

**Corporate Social Responsibility in Brazil: A Comparative Analysis of
Two Paper Companies**

by

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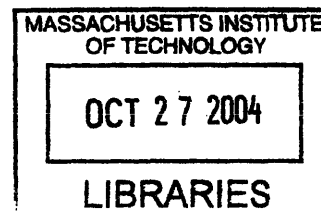
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Abstract

If being socially responsible can result in short or long-term economic benefits, then why do not all companies adopt corporate social responsibility (CSR) practices? This thesis draws on general assumptions from illustrative examples of two paper companies in Brazil – Aracruz and Riocell – to answer this question. The two examples suggest that stakeholder pressure, managers' perceptions of the economic benefits of CSR and managers' environmental and social values affect the decisions of companies to adopt corporate social responsibility. In addition, data from these two paper companies indicate that company size and economic and political context explain the variations of CSR practices between Aracruz and Riocell.

This study argues that both companies have responded to pressures from stakeholders in different ways. As a result, their corporate social responsibility practices have been different. If the goals of companies are to demonstrate increased commitment to corporate social responsibility and to strengthen these practices, businesses need to focus on extending their actions beyond compliance, and incorporate corporate social responsibility as part of their policies.

Key words: corporate social responsibility, personal values, leadership, accountability, social and environmental impacts, stakeholder pressure, competitive advantage, paper sector, Brazil, United States.

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INTRODUCTION

The reasons that companies undertake different corporate social responsibility (CSR) practices are not so obvious. Rationally, the profit-making motive is at the forefront of a company's goals, and historically, government regulations have been a key motivating factor for promoting change in corporate behavior. However, corporate social responsibility is company specific, which means that there is no universal guidance for what kinds of social and environmental practices businesses should adopt. Instead, the needs are tailored to a particular context and to the perceived needs of the locality.

If there are no legally binding international or national mechanisms to create, implement, enforce, or monitor corporate social responsibility, then we can conclude that when companies engage in social and environmental practices, they are acting voluntarily, not in response to regulations. Voluntary action is a fundamental aspect of CSR because it demonstrates a company's initiative to change its corporate behavior. Both the firm and society benefit, resulting in a ripple effect. When a company decides to account for its environmental impacts, it incorporates new practices in its business philosophy. Such practices are usually initiated internally. For instance, the firm will educate its employees about the importance of double sided printing or recycling. Little actions can lead to internal and external changes. The actions of a single firm will push other companies to change in a similar way. A firm becomes socially responsible when it accepts its role in society and becomes a pioneer in improving the environment and communities; when the company makes these changes because it believes these actions can contribute a positive social purpose, social responsibility becomes part of its ethic.

Provided the above observations, a firm does not become socially responsible by simply complying with environmental laws. For instance, if the motivation for firms to adopt environmentally responsible practices is to meet regulations, then we can infer that firms that comply with regulations merely to meet mandates are not really engaged in social corporate responsibility. They are simply complying with the law. Compliance is achieved through installation of prescribed technologies, or temporary solutions. The application of control technology does not require a firm to develop expertise to master new technologies (Russo

and Fouts 1997) or to develop new approaches to their business. Thus, improved environmental performance enhances the reputation of companies in environmental affairs. A positive reputation is in itself a source of competitive advantage.

Corporate entities would not undertake these efforts if it would hurt their bottom lines. In fact, there is evidence that social responsibility may benefit companies financially. If being socially responsible can result in short or long-term economic benefits, then why do not all companies adopt CSR practices? Why do certain companies invest more in CSR programs than others? And, what motivates firms to become socially responsible? This research draws on the stories of two paper companies in Brazil to address these questions. Exploring these questions can help to develop strategies to promote and increase businesses' initiatives for social responsibility.

The CSR concept, used in the context of this research includes both environmental and social initiatives. Social practices include the development and implementation of programs that aim at improving the livelihood of nearby communities and companies' employees. Environmental practices correspond to those initiatives that aim at improving the environment and minimizing industrial impacts. The evaluation and description of the CSR practices of the two companies will be based on the above definitions.

This study views environmental and social initiatives as integral parts of corporate social responsibility. Today, corporate social responsibility focuses on how businesses can minimize the environmental and social impacts of their industrial operations through voluntary initiatives that will produce positive results to society and to businesses. But this requires business leadership, action, open dialogue with communities and transparency. The social and environmental efforts of the two paper companies described in this research reflect such changes in the way firms do business. The main transformations in these two firms happened slowly. As one manager describes, "we have come a long way, but CSR is a continuous process, it never ends because there is still a lot do be done in this field."

The fourth paragraph in the introductory section outlined general questions about CSR. In my research, I build on these questions to answer the following: why have Aracruz and

Riocell – two similar paper factories in Brazil – undertaken different social and environmental practices? What are their motivations to practice CSR? Is it that having good relations with the government and communities was more significant for one firm than the other? One possible answer for the third question is that some companies view good relations with the government and communities as opportunities. There is a high probability that by having such relations and by investing in more sophisticated compliance technology, firms will get extra benefits from governments such as faster permitting and licenses to operate, or a form of reputation enhancement. Companies, especially in the United States do not get rewarded for complying with the law, because meeting regulations is expected of them. But firms may get recognition if they reach out beyond compliance and invest in programs that benefit communities and improve the environment¹.

In Brazil, there is a common belief that economic reasons are the underlying motives for firms to adopt CSR practices (Cappellin and Giulini, 2002). However, findings indicate that other motivations for Brazilian firms to engage in CSR may have emerged from managers' personal values and personal initiatives to incorporate CSR as part of the decision-making process. According to Rosane Borges, a consultant for Aracruz S.A paper mill, the personal views of managers about how to enhance corporate competitiveness and improve relationships with stakeholders (local communities, non-governmental organizations, government, environmentalists, consumers, investors) have changed the business philosophies of some companies in Brazil.

Consider, for example, the managerial response to community conflicts as it influenced CSR practices in one of the subsidiaries of Aracruz Cellulose S.A.², in the Barra do Riacho factory (in the state of Espirito Santo). In the 1970s, community conflicts in the area emerged as a negative response to the siting of the company – Barra do Riacho factory is currently located in an area once occupied by native people and tropical forest. Here, managers have improved the relationship between the company and the local communities by investing in education and in health care. It is possible that in the managers' view, integration and

¹ Savitz. Interview by author. (2004, 9 June).

² Aracruz Cellulose S.A. has recently acquired Riocell paper and pulp, in Southern Brazil. This study describes the CSR practices of Riocell and Aracruz Barra do Riacho, part of the Aracruz Cellulose complex.

acceptance of the company in that community was dependent on developing a set of CSR strategies.

Managers in the Riocell factory have undertaken a different approach to local needs. The company chose not to build schools or health clinics in nearby low-income neighborhoods because it believes the local government already provides those services to local families. Instead, Riocell has adopted other types of CSR practices in response to conflicts such as investing in pollution prevention as well as hiring environmental activists as consultants.

The discussion of the particular CSR practices in the above cases is significant for several reasons. First, the paper sector is important for the economy of developing countries such as Brazil. Second, the two companies – Riocell and Aracruz S.A., which have now merged to become Aracruz Cellulose S.A., are the largest pulp producers of bleached eucalyptus paper in the world. Aracruz Barra do Riacho paper mill in the state of Espirito Santo produces around 2 million tons of cellulose per year. Aracruz paper and pulp is among the ten main Brazilian exporting companies. In 2003, Aracruz Cellulose S.A. exported US \$ 818 million dollars, while Ford Motor Company Brazil exported US \$ 786 million³. In addition, the paper industry in Brazil grew 8.8 % between January and May of 2003, compared to 6.5% for Brazilian industries in general⁴. At the same time, the forest sector represents 7.14% of the total Brazilian exports. Today, Brazil ranks number seven in cellulose production in the world and number eleven as a paper producer worldwide.

Furthermore, a large proportion of the industries in developing countries rely on raw materials that are later transformed into final products such as paper, steel, and chemicals. Transforming raw materials into industrial products is resource-intensive, and produces a large amount of hazardous and toxic wastes. Paper mills are a large source of carbon dioxides, sulfur dioxides, carbon monoxides and other air pollutants. The paper industry has been a large source of accumulated toxic chemicals such as PCBs in the Fox River in Wisconsin, and in the Green Bay System, in the Northeast region of the state⁵. Moreover,

³ Minas Gerais Government (2003). *Brasil em numeros*. Report.

