SOCIAL AND ENVIRONMENTAL IMPACTS OF WORLD BANK/IMF-FUNDED ECONOMIC RESTRUCTURING IN BOLIVIA: AN ANALYSIS OF ENRON AND SHELL’S HYDROCARBONS PROJECTS

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ABSTRACT

With the spectacular financial collapse of Enron in 2001, Enron and Shell’s Rio San Miguel- Cuiabá gas pipeline gained international notoriety for degrading the last, most intact dry tropical forest in the world, Bolivia’s Chiquitano forest. The paper uses specific case studies, including the case of the Cuiabá pipeline, to examine how economic restructuring sponsored by the World Bank, International Monetary Fund (IMF) and Inter-American Development Bank (IDB) facilitated the entrance of multinational oil corporations that have caused significant social and environmental impacts in Bolivia. The paper explores the influence of international financial institutions and multinational oil corporations on Bolivian state institutions, particularly their ability to regulate and address impacts caused by developments in the hydrocarbons sector. It concludes that neoliberal policies, which resulted in partial privatisation of the state oil company and in expanded control over natural resources by multinational corporations (MNCs), were detrimental to sensitive ecosystems and indigenous inhabitants.

Keywords: economic restructuring, decentralisation, Enron, Bolivia, World Bank, indigenous peoples, gas

INTRODUCTION

This paper argues that neoliberal economic “reforms”1 implemented in Bolivia – structural adjustment in 1985; the capitalisation2 of the state oil company Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) and the passage of the Hydrocarbons Law (Ley de hidrocarburos) both in 1996 – facilitated the entrance of multinational oil corporations that were responsible for a series of social and environmental impacts throughout the country. Capitalisation was particularly significant as the Bolivian government sold 50 per cent of the equity in the state oil company to various multinational corporations (MNCs), including Enron and Shell (Table 1). Despite significant protests and criticisms, the process was censored from all public scrutiny and accountability (Vargas Salgueiro, 1996; Molina, 1999a). While it is true that YPFB’s projects were environmentally destructive even prior to capitalisation, the so-called reforms sponsored by the World Bank, International Monetary Fund (IMF) and Inter-American Development Bank (IDB) stimulated sub-
Substantial foreign direct investment in the hydrocarbons sector, leading to a dramatic growth in exploration, production and distribution and a concomitant rise in associated impacts. Between 1997 and 2001, investment in the sector rose from USD 296 million to USD 401.3 million (Economist Intelligence Unit, 2002), which is over five times what YPFB invested prior to capitalisation (World Bank, 2000).

Economic restructuring in Bolivia was implemented in conjunction with decentralisation and accompanying administrative reforms (Kohl, 2002). However, contrary to neoliberal rhetoric that these would boost the economy and deepen democracy, as the Bolivian case demonstrates, economic and political restructuring led to a reduction in state revenues, massive social unrest, and eased MNCs’ access to natural resources (World Bank, 2000). Imposition of radical structural adjustment in 1985 resulted in rapid growth of the informal sector and widespread popular opposition that was met by acts of repression (Conaghan et al., 1990). Based on extensive participatory qualitative research, including interviews with a range of representatives from the state and private sectors and civil society, this paper emphasises the importance of local knowledge in conducting a socioeconomic and political analysis of environmental change (Zimmerer, 1996; Muldavin, 2000a).

Using case studies, the subsequent analysis seeks to explore conflict over access to natural resources and contextual sources of environmental change – two critical areas of inquiry within political ecology (Bryant, 1992) – in the context of radical economic restructuring. It seeks to build upon findings that assert that marginalised social groups embrace both modern and alternative approaches to development (Zimmerer, 1993; Bebbington, 1996). In order to do so, the paper links cases of local place-based acts of resistance arising from impacts generated by developments in the hydrocarbons sector to the broader national economic reforms promoted by international financial institutions and implemented by Bolivian state institutions. This multi-scaled approach employs what Blaikie (1994: 7) has referred to as one of eight elements that comprise an agenda for political ecology:

Since political ecology is usually located, as part of its concerns, in place-based and locally specific interactions as well as in larger, pervasive

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**TABLE 1. CAPITALISATION OF THE BOLIVIAN STATE OIL COMPANY YACIMIENTOS PETROLIFEROS FISCALES BOLIVIANOS (YPFB)**

<table>
<thead>
<tr>
<th>UNIT CAPITALISED</th>
<th>STRATEGIC PARTNER</th>
<th>AMOUNT OF CAPITALISATION (USD millions)</th>
<th>TOTAL FOREIGN INVESTMENT IN CAPITALISATION (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHACO (exploration and production)</td>
<td>BP Amoco Bolivia</td>
<td>306.6</td>
<td>37</td>
</tr>
<tr>
<td>ANDINA (exploration and production)</td>
<td>YPFB, Pérez Compan, Pluspetrol Bolivia</td>
<td>264.7</td>
<td>32</td>
</tr>
<tr>
<td>TRANSREDES (transport)</td>
<td>Enron International, Shell Overseas Holding</td>
<td>263.5</td>
<td>31</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>834.9</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Adapted from VMEH (2002).*
and often non-place-based political and ideational forces (e.g. environmental ideologies or state policies), a number of different levels or scales of analysis are implied. These have to be made specific (a relatively easy task) but also linked by credible explanations (which is very much more problematic, involving the linking of proximate to remote causes).

With regards to decentralisation, the effectiveness of local governments in managing natural resources is questionable (Larson, 2002). The evidence suggests that, when implemented within a neoliberal framework, decentralisation of natural resource management can reduce the decision-making power of indigenous peoples and lead to devastating outcomes caused by multinational oil corporations. Although popular participation may increase accountability (Kaimowitz et al., 1998), the cases here challenge the argument that participation necessarily results in more equitable mechanisms of natural resource management (Ribot, 2002). My analysis complements other research that has shown the socially and environmentally deleterious consequences of economic liberalisation in Latin America (Farthing, 1995; Morley, 1995; Thrupp, 1995; Markandya et al., 1996; Kaimowitz et al., 1997; Pacheco, 1998). Economic liberalisation can lead to a shift towards more polluting resource- and energy-intensive industries and weaken environmental controls (Hansen-Kuhn, 1993; Castaños, 1994; Jones, 1995; Cherp et al., 2003).

