requires companies to manage proactively boundary relationships with a wide range of constituents, ranging from national governments, to local communities and other civil society organizations present in their region of operation.

NOTES

1. Sustainability is typically defined along a spectrum ranging from “weak” to “strong” (Beckerman, 1995; Cabeza, 1996; Howarth, 1997). “Strong” definitions emphasize the need for a net increase in each of the forms of capital associated with sustainable development. In contrast, weaker definitions acknowledge the ability to transform one form of capital into another and define sustainability in terms of a net overall increase in total capital (i.e., some may increase, while others decrease). The very nature of upstream oil and gas industry implies that there is always a reduction in levels of natural capital following the extraction of hydrocarbon resources. This paper therefore applies a weak definition that acknowledges the ability to transform one form of capital into another.

2. For a more comprehensive description of the study and its findings see (Moser, 1998). The research combined quantitative and qualitative methodologies. A structured questionnaire provided data for the “Content” and “Context” dimensions of SBP, while case study research methodologies (Yin, 1994) were used to examine the “Process” dimension. In all cases the research incorporated cross-issue (environmental and social), cross-country (Colombia and Peru), and cross-company (MNOCs, overseas independent and local) analysis. The study involved 12 months field research in Colombia and Peru. The first six months were spent administering the questionnaire to the environment and community affairs managers of the 38 petroleum companies with exploration and/or production activities in Colombia and Peru in 1996. There was a 74% response rate to the questionnaire, with responses from companies operating across Colombia and Peru’s most important areas of hydrocarbon activity. The remaining field research was spent undertaking case study research with two MNOCs and one overseas independent company operating in Colombia, in addition to two MNOCs in Peru. This involved further interviewing of headquarter staff, extensive site investigations, as well as interviews with other stakeholders such as regulatory authorities, NGOs, consultants, subcontractors and local communities.

3. In 1995, 12 of the top 100 companies ranked by foreign assets were MNOCs (UNCTAD, 1997).

4. As illustrated by such cases as the Exxon Valdiz disaster (Amba-Rao, 1989; Clarke, 1991; Shrivastava, 1994), and accusations of negligent social and environmental practice by Shell in Nigeria (Danler & Brunner, 1996) and BP in Colombia (Financial Times, November 8, 1997; Observer, November 10, 1997).

5. Multinational corporations are defined as foreign enterprises (a) comprising entities in two or more countries, (b) which operates under a system of decision-making permitting coherent policies and strategies through one or more decision-making centres and (c) in which entities are so linked that one or more of them may be able to exercise a significant influence over the activities of the others, and in particular to share knowledge, resources and responsibilities with others (adapted from Westney, 1993). Overseas independent companies are defined as foreign enterprises (a) comprising entities operating in up to a maximum of four countries, (b) but within which there is no system for coherent decision-making on policies and strategies throughout the organization and (c) within which individual entities are unable to exert significant influence over the activities of others. The category local company comprises both state-owned enterprises, or enterprises that are owned by the national government of the country within which the enterprise operates; and any privately-owned local enterprise, whose headquar- ters are located in the country of investigation.

6. All figures relate to 1995 data.

7. In 1995, foreign companies were responsible for 83% and 74%, respectively of hydrocarbon activity in Colombia and Peru respectively.

8. Typically 30 m³ of drill cuttings is produced per day per well site.

9. As considered earlier for MNC subsidiaries operating in LDCs, their external context is defined by both their local operating context, as well as the context of the MNC as a whole—including internal corporate policies.

10. A potentially important issue related to Colombia and Peru’s contrasting legislative frameworks concerns
the question of whether companies deliberately select to invest in countries with weak legislative frameworks, or alternatively terminate operations in countries where environmental legislative demands are considered prohibitive—the “Pollution haven” hypothesis (Harrison & Eskeland, 1994; Pearson, 1987). Although not explicitly examined by this study, the research suggested that environmental legislative demands are not a critical factor in MNOC investment decisions. In this respect, Colombia’s more rigorous legislative framework was not considered by the MNOCs examined in this research a sufficient hindrance to prevent investment or the termination of existing operations.

11. The importance of local and international NGO pressure may in fact be higher than indicated if one assumes that the importance given to local and international profile is related to NGO activities and pressure.

12. Health and safety regulation refers to those policies and practices undertaken by oil and gas companies to ensure the health and safety of their employees while at work.

13. The 1991 Constitution introduced a number of mechanisms to encourage public participation in decision-making processes around such issues as hydrocarbon developments, particularly in the case of indigenous or Afro-Colombian peoples.

14. A clear example of using the findings of the stakeholder workshops to influence internal policy was provided by the MNOC’s decision to build no access roads to its area of activity. This was a concern that emerged at a number of the stakeholder meetings and the relevant MNOC manager used the distinct possibility of negative NGO pressure and media comment if the company went ahead with roads to internally justifying the importance of a “no roads approach.”

15. Primary stakeholders can be defined as those directly affected by hydrocarbon activity; secondary stakeholders as those with a specific interest in a region of hydrocarbon activity, including planned programs or activities.

16. Legislation that appears weak compared with Colombia.

17. This framework was designed to shift the emphasis from time-consuming and inefficient environmental licenses and permits for individual hydrocarbon activities, to a more auto-regulatory approach that seeks to identify and mitigate the cumulative direct and indirect environmental and social impacts associated with the different stages (i.e., exploration, construction, production and decommissioning) and components (i.e., multiple well sites, central processing facilities, etc.) of hydrocarbon activity.

REFERENCES


study of Shell in the Niger Delta. Stuttgart, Germany: Brot fur die Welt.