⁴ Brazilian Institute of Geography and Statistics, IBGE (2003).

⁵ Clean Water Action Council. Available at <http://www.cwac.net/>

paper and pulp mills account for approximately 95% of energy use in the U.S. paper industries⁶. Given the environmental impacts of the paper industry, it is surprising that there is limited research about the environmental and social impacts of the paper industry in developing countries, and the types of CSR practices these companies adopt to mitigate such impacts.

While CSR has been researched across many industries in the U.S. (Maignan, 2001), the existing studies that address CSR in Brazil have focused on the auto and metallurgy industry. Although the paper sector is important for the Brazilian economy, there is little existing data about why paper and pulp producers in Brazil engage in CSR, and how these practices differ among companies. Expanding research on CSR in developing countries such as Brazil may increase investment in socially responsible companies. For a growing number of investors, socially responsible practices are important criteria. Investors argue that corporate initiatives involving social responsibility lower the risk of a company facing legal action, stricter government and public scrutiny, or product boycotts.

Moreover, learning about why firms in other countries voluntarily engage in CSR could help scholars, policy-makers, and consumers to better understand the mechanisms that foster environmental and social sustainable practices worldwide. Given the international scope of corporate networks, it is crucial for businesses and the public to learn how corporate social responsibility is perceived in different nations and among companies. If we accept that there is uncertainty about how consumers grant their support to socially responsible firms, then learning more about corporate social responsibility could be a useful tool to promote and market the companies to their consumers, suppliers and buyers across borders (Maignan, 2001). In addition, examining the motives for these two firms to engage in CSR provides a better understanding of how Brazilian society at large can demand legitimacy and accountability from businesses, and how these firms can improve their practices. Successful examples can be used as case studies and contribute to the existing literature on CSR.

This study is divided into five sections. First, the history and definitions of corporate social responsibility are considered. In the second section, the article outlines possible explanations

⁶ The American Council for an Energy-Efficient Economy. Available at <http://www.aceee.org/>

for why companies engage in corporate social responsibility. The third section examines the emergence of CSR in Brazil. Section four provides a historical background of the two paper companies, and compares their CSR practices. The last section concludes the research by discussing possible implications of the findings for the future of CSR in Brazil.

THE HISTORY AND DEFINITIONS OF CSR IN THE U.S.

In a global economy, it is not possible to discuss CSR without outlining the history of this practice in the U.S. The Brazilian economy has always been closely linked to the American economy and business transactions in Brazil are done, or at least, calculated according to the U.S. dollar. Brazil and the U.S. have a long trading history. Brazil exports 8% of its paper production to North America⁷. At the same time, environmental leaders and activists in the U.S. have always influenced the Brazilian society. The U.S.-based Business for Social Responsibility is a leading world organization in CSR issues, and it has subsidiaries in Latin America, including Brazil.

The Evolution of CSR in the U.S.

The CSR concept has emerged as a response to pressing needs caused by environmental disruption and social inequalities. While the environmental movement in the United States is rooted in the political climate of the 1960s, from the civil rights movement to anti-war protests, and Rachel Carson's book, "Silent Spring," the notions of corporate social responsibility date back to the 1870s, with the emergence of big companies such as Standard Oil, Union Pacific Railroad, and the passage of U.S. laws to regulate and control major corporations. In 1890, the Sherman Anti-Trust law was enacted as the first law directly against industrial monopolies and big mergers. In 1933, the U.S. Supreme Court ordered Standard Oil to be divided into 33 different companies. As a result, Exxon/Esso, Mobil, and Chevron were created.

⁷ Minas Gerais Government (2003). Brasil em numeros. Report.

During the progressive era of the 1890s and 1920s, campaigns emerged in response of the new industrial conditions of that period. Chicago residents like Florence Kelley were instrumental in lobbying the U.S. government to regulate working conditions in factories. In the 1970s, environmental groups such as Greenpeace and Friends of the Earth waged campaigns against pollution and waste produced by corporations. In 1973, religious investors in the U.S. created the Interfaith Center for Corporate Responsibility attempting to influence corporate behavior. These efforts increased awareness of environmental and social issues, as well as business accountability and responsibility.

The Woburn, Massachusetts case involving the contamination of the city's wells by industrial discharge, and other stories such as the Love Canal – a canal built in the 1800, that later became a dump site for chemical wastes – and the environmental activism in the 1960s identified villains and blamed companies for environmental injustices. Environmentalism in the 1960s and 1970s was polarizing and the laws and regulations that emerged in the 70s and 80s were rigid, encouraging litigation and discouraging companies to voluntarily change their behavior to become more socially responsible and accountable to society (Chertow and Esty, 1997).

Company managers were beginning to realize that the way some companies were doing business had to change. The bottom line was this: if firms neglected their environmental impacts, regulators would step in. Consumers would respond by boycotting products and environmental activists would wage green campaigns against the environmentally unfriendly companies. Following this logic, by early 1998, around 83 companies in the United States voluntarily certified to International Standardization Organization 14001⁸, an international standard that helps companies to control and improve their environmental performance. The Ford Motor Company and IBM were among the first companies to obtain ISO 14001. In the same year, approximately 5,017 companies worldwide became ISO 14001 certified. With companies voluntarily certifying to ISO 14001, firms started to feel they could carry on with “business as usual” and that satisfied consumers would put any environmental or social justice concerns to rest.

⁸Available at www.iso.org

However, environmental activists soon started pressuring big companies again. Businesses failed to realize that environmental management standards such as the ISO 14001 are necessary and important, but not sufficient to hold companies accountable. A few progressive companies voluntarily increased their workers' wages, provided social infrastructure, invested in more advanced waste treatment technologies, and trained and employed low-skilled workers. These companies addressed the triple bottom line approach of social responsibility: economic, environmental, and social impacts. Although voluntarily certifying to ISO 14001, these companies have only begun scratching the surface in terms of corporate social responsibility and what it really means to become a leader in CSR.

Defining CSR

Today, being socially and environmentally responsible means that a firm should extend its practices beyond economic goals and compliance with laws to include in their agendas social and environmental responsibilities to communities and society at large. It is a voluntary action, not a mandate. Today's view of CSR combines CSR and economic benefits, and sees CSR as an opportunity for businesses to increase profits while addressing environmental and social issues.

Firms are increasingly engaging in practices to improve the lives of local communities by training local labor, generating more jobs, building elementary schools and health facilities, providing opportunities for people of indigenous communities to earn a living, and addressing environmental impacts. "Companies no longer view CSR initiatives as costs, they see these actions as businesses opportunities," explains Ricardo Mastroti, manager of Aracruz S.A., a Brazilian paper producer. "Brazilian companies such as Aracruz S.A understand that the success of business operations depends on healthy and stable communities," the manager adds⁹.

The World Business Council for Sustainable Development (WBCSD) and the Business for Social Responsibility (BSR) offer the best explanations for how companies currently view CSR. According to WBCSD, CSR is "the commitment of business to contribute to

⁹ Mastroti, R. Interview by Author. E-mail (July, 2004).

sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life¹⁰.” According to WBCSD, both social and environmental concerns are part of a company’s CSR (Cramer, 2003). Business for Social Responsibility (BSR) defines corporate social responsibility as “achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment¹¹.”

Being socially responsible however does not imply a firm should forgo profits to improve the environment. Neither does it mean that social and environmental concerns will hold a firm back, restrict business activities, or incur costs and future risks. On the contrary, many socially responsible firms are profitable, and studies have revealed that international investors have increasingly invested in those companies that show commitment to the environment and to social issues (Bauer *et al.*, 2002).

WHY COMPANIES PRACTICE CSR

Posing the question of why some firms adopt CSR to colleagues and experts in the CSR field, as well as to people unfamiliar with the concept of CSR, consistently yields different answers. For instance, some suggest that companies engage in CSR as a strategy for differentiating themselves from competitors. In other words, companies engage in CSR for economic benefits – brand name recognition, consumer loyalty, improvement of reputation, and reduction of cost and risk. But companies are entities with distinct behaviors and different corporate values – some have decided to include CSR in their decision-making; others have not.