Given that economic liberalisation in Bolivia was largely sponsored by the World Bank, much of the paper distils the Bank’s hidden agenda in promoting the reforms and reveals their social, political and environmental impacts. Over the last two decades, civil society pressure arising from impacts generated by notorious World Bank projects such as the Polonoreste project in Brazil and the Sardar Sarovar dam project in India redistributed the Bank’s accountability from borrowing countries to external groups such as advocacy non-governmental organisations (NGOs) (Rich, 1994; Linaweaver, 2003). Despite this shift, this paper lays out arguments in support of Caufield’s (1996) contention that the World Bank is a “master of illusion”. Claiming to have implemented profound institutional reforms to increase transparency, accountability and legitimacy, the World Bank has reshaped its public face as a contemporary proponent of environmental protection and social justice while continuing to be driven primarily by private sector interests.

In addition to the literature on the accountability and regulation of international financial institutions such as the World Bank, over the last 30 years much has been written on corporate responsibility, with topics ranging from debates over moral responsibility (Guerrette, 1986; Crusto, 2003; Soares, 2003) to corporate governance reform, especially in the wake of more recent financial scandals involving Enron, Arthur Andersen, Worldcom, Tyco and Adelphia (Sohn, 2003). The cases presented here demonstrate the manner in which Enron and Shell shirked responsibility for environmental disasters and impacts on local communities in Bolivia by manipulating the press, shaping regulations, co-opting NGOs and elected officials, and gaining control over part of the state oil company.

Proponents of World Bank-sponsored capitalisation in Bolivia argued that state companies were corrupt and inefficient, and that the country needed to increase economic growth by drawing on the capital and technology of multinational oil corporations. Yet, accelerated economic growth in the hydrocarbons sector associated with the economic restructuring entailed the construction and renovation of a series of pipelines for transport of oil and gas to markets within and outside of South America. As a result, such expansion of activities within the sector increased various social and environmental impacts, a point which is acknowledged by the World Bank itself (see, for example, World Bank, 2000).
SOCIAL AND ENVIRONMENTAL IMPACTS OF HYDROCARBONS PROJECTS

Impacts of hydrocarbons projects are particularly harmful as exploration, production and distribution often occur in sensitive ecosystems and indigenous territories. In Bolivia (Figure 1), this is clearly manifested by the Bolivia-Brazil gas pipeline, which runs east from Santa Cruz, through San José de Chiquitos to Puerto Suarez and, ultimately, Porto Alegre in southern Brazil, crossing a number of sensitive ecosystems and seriously threatening the livelihoods of indigenous Guaraní, Chiquitano and Ayoreo communities, both in Bolivia and Brazil. In operation since 1999, the Bolivia-Brazil pipeline triggered increased exploration and the construction of additional pipelines feeding into it, including the Rio San Miguel-Cuiabá pipeline that runs northeast from San José de Chiquitos to San Matías and on to Cuiabá in Brazil, bisecting the Chiquitano forest – the world's largest remaining tract of tall, dry tropical forest – and the Pantanal wetlands, among other protected areas in the eastern lowlands (see Hamerschlag, 1999). Environmentalists have argued that the pipeline “right of way”, the path cleared for the pipeline route that Enron and Shell defined as spanning a width of 30 m along the entire length of the pipeline (Entrix Consultants, 1999), and the illegal service roads have increased access to sensitive areas, with long-term ramifications.

The argument that hydrocarbons projects alleviate poverty in Bolivia by increasing employment and revenue for the state is problematic: profits primarily go to multinational oil corporations; state revenues are unevenly distributed geographically; and the projects generate little employment and create few linkages with the rest of the economy (Andersen & Meza, 2001). These contradictions were at the heart of conflict over the Pacific LNG (liquefied natural gas) project, through which multinational oil corporations British Gas, Repsol YPF and Pan American (a British Petroleum and Bridas Corporation joint venture) attempted to export gas to markets in California and Mexico through Chile. Facilitated by the economic reforms discussed below, the Pacific LNG project, the largest infrastructure project in the history of Bolivia (still in the planning stages), was an underlying cause of the violent clashes between the government and indigenous groups that ultimately culminated in the expulsion in October 2003 of the Bolivian president, Gonzalo Sanchez de Lozada (1993-97; 2002-03).

Documents from the Bolivian energy and Hydrocarbons Vice-Ministry (Viceministerio de Energía e Hidrocarburos) (VMEH, 2002), make clear that economic restructuring facilitated the entrance of multinational oil corporations (including Enron and Shell) into Bolivia and shifted control of hydrocarbons production from the state to foreign-owned corporations:

With the application of the measures of Structural Adjustment, initiated in 1985, there was a redefinition of roles of the state and the private sector. The State stopped participating in production in order to undertake normative and promotive functions of private initiatives... The new Hydrocarbons Law, promulgated the 30 April, 1996, the Capitalisation of Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) and the signing of the contract of purchase – sale of gas with the Republic of Brazil, has in turn figured favourably for national and international private investment... The success of the reforms realised in the sector can be observed in the results of the capitalisation of YPFB, and the substantial investment agreements for the next 8 years.

Company documents also demonstrate that the World Bank’s hydrocarbons sector
capitalisation project, initially implemented by the Bolivian government in 1996, shifted control over oil and gas pipelines, such as the Cuiabá pipeline, from the state to Enron and Shell. With this shift, Enron, Shell and their Bolivian consortia – Transporte de Hidrocar-}

buros S.A., or Transredes, GasOriente Boliviano and GasTransboliviano – became responsible for impacts generated from new hydrocarbons activities (e.g., construction of pipelines, wells and plants). There is ongoing debate regarding the degree to which Enron,

Figure 1. Areas of oil and gas exploration and exploitation in Bolivia (1998-99) and relevant pipeline locations.

