

**Participation +
Corporate Social Responsibility
in Local Agenda 21:**

A Case Study from São Paulo, Brazil

FIRST DRAFT

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In striving to solve problems of environmental management, governments, corporations, and civil society groups are increasingly innovating, and working in cross-sectoral partnerships to create dynamic and more sustainable solutions to critical environmental and social situations. However, defining the roles of the various participants in community development projects is a challenge faced by all sectors, a challenge that is unique to the social and geographical context in which that community exists. Agenda 21 and the discussion of corporate social responsibility have contributed to the definition of the role of participation of stakeholders in both discussion and practice of environmental management and community development projects. This research focuses on a case study in São Paulo, Brazil. The project took place over one year in 2001. It involved a multinational corporation, a civil society organization, and the local community in partnership, and incorporated principles of Agenda 21 and Corporate Social Responsibility, to create a management strategy to improve conditions of the local environment.

This document is one of the outputs of the six-year project, *Bacias Irmãs*, which has gathered and synthesized information on participation, environmental education and capacity building in watershed management. This includes information collected specifically for the project in three metropolitan areas, Piracicaba (Brazil), São Paulo (Brazil) and Toronto (Canada). This research was carried out from February to July of 2006, and was conducted with resources from PROCAM at the University of São Paulo (USP) and Instituto Ecoar for Citizenship, the local third sector partner of *Bacias Irmãs*.

This paper serves as a contribution to the Bacias Irmãs project, as an analysis of the capacity of civil society to encourage participation in environmental management, through incrementing innovative methods in community intervention at the micro-regional scale. The OBATI pipeline, the geographical area examined in this paper, passes through the Pirajussara watershed, one of the three focus areas of the Bacias Irmãs project. This research corresponds to my learning objectives in the MES program: Business and Alternative development, Planning in the Urban Environment, and Stakeholder Participation, as per my Plan of Study.

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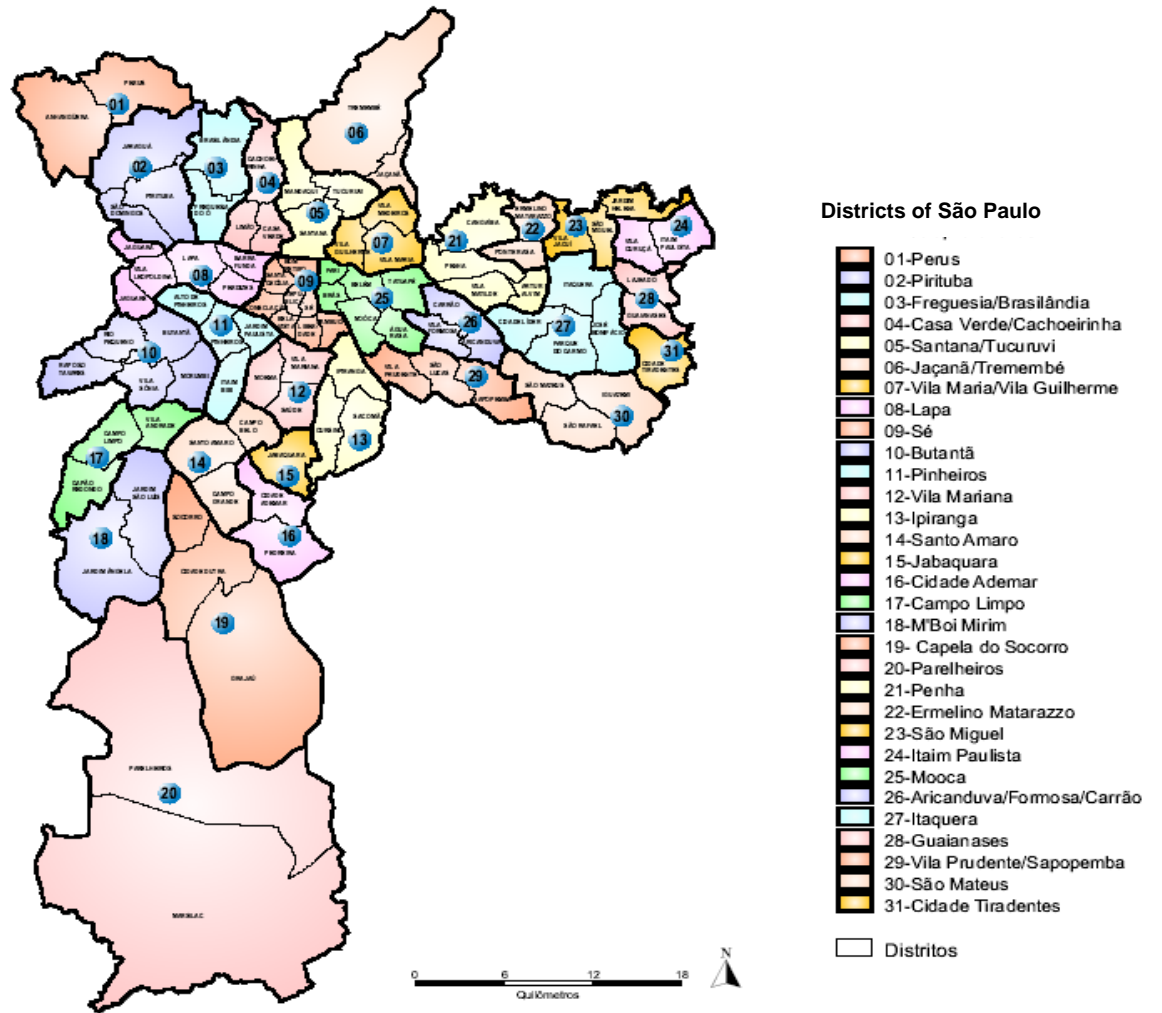
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Chapter 1: Introduction

Agenda 21 has helped to define the role of participation of stakeholders in discussion and practice of environmental management and community development projects that strive toward the principles of sustainability. However, defining the roles of the various participants in community development projects is a challenge faced by all sectors, a challenge that is unique to the social and geographical context in which that community exists. In striving to solve problems of environmental management, governments, corporations, and civil society groups are increasingly innovating, and working in cross-sectoral partnerships to create dynamic and more sustainable solutions to critical environmental and social situations.¹

This research focuses on a specific case study in São Paulo, Brazil; a project that took place over a period of one year in 2001-2, which involved a multinational corporation, a civil society organization, and the local community in partnership, and incorporated principles of Agenda 21 and Corporate Social Responsibility, to create a management strategy to improve conditions of the local environment. This introductory chapter outlines the focus of this research, and the process through which these issues are explored in this paper.

1.1 Context

To properly understand the significance of community-based environmental projects in the urban region of São Paulo, it is essential to define “urban slum” in the context of the mega

¹ *Civil society refers to the arena of uncoerced collective action around shared interests, purposes and values. Civil societies are often populated by organizations such as registered charities, development non-governmental organizations, community groups, women's organizations, faith-based organizations, professional associations, trades unions, self-help groups, social movements, business associations, coalitions and advocacy group.* (LSE, 2006)

city, and describe this environment that is home to nearly half of Latin America's population. Urban slums are a form of unplanned growth, or insurgent planning, and are home to the poor. They are high-density communities characterized by informal housing structures that lack basic urban amenities, such as water, sewage, electricity, garbage pick-up, and recreational facilities. Slum communities are often linked to various environmental hazards, including infectious disease, flooding and exposure to toxins, that lead to serious community health problems. Beyond access to basic municipal services, slums lack schools, clinics, safe places for children to play, and community meeting places. Unplanned growth makes the provision of services complicated, as for example, when garbage collection trucks cannot pass through the narrow and winding streets formed between blocks of houses, and cannot therefore perform garbage collection.

Figure 1.1 Typical Brazilian slum housing, or *favela*



More than 2 billion people are projected to be living in slums by 2025. According to the 2000 census in Brazil, 138 million people, more than 80% of the country's inhabitants live in cities, and an estimated 63 million people inhabit Brazil's urban slums, or "favelas" (WRI 2005).² In Brazil, sewage networks reach less than half of the urban population, and lack of water and sanitation in Brazil's urban areas is estimated to cause some 8,500 cases of premature mortality per year (Fix, 2003). According the Urban Slums Report, growth rates vary within the city of São Paulo, and while the city has had an average growth rate between 3.6 and 0.8%, the slum areas have grown by as much as 620% in the last twenty years, and intensified to densities of 210 residents per hectare (Fix, 2003).

Brazil ranks as one of the top ten GDPs in the world, and the country has made remarkable progress in the Human Development Index (HDI) over the last 30 years, however wealth and economic opportunity are concentrated in areas like São Paulo and Rio de Janeiro (Pamuk and Cavallieri, 1998). This extreme social-economic inequality, problems of rural poverty, and environmental degradation limit the effect that this wealth has had on quality of life for the general population (UNDP, 2005).

The reality of persistent poverty co-exists with another economic reality: a competitive and corporate Latin America. In cases where governments lack the resources and institutional capacity to invest in these social problems, companies have stepped in by contributing the resources necessary to fill in these gaps. In the era following the 1992 Rio summit, companies across Brazil and Latin America began expanding philanthropy activities and incorporating social and environmental programmes into their operations (Puppim de

² Favela: these are agglomerations of dwellings with limited dimensions, built with inadequate materials (old wood, tin, cans and even cardboard) distributed irregularly in lots, almost always lacking urban and social services and equipment, and forming a complex social, economic, sanitary, educational and urban order (UN-Habitat, 2003).

Oliveira, 2006). This movement toward more responsible business or corporate citizenship has evolved out of a tradition of democratization and a highly charged civil society, that has characterized Latin America since the 1980s, and in some cases, has surpassed the progress of companies of Europe and North America (Puppim de Oliveira, 2006).

1.2 São Paulo and the growth of slums

The growth of São Paulo, to become a megacity, occurred in three key moments: in the 1930s when the national focus became industrialization, in the 1950's when the city assumed the role of the country's financial capital, and beginning in 1980 with a massive wave of rural to urban migration (Fix, 2003). This third movement marked a new pattern of urban growth that, caused by economic crisis in the nation, combined with unemployment and low-income levels resulting in a boom in the growth of *favelas*.

The city has long since been divided by social class. In São Paulo these marginal, informal settlements exist in the periphery areas as well as alongside the gated and secured luxury neighbourhoods of the elite. The favelas of São Paulo are commonly located on unoccupied lands that have been ignored by the formal real estate market. For this reason the favelas are usually in high risk areas, such as those areas subject to epidemic and flooding of the city's two major rivers, the Pirajussara and the Tiete. Since public authorities are continually removing these settlements, with a few exceptions, the majority of São Paulo's favelas have been pushed to poor, peripheral, and environmentally fragile regions of the city, such as steep slopes, riverbanks, and swamplands (Pamuk and Cavallieri, 1998).

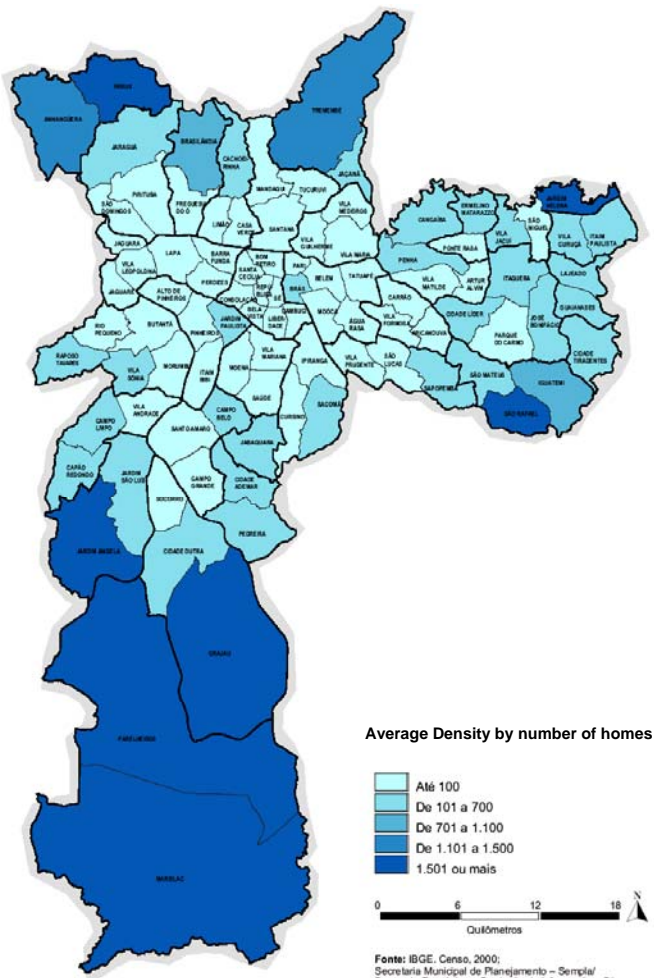
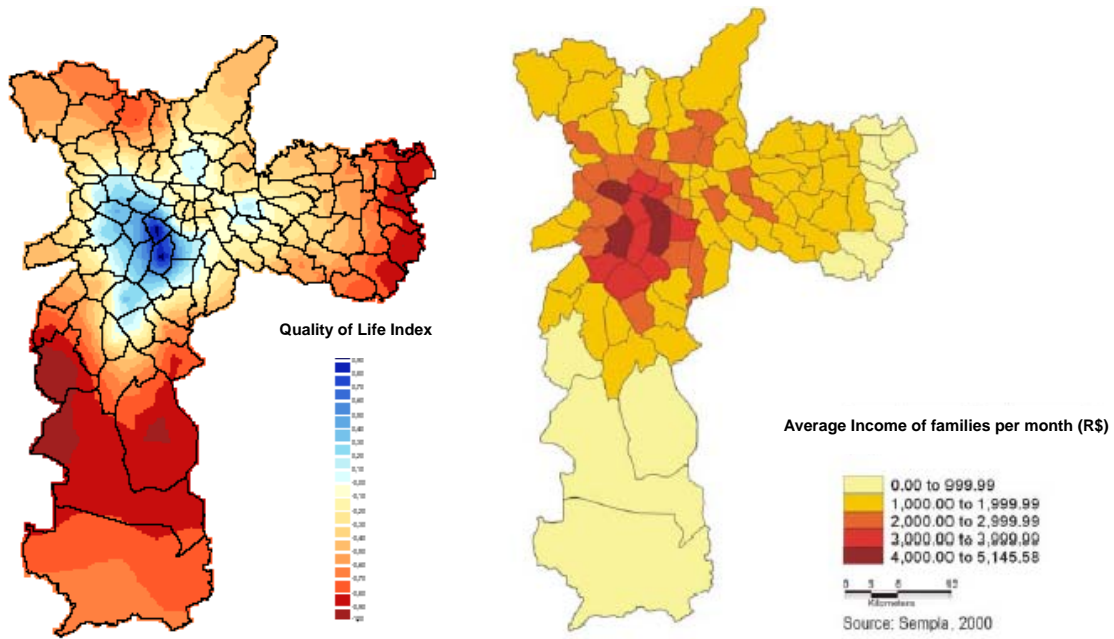
Figure 1.2 Three Maps of Metropolitan São Paulo (SEMPLA, 2000)

The growth of favelas on these lands has had a dramatic effect on the ecological stability of the region, causing an increase in levels of water contamination, frequency of landslide, and severity of the resulting community health problems. Figure 1.2 shows three maps of the Metropolitan Region of São Paulo, whereby neighbourhoods have been mapped based on a quality of life index (i), average income per family (ii), and population density (iii). These maps demonstrate that the highest quality of life is in the central areas of the city and the social, economic, and environmental problems that negatively affect quality of life are concentrated in the periphery.