Today, many companies have decided to allocate more resources to strengthening their relationships with local communities and pay more attention to the concerns of citizens. A growing number of progressive firms have welcomed environmental activists and lobbyists to their internal meetings and sometimes hire them as environmental consultants. Businesses

¹⁰ <http://www.wbcsd.ch/>

¹¹ www.bsr.org

have been more conscious of their social and environmental impacts, and are increasingly willing to invest in community relations and environmental improvement. For example, Timberland now includes community service days in their benefits package, similar to sick days, but for employee volunteer work in communities. Moreover, the Dutch flower industry has developed a closed-loop system for flower cultivation reducing the use of pesticides¹². The Mill Group, a coffee and mineral water factory in Brazil is planning to invest in new machinery to recycle plastic bottles, encouraging the population to collect and recycle the by-product (Cappellin and Giuliani, 2002).

Increased awareness of the environmental impacts of industrial operations, however, does not mean that the level of compliance with regulations is higher, or that all companies have become socially responsible, nor does it mean that the motivations are similar within and across companies. For instance, some managers argue that decision-making about whether or not to engage in CSR is closely related to the type of pressures a company faces. These pressures will result in different responses depending on the issue and the extent of the problem.

Stakeholder /Community Pressure

Freeman's¹³ analysis of the role of stakeholders in corporate decision-making provides a clear understanding of how society as a whole can demand legitimacy and accountability from businesses. If consumers lose their trust in a company, they might choose a different brand. Shareholders may respond by selling their stocks. International investors will choose to invest in firms that show commitment to CSR. Environmental activists may sue the company. The local government could tighten regulations; employees could lose their confidence and loyalty.

Stakeholder pressure has changed the practices of companies and decision-making with regard to social and environmental responsibility. Citizens have witnessed the proliferation of anti-sweatshop, pro-fair trade and pro-green campaigns, as discussed in previous sections.

¹² Porter, *et al* (1995).

¹³ Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman Publishing.

Corporations that have relocated their operations to countries where environmental laws are lax and labor is cheaper have been under strong public scrutiny and are constantly in the spotlight.

Worldwide, environmentalists were increasingly carrying on campaigns to pressure big firms to become more accountable. From Nike to Home Depot in the U.S. to Aracruz paper and pulp in Brazil, and Chiquita banana farms in Costa Rica, companies have changed in response to societal pressures: anti-sweatshop campaigns against Nike motivated changes within the company. Home Depot phased out the sale of wood products coming from old growth. In 2001, Chiquita signed an agreement with its unions and the International Union of Food workers to respect workers rights. Chiquita has differentiated itself from other banana producers such as Dole, and in the same year it released a “2000 Social Corporate Responsibility Report¹⁴.”

Furthermore, the consumer boycott of the Nestlé Corporation for the company’s sales of infant formula in developing countries led Nestlé to organize an infant formula audit commission (Waddock, 2004). Levi Strauss and Reebok, pressured by NGOs and social activists to respond to labor and human rights abuses in their supply chains, have reformulated their own codes of conduct.

Public pressure has showed that activism, boycotts, and protests have changed corporate behavior (Waddock, 2004). Moreover, another source of increasing pressure to increase companies’ accountability is the social and ethical investing movement, which includes approximately two trillion dollars in the U.S., according to Social Investment Forum (Waddock, 2004). Furthermore, stakeholder pressure can be viewed in economic terms. When a manager responds to the concerns and demands of stakeholders to resolve a problem, it does it to continue to operate and make a profit (Cormier et al., 2004).

¹⁴ Source: <http://www.usleap.org/Banana/Chiquita%26DoleDiffPaths12-01.html>

Managers' Perceptions of Economic Benefits

Top managers' perceptions of the economic benefits of CSR initiatives play an important role in companies' decision to adopt CSR programs. When a manager has a clear understanding of the economic benefits from CSR programs, a company is more likely to invest in these programs. By understanding the economic advantages of CSR practices, managers can make better decisions about CSR programs (Burke et al., 1996). At the same time, when the economic benefits of CSR practices are not so clear, firms tend not to invest as much in CSR programs (Burke *et al.*, 1996).

Owen and Scherer (1993) show that “managers do believe that socially responsible corporate actions have an effect on market share and therefore an effect on competitive advantage.” It is possible that if managers believe that engaging in CSR can bring economic benefits for the firm, then these perceptions might drive social decision-making in companies. In other words, CSR initiatives represent individual values of managers.

There are numerous ways CSR practices can benefit a company. First, CSR practices can improve the overall image of the company. Several firms have concentrated their efforts and financial resources to improve their reputation (Gurhan-Canli, et al, 2004). Improved image results in direct economic benefits because it helps corporations to differentiate themselves from competitors. In her research concerning the motivations for multinationals to pursue CSR, Tina Pihl (2002) discovered that “CSR has become a corporate businesses strategy for many large multinationals because negative publicity hurts their brand names.” In addition, the 2002 Sustainability Survey Report by PwC presents evidence that 90% of the U.S. companies surveyed responded that they are committing to environmental and social issues to enhance or protect their reputation. For instance, companies such as ARCO claims that part of their profit is linked to their environmental reputation. Building a positive image takes time, but once it is achieved, it is a valuable resource. One good example is Ben & Jerry's image of a company that is committed to environmental and social justice concerns.

Second, having high environmental standards and good CSR practices prevents litigation and reduces company's costs. For instance, since 1975, the 3M Co's “ Pollution Prevention

Pays” program has eliminated the generation of more than 500,000 tons/year of pollutants, saving the company approximately US \$ 426 million dollars¹⁵. Glen Dowell (et al., 2001) explains that it may be that adopting lax standards hurts the company’s profits in the long run, due to bad publicity.

Furthermore, reputation is as fundamental to investors as it is to presidents and managers of companies. Many investors believe that the greener the company, the less it will be exposed to environmental risks. Environmental risks are defined as the potential loss of profitability as a result of stricter government regulations or legal actions (Boutin-Dufresne, 2004). Thus, the improvement of environmental performance can increase and improve the company’s profitability in the long run (Boutin-Dufresne, 2004). In addition, the key drivers of the decision to internalize corporate social responsibility are closely related to the ability of a firm to directly or indirectly extract the benefits from social practices (Husted, 2003). The above observations may explain why the concept of socially responsible investing in the U.S. has increased.

A number of studies such as the PwC 2002 Sustainability Survey Report, and the Dow Jones report on the paper industry have shown that corporate social responsibility has a positive impact on the economic performance of businesses. Over the last decade, investors have identified companies that are committed to CSR as preferable investments. According to the “2003 Socially Responsible Investing Trends in the U.S.” Report, socially responsible investing in the United States totaled \$ 2.164 trillion in 2003, out of \$19.2 trillion. Socially responsible investing (SRI) is defined as an investment process that identifies the negative and positive aspects of investments regarding environmental and social issues¹⁶. The Report shows that by the year 2000, almost two trillion (or 20% of all funds) of the funds were socially focused¹⁷. This represents a 240% increase since 1995¹⁸. The Report also identifies 200 socially focused mutual funds in operation compared to 55 in 1995¹⁹.

¹⁵ <http://es.epa.gov>

¹⁶ Stone, B.K., *et al.* (2001).

¹⁷ *Ibid.*

¹⁸ Boutin-Dufresne, F *et al.* (2004).

¹⁹ *Ibid.*

Managers' Social and Environmental Values

The adoption of CSR practices also reflects managers' social and environmental values and concerns about the stability and the relationship between the company and the community where it operates. One of the reasons, Wilson (2002) points out, is that a younger generation of executives is emerging, aware of the needs of communities and concerned about social and environmental issues. Ray Anderson, chairman and founder of Interface Inc. is a good example. Interface Inc. is the world's largest manufacturer of carpet tiles and upholstery fabric for commercial interiors. Mr. Anderson's vision includes applying the principles of sustainability to the company's operations. For instance, the company developed sustainable strategies based on elimination of waste, elimination of emissions, use of renewable energy, closed loop processes, use of resource-efficient transportation, and stakeholder engagement (informing people about the company's vision²⁰).