Source: Based on Areas de Exploración y Explotación Petrolera en Bolivia, Centro del Planificación Territorial Indígena & Confederación de Pueblos Indígenas de Bolivia, December 1999.
Shell and their local consortia should be held accountable for impacts stemming from the pre-existing infrastructure inherited from YPFB that, company representatives insist, was in extremely poor condition. This issue became particularly important when Transredes’ OSSA II pipeline (running east from Arica in Chile to Santa Cruz) ruptured in January 2000 in the Andean highlands, spilling some 30,000 barrels of reconstituted crude oil into the Rio Desaguadero and contaminating patches of native prairies, pastures and crops in approximately 18,000 hectares (Getter et al., 2000; La Razon, 2000a). The spill occurred near the town of Sica Sica, in a rural Bolivian altiplano region inhabited principally by Quechua and Aymara indigenous populations that depend on livestock and cultivation of crops such as quinoa, amaranth and potatoes.7 Within the same year, Transredes suffered a further two pipeline spills – one near Cochabamba, the other in Camiri – in addition to three other prior incidents (FOBOMADE & Amazon Watch, 2000).8

An audit conducted in 1999 by a subcontractor for the Hydrocarbons Superintendency (Superintendencia de Hidrocarburos), the state agency that regulates the hydrocarbons sector, found that 65 points of the 2,052 km of oil pipelines in Bolivia (most of which were managed by Transredes) needed immediate repair and 80 other points needed to be repaired in the medium-term (La Razon, 2000b). After six months of investigation, the superintendency found that Transredes had failed to undertake the preventative measures it had recommended on 1 December 1999 (two months prior to the OSSA II spill) and imposed a sanction of USD 114,000 for lack of maintenance and prevention in the section of the pipeline that crossed Rio Desaguadero (La Razon, 2000a). Notwithstanding the team of lawyers from Transredes who dissected the sanction and the company’s appeal, presenting testimony from international experts and local witnesses, in 2000 the sanction was upheld (El Deber, 2000b; La Razon, 2000c). In addition, the company had to spend USD 35 million cleaning contaminated watersheds and other areas (La Razon, 2000c). Ironically, the USD 114,000 Transredes allegedly paid for the sanction merely went to a regional fund to finance oil and gas development, rather than to affected communities or environmental protection measures (La Razon, 2000a).

A few months after the sanction, Transredes also paid local Aymara indigenous communities in Chuquiña and Japo (eastern Bolivia) the sum of USD 3.7 million as compensation and USD 2.2 million for the rehabilitation of native prairies, in accordance with the results of a subsequent independent audit, and then only after pressure from the affected communities (El Diario, 2001). Previously, the Aymara community at Chuquiña announced their intention to sue Transredes and the Ministerio de Desarrollo Sostenible y Planificación (MDSP), the Sustainable Development Ministry: Transredes had not complied with the Ministry’s orders to provide 9,283 metric tons of pasture to the communities in both Chuquiña and Japo as compensation for having degraded their pastures and reeds (El Deber, 2000c). Bolivian environmental NGO Foro Boliviano sobre Medio Ambiente y Desarrollo, or FOBOMADE (2000), criticised Transredes’ failure to follow through with mitigation and compensation.

Social unrest had emerged because Transredes did not comply with providing water, medicine and pasture to local communities, ignoring an administrative resolution in July 2001 from the Ministry (La Razon, 2000d). The company’s non-compliance attests to its significant power in relation to the Ministry; that Transredes was sanctioned at all appeared to stem largely from tremendous press coverage of the spill, as well as the degree of international involvement (over 27 international organisations) (La Razon, 2000d). Yet, in the case of the Cuiabá pipeline,9 in February 2000, Vice-Minister Neisa Roca, whose portfolios included environment, natural resources and forest development (Viceministerio de Medio Ambiente, Recursos...
Naturales y Desarrollo Forestal), issued only a formal warning to GasOriente Boliviano (a consortium of Enron, Shell and Transredes) for not complying with agreements established in the project’s environmental impact assessment (EIA) (PROBIOMA, 2000). It is possible that Roca did not issue a sanction (the next step in the legal process) because she truly believed the company had addressed the issues raised. But ongoing reports from NGOs, indigenous groups and civic organisations regarding violations of the EIA and compensation programmes indicate that this was more likely due to a conflict of interest between the priorities of the Vice-Minister’s environment (i.e. protection) and forest development (i.e. favouring pipeline construction) portfolios, and because the matter received less press exposure than the Rio Desaguadero spill.

During the same year, Transredes was accused of offering 1300 bolivianos (about USD 200) as bribes to community members in Camiri for that oil spill (El Deber, 2000b). Similarly in the case of the Rio Desaguadero spill, Vice-Minister Roca had accused Transredes of concluding agreements with community members who were illiterate (La Razon, 2000d). The behaviour of the company representatives in these instances was similar to that displayed in the case of the Cuiabá pipeline in spring 1999, in which they effectively minimised compensation and mitigation of impacts by negotiating with the 34 Chiquitano and Ayoreo indigenous communities located within the pipeline’s “right of way” in a divided manner, bypassing regional and national organisations. Although the Vice-Minister’s warning to the companies in the case of the Cuiabá pipeline was one of the most significant actions taken by a Bolivian state agency, it was a minor rebuke in comparison to the USD 5.9 million the Vice-Ministry demanded from Transredes for the oil spill in Rio Desaguadero. Yet, critics claimed that even that sum was trivial in comparison to USD 84 million that Petrobras, the Brazilian oil and gas company that has extensive involvements in Bolivia, had to pay for an oil spill in Brazil (El Diario, 2002). In this context, critics used the Brazilian case to emphasise the relative weakness of the Bolivian Sustainable Development Ministry in relation to its counterpart in Brazil, as indeed a Bolivian Sustainable Development Minister conceded:

Transredes is convinced that it will not be sanctioned for the successive oil spills. It is assured that as it “is a Bolivian company” and has national capital, the Government would not dare to apply a severe punishment (El Deber, 2000d).