The single most important economic characteristic of São Paulo is that it is the financial hub of Brazil, with a per capita income of R\$ 633 / month, that is twice as high as the national average. However, as the city with the country's highest unemployment rate, the growing polarization of São Paulo's economy is reflected in the 2-tier employment structure (IBGE, 2000).³ While a small portion of the city residents are employed in services connected to the global economy, a majority of the population work in low-paying domestic and informal employment. The estimate of the number of residents of São Paulo living below the poverty line is approximately 53%, where the poverty line is measured as half of a minimum monthly salary, \$R241 or CAD \$120 per month (UNDP, 2005).⁴

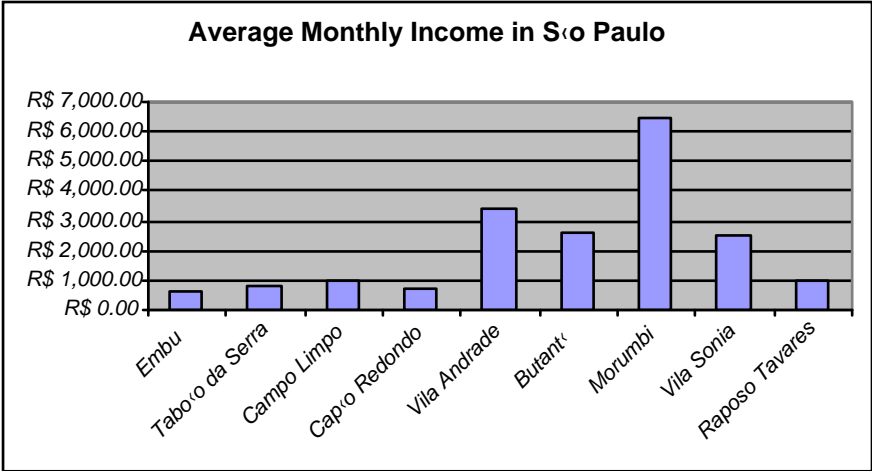
³ Statistical information reported in this document is based on the Brazilian Geography and Statistics Institute (IBGE) census taken in 2000. The next census will be taken in 2010.

⁴ Average Salary for Sao Paulo was R\$1,1000 per month in 2004, or CAD\$ 550 / month (SEMPLA, 2004)



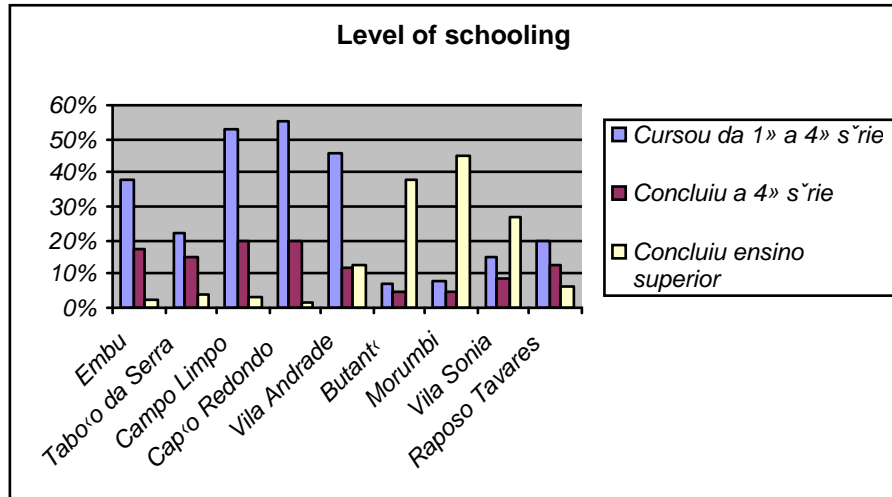
This uneven distribution of wealth, seen in Table 1.2a, shows that the boom of the favelas within the urban landscape of São Paulo is inextricably linked to the vast numbers of Brazilians living on these low wages in a city.

Table 1.2a Income Distribution by Neighbourhoods in São Paulo (IBGE 2000)



There is also a strong correlation between areas of economic power and areas of higher levels of education. Table 1.2b demonstrates that the periphery has markedly lower levels of schooling. A lack of education and information correlates to a lack of understanding of one’s rights and how to exercise them, according to the World Resources Institute. This lack of awareness explains why the poor are often less involved and have little access to political processes. It also explains why legislative changes for participation in decision-making processes are rendered useless if not accompanied by education programmes (WRI, 2005). In this respect, access to environmental information and environmental education is key to a long-term vision for sustainability, for political stability, and for economic growth (UNEP 2000).

Table 1.2b Levels of Schooling by Neighbourhoods in São Paulo (IBGE 2000)



With such a large percentage of Brazil's population living in slum conditions, the implication is that the solutions to problems of poverty, violence, crime, and inequality must be found within the city and addressed with an approach that integrates the social, environmental, and economic issues that plague the slums.

1.3 Research Focus

In the Metropolitan Region of São Paulo, where millions live in favelas, public participation and political representation of marginalized groups is in its infancy stages. This major paper examines community development in the city of São Paulo, Brazil, and analyzes the extent to which a corporate social responsibility (CSR) and Agenda 21 initiative has had an impact on the urban fabric of the city. In particular, this case study discusses how the Petrobras corporation has utilized public participation and stakeholder inclusion strategies, as well as partnership with a third sector organization, Instituto Ecoar, to impact the favela communities of the OBATI (pronounced OH – ba – chee) pipeline region, in which the company operates. Through this case study I will address the following questions:

- *What are the greatest impacts that multi-stakeholder community development projects can have in addressing the needs of slum communities?*
- *How does the private sector contribute to positive environmental change in communities characterized by poverty and a lack of institutional support?*

While an extensive body of research exists on CSR in Latin America, this paper addresses stakeholder inclusion, a specific aspect of CSR that overlaps with the concept of public participation, as defined in Agenda 21. Using ideas of participation and CSR based methods for corporate involvement in the local community, the specific case of Petrobras and the OBATI will be analyzed, as to the extent to which public involvement was incorporated into the OBATI project, and the extent to which the goals that were set out at the projects' inception had been achieved. Through interviews, visits to the OBATI sites, and analysis of archived information, I will compare the current state of the project region with the original objectives, so as to assess the extent to which the OBATI project created lasting tangible changes to the local environment, and the degree to which the experience created intangible changes in the OBATI participants; community members, Petrobras, and Instituto Ecoar. The strategies for community integration and the activities that took place prior to, during, and after the project's completion will be discussed and critiqued according to the principles of participation outlined in the literature review.

1.4 Significance

In combating the massive problems of poverty of the developing world, there is an increasing need to create innovative solutions to social and environmental problems. Forging partnerships and involving new actors is essential to finding integrated solutions.

Corporations have been identified as key to addressing the problems of environmental degradation and poverty that exist in all developing countries. Yet defining the role of the corporation in these problems remains a challenge. Corporate involvement in community development projects is broad and takes many forms, varying in the degree to which they involve working in partnership with civil society and with local communities. By analyzing the benefits and challenges of these relationships through case study analysis, we can better inform the process of community development in the future, expect more significant and long lasting impacts from projects, and ultimately anticipate greater effects on quality of life.

1.5 Organization of this Paper

This paper is divided into six chapters. The following chapter will discuss community based environmental projects, which have begun to take effect in the last decade. Community based refers here to processes that include participation of communities, civil society, government, and the private sector, in decision-making processes. This movement toward participatory processes will be addressed as a phenomenon that pertains to international discourse, Agenda 21, and its representation in the Latin American city. This chapter will also address the role of the private sector within this movement. Here I define social responsibility and the concept of “stakeholder”, based on specific moments in international discussion and on theoretical literature on the topic. That section will highlight corporate social responsibility, or CSR, as it pertains to Latin America, and discuss how this concept has unique implications in Brazil.

The third chapter will identify the research question and relevance of this study within the context of this literature of participation and stakeholder inclusion. This chapter highlights

the specific methodological approaches used to inform this inquiry, as well as the limitations of the selected methods.

Chapter 4 will provide a context for the case study, including an overview of the social, economic, and geographical conditions of the case study area in the Metropolitan Region of São Paulo. Here I will recount the OBATI project as a case study, defining the major participant groups, the Agenda 21 methodology for community engagement, and the process by which Petrobras worked with community leaders to create an environmental management strategy for the OBATI pipeline.

Chapter 5 discusses the extent to which project outcomes met the goals determined at the onset of the project. I will analyze the strengths and weaknesses of the collaboration between Petrobras, the community, and Instituto Ecoar, and the extent to which this collaboration facilitated environmental change in the OBATI project region. I will also discuss the ways in which the case study reflects the strengths and weaknesses of participatory environmental management projects, and commitment to participation, as per the literature discussed in chapter 2.

I address the research questions above in chapter 6. The conclusion of this paper will include a reflection on this project, the research, and describe some of the challenges of the experience of analyzing social responsibility in the Latin American context. Here I will provide possible avenues for future research based on my findings.

Chapter 2: Public participation in community development: Agenda 21, Corporate Social Responsibility, and Brazil

The participatory aspect of this case study is best defined through three concepts of participation. First, participation as understood as representative of the principles of Agenda 21. This understanding of participation is linked to capacity building and leads to a comprehensive plan of action for promoting environmentally sustainable community development. Second, participation as it exists in the literature of community based environmental management. Here, organizations like the World Resources Institute have identified the need for participation in community-based projects that focus on improving the conditions of slum areas. This concept of participation, like Agenda 21, is based on a form of community development planning that engages local residents for the purpose of creating more successful and long-term project results. Third, participation is addressed as a form of stakeholder inclusion, which comes from the dialogue of CSR, whereby the private sector becomes accountable to and inclusive of the local communities (and other excluded groups). Here, stakeholder inclusion is one of a series of responsibilities that are expected of companies that commit to the criteria of responsible behaviour standards, as per global agreements. This chapter looks at the literature of participation in community development through the lens of Agenda 21 and of CSR, and highlights some of the significant debates involving these agendas.

2.1 Participation and Agenda 21

Agenda 21, created out of the United Nations Congress on Environment and Development, or Earth Summit '92, has established the foundation for understanding the role of public participation in the development agenda in Latin America and Brazil. The Earth Summit was the first international conference to define a methodology for

sustainable development. This methodology, Agenda 21, articulates that development toward sustainability must address poverty of the developing world, involve all groups (especially disadvantaged groups) in society, promote education and capacity building, and focus on the management of resources and our natural environment (Agenda 21, 1992).

2.1.1 Strengths of Agenda 21

The implementation plan of Agenda 21 was designed to emphasize the importance of action at every level of society (not just the participation of government) and action plans to achieve sustainable development should be designed at the local level. A key objective of a Local Agenda 21 is that individuals play a more meaningful role through their participation. Thus, Local Agenda 21 projects must be committed to a participatory process of decision-making in order to achieve the level of inclusion and capacity building needed to have a truly democratic process and to “overcome inequality of opportunity to influence decisions” (Wild and Marshall, 1999).

2.1.2 Weaknesses of Agenda 21

Agenda 21 has been summed up by the UN as “a good plan, but with weak implementation” (Houlder, 2002). Ten years after the Rio declaration, Agenda 21 has had little progress in meeting the targets that had been set out for reductions in carbon emissions, ozone depletion, hunger and poverty, and disappearance of biodiversity. While Agenda 21 may have contributed to the design of solid policies and programs to meet these targets, one major criticism is that the voluntary aspect of the implementation plans made Agenda 21 policies often ineffective, the Kyoto Accord being a prime example of this (Houlder, 2002).

In light of the weak mechanisms for implementation, perhaps it is best to analyze the extent to which the principles of Agenda 21 influence processes in the local setting, rather than the extent to which they achieve sustainability targets. From this perspective, as Selman (1998) points out, Agenda 21 can have a greater impact when measured using qualitative rather than quantitative indicators.