"As a forest-based company, Aracruz has, from an early stage, felt the need to foster sustainable development as an inherent part of its business strategy. In fact, taking care of the environment, while leveraging economic growth and improving the quality of life of the neighboring communities, has been essential for the development of the company", says Erling S. Lorentzen, founder of Aracruz Cellulose S.A. "Aracruz's managers have adopted Mr. Lorentzen's principles," Rosane Borges²¹, company's consultant explains. "Managers recognize that the company's contribution to society goes beyond producing goods and generating jobs, to incorporate environmental and social practices in its strategies and operations," Rosane adds.

Relations with the local government and with local communities are crucial for the success of a firm, especially for those types of activities that are entirely dependent on natural resource extraction such as the paper industry. Top management's environmental and social values are instrumental in evaluating the role of the company in the community where it operates. Thus, managers who are sensitive to community relations may be able to avoid

²⁰ WBCSD. "Interface: a learning experience." 01.03.200.
Available at: www.wbcd.org

²¹ Borges, R. Interview by Author. Telephone. (July, 2004).

community conflicts as a result of environmental and social impacts of industrial operations, and instead, build relations with stakeholders.

The above observations are important because managers' behavior can change organizational strategies and business philosophies. Moreover, managers' decision-making can have significant impacts on both local communities and the firms themselves. Business decisions have social and environmental consequences²². For example, initiatives such as self-reporting of social and environmental actions or the use of organizational mandates aimed at enhancing environmental awareness can reduce companies' impacts on the natural environment and develop trust and credibility with citizens in a community (Sharma and Vredenburg 1998).

CORPORATE SOCIAL RESPONSIBILITY IN BRAZIL

Although the concept of corporate social responsibility has been known in Brazil for more than a decade, there is no generally accepted definition or practice of CSR (Cappellin and Giuliani, 2002). In fact, the two stories— Aracruz and Riocell – show that managers view CSR practices as both compliance with laws and voluntary initiatives. The adoption of CSR practices in Brazil is left at the discretion of top managers. Thus, decisions to undertake CSR programs are based on managers' perceptions of the economic benefits of CSR practices, managers' environmental and social values, and community pressure.

CSR practices in Brazil are company-specific and vary across firms. Some Brazilian businessmen believe that addressing environmental and social concerns can improve both productivity and the image of companies²³. Others argue that environmental conservation is not sustainable without economic profit²⁴. Some corporate managers summarize

²² Davis, K. (1990). "Five Propositions for Social Responsibility," in Richard J. Klonoski.

²³ Cappellin and Giuliani (2002).

²⁴ Ibid.

environmental responsibility by the name *R-Ambientário*²⁵, that is to reduce consumption, to rationalize by working in a team, to reuse and recycle, and to relate to communities by fostering relationships with schools, hospitals, associations and municipal authorities.

Other companies in Brazil, such as the Belgo Mineira, a mining company founded in 1930s undertook philanthropic actions to respond to community demands and to show commitment to CSR. In 1997, the company changed its approach and conducted surveys to identify community's needs and expectations (Cappellin and Giuliani, 2002). Riocell, in the state of Rio Grande do Sul adopted a similar approach. It has recently conducted a community survey to identify the local concerns and develop social programs tailored to community needs²⁶. Natura, one of the biggest cosmetic Brazilian companies, has become one Latin American example of corporate social responsibility. In 1998, the company set up a Social Action Department to help small businesses in poor districts by creating a special cosmetic line named "Ekos" for its small suppliers in the states of Amazonas, Para and Rondonia (Cappellin and Giuliani, 2002).

Investment in CSR programs is likely to continue among Brazilian companies. A recent study by the Brazilian Institute of Applied Economics (IPEA) shows that out of 445 thousand Brazilian firms surveyed, approximately half expressed intentions to increase investment in social programs in the near future, 67% are engaged in some kind of social action to help communities, while only 16% do not adopt any social practice²⁷.

Investments in social programs in Brazil reached US \$ 73 million dollars in 1999 (Queiroz, 2000). The survey reported that in the same year, one company alone invested \$ 8.5 million USD in social programs, and about 92% of the top managers interviewed indicated that

²⁵ Conference of Robson de Almeida Mello e Silva, Manager of Environment of the Companhia Siderúrgica Tubarão (Petrobrás, 1999). It akin to an "environmental spelling book" and is similar to the Apple and Hewlett Packard's program named R³P³ (Reduction, Reuse, and Recycling of Protective Packaging), in Cappellin, P (2002). "The Political Economy of Corporate Social and Environmental Responsibility in Brazil." Report. Rio de Janeiro, Brazil. November.

²⁶ Klein, J. Interview by Author. Telephone (June, 2004).

²⁷ IPEA Report [2000]. "Investimento Social Privado."

social programs were a part of the companies' philosophy. Brazilian firms have come a long way, and although the Brazilian society has seen great improvement in corporate behavior towards more sustainable practices, this has been a slow process that started in the 1960s.

Environmental and social corporate responsibility in Brazil developed in four different stages, and the following are the different strategies used by businesses when pressured by stakeholders. The first strategy was *rejection* or failure to recognize environmental and social impacts of industrial operations. In this period, firms behaved as if "environmental and social issues did not exist" (Kishiname, *et al.*, 2002). In the 1960s, the role of Brazilian organized groups as catalysts to environmental sustainability was less defined than in the United States due to political constraints during the Brazilian dictatorship, that often prevented individuals from organizing and disseminating information.

In the 1970s, Brazilian firms began to acknowledge environmental and social impacts of their activities, but denied their responsibility to address such impacts (Kishiname, *et al.*, 2002). This reaction was expected from corporations whenever organized groups demanded responsibility and accountability from industries. The most significant difference between the first phase and the second is that in the second phase, organized groups in Brazil, such as environmentalists started to recognize their role as potential catalysts in changing corporate behavior.

In the third phase, companies began to take responsibility for environmental impacts and shifted from a neutral, passive attitude to cooperative and active behaviors, recognizing that "problems exist and industries should make efforts to resolve them" (Kishiname, *et al.*, 2002). The most recent change in corporate behavior in Brazil is characterized by a shift towards clean industrial practices and certification schemes. This shift to cleaner operations includes transformations in product design and manufacturing such as pollution control technologies, implementation of environmental management systems such as the ISO 14001 and certification schemes such as the Forest Stewardship Council (FSC) that focuses on sustainable management of forestland²⁸. ISO 14001 is one of the most visible aspects of

²⁸ Cashore, B. *et al.* (2003).

corporate social responsibility in Brazil²⁹. In 1999, approximately 208 Brazilian companies certified to ISO 14001 (Queiroz, 2000). Today, the number of certified companies is approximately 350³⁰.

Since the late 1990s, the interactions between Brazilian firms and communities have expanded to incorporate the needs and concerns of different stakeholders. Prior to focusing on stakeholder perception and demands, Brazilian firms generally viewed themselves as powerful entities and were not concerned about specific environmental and social impacts of their practices. However, increasing environmental awareness led communities to organize and demand transparency and accountability from Brazilian businesses.

TWO STORIES

This section focuses on three motivating factors – stakeholder pressure, managers’ perceptions of the economic benefits of CSR practices, and managers’ environmental and social values – described in “why companies practice CSR” – to explain why Riocell and Aracruz have undertaken CSR programs. In addition, this section explains some variations in CSR practices between these two companies.

Riocell

Riocell is an illustrative example of the ways in which firms might respond to different circumstances. It shows that the motivations for companies to adopt CSR programs are a result of community pressure, managers’ views of the economic benefits of CSR practices, and managers’ social and environmental values. Although Riocell has invested in both social and environmental programs, findings indicate that the company has focused on the latter, especially between 1970s and 1990s. Examples of Riocell’s environmental programs include: *pollution prevention and odor control technologies, solid waste recycling, environmental monitoring, certification to ISO 14001 and FSC*. In the social arena, Riocell has developed *education projects*, promoted

²⁹ Cappellin and Giulini (2002).

³⁰ Oliveira (2002).

community work and cultural activities, conducted technical training programs, donated to charity and helped nearby associations to generate extra income.

A Brief History of Riocell

The company operations began in 1972 as an arm of the Norwegian multinational company Borregaard. In the late 1960s, and early 1970s, Norwegian pulp industries had been seeking to expand their production and Norwegian managers started to look for potential new locations to build factories. The Guaíba region was considered an ideal site for the pulp mill because of its proximity to Porto Alegre, a major port, the availability of natural resources (land and eucalyptus trees), and the local government's policies that facilitated foreign investment such as fiscal incentives and subsidies.