The aforementioned statements point to the tremendous power of multinational oil corporations in relation to Bolivian state institutions, particularly those charged with regulating their actions. In addition, actions undertaken by Hydrocarbons Superintendency as compared to that of the Sustainable Development Ministry suggest a significant fracture between the two state institutions. The Superintendency, for instance, did not accuse Transredes of negligence in the OSSA II pipeline rupture, but merely stated the company did not act quickly enough to take preventative measures (El Diario, 2000). In contrast, Vice-Minister Neisa Roca found that Transredes was negligent because it could have greatly reduced the amount of oil spilled had it acted more rapidly (La Razon, 2000d). She claimed that 29,000 out of 30,000 barrels of oil spilt were lost during the first 23 hours, when oil was still being pumped through the pipeline. Staff at the NGO FOBOMADE went further, suggesting that Transredes had not just manipulated the press to diminish the significance of the spill, but failed to provide essential data, endangered the health of community members engaged in cleaning operations and improperly disposed of contaminants (FOBOMADE & Amazon Watch, 2000).

Given the significant impacts caused by the three oil spills and the construction of the
Cuiabá pipeline, it is significant that Bolivian state institutions imposed relatively minimal sanctions, did not press criminal charges nor suspend construction or operation of the pipelines – actions that were supported by existing legislation (La Prensa, 2000). Because of the severity of the Rio Desaguadero spill, there was even discussion of the possibility of the Bolivian government pressing criminal charges against Transredes; however, neither the Hydrocarbons Superintendency nor Ministry of Sustainable Development pursued legal action. Even Vice-Minister Neisa Roca (cited in La Prensa, 2000), who maintained that Transredes was negligent, intimated she would not pursue criminal charges because pipeline ruptures were out of her jurisdiction, and the legal process would be arduous and slanted in favour of the company:

I still don’t want a lawsuit against [Transredes]. The Prefecture of Santa Cruz brought a lawsuit [for insufficiently treating waste products] against Guabirá [a sugarcane refinery] for the death of fish [in the Pirai river] and Guabirá won after strolling through five provincial tribunals.

What is implied in the Vice-Minister’s statement is that it was more politically feasible to take administrative rather than legal action for a criminal act. Bolivian Environmental Law, Ley del medio ambiente of 1992, states that contamination of waterways constitutes an environmental crime on which the Vice-Ministry should prepare a site report to be submitted to the Public Ministry. That the Vice-Minister herself openly shunned pressing criminal charges attests to the perceived clout of Transredes, which is well equipped with legal and public relations teams. It is likely that this was also a factor explaining why the Ministry of Sustainable Development did not suspend the construction or operation of any of the pipelines, even after multiple oil spills and the environmental degradation caused by the construction of the Cuiabá gas pipeline. Rather, both state agencies pursued moderate administrative measures.

FOBOMADE (2001) criticised Transredes for manipulating communities and influencing the supposedly independent audit of the oil spill. Moreover, it lamented nepotism that arose between the state, Transredes, and the various NGOs and consultants contracted by Transredes. While some of the emergent conflicts of interest between multinational oil corporations and NGOs are analogous to those present between international financial institutions and collaborative NGOs (Hochstetler, 1997; Keck & Sikkink, 1998), these are particularly problematic, in the Bolivian case, when NGOs are directly contracted by non-transparent, illegitimate and unaccountable oil corporations.

**REGULATING THE HYDROCARBON SECTOR: THE WORLD BANK**

The World Bank influenced Bolivian state institutions in various ways through structural adjustment and capitalisation as well as financial and legal reforms. Within the hydrocarbons sector, World Bank support for capitalisation and for modifications of policies, laws and regulations were paramount in encouraging private investment. The promulgation of the Hydrocarbons Law in 1996 was expected to liberalise trade in oil and natural gas; establish an independent government agency to promote exploration investments and negotiate contracts; create an agency to regulate distribution tariffs and identify anti-competitive practice; and deregulate prices (World Bank, 1994a).

United States (US) economic interest was a significant motive for capitalisation. CORE International Inc. (1994), which assessed the funding prospects for the US Trade and Development Agency, indicated that funding the capitalisation would benefit US investors, create demand for equipment, open new markets and create jobs. The US government itself and the IDB also played key roles in encouraging the Bolivian government to
implement capitalisation (CORE, 1994). In July 2000, the national Bolivian newspaper *La Razon* (2000e) reported that World Bank staff exerted significant pressure on the Bolivian congress to approve the Public Ministry Law, *Ley orgánica del ministerio público* of 1993, implement reforms to the Judicial Counsel Law, *Ley de organización judicial* of 1993, and institutionalise the Counsel. These were some of the pre-conditions for approval of a USD 30 million “judicial reform” loan. The capitalisation programme itself imposed stiff conditions that these legal, regulatory and financial reforms had to be enacted in order for this loan to be disbursed (World Bank, 1994a).

As the investment, mining and hydrocarbons laws were of paramount economic importance, the World Bank (1994a) made their passage a condition of the judicial reform loan. A letter from the Bolivian government (Minister of Finance, 1994) requesting the loan also confirmed that the Bank had stipulated the passage and promotion of various other laws and regulations as necessary conditions. Through (this and other) conditional loans, the World Bank shaped virtually every major state institution in Bolivia, effectively making state employees dependent on World Bank funding. Such financing presents a significant conflict of interest for state officials in institutions responsible for monitoring and regulating the social and environmental impacts of the World Bank’s economic reforms associated with the hydrocarbons sector.

In particular, the World Bank’s project for hydrocarbons sector reform and capitalisation credit sponsored the creation of an environmental office, Unidad del Medio Ambiente (UMA), within the Energy and Hydrocarbons Vice-Ministry (VMEH), ostensibly to regulate, prevent and mitigate negative social and environmental impacts associated with the economic reforms in the hydrocarbons sector. In addition, the World Bank (2000) sponsored what came to be known as the “learning and innovation loan” (LIL) capacity-building project to strengthen the socio-environmental management capacity of UMA.10 The total estimated cost of the LIL project was USD 5.5 million, of which the Bank financed USD 4.8 million. The LIL project was one of the institution-building activities sponsored by the Bank to ensure that structural, legal and financial reforms were implemented successfully, and without negative effects. However, from the inception of the project in 2000, NGOs and indigenous organisations criticised the World Bank funding, alleging that UMA was ineffective in addressing negative impacts of hydrocarbons projects brought by the economic reforms (FOBOMADE, 2000). Representatives of various civil society groups affected by Enron and Shell’s projects alleged that UMA was partial to the companies and their local consortia, and that the Energy and Hydrocarbons Vice-Ministry too had failed to enforce existing laws owing to their extensive ties to energy companies:

In the current context, social and environmental impacts in the sector have multiplied. Some of them, such as the oil spill in Río Desaguadero, have provided evidence of the non-existent technical capacity on the part of companies and responsible government agencies in confronting these types of accidents, the vulnerability of communities, but, above all, the scarce will of responsible environmental institutions in applying and enforcing existing legislation, particularly the Vice-Ministry of Energy and Hydrocarbons, whose close links with energy companies has been observed in the national press, as with the case of the current functions of the former Vice-Minister of Hydrocarbons in the company Chaco (AMOCO), the ex-head of UMA, and other functionaries that have moved from this Vice-Ministry to energy companies (FOBOMADE, 2000).