2.2 Participation in community-based environmental projects

The United Nations Environmental Program has declared that the first priority of governments of Latin America is to find solutions to the social and environmental problems of the urban region, primarily housing, sanitation, and transportation. In many Latin American cities, the percentage of the population living in slum areas, with inadequate access to water, sanitation, and social services, continues to grow. The weak response of local governments, or *institutional support*, can be attributed to a lack of resources, as well as a lack of capacity to adopt innovative strategies needed to address the problems of slum settlements (Satterthwaite, 2005; Puppim de Oliveira, 2006).

Appadurai recognizes the importance of infrastructure and service provision for the poor, but describes the need for these changes to be more than merely technical changes; they must as well be political (Appadurai, 2001). Here, in dealing with improvements to the slum community environment, it becomes essential to think of livelihoods, and economic and political capacities, and not merely of the “upgrading” of the physical amenities (Roy, 2005). When these processes are inclusive and include the idea of capacity building or empowerment, the process is considered *sustainable* human development. Here, the concept of social capital serves to strengthen this understanding of *community-based*, whereby building communities is based on the social connection of participation and the resulting network that brings together individual actors in the community (Putnam, 2000).

2.2.1 Obstacles to Participation in community-based environmental projects

In order to achieve a more broad and inclusive participation in environmental management, the main obstacles to participation must be addressed. There are several reasons why the poor are often less involved and are less likely to participate, such as a lack of education, information, and awareness, and a lack of understanding of their rights and how to exercise them (WRI, 2005). According to Fix “Among slum dwellers there is an acceptance that being poor means accepting these conditions, whereby dwellers often do not believe they have rights, and their engagement with the political system is minimal” (2003). In this respect, access to environmental information becomes essential to creating a long-term vision for sustainability, political stability, and economic growth (UNEP 2000).

2.2.2 Participation in Decision-making

Participation has been defined as a point of entry whereby the public has access to specific official processes, such as public hearings. However, in many countries that have adopted the legal changes to include the public in decision-making processes, implementation of these laws is often weak, and often comes after major decisions have already been made (WRI, 2005). Authentic participation means playing a role in decision-making processes by shaping agendas and establishing priorities for community action to ensure that they are inclusive and effective in producing the anticipated benefits (WRI, 2005). Examining whether participation is wide vs. narrow, deep vs. shallow, is based on the degree of community influence, the level of involvement, the scope of participation, and the extent to which participation challenges existing inequalities (Arnstein, 1969; Perkins, 2005; Wild and Marshall, 1999).

One way that barriers to participation can be overcome is through the inclusion of civil society organizations that organize community members' demands into a collective voice. In many cases, these organizations, which draw on local knowledge and resources, have successfully improved provision of water, sanitation, drainage, and solid waste collection in a way that is cheaper and more effective than government and private sector projects (Satterthwaite, 2005). While the focus of these projects may be infrastructure development and other types of "urban upgrading strategies", this local leadership approach, more frequently used by NGOs, makes the decisions accountable to the expertise of the residents of informal settlements, and is more likely to incorporate previously excluded groups (Appadurai, 2001; Roy, 2005). Thus, in addition to service and infrastructure developments, participatory projects should be understood as processes that lead to increased trust, willingness, and capacity for work in partnership with local governments (Satterthwaite, 2005).

2.2.3 Participation in Brazil

The move toward more democratic processes in Brazil, which includes significant participation of civil society in all levels of government, began more than two decades ago, and corresponds to a simultaneous process of decentralization which gave power to local governments. Baiocchi argues that Brazil's move toward decentralized and participatory democracy lacks active citizenship, whereby participation is available to the privileged, and where private entitlement reigns over "public good" (Baiocchi, 2003). However, several areas where local governments have adopted innovative policies for public participation, showed significant progress in local governance, inclusion, and economic development (Campbell, 2003). Participatory budgeting in the city of Porto Alegre is one example of this progress, and supports the claim that Brazilians show a high level of participation and

support of environmental causes, even in low-income communities who are typically less likely to participate (Abers, 1997; Jacobs, 1997; Baiocchi, 2003).

2.3 Corporate Social Responsibility for Sustainability

The responsibilities of the private sector in striving toward sustainable development have been conceptualized in many ways, and vary across differing economic and geographical contexts. While no universal understanding of Corporate Social Responsibility (CSR) exists, three key moments in international discourse have contributed to the principles that form the basis of CSR: The UN Congress on Environment and Development in Rio de Janeiro, which produced the Agenda 21 document (described above); the UN Global Compact, introduced at the World Economic Forum in 1999; and the World Summit for Sustainable Development, a follow-up to Agenda 21, adopted in 2002. Many other institutions from civil society, the public, and the private sector, have as well worked to put forth a universal definition of CSR, including the OECD Guidelines for Multinational Enterprises, and the World Business Council for Sustainable Development, created by 175 companies from around the world.

The tremendous growth of private sector involvement in developing countries has caused governments, development agencies, and civil society to re-think the ways in which business can be a partner in striving toward sustainable development (Wheeler et al., 2004).

2.3.1 UN Global Compact (UNGC)

The UN Global Compact's 10 principles (Table 2.3.1) identify the issues that pose the greatest threat at the global scale, including human rights, labour standards, environmental sustainability, and anti-corruption. These issues are considered essential to

the articulation of the role of the corporate sector in relation to governmental agencies and for the promotion of *responsible* global corporate citizenship. The purpose of the compact is two-fold, both to highlight the areas of convergence between government and business interests, and to solicit commitment by companies around the world to the principle that a well-functioning market can only succeed if progress is made in the defined areas (UNGC, 1999). Since its official launch in 2000, the UNGC has grown to include over 3,000 companies around the world.

<p>Table 2.3.1 The Ten Principles of the UN Global Compact</p>
<p>Human Rights Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Principle 2: make sure that they are not complicit in human rights abuses.</p>
<p>Labour Standards Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: the elimination of all forms of forced and compulsory labour; Principle 5: the effective abolition of child labour; and Principle 6: the elimination of discrimination in respect of employment and occupation.</p>
<p>Environment Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: undertake initiatives to promote greater environmental responsibility; and Principle 9: encourage the development and diffusion of environmentally friendly technologies</p>
<p>Anti-Corruption Principle 10: Businesses should work against all forms of corruption, including extortion and bribery.</p>

On the part of the private sector commitment to CSR, signing the UN Global Compact is a *voluntary commitment*; companies are not legally bound to the codes of conduct. In this way, CSR has been defined as a process for organizational change, whereby each company is responsible for finding the appropriate management tools for adopting the ten principles. However, the voluntary nature of the compact means no obligation to follow

these codes, and voluntary CSR continues to be criticised ineffective by critics in CSR discourse (Haslam, 2004).

2.3.2 World Summit on Sustainable Development (WSSD)

The Johannesburg World Summit on Sustainable Development marked the ten-year anniversary of the Rio summit and the signing of Agenda 21. Recognized at this summit was the Plan of Implementation for the active promotion of corporate responsibility and accountability, including the development and implementation of public-private partnerships and agreements to support sustainable development. Particular emphasis was placed on “encouraging dialogue between enterprises and the communities in which they operate and other stakeholders” (GGDP, 2006). In addition, the WSSD mandated the São Paulo Consensus, to carry out analytical work that facilitates and enhances positive contributions to the economic and social development of developing countries, focused on identifying how trans-national corporations may best contribute to sustainable economic and social development.

2.3.3 The Business Case in CSR

There is a growing global interest in promoting business' role in social, environmental, and ethical issues, especially in areas such as environmental damage and resource degradation, worker salaries, and health and safety standards. Simultaneously, several major corporations such as Shell, Monsanto, and Nike, have set an example for other companies by demonstrating the tremendous impact of ignoring the responsibilities of corporate citizenship, and suffering the consequences in their financial performance. Authentic CSR goes beyond both charity and reputation management. It requires that a responsible company will take into full account the impact on all stakeholders and on the environment when making decisions. This requires them to balance the needs of all

stakeholders with their need to make a profit and reward their shareholders adequately (Wheeler, 2003).

The literature on corporate social responsibility is essential to understanding the need for a greater presence of the private sector in addressing global social and environmental concerns. However, the complexity of this process is heightened when the distinction is made between responsible corporate citizenship and a strategic CSR. The latter is detailed in the *business case* for sustainability, which favours particular strategies that can enable corporations to *benefit* from a proactive stance to its social, environmental and economic responsibilities (WBCSD, 2002).

The complex change faced by business can be divided into *context* (global economic, social, political, technological, and environmental change) and *relationship* (changing roles of government, business, and civil society) (Starik and Rands, 1995). With regard to the latter, developing strong “interface capacity” or effective cross-sectoral relationships is at the core of stakeholder inclusion, network building, and “boundary spanning.” Forging and improving relationships with civil society and other stakeholders is a key source of new knowledge, and often where the most innovation occurs (Prahalad and Hammond, 2002). Thus, when business improves their capacity for working with stakeholder groups, they as well improve their performance in addressing social, economic, and environmental problems. Partnership increases capacity for understanding the larger context, and thus adopting a philosophy of responsibility (UN Global Compact, 1999; Wheeler and Sillanpaa, 1997).

According to the Ethos Institute, the business case for adopting this philosophy is multi-faceted, in that employing best practices in corporate governance, appropriate

environmental management, and investment in economic and social development brings other benefits such as increased sales, decreased cost, and reduced risk (Instituto Ethos, 2006).

2.3.4 The Stakeholder Case for CSR

Engagement in the community represents one aspect of the business-case for CSR, in which corporate innovation can work to both provide value to the communities in which it functions and can increase its profit through doing so. For corporate decision makers, prosperity and poverty alleviation can be dual benefits of business activity. From this angle, for business that is attentive to its stakeholders and that practices the commitments to responsibility (such as the UNGC), the benefits of a strong reputation will translate into a strong financial performance over a long-term period. A holistic stakeholder approach to business contextualizes the company as a full partner in the local communities, rather than a traditional view that focuses solely on shareholders.

The complexity of stakeholder inclusion extends beyond the discussion of cross-sectoral partnerships, and includes the discussion of the local community where the companies operate, including in many cases, marginalized / low income communities and slums. Engagement in these communities is considered an essential strategy, according to the UNMDG, and is likely to generate “very significant social benefits, including job creation, expanded economic opportunity, and more widespread capacity to participate in economic and political activity” (UNMDG 1999; WRI, 2005; Prahalad and Hammond, 2002).

2.3.5 CSR in Brazil

While most Latin American multinationals have shown some level of CSR, the private sector participation has been characterized as “relatively weak”, with most of the work of

CSR promotion being done by civil society organizations. Current debate on the state of CSR in Latin America highlights the progress of a select group of Latin American companies in committing to transparency, reporting initiatives, and social and environmental investments. This progress is attributed to the pressures, incentives, and advocacy of international movements (like the UNGC), and foreign firms to which the local firm is linked (Haslam, 2004). One of the major obstacles to measuring this progress, however, is a lack of independent or “watchdog” organizations, and a prevalence of voluntary commitments on the part of the corporations, whereby CSR codes are not obligatory, and where companies receive no sanctions or consumer backlash for non-compliance (Haslam, 2004).

Brazil is a clear leader in CSR in Latin America, where CSR has been largely associated with community involvement and social issues, involving poor education, access to health care, and other media savvy issues (Balch, 2006). One example of this progress is the NBR 16001, a document setting national standards for norms of corporate responsibility. However, what is lacking in the CSR strategy of most Brazilian companies is a proactive (rather than reactive) posture, and attention to some of the more immediate problems in Brazil: corporate accountability and transparency, and stakeholder engagement whereby business elites learn to listen to the voice of civil society (Balch, 2006).

2.3.6 Criticism of Corporate Social Responsibility

There are extensive criticisms of CSR, and the philosophy that companies will go beyond profit generation to make genuine positive social and environmental impact. Since CSR is a voluntary initiative, it takes the place of government led regulation of companies, a regulation that would require far higher standards of ecological, economic, and social accountability. There is also fierce criticism of CSR – related spending, which describes

these dollars as marketing dollars, spent solely for the purpose of commercial benefit. As it is the corporations themselves that report on their CSR activities, their selection of performance measurement criteria allow a company to “pump its positive image” while hiding information that will be more damaging to their reputation (Zambon, et al. 2005).

Corporations, especially in the oil and gas sector, make their profits from the extraction of natural resources, while society absorbs the ecological and social cost of their operations. While CSR may improve the relationship that a company has with the society and environment in which it operates, the corporation’s mandate to increase profits through consumption is in itself unsustainable. From this perspective, CSR does not contribute to a more sustainable future unless it strives toward more sustainable production and consumption patterns (Barber, 2003).

2.4 Summary

This discussion highlights several dimensions of participation, which provide a framework for examining the roles of various stakeholders in community development processes. From the literature, there is a strong weight on organizational change, capacity building, and increased inclusion of stakeholder groups in understanding participation, whereby the qualitative, or intangible changes that can result from participatory processes are viewed as the most valuable outcomes of multi-stakeholder projects.

Chapter 3 Research Framework

Participation and community involvement are well embedded in the concept of sustainability as it pertains to planning and the creation of local Agenda 21 projects. These community development projects can significantly effect progress in bettering quality of life, such as improvements to public spaces, to environmental health, and to access to public services. The benefits of such projects as well extend to include possible intangible outcomes: behavioural changes, incorporation of partnership strategies that include various actors, and innovation in problem solving techniques. In this regard, the beneficiaries of the project should as well include the participating NGO or corporation, just as it refers to the local community. This research therefore analyzes the physical or tangible, as well as the intangible benefits of the OBATI project, in assessing whether the principles of CSR and Agenda 21 were effectively incorporated in the project, and how the OBATI project produced positive environmental change.