The state of Rio Grande do Sul benefited from the siting of the company through tax revenues and the creation of 2,500 new jobs³¹; however, the pollution that resulted from the plant's operations was significant. In addition to environmental impacts, such as pollution, the location of the plant by the banks of the Guaíba River had social and economic implications. For instance, 4,000 jobs in the agricultural sector were lost since the factory was built on land that had once been used for rice cultivation³².

Parties in the Brazilian local government and the Norwegian government who were involved in the siting of the paper plant failed to identify the ecological and social impacts of the company in the early stages of its industrial operations. Citizens of nearby communities were neither included in the decision-making of the siting process nor were they informed about the types of benefits or environmental impacts resulting from the location of the company in the region (Slongo 1990). Building the paper factory in Guaíba met the Brazilian economic development policies of the late 1960s, which were designed to promote the development of the paper sector in Brazil by encouraging large-scale plantations of eucalyptus, an exotic tree used for paper and pulp production. As part of an economic development strategy, the Brazilian government provided incentives in the form of tax breaks for pulp machinery imports and loans for mill construction projects.

³¹ Pinheiro S. Interview by Author. (June 2003).

³² Ibid.

In 1966, several years before the local government approved the siting of Borregaard, scientists from the local university – *Universidade Federal do Rio Grande do Sul* (UFRGS), issued numerous reports showing that the paper mill was a potential threat to society because it lacked solid waste treatment and management technologies. Although these reports were studies about possible environmental impacts of the factory, they were produced by reputable experts. The local government initially ignored the information fearing the reports would instigate public protests, leading to the relocation or shut-down of the paper factory, a prospect that would hinder the economic development in the South (Bones and Hasse 2002).

Borregaard started to operate in 1972, and the company's industrial activities gradually became a public issue because Porto Alegre residents could smell the strong odor coming from the paper factory kilometers away. Air pollution began to affect the entire population and people from all social classes, including government officials, became concerned. However, at that time, the concept of corporate social responsibility was unknown to Brazilian citizens; companies in Brazil had a license to pollute and businesses' responsibility was viewed as producing goods.

Smells from the Borregaard plant in Guaíba traveled 15 kilometers to Porto Alegre. The odor came from the substance dioxin 2,3,7,8 TCDD (tetrachlorodibenzo-p-dioxin, also known as TCDD). TCDD is generated as a by-product during the chlorine bleaching process, in which, wood pulp is whitened by sequential bleaching and extraction (Coakley, et al. 2000). Dioxins (e.g. TCDD) are extremely persistent; they are not easily broken down and accumulate as they pass through ecosystems. For any dose of dioxins received today, a human will have traces of the compound for decades (Hays and Aylward 2002). Although there is some controversy about the extent of health effects of these substances, studies conducted by the U.S. Environmental Protection Agency (EPA) show that 1 pg/kg/day, and possibly less, may pose significant health risks to humans (Hays and Aylward 2002).

Organizations such as the Environmental Protection Association (AGAPAN), a local environmental NGO, politicians, journalists, scholars, and physicians pressured the

multinational to invest in pollution control devices. As a result of these combined efforts, the State Assembly of Rio Grande do Sul created a special committee to investigate and resolve the problem. In December of 1973, the Health Secretary ordered the closure of the factory. However, Borregaard reopened just one year later in March of 1974 only to be closed down again in November of the same year. This time, in order to resume operations, the state government required the multinational to invest approximately US \$3.5 million dollars in new pollution control technology (Bones and Hasse 2002).

In 1975, the Klabin group acquired Borregaard, changing the company's name to Riocell. Immediately after the business transaction, Riocell's managers and directors started to discuss public relations strategies – including the development of the Public Relations Committee – to improve the negative image of the company associated with Borregaard's unsound environmental practices. Also in 1975, Riocell hired AB Energikonsult, a Swedish consulting company to develop a modern and integrated pollution control system.

In late 1970s, Dr. Aldo Sani, Riocell's director created the Environmental and Chemistry Research Laboratory. With the construction of the laboratory and a paper bleaching facility, Riocell no longer depended on Norwegian technology for paper bleaching³³. However, the public viewed the company's investments as merely expansion of industrial operations with negative environmental impacts (Slongo, 1990). Some of the headlines by one of the local newspapers were: "Riocell Attacks Again and Will Receive One Billion to Pollute³⁴." Another title included: "Cellulose Bleaching Increases Pollution in the Guaiba River³⁵."

Motivated by the suspicion of toxicity and public's opposition to Riocell's industrial operations, the local environmental protection agency in Porto Alegre, FEPAM, took water samples from the Guaiba River to determine levels of pollution, in the early 1990s. The study was done in partnership with the German Society for Technical Cooperation (GTZ) and was financed by Riocell. The results of the seven experiments revealed levels of TCDD in the Guaiba River at 3 pg/kg (Relatorio Verde, 2002). In addition, residents of ten

³³ Before the construction of the laboratory, cellulose bleaching was done in Norway.

³⁴ A Folha da Tarde. (1978). 2 October. In Slongo, L. A. (1990). "Meio Ambiente e Estratégia Tecnológica da Riocell." *Revista de Administração*. São Paulo. Vol. 25 No. 3. pp 75-82. July/September.

³⁵ Ibid.

municipalities surrounding Borregaard were exposed to high levels of sulfur dioxide emissions – approximately 1,800 ppm, which is above the accepted level of 70 ppm set by the World Health Organization. In 1992, Porto Alegre authorities issued a press release indicating that the local government opposed the expansion of the factory because further studies needed to be conducted to determine the sources of contamination in the Guaíba River. Since it started its operations in 1972, Riocell invested more than US \$ 73 billion dollars in environmental improvement. The company has allocated fewer resources to social initiatives³⁶.

Describing Riocell's Social Practices

This section discusses Riocell's main social programs and explains the motivations that led company to undertake these practices in terms of stakeholder pressure, managers' perceptions of the economic benefits of CSR, and managers' social and environmental values. Some of the social practices Riocell has undertaken include: *the Education project, The Cellulose and Paper Technical Training, Donation programs, and Community Work and Cultural projects*. I will describe these practices in order.

The Education Project

The *Education project*, carried on by Riocell paper and pulp has existed for 11 years and entails the distribution of approximately 300,000 notebooks produced by the company to public elementary schools of 25 municipalities where Riocell has the industrial plant and forestry plantations³⁷. In 2001, Riocell invested R \$ 87.3 thousand Reais (or US \$ 29.2 thousand dollars) in school notebooks. There are two main motivating factors that led Riocell to undertake the Education project. First, the company believes that by distributing 300,000 notebooks to public schools in nearby communities it helps children to succeed in school, which will eventually benefit Riocell in the form of access to a better educated workforce. Second, the decision to undertake the Education project is in line with managers' social values. The project ensures basic school materials to public schools in low-income neighborhoods.

³⁶ No data was found regarding Riocell's total investments in social programs since it started its operations.

³⁷ Riocell Annual Report (2000).

The Cellulose and Paper Technical Training Course

In addition, in 1979, the company created the *Cellulose and Paper Technical Training Course*. The company invested US \$ 30 thousand dollars in this course offered by the Gomes Jardim State School, sponsored by Riocell. The classes are taught by professionals, most of them Riocell's employees. Trained workers get employed in the paper factory and other companies in the same sector (Riocell Annual Report, 2001). The main motivation for Riocell to develop the Technical Training course concerns managers' perceptions of economic benefits of CSR practices to the company. Riocell's managers believe that the level of education in society affects the availability of qualified labor force in the job market. In this sense, the technical training course is the natural continuation of the support of elementary school education. Another reason why Riocell invested in the Technical Training program concerns managers' social values: to benefit the largest number of people as possible in the communities where the company operates.