Moreover, anonymous interviewees at the Sustainable Development Ministry in early
2000 argued that UMA should not have monitored environmental issues since (as part of the Vice-Ministry of Hydrocarbons) it had a vested interest in advocating hydrocarbons projects as “national interest” and defending multinational oil corporations. Ironically, by promoting the LIL project, the World Bank attempted to finance a questionable institution (which it had originally created) to address the increasingly negative impacts of hydrocarbons development that the Bank itself had conceded resulted from its own economic reforms. Clearly too, UMA staff had a conflict of interest in monitoring impacts associated with the World Bank-sponsored reforms of which they were a part. Moreover, under the Hydrocarbons Law, the state received a portion of payments made by energy companies for concessions, some of which was channelled to UMA (World Bank, 2000). Ultimately, therefore, UMA’s funding depended on revenues from environmentally destructive hydrocarbons projects, another conflict of interest.

During the design phase of the LIL project, FOBOMADE (2000) recommended that it be modified such that representatives of local communities affected by hydrocarbons activities would have decision-making power, directly monitor impacts and supervise project implementation. After the third round of consultations, the World Bank reoriented the project to a limited extent and created commissions of inter-institutional coordination at national, departmental and local levels that were to have decision-making power and undertake monitoring, regulation and conflict resolution (FOBOMADE, 2000). These commissions were to be based on the Popular Participation Law, Ley de participación popular of 1994, and composed of representatives from a broad range of sectors within civil society as well as various state institutions. In the spirit of decentralisation, FOBOMADE proposed that local monitoring by those communities affected by hydrocarbons activities be the lynchpin of the project. However, the revised project documents, purportedly incorporating the civil society concerns raised, revealed that, rather than heeding these proposals, the World Bank (2000) remained steadfastly resolved to fund UMA to conduct monitoring. This, FOBOMADE (2000) argued, essentially reduced the “monitoring network” to a handful of UMA consultants in the city of Santa Cruz. A director of the Bolivian NGO Centro de Estudios Ambientales para el Desarrollo Sostenible (CEADES) insinuated, the entire consultation process was manipulative and deleterious to vulnerable communities affected by hydrocarbons activities:

Through the World Bank LIL project the oil companies are trying to use [Confederación Indígena de Bolivia – the national indigenous organisation] to legitimate a consultation regime that is totally contrary to the interests of indigenous and peasant communities. They pretend to undertake regional meetings with indigenous peoples (without participation of peasants or colonists, and with a small number of NGOs, the majority of which are functionaries of the World Bank), and with no democratic participation of affected communities, seek to approve this regime, which would enormously hinder social monitoring of the companies (personal correspondence, Jorge Cortés, 8 August 2001).

In this context, the LIL case corroborates Gwynne & Kay’s (2000) contention that decentralisation in Bolivia shifted functions to the local scale without transferring significant decision-making power. That indigenous and peasant representatives were ultimately relegated to insignificant roles within the LIL project supports the notion that control over decision-making on natural resources is shaped by disparate power relations (Boelens & Doornbos, 2001).

In March 2000, I observed a videoconference between the World Bank’s offices in
La Paz, Bolivia, and Washington, D.C., at which NGOs and indigenous organisations were arguing against the support for a project that focused on strengthening UMA. A World Bank official in La Paz commented that it was too late, insinuating that the Bank too recognised the controversial aspects but was already committed to funding UMA. Indeed, despite its alleged receptivity to modifications proposed by civil society groups, the LIL project appeared “pre-cooked”. Moreover, the World Bank’s (1994b:2) project document for the capitalisation programme, which was prepared in 1994 prior to capitalisation, explicitly stated that a forthcoming technical assistance project (i.e. the LIL project) would be implemented to improve the capacity of the Energy and Hydrocarbons Vice-Ministry’s “environmental assessment of hydrocarbon and power-related reforms”.

Internal World Bank documents show that representatives were well aware that its investments were at odds with its mandate of sustainable development and poverty alleviation and, further, that the Bank supported the project because of its high returns, rather than any true desire to address impacts generated by the economic reforms and associated hydrocarbons activities:

Another internal Bank document obtained by [the Institute for Policy Studies] outlines the profitability of the oil, gas and mining sector for the World Bank. That memo stated, “By sector, Oil, Gas and Mining had by far the highest equity return after specific provisions (26.6 per cent)” (Wysham, 2001:n.p.).

The LIL project information document (World Bank, 2000), written approximately four years after the capitalisation of the Bolivian hydrocarbons sector, admitted that reform and capitalisation of the state oil company, along with the opening of the Brazilian gas market, had triggered social and environmental impacts which were beyond the regulatory capacity of state institutions to contain. Similarly, other documents describing potential impacts of capitalisation prepared prior to capitalisation (e.g. World Bank, 1994b), had anticipated that capitalisation could increase hydrocarbons development and its associated impacts, which indicates that the World Bank failed to prevent, control and mitigate negative impacts fully envisioned in its own studies.