3.1.1 Evaluation of Agenda 21 projects

In evaluation of Local Agenda 21 initiatives, inquiry is often embedded in quantitative research methods, specifically in the evaluation of project results (Selman, 1998). However, a *stakeholder-oriented* evaluation approach focuses away from a quantitative understanding of environmental management, toward the inclusion of other factors of social capital, such as community-driven environmental solutions, building of livelihoods of local communities, changes in stakeholder representation and authenticity of participation (UNFAO, 2006). As Selman points out, such qualitative methods “explore the reality of experiences as revealed by participants in Local Agenda 21,” and considers a variety of types of attainment through Agenda 21 projects, such as networks, stimulation of environmental citizenship, inclusion of various sectors, and challenging of traditional

assumptions. Selman argues that changes that cannot be measured quantitatively (Selman, 1998).

3.1.2 Evaluation of CSR

Much of the research on CSR is of a case study driven nature, since the debate on CSR exists largely on the determination of best practices and degree of adoption of CSR codes (Halsam). An evaluation of the extent to which a company has adopted these codes, such as an *inclusive* stakeholder approach, is a challenge. Zambon argues that corporate reporting on stakeholder-oriented activities is in itself an indicator of progress in this area, and the act of communicating these experiences within the company indicates that there is learning and organizational change occurring (Zambon, et al, 2005). The communication of the experience demonstrates that the corporation is evolving toward more socially responsible operations, and working to bridge the gap between theory and practice of CSR.

3.1.3 Case study Approach

A case study approach has been described in the literature as a tool for an in-depth study of a single example in order to increase our understanding of a phenomena (Ruddin, 2006). For case study research, the investigator must take into account an open-ended interview approach may be necessary (as the data collection environment is not controlled), and that the interviewee may not necessarily answer all questions fully. As the researcher is making observations of real-life activities, there may be a need to for the researcher to act as a participant observer (Yin and Campbell, 2001).

While case study research is often criticized as ineffective in creating generalizable research results, Flybjerg argues that case study research, which demonstrates a

phenomenon, can lead toward greater understanding and innovation (Flybjerg, 2006). Ruddin argues that the strength of the case study is that it captures “reality” in a greater detail, making possible the analysis of a greater number of variables (Ruddin, 2006). In doing case study research, Stake has put forward the concept of *natural generalization*, in which the role of the researcher is to illustrate the case properly, capturing its unique features, and then natural generalization will take place, based on the readers’ interpretation of the case (Flybjerg, 2006).

3.2 The Case Study: Research Question and Data Collection Methods

This research paper explores the transformation of the degraded spaces of an urban slum community through a Local Agenda 21 initiative. In particular, I question:

- *What are the greatest impacts that multi-stakeholder community development projects can have in addressing the needs of slum communities?*
- *How does the private sector contribute to positive environmental change in communities characterized by poverty and a lack of institutional support?*

I attempt to answer these questions through an exploration of the OBATI project in São Paulo, Brazil. This project was chosen because of the innovative approach to community-based environmental management, where CSR intersects with Agenda 21.

A single case study approach was chosen for this research, because of the size and complexity of the case, whereby an investigation at various scales within the case study will help to better our understanding of the research questions, rather than an attempt to study comparison cases (Stake, 2000).

The principal research method applied to this inquiry is semi-structured interview. Additional evidence to support interview findings will be found through other research techniques, including analysis of archived project documents, community diagnostic data, and through participation in a variety of community intervention projects conducted by the project partners.

3.2.1 Interviews

12 interviews were conducted for this research, of which nine of the interviews were conducted with the individuals that played a roll in the execution of the project and in the project's results. This group includes project participants, CSR management staff from Petrobras, and OBATI project coordinators from Instituto Ecoar (Appendix 1). An additional three interviews were conducted with community residents, that were knowledgeable about the local area (community organizers, local educators, municipal staff), which added to this analysis of the community transformation that took place during and after the implementation of the OBATI project. All of these interviews were carried out with individuals that responded in their professional capacity to the context of the project, the neighborhoods, and other participatory environmental restoration projects from the same region of São Paulo.

The interviews were semi-structured as they vary in the degree to which the questions were in fact prepared in advance, though there was a certain degree of standardization of interview questions (Wengraf, 2001). The interviews were based on a generic set of questions regarding the strengths and shortcomings of the methodology for engagement, the partnership of all of the involved stakeholders, and the various tangible and intangible gains of the project in its aftermath. Interviews move from less structured to more structured through the interview process, in order to cover the topical range of research

question, and to give the interviewee the chance to introduce new topics of their own, as per Flick (2006).

Semi-structured interviews are most widely used, due to the expectation that the interviewed subjects' viewpoints are more likely to be expressed in an openly designed interview situation, rather than in a standardized interview (Flick, 2006). The main weakness of the semi-structured interview is that without a "right" way to conduct the interview the degree to which the interview provides answers to research questions may vary, whereby criteria (topics covered, depth of response) cannot be matched in every interview (Flick, 2006). Another weakness is the question of *validity* of information used as evidence in a research question about a non-interview reality (Wengraf, 2001). For this reason there are a series of other methods of data collection used in this study to validate (or invalidate) interview data.

3.2.2 Document Collection

Document collection utilizes a specific methodology through which decision making processes, and thus power relations are investigated through the use of multiple sources of information, in a triangulation process, to illuminate contradictions and increase the validity of the research outcome. This analysis, has incorporated extensive archived information that was collected prior to, during, and after the completion of the OBATI project, including meeting minutes and attendance records; community characterization photos and commentaries found in project publications produced by Ecoar; 3 video documentaries of project participants before and during the project, including over 30 recorded interviews; and 14 monthly OBATI publications. These documents served for triangulation of information collected from socio-economic survey data, personal accounts, and my own observations.

3.2.3 Community Diagnostic Data

The Bacias Irmãs project team completed this community diagnostic in 2005 in order to identify effective intervention strategies for capacity-building activities in the Pirajussara watershed region. This questionnaire was given to more than 550 people in the watershed and inquired on questions of resident's satisfaction with environmental conditions of their community, sense and forms of participation that are evident in the community, and identification of the institutions in the community that work with residents to address social and environmental issues. The diagnostic provides further insight into this evaluation of the OBATI project by providing a sample of residents that were not participants in the OBATI, but are nonetheless affected by the state of environmental degradation in the slums and the solutions that have been put into effect in order to address these problems (see Appendix 2).

3.2.4 Participation

Participation in this context consists of observation and engagement as a volunteer with initiatives planned by both the University of São Paulo and Instituto Ecoar. Participation emphasizes a bottom-up approach, whereby the key element is the influence that participation has upon the attitudes and conceptualization of the researcher (Cornwall and Jewkes, 1995). This component was fulfilled by attending various community meetings and environmental education workshops, asking questions about the types of community networks and environmental projects that have taken place in the case study area and observing the receptiveness of community participants in these projects. The projects include the "Fruita no Quintal" environmental education workshop, "Rio Tiete" environmental education tours conducted by Instituto Ecoar, "Comite Technical do Alto Tiete" participatory watershed management meetings, and the "Vila Clara CDHU" project

for urban upgrading in one of São Paulo's favelas, and perhaps most relevant to the case study, "Óleo no Ambiente" a Local Agenda 21 project being put together by Instituto Ecoar in partnership with Petrobras. Through this research method I was able to gain exposure to "locally defined priorities and local perspectives," with regard to participatory processes in Brazil (Cornwall and Jewkes, 1995). These activities added helped to highlight common themes and common debates that surface in these community forums, and to include these observations in my analysis of the events that occurred during the implementation of the OBATI.

3.3 Analysis of data

This is a layered case study, in that within this single case, in which there can be analysis at the organizational scale, identified by sector; at the community scale, identified by neighbourhood; and at the regional scale, by investigating the OBATI area as a single unit of analysis (Patton, 2001). It is essential to investigate the project at these scales, in order to gain a deeper understanding of the many dimensions of this case and all of these layers of analysis were considered in arriving at the final research conclusions.

As methods for data collection are varied, so are methods for data analysis and interpretation. Changes in the community, according to the goals set out by the OBATI project were discussed in interviews with project participants. Interviews were transcribed and stored, and analyzed through a research database, organized according to the common themes found in interviewees' responses (Appendix 1).

Visits to the project sites included informal conversations to corroborate with interview statements, and in some cases, they brought new issues into the scope of the research. Before and after photos were taken to see what effects or "no effects" had occurred in the

community, as per Yin and Campbell (2001). The criteria for interpreting this was done through a comparison of the state of the sites in 2006 with the photographs and descriptions of the sites that were part of the community characterization data collected at the onset of the project. This was also done through analysis of community interviews conducted and videotaped at the end of the project and with community interviews collected in 2006, to see whether the activities outlined as the project's objectives have occurred in the community.

3.4 Limitations

3.4.1 Data Collection

Literature on the qualitative research approach points to several limitations, such as the inherent biases of the results, attributed to the influence of the perceptions of the researcher (Stake, 2000; Yin and Campbell, 2001). Thus, in this case study data has been gathered using a combination of various qualitative research methods, as it is fundamental for obtaining quality results, and eliminating biases (Yin and Campbell, 2001). As such the views expressed by the sample of community residents is considered as representative of the views of other project participants. As well, given sensitivity of the inquiry, data may also be skewed due to participants' emotional connection to their homes, their communities, and their workplaces. Triangulation with other sources of information was used in an attempt to seek validity of interview responses.

Lastly, this research was undertaken in 2006, 4 years after the completion of the OBATI project, and therefore my analysis of the OBATI project activities was conducted without having witnessed the workshops. This as well limited the total number of community member interviews possible, as few of the original participants were available for interview.

3.4.2. Data Analysis

The greatest concern or potential limitation to the data analysis is the bias of the researcher, whereby the researcher is at risk of a “false sensation of certainty over his or her conclusions” (Gil, 2002). Therefore, as with the data collection, the subjectivity of the researcher has been considered a limitation and of consideration throughout this research, as all forms of data collection will be influenced by my interpretation and biases.

3.5 Summary

While this research deals with a case unique to São Paulo, the conclusions drawn from this analysis may help to understand and lead to innovation in thinking about multi-stakeholder projects in local environmental management. This work will follow a qualitative research design, including interview, analysis of community diagnostic data, project archives, and participation in related community-based environmental projects. A combination of several qualitative methods was selected, in response to the need to identify both changes in planning and the urban fabric of the case study area, as well as changes in the capacity of stakeholders to engage in a more participatory decision-making process in community-based environmental management. This case study focuses on the actions and changes that take place with each of the specific partners, and therefore the analysis can help us to reflect more generally on projects that involve participation of community, NGOs, and the private sector, improving our understanding of what those roles should be.

Chapter 4: Case Study: The OBATI Oil Duct

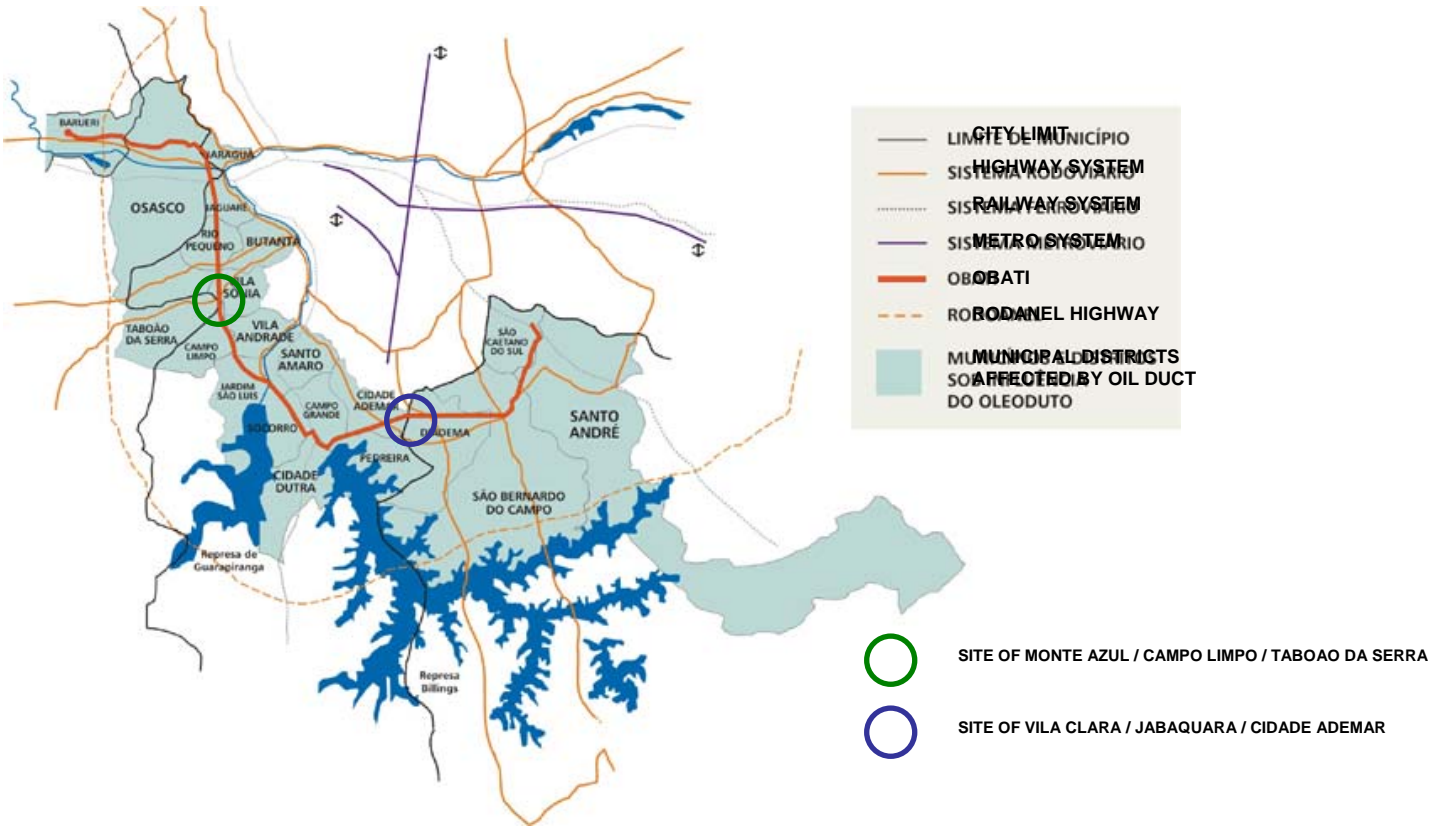
Agenda 21 is a tool for environmental management that has as its objective the inclusion of all stakeholders, especially marginalized groups, in integrated solutions to address the social, environmental, and economic problem described earlier in this paper. In Brazil, cases of corporate participation in areas with weak institutional support are few. In the case of the OBATI, Petrobras was the only corporation adopting strategies of stakeholder inclusion and public participation to address these critical environmental concerns. This chapter recounts the story of the OBATI project, defining the major participant groups, the Agenda 21 methodology for community engagement, and the process by which Petrobras worked with community leaders to create an environmental management strategy for the OBATI pipeline.