Donations

Riocell also *donates to charity*. In 2001, Riocell donated 1,200 kg of honey that comes from the eucalyptus forest flowering in the company's forest plantations to the Association of Parents and Friends of the Down Syndrome Mentally Handicapped (APAE), in Guaiba and surrounding areas. The organization's employees consume part of the honey donation APAE receives. The remaining is sold in the market, and the revenues are invested to maintain APAE's facilities (Riocell Annual Report, 2001). In the same year, Riocell donated 15 tons of paper to a children's hospital in Porto Alegre. Riocell also helps the city of Porto Alegre to organize campaigns for blood donation. Managers' social values and managers' perceptions of economic benefits play a role in the decision of Riocell to adopt these programs. Riocell believes that these initiatives improve the company's credibility in the community by reinforcing the image of Riocell as a company that is concerned with creating values among citizens, by encouraging volunteer actions, improving the environment and helping communities to have higher quality of life.

Community Work and Cultural Projects

Riocell participates in community work and cultural projects by collecting food and organizing toy campaigns for day care centers and geriatric homes in the city of Guaiba,

where the Riocell mill operates. In addition, the company's employee choir performs in these institutions and hospitals. Moreover, Riocell participates in *cultural projects* such as the Brazilian Marathon Championship, the Rustic and Klabin Riocell Walk, the Sports Event in the forest areas, the Guiaba Book Fair, and the donations of cellulose sheets to museums and universities to be used in photographic exhibitions. The company invested over US \$ 38,000 dollars in cultural activities in 2001. In all of the community work and cultural projects, managers' perceptions of economic benefits and their social and environmental values explain why Riocell has undertaken these practices. Adopting these programs help the company to maintain a good relationship with the local government and communities. The Sports Event conducted in Riocell's forested areas reflects managers' environmental values to educate and inform the public about the company's environmental practices.

Table 1. Riocell: Main Social Practices

Project	Managing Entity	Motivations	Outcomes
Education Project	Riocell	1) Managers' views of economic benefits: access to qualified workforce, to maintain company's reputation; 2) Managers' social values: to help low-income students to succeed in school	In 2002, the project benefited 10,000 children
Technical Training	Riocell and Gomes Jardim State School	1) Managers' perceptions of economic benefits: greater access to qualified labor force; 2) Managers' social values: to benefit the largest number of low-income families as possible.	No data on number of students employed; R \$ 100 thousand Reais are invested annually in this program
Donations	Riocell ,APAE, Children's Hospital in Porto Alegre	1) Managers' social values: to provide financial support to APAE; encourage citizens to engage in volunteer actions – donate blood, help seniors and low-income children; 2) Managers' perceptions of economic benefits: to maintain good reputation	1,200 kg of honey donated and money invested in infrastructure projects; 15 tons of paper donated to local hospital
Community Work and Cultural Activities	Riocell	1) Managers' perceptions of economic benefits; 2) Managers' social values: to encourage volunteer actions among citizens and to support cultural activities in Porto Alegre and Guiaba	Riocell invested R \$ 111.5 thousand Reais in 2001

Describing Riocell's Environmental Practices

Given a history of conflicts with communities, negative image and public campaigns to close down Riocell (formerly known as Borregaard), the company developed a number of environmental projects to improve the environment and to improve the company's negative reputation. Some of these projects include *Air Quality Monitoring Project*, the *Solid Waste Management Program* the *Environmental Monitoring Project*, and the *FSC and ISO 14001 certifications*.

The Air Quality Monitoring Project

The project consists of a partnership between volunteers, a city foundation and Riocell to eliminate gas emissions and bad smell from chemical compounds in the production of paper and pulp. A group of volunteers help Riocell to monitor the odor resulting from the paper and pulp production. The program covers nine neighborhoods in Guaiba, the city where the factory operates and seven zones in Porto Alegre. The Air Quality Monitoring project is part of the "Riocell 2000" program that designated part of US \$136 million dollars for a new recovery boiler and a new collection and oxidation system, with low emissions and odor technology³⁸.

Given community pressure, Riocell has concentrated its CSR efforts on the areas in which the company has been under most criticism – air and water pollution. The company has invested millions of dollars in environmental projects. Between 1972 and 1988, Riocell invested a total of US \$ 41,270,000 dollars in environmental programs, while between 1989 and 2001, the company spent US \$ 32,511,370 million dollars. Community and government pressure and managers' perceptions of economic benefits resulting from improved reputation explain why the company has undertaken environmental programs such as the Air Quality Monitoring Project, and why the company's investments in environmental improvement were larger between 1972 and 1988.

Nevertheless, managers' environmental and social values played a role in the company's decision to adopt the Air Quality Monitoring Program. Three managers – Aldo Sani, former Superintendent and Director, Alfred Freund, former Planning Director, and Celso Edmundo

³⁸ Riocell Social and Environmental Report (2001).

Folkel, former Environmental Technology Director have been at the forefront of important decisions at Riocell. Together, they changed industrial policies concerning investment in pollution prevention technologies. Nevertheless, the former Directors have always believed that Riocell's success depends on maintaining a good relationship with the local government and communities³⁹.

The Solid Waste Management Program

This program consists of a partnership between an environmental consulting firm, *Vida Products and Services* and Riocell. Vida was created in the 1980s by Jose Lutzemberger – one of the pioneers of the Environmental Movement in Brazil. Supported by Riocell's managers, Lutzemberger organized a research team to evaluate the feasibility for building a solid waste facility to treat the company's residues. Riocell provided financial resources for the project as well as the necessary infrastructure such as laboratories and equipments. *Vida Products and Services* recycles more than 99% of solid waste from the Riocell production. The remaining 1% that it is not recycled returns to the manufacturer to be incinerated⁴⁰. The recycling facility is located on a 100-hectare property. Riocell invested almost one million dollars in this project⁴¹. The solid waste facility processes 10,000 tons of residues per month from Riocell. The pulp mill waste – which includes eucalyptus bark and sawdust, lime sludge, dregs, grits and general garbage – is transformed into organic fertilizer and soil pH correctives⁴².

There are three main explanations for why Riocell has undertaken the Solid Waste Management Program. The first reason concerns managers' environmental values. The practice minimizes the squandering of natural resources, by the utilization of extensive plots of land to accommodate the solid waste. Second, Riocell's managers viewed the Waste Management Project as profitable. By investing in the solid waste project, Riocell avoided legal actions as a result of improper disposal of waste, and water and soil pollution. Thus, the project reduces the company's risks and costs. Also, the project was an important tool to enhance the company's image by showing its commitment to environmental improvement.

³⁹ Borges. R. E-mail (June 2004).

⁴⁰ Aracruz News (Dec. 2003).

⁴¹ Ibid

⁴² Ibid.

Environmental Monitoring

The monitoring of the local environment has been carried out since 1996, in partnership with the Institute for Forest Studies and Research (IPEF). For example, in the *Terra Dura* forest, three experimental sites were built to identify chemical and physical parameters of the water quality. The results are used as indicators of the environmental impact caused by forestry activities. Environmental monitoring performed by Riocell and partnering organizations includes: soil loss, biodiversity and micro basin monitoring (Riocell Annual Report, 2001).

Riocell's management of environmental resources was developed to meet the requirements for maintaining the forest certification, FSC. These projects are also in line with managers' environmental values to improve the quality of forestry activities and to reduce negative environmental impacts. Environmental monitoring programs were developed to improve the conditions of protected areas, to recuperate areas used for material extraction or areas affected by erosion processes, provide better environmental conditions for forest growth, and obtain data to monitor the impacts of forest operations⁴³. Also, environmental monitoring programs such as the *Terra Dura* informs the public about Riocell's environmentally sound practices during sports activities and school visits to the factory.

FSC and ISO 14001

When Riocell obtained the FSC certification in December 2001, it made the company the first in the world to produce short fiber cellulose with 100% certified raw materials. When FSC was created, its main purpose was to ensure that forest products come from sustainable sources. In November 1999, Riocell obtained the ISO 14001 certification. The ISO 14001 is part of the Environmental Management System (EMS) that monitors the environmental impacts of the company's activities.

Managers' perceptions of economic benefits led Riocell to certify to FSC and ISO 14001. The certifications ensure Riocell international recognition, and enhance Riocell's competitive advantage, leading to increased sales and profits. According to Maurem Alves, a forest

⁴³ Riocell Social and Environmental Report (2001).

engineer of Riocell, FSC and ISO 14001 certifications are important environmental strategies Riocell undertook to differentiate the company from its competitors.