**CAPITALISATION: MNCs, THE STATE AND NGOs**

Investors who were interested in buying parts of Bolivia’s capitalised public enterprises had tremendous influence on the Bolivian government in crafting the Capitalisation Law (Ley de capitalización of 1994) which involved various sectors, including hydrocarbons, airlines, telecommunications and mining. The World Bank’s definitional mission report (CORE, 1994) on capitalisation of state enterprises stated that private investors (like Enron and Shell) were to be given a 50 per cent share in the companies, but with assurance of control through a management contract. Such an arrangement suggests that contrary to World Bank, IDB and Bolivian government discourse assuring the public that control of capitalised enterprises was to be evenly split between the government and private investors was unfounded. In reality control rested with private companies.

In the case of the Cuiabá pipeline, it is clear that Enron and Shell wielded control. Ownership of GasOriente Boliviano was split in the following manner: Enron 20 per cent, Shell 20 per cent and Transredes 60 per cent. Transredes, the oil and natural gas transport consortium, was in turn owned by both Enron and Shell (25 per cent each).11 two Bolivian pension funds, *Futuro de Bolivia AFP* and *AFP Previsión BBV*, (34 per cent), as well as private investment funds and former workers of YPFB (16 per cent). Of this last 16 per cent, in 2002, a representative from Transredes admitted to me during a confidential interview that some ex-employees of YPFB had sold their
shares to the private companies Fondelec (see <http://www.fondelec.com/portfolio/>) and Indosues. This meant that the Bolivian state – through the pension funds – ultimately only owned 20.4 per cent of GasOriente Boliviano.

Through capitalisation, the Bolivian state receives a relatively small proportion of revenue – 18 per cent from new gas fields and 50 per cent from existing fields – compared to Enron and Shell (CEDIB, 2001), particularly in view of the fact that, as of May 2002, 97 per cent of hydrocarbons reserves were new (Los Tiempos, 2002). Moreover, the amount of gas in new reserves discovered after capitalisation (1.44 trillion cubic metres) far exceeds existing reserves (0.04 trillion cubic metres) (La Razon, 2000f; CEDIB, 2001; Los Tiempos, 2002).

In addition to issues related to the relative control of private investors as compared to the state, there was also controversy over the manner of Enron’s entry into Bolivia. Following the fallout from the Enron bankruptcy scandal, an opinion piece in the national newspaper El Diario (2002) stated that there was no fair bidding process, and that Enron’s entry was secured by questionable financial contributions to government representatives negotiating the capitalisation.

Scrutiny of the way that Gonzalo Sanchez de Lozada’s administration implemented capitalisation during his first term (1993-97) suggested that certain state representatives willingly adopted neoliberal economic policies because they benefited personally. President Lozada was criticised because, as founder and head of the private company Compania Minera del Sur (COMSUR) he had an enormous economic interest in the mining sector (Conaghan et al., 1990) and, therefore, stood to gain from capitalisation of the state mining company, Corporación Minera de Bolivia (COMIBOL). These allegations were confirmed in September 2002 when indigenous Chiquitano peoples’ representatives, accompanied by a delegation of NGOs, travelled on rural roads originating near the town of San José de Chiquitos to the heart of the Chiquitano forest and found that COMSUR was about to tap gas from Enron and Shell’s Cuiabá pipeline for the Don Mario gold mine – a project operated by Orvana Minerals Corporation (http://www.orvana.com) in which Losada’s COMSUR had a controlling interest. This implied that Enron, Shell and COMSUR secretly conspired to construct the pipeline through the middle of the forest in order to provide energy to the remotely located gold mine. In July 2003, Chiquitano and Ayoreo indigenous representatives lodged a complaint with Rachel Kyte, the World Bank ombudsman in Washington, D.C. (Compliance Advisor Ombudsman, 2003), alleging that the World Bank, through its group member International Finance Corporation (IFC), was both a funder and shareholder (11.1 per cent) of the Don Mario project in violation of International Labor Organisation (ILO) Convention 169 on indigenous and tribal peoples, Bolivian environmental law, and the World Bank’s operational guidelines. The letter called upon the Bank to suspend the Don Mario project until investigations were completed and to indemnify the affected populations. Consequently, in late August 2003, the World Bank ombudsman came to Bolivia to conduct an investigation, recommending an investigation of all of COMSUR’s operations in Bolivia (see Compliance Advisor Ombudsman, 2003).

The Bolivian state depends heavily on revenues from oil and gas, particularly given that it has the second largest gas reserves in South America. In 1994, the World Bank estimated that the Bolivian Treasury received approximately 50 per cent of its revenues from the sector (World Bank, 1994c). With the completion of the Cuiabá pipeline, extensive new gas finds and additional pipeline construction, this amount will likely increase, assuming the state receives its fair (albeit minimal) share of profits. However, as state coffers grow, pressure to approve damaging hydrocarbons projects will likely increase. Confidential interviewees at the Sustainable Development Ministry acknowledged that
Enron and Shell placed immense pressure on the Bolivian government to grant the environmental license for the Cuiabá pipeline as rapidly as possible with the route bisecting the Chiquitano forest. Although Vice-Minister Neisa Roca wanted to approve the alternative routing that followed existing roads, she was told by the Vice-President’s Office to grant the environmental license for the cheapest route, the one that would clear a right of way directly through the Chiquitano forest (Plate 1). In retrospect, representatives from the Treasury and Economic Development Ministry realised that this was a mistake, but by then, construction had already commenced. In addition, given the alleged conspiracy between Enron, Shell and former president Sanchez de Lozada’s company COMSUR, it appears the pipeline was also constructed through the middle of the forest in order to supply energy to the Don Mario mine. On 15 June 1999, the day the US government’s Overseas Private Investment Corporation (OPIC) approved a USD 200 million loan to Enron and Shell, OPIC issued a press release hailing the unprecedented environmental requirements it had imposed upon the companies and alleging benefits accruing to indigenous peoples. In the release, OPIC (1999) echoed Enron’s proud sentiment about passage of the “Heart” Law, Ley corazón of 1999, that was aimed to make Bolivia a centre, literally “the heart” for energy and telecommunications development by opening export corridors/highways.