4.1 The OBATI (The Barueri-Utinga) Pipeline

The OBATI, or Barueri-Utinga oil duct, is a pipeline owned by Transpetro⁵, a subsidiary of Petrobras that transports gasoline, alcohol, combustible oil, and GLP, or household gas, and runs beneath ground level at a depth ranging from 1 to 3 meters. The 50 kilometers of the OBATI cross the southern zone of the city of São Paulo, and just under half of the pipeline traverses another 7 municipalities on the periphery of the city of São Paulo (Figure 4.1). This strip of land runs beneath several industrial zones and highways, and borders on many communities, home to more than 1.2 million residents. However, given the rapid growth rate of slum communities, the strip of land where the OBATI is buried, has become home to sprawling favelas.

⁵ For the purpose of clarity, Transpetro will be referred to as Petrobras for the remainder of this paper.

Figure 4.1 Map of the OBATI Pipeline Region



4.2 Participant groups

4.2.1 Petrobras

Petrobras is Brazil’s largest company, and among the fifteen largest oil and gas sector companies in the world. The company is well known as Brazil’s leader in philanthropy, as they are the largest national contributor to social, cultural, and environmental activities. This is perhaps attributed to the fact that Petrobras is state-owned, and until recently was legally granted a monopoly on Brazil’s petroleum market. In 2006 Petrobras announced self-sufficiency for Brazil in petroleum, an economic advantage that few other countries share. However, as an oil and gas sector company, Petrobras continues to face many

challenges to its reputation, from current protests to oil extraction in Bolivia to memories of the tragic accident in Vila Soco, Cubatão; a small city in São Paulo where a pipeline explosion caused over 90 deaths in 1984.

Petrobras made an official commitment to incorporate CSR in all of its operations in 2000, with the initiation of a major program: Excellence in the Management of Environment and Safety Operations (PEGASO). Since the creation of the PEGASO project, Petrobras has spent over US\$ 4 billion on projects to improve their performance in ten key areas, including community engagement. This program has funded over 4,000 projects across Brazil ranging from job training and community building to conservation and environmental management, reflecting the ten principles of the UN Global Compact (signed in 2004), and placing Petrobras as next in line to join the Dow Jones Sustainability Index.⁶

The area occupied by the OBATI had previously been characterized by Petrobras as the pipeline with the most “critical risk” due to the environmental degradation occurring here and because of six specific areas along the pipeline, where favelas had begun to spread onto the pipeline area. This situation became a continuous problem for Petrobras because their infrastructure posed a potential threat to the local residents given its proximity to these favela communities. Various attempts to use “infrastructure-based” solutions to avoid accidents in this area, such as walls and caution signs, had proved ineffective in keeping the pipeline area uninhabited. For Petrobras, these pipelines are integral to their operations and reflect Petrobras’ relationship with the environment. The activities that occurred along the pipeline, specifically the construction of homes and burning of garbage,

⁶ The Dow Jones Sustainability Indexes (DJSI) are a number of indexes, that track the financial performance of the companies that have been identified as the most sustainability-oriented, through an assesment of the companies’ economic, environmental, and social performance. The DJSI includes over 300 companies from 24 countries.

became an increasingly problematic community health and safety issue, as well as a threat to the reputation of Petrobras.

4.2.2 Instituto Ecoar

Instituto Ecoar (Ecoar Institute for Citizenship) is an NGO based in São Paulo. It was created in 1992 following the UN Conference on Environment and Development (Rio 92). Instituto Ecoar was formed by professionals, academics, and environmentalists, in order to influence public policy, act on environmental issues, and to develop a plan for the execution of Agenda 21 projects at the local level.

Instituto Ecoar focuses on urban areas, often working with favela communities. Their objective is to use education as a form of intervention to address issues of equity and shared responsibility in improving quality of life, environment, and security in communities. Their role in projects like the OBATI is to provide technical support by assisting communities in achieving a politicized environmental education, through capacity building activities, emancipatory education strategies, and a methodology of Local Agenda 21. This Local Agenda 21 methodology was used as a basis for the Agenda 21 OBATI project, entitled *Projeto Convivencia e Parceira*, or “Living in Partnership”.

The Agenda 21 methodology of Instituto Ecoar, *Agenda 21 ao Pedaco*, is defined as participatory planning for local sustainable development, observing social, environmental and cultural specificities” (Instituto Ecoar, 2002). It is an actual agenda, with a seven steps plan for sustainable environmental management. The first step is a participatory social and environmental diagnosis, including an analysis of secondary data, perception surveys, cartographies, mapping social capital and public policies for the area, and place recognition activities. The second step involves future workshops, including the Dream

Tree and the Lamentation Wall, were participants discuss the elements that they would like to change in their local environment and envision what their community could look like in the future. The third step includes the thematic workshops, whereby local groups choose the most important environmental issues to be the themes addressed in the Agenda 21 project. The fourth step includes visiting similar successful community-based environmental projects, and drawing from these experiences in order to brainstorm about possibilities for the Agenda 21 project. Carrying out the project plan is step five, where the groups learn how to transform the issues under discussion into concrete projects. Participants discuss project objectives, determine who is responsible for making the project come together, design an action plan to coordinate all of the resources to reach those objectives, and select indicators to evaluate if the objective has been met. Step six is a networking exercise for putting together all of the governmental and non-governmental actors of the local area that play a part in the implementation of the project. These actors were identified by the participants during an earlier planning phase of step five. Finally, the joint implementation is step seven, where the various participant groups learn how to work together in a collaborative way via the completion of the environmental management project. Included in step seven is an evaluation of the project, where the results are analyzed, difficulties are discussed, and new actions of the projects are identified (Instituto Ecoar, 1999).

4.2.3 OBATI Communities

In six areas along the OBATI oil duct, the favelas had grown so much that homes had been built literally on top of the oil duct, and these were the sites chosen for the Local Agenda 21 projects to take place. Due to the size of the entire OBATI project two of these sites were selected as the focus of this case study, because of accessibility and availability of interviewees. The Campo Limpo / Taboão da Serra / Monte Azul segment, located

within the Pirajussara watershed, is in the southern periphery of São Paulo. The Vila Clara / Jabaquara / Cidade Ademar segment, also in the southern periphery, is located east of Campo Limpo and within the municipal boundaries of the city of São Paulo (refer to Figure 4.1).

In both of the pipeline segments analyzed, many details of the neighbourhoods show urbanization that does not interfere with the oil duct area. As the OBATI traverses these municipal districts much of the oil duct area is surrounded by local commercial districts, middle class residential neighbourhoods, parks and gardens, with adequate infrastructure for municipal services. These communities consist of a variety of middle class and low income housing, as well as favelas. According to the census data collected by the Brazilian Geography and Statistics Institute, the IBGE, most households in these communities can be characterized as areas of “permanent construction”, with access to the water supply, sewer system, and regular garbage pickup. IBGE data states that between 1% and 10% of the population lives without access to these basic amenities, and according to the Taboão da Serra Department of Waste, 100% of homes in this area have regular garbage pick-up (IBGE, 2000).

However, the OBATI project teams sought to identify marginalized, at risk areas that existed along the oil duct. These were the areas that were most lacking in institutional support, vis a vis municipal services. The margin of 1 to 10% of residents that live without access to services (identified by IBGE) live in areas with characteristics that correspond to the description of São Paulo’s favelas (see chapter 1). According to the community characterization research that was conducted in 2001 by the Instituto Ecoar

Figure 4.2.3: Before and After Photos of 6 areas of the OBATI project



project technicians, this area has been described as “critical” with improper disposal of garbage (waste in streets and sewers), degraded vegetation, and lack of sidewalks and lack of closed sewage / storm water management systems. Figure 4.2.3 shows before and after images of six of the areas of the OBATI. The before photos demonstrate dense overgrowth that leads to rat infestation and the poor water management that results in polluted run-off streams, floods, and landslides.

4.3 “Living in Partnership”: Agenda 21 OBATI

The OBATI project was born out of a response to a request by Instituto Ecoar for Petrobras to take greater responsibility in the care and maintenance of the oil duct areas. In light of the company’s failure to solve the problems in the OBATI, the local management team opened their doors to Instituto Ecoar, and agreed to engage with the NGO in a participatory environmental education program together with members of the 6 critical communities.

In order to effectively access local residents, and achieve a broad participation, Ecoar sought out and contracted *community monitors*. These were active members of the local community that had built up reputation and credibility in their neighbourhood. These individuals worked to bridge the gap between the NGO and the community. One of their roles was to provide local knowledge to technicians, such as access to points of social capital (e.g. public venues, important groups). The second role of monitors was to act as communicators, articulating the importance of participating in the project, to other residents. Monitors were generally active in specific areas of the community that already worked toward social change, such as local breakdancing teachers and school administrators.

Agenda 21 OBATI included three types of workshops in the areas that had been identified as critical, or at risk. When the workshops began, they included Petrobras staff, community residents, school administrators, health care officials, and public service sector employees, representing all of the identified stakeholder groups. *Future* workshops were conducted following Instituto Ecoar's methodology for identifying the "victims and actors" of the effected areas, and involved activities to envision another reality in the local community. This type of workshop was designed to encourage participation and to energize community members to engage in the project. In addition to these there were OBATI *Zone* meetings that identified environmental management problems of the oil duct area and opened discussion to possible solutions. These were designed to determine what physical changes were possible for the local environment. Finally, *Theme* workshops were organized along the themes of water, garbage, work and income generation, art-education, health, and communication networks. Participants then identified some of the feasible solutions to these problems, and discussed short, medium, and long-term strategies for making the necessary changes. The theme workshops were targeted to promoting, above all, quality of life changes, that could be possible through community organization and participation.

The project was designed "to guarantee the wellbeing of the populations that live and work within the OBATI pipeline area and to establish an intimate relationship between the population and the environment in which they live" (Instituto Ecoar, 2002), and had the following five goals:

1. Develop a rapport with communities of the OBATI, so that they identify the present risk factors associated with their environment, and become watchdogs of this area, helping all community members to understand the potential danger of the pipeline;

2. Create new spaces as a forum for community issues, where community members can find and discuss information with Petrobras and other active local groups;
3. Define decision making processes from within the community, and establish a horizontal democratic process in this area;
4. To ensure community involvement in all of the proposed activities in order to develop a relationship whereby all participants understand the safety issues involved with the pipeline, and work together to keep the OBATI safe;
5. Petrobras improves their performance in managing the pipeline, providing a healthier and safer environment in the pipeline area, and gains skills in exercising *citizenship* with the local community.

The length of the OBATI was divided by the Agenda 21 OBATI technicians into 6 segments, in which the project was managed by a different subgroup of stakeholders that belonged to that specific community, as well as municipal private sector representatives from these local areas. Each subgroup was responsible for a characterization of their area, including mapping, photographing, and collection of statistical data. Figure 4.3 shows Segment 3: Campo Limpo/ Taboão da Serra / Monte Azul and Segment 4: Vila Clara / Jabaquara / Cidade Ademar, the areas that were investigated in this case study.

In both of these segments the environmental problems that were to become the focus of workshops included occupation the oil duct area with houses, an overgrowth of weeds and brush, sites for burning garbage, polluted run-off streams, and rat infested abandoned structures along the oil duct. In these areas the relationship between the

Figure 4.3 OBATI oil duct in the two case study sites, photos taken July 2006



Segment 3: Campo Limpo/ Taboão da Serra / Monte Azul



Segment 4: Vila Clara / Jabaquara / Cidade Ademar

residents and the oil duct was most strained and the need for an intervention deemed “critical” by Petrobras’ management. These were areas where Petrobras had previously experienced difficulties, such as fires and encroachment of favela, and were the same areas that were most lacking in institutional support, via municipal services.

From the Future Workshops, participants designed seventeen proposals for parks, sports areas, public art, and garbage collection facilities, each requiring an investment for implementation ranging from R\$ 500 to R\$ 10,000. Of these proposals, Petrobras built more than 60%. Before the project was completed in 2002, community works such as

clean-ups, sanitation projects, landscaping, staircases, gardens, and art education projects had already been implemented (Allan, 2002).

4.4 Summary

Facilitated by Instituto Ecoar, the Local Agenda 21 OBATI involved more than 112 meetings, 2,400 participants (project teams sent out over 4,600 invitations), and brought together several new stakeholders into discussion, including principally Petrobras, Eletropaulo, the state water distribution company SABESP, and other municipal and state actors that are important to these communities. Between October of 2001 and January of 2002, the Living in Partnership workshops created action plans for these communities that involved a variety of projects in order to solve the environmental problems identified in the communities, such as lack of leisure spaces, places for garbage collection, and safe, walkable passageways that made the favela accessible to all residents. In addition the workshops addressed issues of participation through education on how to exercise citizenship, improve community health and sanitation, and how to live safely within an oil duct area, an area with increased environmental risk.