Table 2. Riocell: Main Environmental Practices

Project	Managing Entity	Motivations	Outcomes
Pollution Prevention and Odor Control	Riocell	1) Stakeholder pressure: to improve reputation; 2) Managers' perceptions of economic benefits: increase competitive advantage; 2) managers' environmental and social values: environmental improvement and good relations with stakeholders are crucial for the company's success.	US \$ 136 million dollars invested; according to local population, pollution and odor has improved; community participation (local volunteers helped with the project)
Solid Waste Management	Riocell and Vida	1) Managers' perception of economic benefits: solid waste reduction, elimination of extra costs and risks from legal actions; 2) Managers' environmental values: less use of land for waste disposal	Around 99% of solid waste recycled; 1% gets incinerated; reduces land occupied for waste disposal; R \$ 2.8 million Reais invested
Environmental Monitoring – The Terra Dura Project	Institute for Forest Studies and Research (IPEF) and Riocell	1) Managers' environmental values: improve quality of forestry activities and reduce negative impacts, improve conditions of protected areas, and recuperate environmentally damaged areas	The results are used as indicators of the environmental impacts of forestry activities
Forest Stewardship Council (FSC) certification and ISO 14001	Riocell	1) Managers' perception of economic benefits: FSC and ISO 14001 increase company's competitive advantage.	The certifications have ensured Riocell's international reputation as a company that is committed to improving the environment.

Summary

There are numerous explanations for Riocell's decision to adopt the environmental and social programs. For instance, the Education project and the Technical Training program reflect managers' view of the economic benefits of CSR. The initiatives benefit communities and the company. Local residents gain skills, which enable them to pursue better jobs. Riocell benefits because it has easy access to an educated labor force. Also, the decision to undertake these programs concerns managers' social values: to benefit the largest number of people as possible in the communities where the company operates.

In general, managers' perceptions of the economic benefits of CSR have played a role in the decision of Riocell to adopt social and environmental programs. Riocell believes that these programs improve the company's credibility in the community by reinforcing Riocell's image of a company concerned with local needs and the environment. At the same time, managers view environmental initiatives such as the FSC and ISO 14001 certifications as important strategies to increase the company's competitive advantage. Community pressure is another factor that explains Riocell's decision to invest millions of dollars in the Air Monitoring Program and to support the Solid Waste Management Program.

Aracruz Cellulose S.A. ⁴⁴

The Aracruz case is an illustrative example of the ways in which firms might respond to community pressure. The case also shows that managers' environmental and social values and their perceptions of the economic benefits of CSR might explain why Aracruz has undertaken CSR initiatives. In the social arena, Aracruz has developed the *Formar and University for All* projects, created the *Vila do Riacho/ Barra do Riacho* programs, and helped local families through the *Indigenous Communities* program. In addition, the company developed the *Faith Through Action* project, the *Community Nursery of Aparaju* and the *Forest*

⁴⁴ Aracruz Cellulose has subsidiaries in four Brazilian states. Two of them, are the company's main paper factories: Aracruz Barra do Riacho, in the state of Espírito Santo, and Riocell, in the state of Rio Grande do Sul. These two paper factories are used in this study as illustrative examples to explain why firms undertake CSR practices, and how these practices vary among companies.

Partners program. In the environmental area, Aracruz developed the following programs: *Biodiversity Monitoring*, the *Watershed* program, the Cereais Project, and the *Caboclo Bernardo* project.

A Brief History of Aracruz Cellulose S.A.

Aracruz was created in 1967, under the name of Aracruz Florestal S.A. Aracruz is both privately and publicly owned, and it is managed by a combination of national and international organizations⁴⁵. Aracruz Cellulose S.A. operations include: two pulp mills, a hardwood lumber saw mill, a port terminal, and eucalyptus plantations in four Brazilian states: Rio Grande do Sul, Bahia, Espirito Santo and Minas Gerais. The company owns 128,000 hectares of native forest in the above states⁴⁶. Ports and forest reserves are part of an integrated system that produces more than 2 million tons of pulp annually⁴⁷.

Aracruz Cellulose S.A. is global leading producer of bleached eucalyptus pulp. Its production comprises 31% of the global supply of pulp used in the manufacturing of tissue, writing and printing paper⁴⁸. The company produces hard-grade hardwood used by manufacturers of consumer paper products and furniture in Brazil and abroad. Aracruz exports 97% of its products. Of Aracruz's total exports, 38% are shipped to Western Europe, 36% are shipped to North America and 23% are shipped to Asia.

Since the 1960s, Aracruz has been committed to improve the environment and the lives of communities in the state of Espirito Santo⁴⁹. From the early start, Erling Lorentzen, Aracruz's founder and chairman understood that the success and survival of the company in the impoverished state of Espirito Santo depended on developing sustainable strategies for recuperating degraded land. The company took advantage of numerous tax incentives for tree planting in the late 1960s and started to buy and restore degraded land⁵⁰. By 1992,

⁴⁵ Lorentzen, Safra and Votorantin – each of which controls 28% of the company – and shareholders such as the Brazilian National Economic and Social Development Bank, BNDES, who together control 12.5% of the company.

⁴⁶ Ibid.

⁴⁷ Aracruz's two main pulp factories, located in Rio Grande do Sul and in Espirito Santo, produce a total of 2.4 million tons of pulp each year.

⁴⁸ Available at the company's site: www.aracruz.com.br

⁴⁹ <http://www.wbcscd.ch/>

⁵⁰ Carrere R. et al (1992).

Aracruz had acquired 200,000 hectares and planted 130,000 hectares with eucalyptus, raw material used in its industrial operations⁵¹. The remaining was designated as conservation land⁵². By reforesting degraded land, unsuitable for agriculture, Aracruz addressed a fundamental environmental issue in the region. By distributing millions of seedlings to local farmers, Aracruz believes it is addressing local poverty and improving the environment. The distribution of eucalyptus seedlings, according to the company is a strategy to reduce farmers' dependency on natural resources for fuel and lumber and land depletion from unsustainable practices⁵³. Also, Aracruz has helped to address poverty in rural Espirito Santo by hiring local people. Nevertheless, the company has invested approximately \$ 125 million dollars in social programs – housing, schools, hospitals and a training center for employees⁵⁴. In fact, just recently, Aracruz has spent more on social programs than it did on wages - \$ 1.20 for every \$ 1 in wages⁵⁵. According to the company, the living standards of local families have improved since Aracruz started to invest in social programs.

Aracruz S.A. acquired Riocell in May 2003, and it is currently building a paper mill in the state of Bahia, Northeast of Brazil. The project is part of a large expansion plan, which includes the completion of the largest single-line bleached eucalyptus pulp mill in the world, with a production of 900,000 tons a year. The project is a joint venture between Aracruz S.A. and Stora Enzo, a Swedish-Finish corporation and a leader in integrated forest products.

Before it became a global producer of pulp, Aracruz S.A. faced a series of challenges ranging from opposition to the siting of the company in native territory to negative reputation exacerbated by the perceived view of eucalyptus plantations and social and environmental threats. No topic has generated more controversy within the environmental practices of Aracruz than the eucalyptus plantations. Out of the total area, 22,428 hectares of the Atlantic Forest, equivalent to approximately 5.5% of native forest in the state of Espirito Santo were destroyed between 1990 and 1995 (Oliveira, 2002).

⁵¹ Ibid.

⁵² Hart, S. (1997).

⁵³ Hart, S. (1997).

⁵⁴ Ibid.

⁵⁵ Ibid.

In September of 2001, the Espirito Santo State Legislative Assembly created a law that prohibited eucalyptus plantations in the state for the purpose of cellulose production. The legislation was later modified to require new permits for eucalyptus plantations⁵⁶. Espirito Santo is one of the few Brazilian states that require permits for eucalyptus cultivation. The company argues that the new legislation affects the company's operations and also Brazil's exports, since paper and pulp producers are among the largest Brazilian exporters, generating in the year 2000, more than US \$ 2.5 billion dollars in foreign exchange earnings.

Although the above figures are significant, the *Alerta Contra o Deserto Verde* (Campaign Against Green Desert), a Brazilian NGO is not convinced that Aracruz' eucalyptus plantations bring social and economic benefits. The NGO argues that Aracruz employs only 1,689 and that the company owns a significant portion of the properties in the state of Espirito Santo, while 70,000 rural families own only a few hundreds of hectares of land. According to Marcelo Calazans, of the Campaign Against Green Desert, the regulation that limits eucalyptus plantations in the state makes sense in this context, because Aracruz has always benefited financially at the expense of the local families⁵⁷.