Prior to this, Enron representative, Abraham Moreno, commented that Enron “had achieved the approval of the ‘Law of the Heart’” (Molina, 1999b:199), thereby presuming to remove any legal barriers to constructing the pipeline. The Ley corazón identified 11 projects, including the Cuiabá pipeline, to attract foreign investment and promote the export of natural gas and electricity to neighbouring
countries under 40-year concessions (Department of Energy, 2002). In February 2000, at a consultation meeting on the bi-oceanic highway (export corridor) project administered by IDB, which was attended by dozens of civil society groups, including NGOs, indigenous representatives and politicians (and at which I was present), Vice-Minister Roca argued that Bolivia is a poor country to justify the need for foreign investment from MNCs and international financial institutions for mega-projects. Yet, Roca had been quick to criticise them for taking away power from the state by investing in the USD 30 million “Chiquitano Forest Conservation Program” negotiated by Enron, Shell and (initially) five conservation NGOs that, to date, excludes representatives of local indigenous and peasant communities from the programme board:

They did their business amongst themselves. They are going to use the land to put the pipeline in. They are going to see that the environment will not be hurt. They are judge and jury….This is my country, those are my natural resources, and I am in charge of them. And now we are going to give responsibility to third parties? (Neisa Roca quoted in Langman, 2000).

CONCLUSIONS

Current conflicts in Bolivia relating to hydrocarbons development are similar to those that occurred in the early and middle part of the twentieth century, when foreign aid, legal and technical assistance and political pressure from the US persuaded Bolivia to surrender domestic reserves to such foreign companies as Standard Oil and Gulf. After a series of nationalisations and de-nationalisations of the state oil company YPFB, the neoliberal economic “reforms” adopted in 1985 and thereafter marked the beginning of another era in which foreign aid, legal and technical assistance and political pressure once again encouraged the state to capitalise the national oil company, deregulate the economy, provide fiscal “incentives” for MNCs and grant Enron and Shell the first major contract for natural gas exports to Brazil. Although international pressures were similar to those applied in previous eras, the economic, legal and institutional reforms adopted in this contemporary neoliberal era have transformed the state and economy much more profoundly.

Economic and political restructuring in Bolivia facilitated the entrance of multinational oil corporations that constructed a series of pipelines which were particularly detrimental to indigenous communities, and which led to negative environmental impacts of an unprecedented scale and magnitude. This argument represents a nuanced analysis of what Bryant (1992) has referred to as contextual sources of environmental change, one of three critical areas of inquiry within political ecology (see also Peluso, 1988; Hirsch, 1990). By referring to historical and contemporary dynamics of indigenous peoples’ struggle over protecting sensitive ecosystems that are the basis for their livelihood, the paper opens a second area of critical inquiry within political ecology, conflict over access to environmental resources (Bryant, 1992; Blaikie, 1994). In particular, the so-called reforms juxtaposed extremely powerful corporations beside vulnerable indigenous groups who were compelled to engage in acts of resistance in order to re-assert their claims over natural resources.

Based on the premise of attracting foreign investment through deregulation, economic restructuring impeded the responsible state institutions from addressing impacts caused by developing the hydrocarbons sector, but strengthened others that were allied with multinational oil corporations. Since the construction of the main Bolivia-Brazil pipeline began, Enron, Shell and their local consortia have been responsible for four major oil spills, a gas leak and various ramifications on local environments and livelihoods caused by the pipeline construction. In these cases, company
personnel dealt with affected communities separately and thus minimised compensation and mitigation of impacts. The companies’ persistent acts to thwart the minimal sanctions imposed by state agencies and their disregard for domestic and international laws is evidence of their immense power.

Along with the administration of Gonzalo Sanchez de Lozada, the international financial institutions that promoted capitalisation of the state oil company, including the World Bank, IMF and IDB, should be held accountable for the impacts generated by the capitalised companies in Bolivia and also for promoting a process that purported to leave the state with equal control, but left it with only a 34 per cent stake in Transredes, Enron and Shell’s newly capitalised company. The capitalisation plan promoted by the aforementioned international financial institutions was particularly insidious in that it made public welfare dependent on profits from unsustainable hydrocarbons development. Furthermore, contrary to neoliberal rhetoric, the motives for capitalisation were anything but humanitarian. Rather, they aimed to support investors, open new markets and create jobs – in the US. Staff and consultants from international financial institutions worked hand in hand with representatives from Bolivian state institutions to implement the institutional, legal, regulatory and financial reforms. Contrary to its professed directive of sustainable development and poverty alleviation, the World Bank consistently funded projects that marginalised indigenous peoples, degraded the environment, increased debt and aided problematic state institutions.

The World Bank’s LIL project is one of the most egregious projects the Bank has supported in Bolivia. Although the project has aimed to address negative social and environmental impacts engendered by the very economic reforms it promoted, the Bank merely funded an environmental office (UMA) of a state agency that is heavily influenced by multinational oil corporations. Ironically, local monitoring, which was proposed by indigene-
Representatives of state institutions involved in regulating and monitoring the hydrocarbons sector. As a result of such pressure, private investors gained control of capitalised companies through management contracts and creative divisions into consortia (such as GasOriente Boliviano and Transredes), among other mechanisms. Such slick manoeuvring obscured the actual control exerted by private investors in comparison to the Bolivian state and was misleading, if not intentionally deceptive, in justifying capitalisation with arguments that the state would maintain equal control (but now retains a mere 34 per cent). Representatives from Enron, Shell and their local consortia placed immense pressure on the Bolivian government to issue the environmental licenses for destructive projects. In this context, by analysing nuanced relationships within and between MNCs, civil society, state institutions, and the environment, this paper aims to deepen political ecological research linking MNCs to environmental change (Pearson, 1985; Redclift, 1987; Leonard, 1988; Bryant, 1992).

The economic reforms, regional trade agreements, and associated increases in hydrocarbons activities carried out by multinational oil corporations have profoundly affected sectoral and geographical patterns of dependency in Bolivia. In a relative sense, increasing dependence on hydrocarbons reduced Bolivia’s economic dependence on the mining sector and shifted Bolivia’s regional dependence from the Andean group countries (Colombia, Ecuador, Peru and Venezuela) to the Mercado Común del Sur (Mercosur) or “Southern Cone Common Market” countries of Argentina, Paraguay, Uruguay and, particularly, Brazil. In fact, Enron and Shell claimed that the Rio San Miguel-Cuiabá pipeline was a model for Bolivia’s integration with Mercosur:

The pipeline and power plant expansion is a project of Transredes S.A., Enron and Shell Gas Latin America B.V., and has been developed with the strong support and close cooperation of the Bolivian, Brazilian and Argentine governments. It is viewed as a model project for Mercosur economic and energy integration. It also demonstrates that responsible economic development can go hand-in-hand with progressive environmental policy. Nonetheless, Enron and Shell’s increased role in Bolivia, along with other foreign oil companies, has in turn made Bolivia increasingly dependent on private investment from the US and Europe.