Chapter 5: Analysis and Criticism

This chapter synthesizes the information that was collected through 12 interviews, and through review of the project archives and published articles. The chapter analyzes this data on the project’s outcomes in contrast against the goals set out at the onset of the OBATI project. Through this analysis the strengths and weaknesses of each of the identified participant groups are examined.

5.1 Interviews

Twelve interviews were conducted between March 1 and July 31, 2006. Interviewees were selected based on their relationship to the OBATI participants or the OBATI community areas, and all were interviewed in their professional capacity (Table 5.1). Participants were defined by the sector that they represent, NGO (five), private sector (one), or local community (six). Community respondent were 50% project participants, and 50% individuals that are active in the local community, but that did not participate in the OBATI project.

Table 5.1 Twelve Interviews conducted between March 1 and July 31, 2006

<p><i>9 Participants</i> in the OBATI project, representing the three major stakeholder groups</p>
<p><i>1 Interview with Petrobras</i> employee Chosen for his role as coordinator of Petrobras team in OBATI. Additional interviewees from Petrobras were not available for interview.</p>
<p><i>5 Instituto Ecoar</i> employees involved in OBATI</p>
<p><i>1 Director of Ecoar</i> Chosen for knowledge of the history of the partnership between Ecoar and Petrobras, and for her vision of sustainability and partnership, in general as well as related to NGO – private sector partnership, and community participation.</p>

4 Project Technicians of OBATI

Chosen for their experience as project technicians in the selected sites of case study, and their familiarity with the methodology of Instituto Ecoar and the events that have happened within the NGO since the completion of the OBATI.

6 Residents of OBATI case study areas, active in local environmental management projects

3 Residents of OBATI

Chosen because they participated as community monitors in OBATI case study sites, selected through snowball technique, whereby one of the monitors that was available for interview introduced me to other residents that worked on the project with him. Because of this individual I was able to contact other community monitors for interview, however, only contacts available were in the Vila Clara district.

3 Residents of OBATI sites that were not involved in OBATI

Chosen because they that are knowledgeable about local environmental management initiatives, chosen for their involvement local environmental management initiatives in case study areas. These individuals were community leaders that were participating in the environmental projects, like Bacias Irmãs and Fruita no Quintal, and were chosen because of their experience and knowledge of the history of involvement of community and civil society groups in their local area. Interviews were limited to residents of Taboão da Serra based on availability of individuals for interview.

5.2 Analysis of Project Goals

Referring to the original project goals (section 4.3), this section examines the extent to which these goals were achieved in the projects aftermath.

5.2.1 Goal #1 *Develop a repertoire with communities of the OBATI*

Petrobras continues to be involved in the maintenance of greenways along the oil duct; however, Petrobras' involvement beyond a minimum maintenance of those spaces was not incorporated into the planning of Agenda 21 OBATI. As a result, some of the community gardens and landscaping that had been built as part of the project were no longer in existence, just a few years after the projects' completion (Appendix 4). In one instance, a staircase costing over R\$10,000 was designed and constructed in a region that was prone to landslide, in order to create a safe access from the higher to the lower areas

of the region. However, following construction, Eletropaulo (electrical company) ordered the staircase to be removed as it had been constructed in an area designated solely as a corridor for the Eletropaulo power lines. After participating in a limited capacity in the OBATI, Eletropaulo discontinued to take responsibility for the area its power lines occupy. Figure 5.2.1 shows this relationship – minimal maintenance is only evident on the area occupied by Petrobras, and the space occupied by Eletropaulo has not been maintained. This and other examples demonstrate both a lack of continuity and a lack of genuine partnership with all stakeholders.

Figure 5.2.1 Landscape maintained by Eletropaulo (left) and by Petrobras (right) July 2006



5.2.2 Goal #2 Create new spaces as a forum for community

Appendix 3 shows some of the positive environmental changes made in the OBATI region in the Monte Azul and Vila Clara areas. Photos illustrate parks, plazas, and storm-water drains. However, the spaces that were built for community activity were not centres or offices, but rather public plazas, and parks. Major improvements to these public spaces, such as walkways and green spaces are visible, but garbage and contamination in run-off streams have returned in some areas, and continue to be a problem. New community spaces were constructed in these areas, and an art education team designed murals that encourage responsible care for the local environment. However, upon visiting the sites of the projects, there was evidence that many of the new spaces built for community have the same critical environmental problems that were defined at the onset of the project. Appendix 4 presents photographs taken in 2006, illustrating examples of where these environmental problems have returned. This suggests that the Agenda 21 project outcomes would have been stronger with a continued support for maintenance and communication of the environmental issues of the area in order to protect these new spaces.

5.2.3 Goal #3 *Establish a democratic decision-making process*

Several democratic community-based organizations had already been, and continue to be, in existence in the case study area. These organizations, such as the Residents Association of São Mateus, are designed to include democratic decision-making processes. However, community organizers that were interviewed agreed that participation is a challenge, as poverty, illiteracy, and lack of information (or

misinformation) cause many to be discouraged or disinterested in participation with projects or in democratic decision-making processes.

“Really the problem with participation here, is that the most marginalized, in the worst conditions, for example, the ones that are most effected by flooding, they are the ones that are least likely to participate. And it is difficult when there is a lack of information and a lack of literacy. People who can’t read don’t know what is happening when the state comes in and changes something or takes away a favela.”

–Resident of Taboão da Serra

This reply by community residents is consistent with the analysis of project technicians prior to the start of the project, and leads to the conclusion that decision-making processes have for the most part not been effected.

5.2.4 Goal #4 *Ensure that community members know safety issues of pipeline*

“The principal merit of the project is exactly this...clearing up doubts of the community about the risks of living in an area like this, and te need for everyone to help to preserve the strip safely, making a harmonious co-existence possible.”

–Regional Administrator, Jabaquara

Based on interviews with local community residents there was a general awareness of where the OBATI oil duct is located, and yellow posts mark the area where the oil duct passes. The change that had occurred in these communities at the time of the OBATI project was dramatic. Many community members remember a friend or a relative that had been affected by the project, such as those that lived on top of the oil duct, whose homes had to be purchased and destroyed. In areas where the favela had been removed from the oil duct strip, the memory of the experience helps to remind residents of the safety risks involved, and remnants of the homes that had been built in these areas are still evident.

However there has been no follow-up to the environmental education activities that took place, that would help residents to share a common understanding of the oil duct threats. One factor that limits the extent that community members will have an awareness of these issues is the lack of an on-going communication. Use of communication materials, like the *OBATInforma* newsletter and the OBATI video documentary, was discontinued after the projects completion. As well, according to one interviewee, many of the residents that lived in the area have moved out in the last five years, just as new residents have moved in. The lack of a health and safety campaign about the oil duct leads to the conclusion that awareness of the safety issues decreases, rather than increases.

Figure 5.2.4 One of many posts along the OBATI to remind community of safety issues



5.2.5 Goal #5 *Petrobras improves performance in managing pipeline area*

There is physical evidence of the improvement in environmental management in the area, such as a better maintained green space covering the pipeline, clear signage identifying the course of the pipeline, and community bulletins that discourage depositing garbage in these areas. The sign in Figure 5.2.5 says “Attention: Buried duct, do not throw garbage,

do not dig,” and includes the green line phone number to reach Petrobras directly with complaints or concerns. However, of the community members interviewed, only two out of six were aware that there was a means for contacting Petrobras with concerns about the oil duct, and those that had not participated in the OBATI had no knowledge that Petrobras had ever been present in a community discussion about the local environment.

Figure 5.2.5 Evidence of Petrobras' management of pipeline area Photos taken July 12, 2006



In further inquiry, the data collected in 2005 by the Bacias Irmãs Project confirms that the same environmental problems identified by Instituto Ecoar in 2001 continue to affect these communities (Appendix 2). In their analysis, the data collection took place in slum communities of the same (relatively) municipal districts, and the resulting environmental characterization had differed only slightly from the description of the conditions in 2001. A

majority of community members continued to feel that garbage and pollution in the waterways, air contamination, and the presence of rats and insects were characteristics that defined their neighbourhoods. As well, a significant number of respondents identified that there is a lack of garbage disposal facilities and of stable land that is safe from landslide and flooding. The data also showed that community members generally felt a lack of representation in decision-making processes that affect them (Bacias Irmãs, 2005). This indicates that Petrobras performance in the four years following Agenda 21 OBATI was rather ineffective; with little social and environmental change occurring after the project was completed.

5.3 Participant Groups

The following section is based on interview responses. The interviews were analyzed to highlight the strengths and weaknesses of participation in the OBATI project in reference to each of the main stakeholder groups.

5.3.1 Petrobras

The participatory problem solving strategy was described as lengthy and more challenging than the traditional methods of environmental management. However, “breaking with the paradigm” and working with the NGO and the local community sparked several changes within Petrobras. Overall the experience had a positive impact in two key areas.

Petrobras – Strengths

Model for Participatory Problem-solving. The OBATI project was replicated in other critical pipeline areas across Brazil, several of which were in, or bordering on, favela communities. According to a representative of Petrobras, the OBATI was a valuable learning experience, so that when the process was replicated in other areas, the success

and longevity of the projects continued to improve. Currently Petrobras has launched a new program entitled “Eye on the Environment” in which they started in 2006, to implement Local Agenda 21 projects in 17 states in Brazil, and in over 80 communities in the state of São Paulo.

Improved CSR Strategy. A second outcome of the project is that the experiences of the OBATI demonstrated the effectiveness of community participation and set a precedent for other departments of Petrobras to follow and improve upon.

“The OBATI project occurred at the regional level of the pipeline and transportation sector. That is why we felt it was such a big accomplishment when the story of what had happened reached all the way to the executive board and was communicated to the other sectors of Petrobras. We were a very small operation and the story was told throughout the company. We call this “chuvero and bidero”, which means that the showerhead and the bidet meet in the middle, part of the work comes from the top and part has to come from below.”

In this case, using Agenda 21 to solve a problem moved from being a strategy used in the oil duct department (in the field) to a strategy adopted by the corporations’ management at the national level. This project, specifically has contributed to a company-wide understanding of the necessity of participatory and partnership-based projects.

The project brought international recognition to Brazil, and through the OBATI, international industry partners have recognized the company’s achievements in using non-conventional problem solving methods. In the oil and gas sector, firms from Europe, Canada, and the US have looked to this example as a benchmark in developing community relations and avoiding high-risk situations. This positive feedback is significant as international awards and recognition in industry publications encourage the company to work further to achieve and maintain a strong image in corporate citizenship. From this internal and external communication of stakeholder-based processes, Petrobras’ adoption

of the OBATI project demonstrated two ways in which the company has experienced organizational change toward sustainability (Zambon, 2005). This communication increased the company's capacity to develop trust, mutual understanding and shared values in partnership, according to this interviewee.

I think the most important change was the break from the paradigm that I mentioned before. These engineers that participated learned a lot from the experience and everything, from working with an NGO to being a partner, designing with community was new....It's hard to widen someone's view to try a new approach, especially when they are "experts". But the solution worked much better than what we had been doing before and I think that helped them.... by seeing results.

– Project Coordinator. Petrobras

Their initiative to participate in the project is indicative of a growing commitment to stakeholder inclusion, an adoption of the principles of CSR that has not been matched by any other company present in this sector in Latin America. Their actions in the OBATI project were unprecedented, and from this perspective Petrobras is setting an example for the other companies present in these communities, and more broadly, for most corporations that have not achieved this degree of community involvement in their environmental management strategies.

Petrobras – Weaknesses

Lack of Continuity. One of Petrobras' main weaknesses in CSR was demonstrated in the OBATI process: a lack of *continuity* in working with stakeholders for ongoing involvement in environmental management. According to project technicians, the lack of continued support of Petrobras, after the 1.5 yr timeline of the project came as a shock to all participants.

"We had worked together for so long, and the whole time we were like "Yes, this is how we can build a proposal" and "yes we will present these together for Petrobras". The proposals ranged from R\$ 500 to R\$10,000. We thought that Petrobras wouldn't pay all of it but that they would at least pay a little. Like an initial investment. But after the presentation of the proposals, Petrobras was finished. For them the project was over. It was so sad."

– Project Technician, Instituto Ecoar

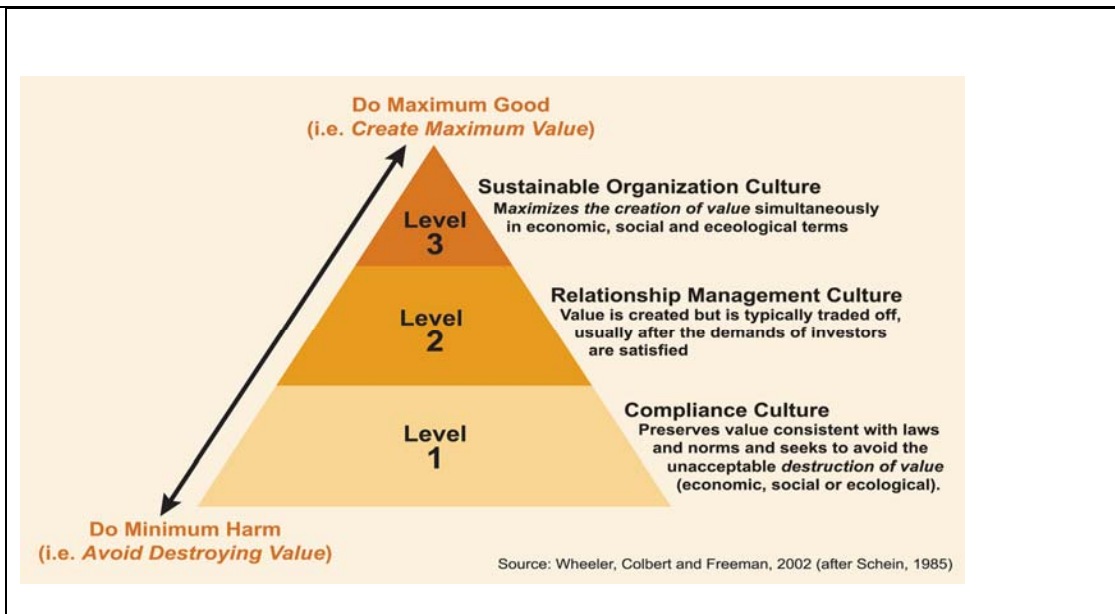
While the project marked significant positive change in the CSR strategy of Petrobras, it also illustrated that they show weak performance in ongoing community relations. In the “Eye on the Environment”, the Local Agenda 21 projects will last only 8 months, instead of the 1.5 years of the OBATI, and continuity will be in the form of a guarantee of new Agenda 21 projects in the future, rather than a longer timeframe on the current project.