The main cases analysed in this paper, the construction of the Rio San Miguel-Cuiabá (Bolivia-Brazil) pipeline, the World Bank’s LIL project and the OSSA II pipeline (Rio Desaguadero) oil spill, vividly illustrate the grave consequences of economic restructuring in Bolivia. Although pressure from civil society in Bolivia has caused international financial institutions to implement some reforms related to their accountability, legitimacy and transparency, such measures have not fundamentally changed their practices but, rather, have served to legitimate damaging projects and policies. The analysis reveals that their rhetoric of poverty alleviation and sustainable development is, for the most part, a veneer that obscures their destructive practices and does little for the indigenous communities who directly suffer the consequences:

These (large-scale) projects manage many resources in the name of Indigenous Peoples. Nonetheless, our people and communities continue to be the same or worse. We see people and projects pass in which others improve their situation, but in our communities, nothing or little has changed. We remain at the margin of economic benefits (OICH, 2000).

At the time of writing, pressure from indigenous groups and other sectors of civil society continuing in the wake of the ousting...
of Sanchez de Lozada had led the government to modify the Bolivian Constitution and the Hydrocarbons Law; ultimately, these would entail the convocation of a constituent assembly and a national referendum on natural gas. It remains to be seen to what extent such changes will alter the proportion of revenue the state retains from multinational oil corporations and whether environmental and social impacts generated in the sector will be addressed directly.

ACKNOWLEDGEMENTS

This research was funded by grants from the Inter-American Foundation, UCLA Latin American Center, and UCLA International Studies and Overseas Program. I am particularly grateful to Joshua Muldavin, John Agnew, Stephen Bell, Carlos Torres, Susanna Hecht and Judith Carney for their guidance in conducting this research. I am most deeply indebted to various individuals from the Chiquitano and Ayoreo communities, as well as a number of NGOs in Bolivia for the invaluable information they provided. I am particularly grateful to Henry Tito and Jorge Cortés of CEADES, who have inspired me in the way they work to strengthen indigenous movements by encouraging autonomy and self-sufficiency.

ENDNOTES

1 I use the term “reform” merely to maintain consistency with the terminology used by the World Bank and Bolivian state institutions without implying any positive connotation whatsoever.

2 The process of capitalisation differs from privatisation in that the money gained from the sale of the state company does not go to the state, but, rather, stays with the company to finance future investment (Ewing & Goldmark, 1994).

3 Fieldwork was conducted from October 1999 through August 2000, and during my subsequent trips in 2000, 2001, 2002 and 2004. Ethnographic qualitative research techniques (in particular, semi-structured interviews and participant observation) were combined with political-economic structural analysis (based on archival review) (Little & Horowitz, 1987; Bassett, 1988; Hecht & Cockburn, 1989; Bryant & Bailey, 1997).Various individuals were interviewed in the state sector (the Energy and Hydrocarbons Vice-Ministry (VMEH), Sustainable Development Ministry (MDSP), National Protected Areas Service (SERNAP) and Senate Commission for Sustainable Development), the private sector (Enron, Shell and their consortia in Bolivia, and their consultants AATA and Dames & Moore), various international and Bolivian NGOs (Friends of the Earth, WWF, Amazon Watch, Bank Information Center, Missouri Botanical Garden, World Conservation Society, PROBIOMO, CEADES, FOBOMADE), and members of the Chiquitano and Ayoreo indigenous communities and journalists.

4 See maps of oil and gas pipelines at <http://www.superhid.gov.bo/public/LSMAPAS_3_archivo.pdf>. The Bolivia-Brazil pipeline traverses the Kaa-Iya Gran Chaco National Park (managed by Guarani indigenous representatives), the Chiquitano forest, and the Izozog, Chiquitos and Utoquis wetlands in Bolivia; and in Brazil, the protected areas of Itibitinga and Corumbatari (important for migratory birds); the National Forest of Ipanema; the Pantanal National Park; and the endangered remnants of the Mata Atlantica (see Pató, 2000; Hamerschlag, 1999). The routing and construction of the Rio San Miguel-Cuiabá pipeline negatively impacts the livelihoods of, in particular the Chiquitano, as well as Ayoreo indigenous communities, apart from small-scale agricultural producers and other sectors. Forest clearing for the pipeline right of way have increased the susceptibility to fire (due to edge effect) and prospects for illegal logging and colonisation. Approximately 90 species found in the Chiquitano forest are listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

5 In the months leading up to his ousting, Gonzalo Sanchez de Lozada was implicated in conspiring with the Pacific LNG consortium on the controversial plans to export natural gas to California (via a regasification plant in Mexico) through Chile rather than Peru. Deep-rooted tensions had flared up as Bolivians viewed the project as a means by which to regain the access to the Pacific that had been lost in 1879 when Chile annexed Bolivia’s coastal territory in the Pacific War; additionally, the project would have generated significant profits for Pacific LNG, but only relatively small revenues for the Bolivian government. In summer 2004, Bolivians voted in a referendum to export gas through Peru, not Chile. The project is intimately tied to economic restructuring in Bolivia, as the entrance of foreign oil corporations enabled by capitalisation included those in the Pacific LNG consortium.

6 Documents from Enron, Shell and their Bolivian consortia for which I am not at liberty to disclose details.
12 Sanchez de Lozada founded COMSUR in 1962.

13 Article 15 of ILO Convention 169, in particular, specifies the rights of indigenous peoples to participate in the use, management and conservation of national resources in their lands and that “governments shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands. The peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages which they may sustain as a result of such activities” (<http://www.ilo.org/iloex/english/convdisp1.htm>).

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