Limited Stakeholder Inclusion. A second major weakness of Petrobras’ performance in the area of stakeholder engagement was revealed in community interviews. Nearly all of these interviewees were familiar with the signage posted along oil duct areas instructing individuals not to litter. However, none of these interviewees that had not participated in Agenda 21 OBATI were aware of Petrobras’ community involvement, or the OBATI. Nor were they aware that Petrobras had previously been in dialogue with community groups or that Petrobras was accessible to discuss issues that affect the local community.

According to one interviewee, Petrobras’ oil duct supervision department is currently in discussion with other utility providers about a potential threat to the safety monitoring system, a discussion that is only open to representatives of each of the involved utility companies. The OBATI project may demonstrate that Petrobras is changing, however evidence collected during interviews suggests that the company’s inclusion of stakeholders is still rather weak. Local community continues to be excluded from discussion about decisions that affect them.

In light of these two major weaknesses, Petrobras’ performance in the OBATI project is demonstrative of an organization that is making strides toward sustainable behaviour. However, there continues to be a gap between being a company with a risk management perspective and becoming an organization with a more holistic perspective, that demonstrates a greater incorporation of the philosophy of CSR (Starik and Rands, 1995).

Figure 5.3.1a Corporate Culture Pyramid (Wheeler, 2003)



Using Wheeler's model (Figure 5.3.1a), Petrobras can be placed as a level 1 company for demonstrating values consistent with following laws and norms, and avoiding ecological and social risk / destruction. Following this model, Petrobras would need to demonstrate an ongoing relationship with stakeholders and the creation of value in its environmental endeavors in order to demonstrate an authentic *culture of sustainability*, level 3 on the model.

5.3.2 Instituto Ecoar

While Instituto Ecoar was founded in order to develop and implement Local Agenda 21 projects like these, there was a significant learning for the organization. Several aspects of the OBATI project were described as unfamiliar territory for the NGO, specifically partnering with the private sector and executing a project of this magnitude.

Instituto Ecoar – Strengths

Organizational Change: Agenda 21 OBATI was the largest project that Instituto Ecoar had ever taken on. Partnering with Petrobras required a significant organizational change within the NGO. Instituto Ecoar was required to test and improve upon their abilities to forge cross-sectoral partnerships. According to interviewees, one of the greatest strengths of this project was the capacity building that occurred with each of the involved partners. At the time that the OBATI project was proposed, the prospect of working together with Petrobras, became a source of tension within the NGO. The question of whether collaboration with an oil and gas company was ethical and within Instituto Ecoar's mandate was a topic of heavy debate. However the public, or state-owned aspect of Petrobras, was a crucial factor in persuading the dissenting members.

Based on these responses, perhaps one of the main benefits for Instituto Ecoar was that they learned to adapt to a new role in environmental education: to assist the private sector in creating positive environmental change. This organizational change is significant. Instituto Ecoar has since grown their abilities in working with the private sector, and has improved their effectiveness in this partnership setting. Today Instituto Ecoar is involved in several joint projects with Petrobras, including both an internal audit to improve Petrobras' ecological footprint, and the "Eye on the Environment" project that will create Local Agenda 21 projects in over 80 communities in São Paulo.

Capacity Building: According to one project technician, one of the greatest impacts of the process is the lasting effect that the act of participation has had on the individuals that participated.

“The project was a success in many ways, especially in terms of changing the consciousness of some of the monitors of the community, however, it was also a failure in that both Ecoar and Petrobras neglected the need for a more long-term commitment to the project for it to have lasting results.”
– Project Technician, Instituto Ecoar

Project technicians’ descriptions differed regarding the various difficulties encountered during the project, with some interviewees expressing that their ability to change the urban landscape of these favelas was “limited”. In spite of this, the Local Agenda 21 project was described by all interviewed technicians as successful, because the methodology they followed is designed to encourage individuals to act in their local communities, and the project demonstrated that these actions can change the local environment.

Here, the Local Agenda 21 project had a greater impact at the scale of the individual, than at the community scale. In light of the barriers to participation, as defined by the WRI (2005), Instituto Ecoar was effective in increasing participation of individuals that are less likely to participate. According to a film made after the conclusion of the project many individuals, especially women and elderly individuals, said in their testimonies that they had never before participated, or never thought of participating in this way.

“First time we had ever seen anything being done about these problems in the landscape.”
– Resident of Jaqueline

“We know that we have all of these groups here 3rd age, young people, a variety of people here and we know that these projects help to us help everyone to respect, to identify with this place and to use their citizenship...We were in a place owned by the state and the idea was to get more people in the workshops, more people to participate.”
– Community Monitor, Vila Clara

This politicized change reflects the two-pronged change described by Appadurai (2001) for community development, whereby the politicization of marginalized or powerless groups is as important as the physical amenity improvement. By “widening” the participation in the

project areas, through various outreach strategies, it confronted and, in some cases, remedied the distrust and disillusionment of individuals that had not previously exercised their citizenship via participation in democratic processes.

Instituto Ecoar – Weaknesses

Lack of Continuity. The lack of continued engagement on the part of Petrobras and Instituto Ecoar in the OBATI project has had mixed results on the urban landscape in these areas. Regrettably, even less than 5 years after the completion of the project, some of the improvements have already disappeared. Appendix 4 shows that polluted streams and litter have returned to Monte Azul despite the signs placed there by Petrobras in 2001.

A problem in communication between Ecoar and Petrobras left the project technicians without the funding to implement many of the proposed improvements to the landscape that been requested by community participants. According to project evaluation documents, the “interruption of the engineering projects in this period and the absence of maintenance on completed projects had a negative effect on the population” (Instituto Ecoar, 2003). The Instituto Ecoar project manager described this outcome as unfortunate, but as well as a learning experience for Instituto Ecoar to better articulate to community members what they can and cannot do, in future projects.

Articulation of Partnership. Imbalance in management and project design between Petrobras and Instituto Ecoar ultimately impedes the NGO’s ability to create more participatory and democratic decision-making processes. In the project evaluation publication produced by Instituto Ecoar, they criticize Petrobras in the area of commitment to partnership and engagement with the next phase of the project (construction of the remaining infrastructure proposals). However, this evaluation came after the completion of

the project, and Instituto Ecoar had little to no ability to effect project budgets or timelines in order to create a more long-term commitment.

In “Eye on the Environment”, Instituto Ecoar is responsible for executing a Local Agenda 21 project in over 80 communities in the state of São Paulo, but the projects must be implemented according to the guidelines set out by Petrobras. The timeline on this project is 8 months (rather than the 18 of the OBATI), and will be at a bigger scale, as the project does not focus on a specific aspect of the community (like an oil duct), but rather the community as a whole. According to one Instituto Ecoar employee, one of the obstacles to a stronger articulation of their objectives in project design and implementation is the risk of losing their ground and the trust that has already been built with Petrobras. The third sector is a competitive environment, many other NGOs in the area are available to execute this project, and therefore, Instituto Ecoar has little bargaining power with Petrobras to negotiate project details.

For Instituto Ecoar, their methodology for Local Agenda 21 is one of their strongest assets. This expertise gives them the ability to bridge the gap between community and other project partners. However, as the body that facilitates partnership between all of the actors in a Local Agenda 21 project, a stronger articulation of partnership and increased continuity are essential to “overcoming inequality of opportunity to influence decisions”, to produce truly democratic processes (Wild and Marshall, 1999). Ultimate decision-making power remained with Petrobras, via control of project timeline and expenditures.

Therefore, changing this centralized power to be more open to other partners will remain a challenge for Instituto Ecoar. Participation will be more authentic when, as per Arnstein’s *Ladder of Participation* (1969), the process includes the public in shaping agendas and includes the public in decisions at early stages of the project (WRI, 2005). Finding a way

to create a more authentic participation will thereby strengthen some of the weaker outcomes of their projects.

5.3.3 OBATI Communities

Several government-funded initiatives have brought infrastructure development projects into these regions; however, peripheral areas often win investment dollars only after long bureaucratic processes. In one instance, an interviewee reported that he wrote letters requesting asphalt for the main road for over 21 years before getting the municipality to act on his request. From this perspective, one of the greatest impacts of the OBATI experience was the experience of seeing political action, like petitions; take on a physical form, like garbage bins.

OBATI Communities – Strengths

Individual Change. Notable differences were apparent throughout the communities.

Almost all participants showed improvement with tasks such as filling out forms. However, the effects of the OBATI project are most evident at the individual scale. Some of the participants in the project made life-changing decisions as a result of the experience. In one case, a man that had been the owner of a local bar worked to become a community health promoter, and began working in the local clinic. Several other examples exist of participants changing vocation, achieving higher levels of education, and mobilizing to make other changes after the Agenda 21 OBATI had ended. An interesting aspect to this change is that following the methodology of Instituto Ecoar, individuals that are already central and active in their communities are the ones chosen to work with the project.

However, according to project technicians, in many cases it was the individuals that have

little experience in participating that had reached a new level of activism or engagement, with this project. These changes have clearly not transformed the harsh reality the favela, but case by case, have changed the lives of several individuals.

Problem / Solution Articulation. The residents of these communities were involved in all stages of the project, including the community diagnostic phase and the problem/solution identification activities. In these phases their participation was deeper and more authentic because of the integration of local knowledge. The OBATI workshops as well brought residents into dialogue with elites, including Petrobras, government officials, and decision-makers from other major corporations active in the area, such as Eletropaulo. This opportunity to communicate with powerful actors from the local community provided for a valuable lesson in exercising citizenship, whereby these stakeholders had generally been (either perceived or legitimately) inaccessible to the community members.

“Take into count that people are often outside of the social system, decision-making, and are not part of the community collective, and this way combats social exclusion because a lack of infrastructure is a form of social exclusion.... When you work on a bigger consciousness, this discussion helps us to brought the idea of “what is public” into the dialogue of the partners. For example urban infrastructure is not just PB or SAEBESP, you can articulate that its all of our responsibility.”
– Representative SABESP

This change at the scale of the individual was, in part, achieved through the environmental education activities, in which individuals that engaged with the project gained a familiarization with the political institutions and bureaucratic processes necessary for gaining information and making social and environmental changes in their communities. The result, according to several interviewees, was an improved capacity of residents to identify and articulate the problems and solutions of their community, thereby increased their power to achieve a long-term vision for sustainability, political stability, and increased economic capacity, as per the UNEP (2000).

OBATI Communities – Weaknesses

Lack of Continuity in Relationships. One of the weaknesses of the project, in its aftermath, is the disintegration of the partnership that had developed between the community and the other project partners of the network. For the community members that had participated in the project, without continuity of relationships, the benefits that they received from partnership were not available for future projects. For example, community members that had been active in the area before and after the project commented that during the OBATI they were able to get a lot done because the names Petrobras and Instituto Ecoar were backing them. When a government sees Petrobras' name on a proposal or letter of complaint, there is much more of a likelihood that that letter will get a response. Without a continued support network, in which reputable organizations back community action projects, organizers lacked this added legitimacy in their claims. The length of time required to get government to respond to their requests returned to what it had been prior to mobilization activities, despite improvements in the articulation of these requests.

Lack of Continuity in Communication. Interviews with community members that had not been involved with the OBATI project indicated that there was little awareness of the oil duct, Petrobras' community involvement, or the Agenda 21 OBATI workshops that had taken place in 2001. What was consistent from all six community interviewees, however, was a knowledge of other local projects for community mobilization, including environmental movements, residents associations, partnerships with universities and other NGOs, and outreach programs based in local schools. It is important to note that each community member interviewed was unaware of the other projects happening locally, which points to two conclusions. First, there continues to be a weakness in

communication of activities happening in the local community, or at least a lack of networking between local groups. Second, the changes that were made, both tangible and intangible, were not well articulated throughout the community. In the aftermath of the OBATI project, little evidence exists of the network building activities that took place between various participant groups.

Really the problem with participation here, is that the most marginalized, in the worst conditions, for example, the ones that are most effected by flooding, they are the ones that are least likely to participate. And it is difficult when there is a lack of information and a lack of literacy. People who can't read don't know what is happening when the state comes in and changes something or takes away a favela.
-Resident of Taboão da Serra

Small Impact on Attitude toward Participation. Another common response from interviewees was that mobilization efforts continue to be single the most important factor in community based activities, whereby only participation of residents brings longevity to projects. According to the president of the Taboão da Serra Residents Association, inclusive participation remains a challenge because illiteracy and access to information continue to be a barrier for the most marginalized individuals, despite efforts directed to address this issue.

One interviewee, a community activist in Via Clara, pointed out that he can only encourage the individuals to come and participate, but unfortunately, in some cases, his efforts are fruitless. While projects like the OBATI exist to encourage mobilization of individuals, in the end they are projects, and continuing the momentum that is gained after the project's completion remains a challenge that, indeed, is most difficult for the local residents.

Perhaps one of the greatest setbacks reported by interviewees is the lack of strong networks in the aftermath of the project. Social capital, as per Putman's definition, is a

network of relationships and experiences that build a social connection between the individual and the community, in order to build a vision for sustainable human development (2000). According to the project plans, the responsibility for a continued network lay with the residents themselves. The social capital in these areas was increased, through the capacity building and mobilized individuals that participated. However the social capital was not enhanced to the degree that Instituto Ecoar had anticipated, given that communication and action around environmental issues was slow following the completion of the OBATI. This may be in part related to the lack of resources available for community projects after the Agenda 21 OBATI had ended.

5.4 Conclusion

This chapter discussed the outcomes of the Agenda 21 OBATI, both tangible, like infrastructure developments, as well as the intangible outcomes, as in organizational change and capacity building. The analysis demonstrates that there are stronger and weaker aspects in relation to the activities of each of the major participant groups, Petrobras, Instituto Ecoar, and the community members of the sites of the OBATI. While not fully meeting the goals that were set out at the onset of the project, the Agenda 21 OBATI had many lasting impacts on the partner groups and the local community.

With this case study analysis, changes to the social capital can be seen as strong in reference to the individual and in reference to the health and safety aspects of the community, vis a vis infrastructure improvements. However, the case also demonstrated that the community was not able to grow its social capital in all of the aspects that had been expected. This is seen in their inability to continue the momentum of the project at

the community and organizational scale, where the partnerships that were forged during the OBATI disintegrated after the projects' completion. These themes will be discussed further in the next chapter.

Chapter 6: Conclusions

This case study has examined the effects that a private sector organization, their decision to work in partnership with a civil society group and a Local Agenda 21 project has impacted the environment in several slum communities in São Paulo, Brazil. The projects results were mixed, however, this case study enables us to make some interesting observations on the role of the private sector in community based environmental management, and the ways to move forward in finding integrated solutions to the social, environmental, and economic problems of the slums of the developing world.

6.1 Research Questions

6.1.1 Question 1: *What are the greatest impacts that multi-stakeholder community development projects can have in addressing the needs of slum communities?*

The behavioural changes that took place for the corporation were described as a “break from the paradigm” or a shift in the organization’s activities, and are consistent in the responses from interviewees from all of the participant groups. This organizational change, a change toward inclusion of new partners and an openness toward innovative strategies for environmental management, is perhaps the most valuable output of multi-stakeholder community development projects.

The learning for community members included increased capacity to identify problems, and increased willingness to act on issues that affect their environment. The quality of life changes that occurred were both improvements in the environmental health (tangible) and in the individual’s capacity to effect change (intangible), the latter being described by several interviewees as a long-term, life changing movement. These qualitative changes

indicate that the OBATI was successful in achieving “development towards sustainability.”

Identified in Agenda 21, these changes include capacity building, education, resource management, and involvement of disadvantaged groups (Agenda 21, 1992).

A second observation is that this case study has demonstrated that multi-stakeholder community development projects, and Agenda 21 can address the needs of slum communities by improving upon the diagnosis and the creation of solutions. The stakeholder-based, or participatory research methods, used in the Local Agenda 21 process enable project partners to access information on communities, individuals, and environments that could not be accessed without an intimate knowledge of local communities, and the incorporation of local knowledge. Combined with the methodology for partnership building, as well as the technological / engineering knowledge brought by Petrobras, the environmental management solutions that resulted from the project could not have been reached had they not been addressed in partnership. No group can find these answers as effectively as a multi-stakeholder process.

6.1.2 Question 2: How does the private sector contribute to positive environmental change in communities characterized by poverty and a lack of institutional support?

For environmental gains to have an positive, *sustainable*, impact there must be an element of longevity to them, which can only result from a commitment to ongoing genuine stakeholder inclusion. While the OBATI project had several weaknesses on the part of private sector involvement, one clear area for improved performance is continuity. A continued commitment to the inclusion of stakeholders in the company’s operations is essential to both the genuine commitment to CSR and the environmental health of the community in which it operates. Without a corporate culture that includes the perspective

of community, and looks for an inclusion of these stakeholders that can bring about genuine *mutual* gain, corporate spending becomes an act of philanthropy, rather than a commitment to responsible corporate citizenship and sustainable environmental management.

This case study demonstrates a high level commitment to stakeholder inclusion in environmental management within a particular context. However, it does not represent a holistic approach to stakeholder inclusion, whereby the organization integrates the community interests, voiced by community representatives, where the company's operations affect them. To transition toward more integrated stakeholder inclusion, the business case for CSR must be applied to the corporate strategy. As in the case of Petrobras, the examples of successful incorporation of CSR must be communicated to executive management and transmitted throughout the organization. Experiencing the positive benefits of stakeholder dialogue, for both the corporation and for the community, private sector firms can gain expertise in working in partnership with community and civil society groups. In this way, isolated cases of stakeholder inclusion can transform the organizational culture to become a company that operates more sustainably.

In this case, partnership was as simple as an organization lending its name to support a project or action, and partnership can result in a tremendous impact on the local reality for participant groups and on the environment. Partnership has been described as a process that leads to increased trust and willingness to participate, and is essential to improve upon processes of environmental management (Satterthwaite, 2005). In order to begin to address the massive problems of poverty and lack of institutional support that exist in Brazil, partnership is essential, involving private sector organizations alongside government and NGOs. As a reflection on CSR in Brazil, this case study highlights a need

for a more broad support from the private sector. More companies must enter into dialogue and partnership with stakeholders, in addressing mutually shared problems.

6.2 Area for future research

The methods for evaluating this case study were qualitative, with a strong component of semi-structured interview so that project participants themselves had the opportunity to identify problems and the tangible and intangible project outcomes. In doing so, they evaluated the positive and negative aspects of these outcomes. Future avenues for research in this area may include a comparison of traditional, or government-led urban upgrading projects in Brazil's favelas contrasted to non-traditional planning methods, such as university-led, NGO driven, or corporate sector initiatives in this area. Another area that demands future exploration is the extent to which these intangible changes, and changes that occur at the individual scale, materialize into future tangible outputs – changes to the urban fabric of the favelas that occur the community scale.

6.6 Conclusion

The actions of Petrobras and Instituto Ecoar in community organizing and building partnerships did in fact have a lasting effect in the OBATI region. The project marked only the beginning of a larger process of defining the co-responsibility of companies and communities of the area in local environmental management. In order to understand the outcomes of these projects, both tangible and intangible gains must be evaluated, and analyzed within the context of our existing theoretical knowledge of these processes, such as CSR and Agenda 21, so that we may further understand the needs of all actors in solving environmental problems and in striving toward sustainable environmental management.

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Appendix 1: List of Interviewees, Interview Questions and Database of Coded Responses

	Organization	Interviewee
1	Petrobras	Interviewee 1 Regional SMS Coordinator/ Project Partner
2	Instituto Ecoar	Interviewee 2 Director
3	Instituto Ecoar	Interviewee 3 Project Manager
4	Instituto Ecoar	Interviewee 4 Project Technician
5	Instituto Ecoar	Interviewee 5 Project Technician
6	Instituto Ecoar	Interviewee 6 Project Technician
7	Residents Association, Jardim São Mateus	Interviewee 7 President / resident Taboão da Serra
8	Ensino Fundamental School, Taboão da Serra	Interviewee 8 Director / resident Taboão da Serra
9	Department of Waste and Conservation, Taboão da Serra	Interviewee 9 Director / resident Taboão da Serra
10	Agenda 21 OBATI	Interviewee 10 Community monitor / resident Vila Clara
11	Agenda 21 OBATI	Interviewee 11 Community monitor / resident Vila Clara
12	Agenda 21 OBATI	Interviewee 12 Community monitor / resident Vila Clara

Interview Questions

1. Are you familiar with the OBATI?
2. What kind of changes did the Project bring about?
3. What went right, what didn't go right? How did you determine this?
4. What was the partnership like with the other actors in the project?
5. How was partnering with Petrobras?

6. What is the OBATI like today?
7. Is Petrobras active / accessible there?
8. Did it change the way you think about community projects?
9. What other types of community-based environmental projects are in your community?
10. Are there corporations actively working with environment in this community? Petrobras?

Database of Coded Interview Responses

		1	2	3	4	5	6	7	8	9	10	11	12		
A	Gender	M	F	F	F	F	M	M	M	F	M	M	M	M=7	F=5
B	Worked on the OBATI	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y=9	N=3
C	Familiar with the OBATI	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y=9	N=3
D	Partnership in project was strong / weak (2001) *	S	S	SW	SW	W	W	-	-	-	SW	SW	SW	S=2 SW=5	W=2
E	Changes in Infrastructure strong / weak (2001) **	S	-	W	SW	W	W	-	-	-	S	S	S	S=4 SW=1	W=3
F	Change in participants capacity to participate*** (2001)	-	-	Y	Y	Y	Y	-	-	-	Y	N	Y	Y=6	N=1
G	Change in increased number of participating residents (2001)	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	Y	Y=9	N=0
H	Change the way others think about community projects (2001)	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	Y	Y=9	N=0
I	Change the way we / I think about community projects (2006)	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	Y/+	Y+=6 Y+/-=3	N=0
J	Aware of access to communicate with Petrobras (2006)	Y	Y	N	N	N	N	N	N	N	Y	N	N	Y=3	N=9
K	Petrobras is active in the community (2006)	-	-	-	-	-	-	N	N	N	YN	N	N	Y=0 YN=1	N=8
L	Community has projects about environmental mgmt (2006)	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y=6	N=0

Y- Yes - - Not addressed in interview
 N- No /+ Positive
 S- Strong /- Negative
 W- Weak

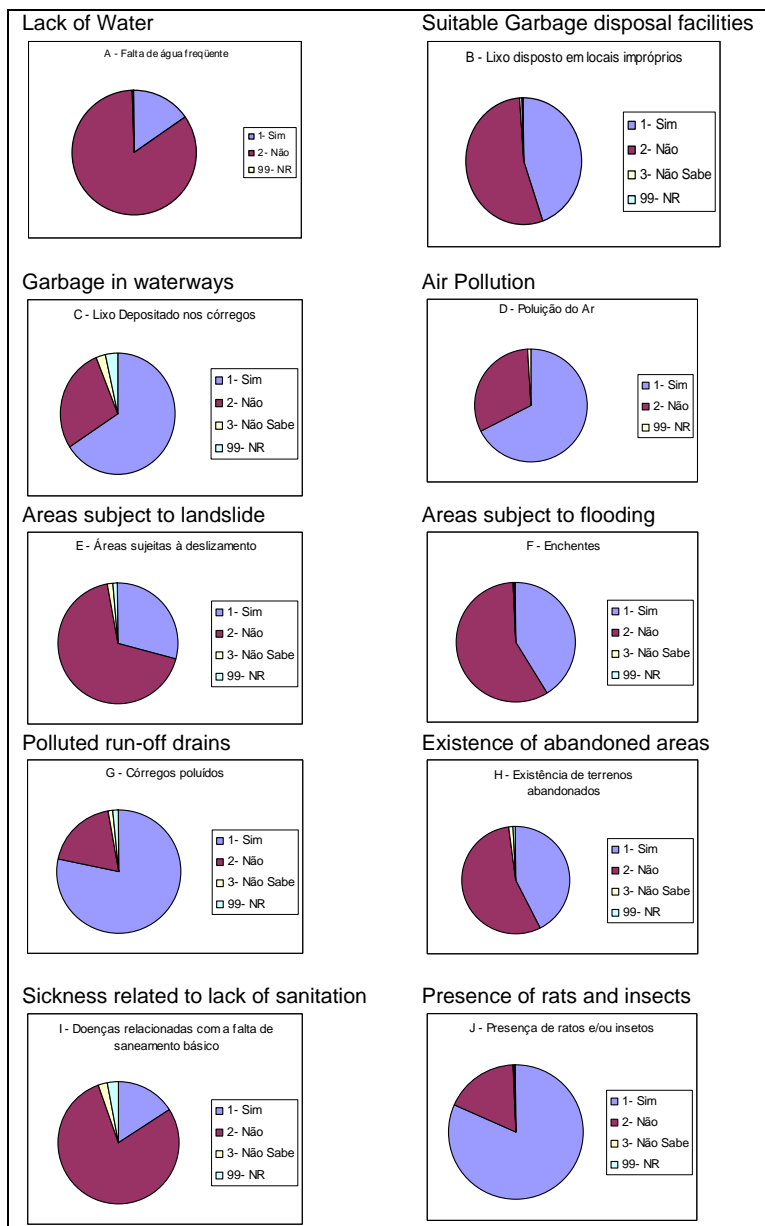
*Partnership includes responses that describe commitment, decision-making power, trust, listening

**Infrastructure includes physical amenities, landscape changes, visible changes, changes in environmental characteristics identified such as garbage, rats, overgrowth, odor, sewage, storm-water run off, and run off streams.

***Capacity includes responses that describe communication, mobilization, network building, community bonds

****Participation includes responses that describe meeting, discussing, filling out forms, signing petitions, voting, organizing, painting, attendance at meetings, participation in cleanups

Appendix 2: Environmental Characterization gathered through community survey by the Bacias Irmãs project 2005



Appendix 3: New Public spaces and infrastructure created through the OBATI project



Photo on left is staircase connecting to public transportation (bus) station, Photo on the right is one of many staircases that were built on the sloping walkways that connect the high to the low areas.



Storm water management system, installed by Petrobras engineers replaced open run off streams and reduces landslide



Above is an art education project constructed to improve resident' care of local environment and a small plaza hat was built with benches and community garden (protected by wood fence)

Appendix 4: Environmental problems that have recurred after the OBATI project

OBATI™
100% recycled paper
and 100% recycled ink

Open sewer / storm water run-off stream that is contaminated with litter



Areas where maintenance has been ignored and garbage and overgrowth return. The only signs remaining of the OBATI project are the signs.