Describing Aracruz's Social Practices⁵⁸

The next paragraphs discuss Aracruz's main social programs and explain why the company has undertaken these practices. Some of the social initiatives Aracruz has adopted include: the *University for All* and the *Formar* projects, the *Vila do Riacho/Barra do Riacho* and *Fiberline C* projects, the *Indigenous Communities* Program, the *Community Nursery of Aparaju* and the *Forest Partners* program. To meet social targets, Aracruz had initially planned to invest a total of US \$ 2.3 million dollars in 2002. Over the year, US \$ 4.2 million dollars was spent⁵⁹.

⁵⁶ Aracruz Annual Report (2001).

⁵⁷ <http://www.partes.com.br/ed16/socioambiental.asp>

⁵⁸ This section describes environmental and social programs adopted by Aracruz Barra do Riacho paper factory, one of the subsidiaries of Aracruz Cellulose S.A. Aracruz Barra do Riacho Unit is located in the state of Espirito Santo.

⁵⁹ Aracruz Annual Report (2003).

Education Projects: Formar and University for All

The Formar Project is a good example of Aracruz's social efforts to educate local communities. The Program, created in 1997, aims at improving the skills of teachers in six municipalities of Espirito Santo, benefiting 2,500 schoolteachers. In recognition for its social efforts, Aracruz won the Espirito Santo Federation of Industries (FINDES) award in the Social Responsibility category.

University for All

The University for All Project is another example of Aracruz' efforts in the social arena. This project consists of providing public school students with free preparatory courses for college entrance exams – in Brazil, entrance to college is contingent upon high performance on subject exams (math and science and humanities).

Managers' social values played an important role in Aracruz's decision to adopt CSR practices. "When Aracruz built its first paper factory in the state of Espirito Santo, it also had to build communities, by providing them infrastructure, health and education," says Rosane Borges⁶⁰, Aracruz's consultant and former Riocell manager. "Aracruz is committed to helping communities to have access to better education and better homes, and that is why Aracruz has undertaken education and community infrastructure projects," she explains. The *Formar* program helps to improve the education system in rural areas by training teachers. The *University for All* program is also significant for local communities because it provides opportunities for young adults to pursue a college degree.

Managers' view of the economic benefits of CSR practices may also explain why Aracruz has adopted these education programs. Managers believe the company benefits through these initiatives because skilled and well-educated individuals will eventually be part of the company's labor force. According to Rosane Borges, Aracruz has been training local laborers for several years. When the paper mill was built in Espirito Santo, Aracruz provided training for thousands of local workers. Today, the Aracruz Barra do Riacho paper mill in the state

⁶⁰ Borges, R. Interview by author. Phone (July 30, 2004).

of Espirito Santo employs 1,300 workers from local communities, created thousands of indirect jobs, and generated tax revenue to the local government.

Infrastructure Projects: Barra do Riacho/Vila do Riacho and Fiberline C

The Barra do Riacho and Vila do Riacho projects are infrastructure programs that aim at improving the living conditions of the communities in Barra do Riacho, the town where the paper mill operates⁶¹. Aracruz S.A. provides assistance to projects that communities consider priorities. Such priorities could be water, electricity, and construction of sidewalks, street pavement, or repairs in nearby buildings.

The Fiberline C Project

As part of Aracruz's commitment to helping the population at large, US \$ 4 million dollars out of US \$ 26 million dollars have been invested in social infrastructure including donation of 17 ambulances to nearby hospitals and the implementation of computer networks in state hospitals⁶². Part of the Fiberline C project is the expansion of eucalyptus plantations and the expansion of a paper mill, projected to create 11,500 jobs, and generate US \$ 50 million dollars in state and federal taxes⁶³. In 2002, the amount paid in state and federal taxes was above what the company had initially projected: US \$ 52.1 million dollars, while in the year 2000, those figures were US \$ 28.3 million dollars⁶⁴.

Managers' social values explain why Aracruz has undertaken the Barra do Riacho/Vila do Riacho and Fiberline C projects. "Aracruz understands that in order to have a healthy and sustainable community, it is also important to invest in education, health and infrastructure," says Ricardo Mastroti, manager of Aracruz S.A. "The company has generated thousands of jobs. However, providing jobs is just part of Aracruz's responsibility to meet local needs," Mastroti explains. Community pressure also plays a role in Aracruz's decisions to adopt the above projects. Nearby communities in rural Espirito Santo demand from Aracruz because people believe the company has the financial resources to build schools and health facilities,

⁶¹ Ibid.

⁶² Aracruz News (August 2003).

⁶³ Aracruz Annual Report (2000).

⁶⁴ Aracruz Annual Report (2002).

and provide opportunities for local people to earn a living. Communities recognize that the local state lacks the financial resources to meet local needs.

Community Projects: The Indigenous Communities and Aparaju Nursery

Indigenous Communities Project

In 1998, Aracruz signed an agreement for long-term aid to the Brazilian indigenous groups. By the end of 2000, the company provided US \$ 1.3 million dollars to indigenous communities, of which US \$ 860,000 was paid in compliance with the agreements and US\$ 460,000 given as voluntary donations from the company⁶⁵. In addition, Aracruz and the Association for Alternative Technology Programs (APTA), a non-governmental organization created a partnership to provide technical assistance for local farmers. The project aims at helping indigenous communities to improve farming techniques to increase crop production.

Aracruz supports local culture by strengthening the community values and traditions.

Transforming Pulp Into Art is a project that also benefits indigenous groups from Boa Esperanca and Tres Palmeiras neighborhoods, near the Aracruz pulp mill in Espirito Santo. Local artists use Aracruz pulp instead of traditional canvas to produce artwork such as paintings. Priority is given to art, culture, and education projects. The work of the Guarani natives has produced a number of beautiful paintings. The paintings depict the culture of the Native people, nature and life in the forest⁶⁶.

Community Nursery of Aparaju

Aracruz's projects extend to other Brazilian states besides Espirito Santo. The Community Nursery of Aparaju project has benefited 92 families and 6 communities in the state of Bahia, by generating income to local farmers. In the past several years, families have cultivated, harvested and sold 157 thousand native seedlings donated by Aracruz. In addition, the company has provided technical assistance and training to local residents⁶⁷.

⁶⁵ Aracruz Annual Report (2003).

⁶⁶ Ibid.

⁶⁷ Ibid.

Given the history of conflicts between Aracruz and local communities that emerged from the environmental and social impacts of industrial operations, stakeholder pressure played a key role in the company's decision to adopt the Indigenous Community project and the Community Nursery of Aparaju program. Community demands have led the company to invest extensively in social programs to help indigenous groups with agricultural projects, art and education. The programs help to strengthen the relationship between company and stakeholders. Maintaining a good relationship with communities and local government is crucial to the company's operations. For instance, expansion projects depend on the approval of local residents as well as the local government.

The Forestry Partners Program

The Forestry Partners program was created in 1990 to establish planting partnerships with independent local farmers to grow eucalyptus trees through agreements with Aracruz⁶⁸. Approximately 2,600 farmers in 113 municipalities in the states of Espirito Santo, Bahia and Minas Gerais are currently participating in the program⁶⁹. Approximately 47,000 hectares out of 58,000 are eucalyptus plantations, with an average area for contract of about 22.5 hectares. In 2003, Aracruz invested around US \$ 28 million dollars to purchase the timber that was harvested through the program.

In 1999, the company extended the program to indigenous communities that live near the pulp mill⁷⁰. The Program has three main components: the seedling delivery agreement, purchase/sell contract, and the purchase/sell contract with financing. In the seedling agreement, Aracruz supplies eucalyptus seeds, provides technical assistance, and commits to buying wood from the participating farmers. In the purchase/sell contract, in addition to supplying seedlings and technical assistance, Aracruz provides fertilizers and ant traps to participating partners. The purchase/sell with financing program is the most complete plan, in which the farmer obtains financing for setting up the entire plantation project⁷¹. The financial value is paid through harvested timber. According to the company, the debt of the

⁶⁸ World Business Council for Sustainable Development (2004). Aracruz Cellulose: The Forestry Partners Program. A Case Study.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

participating farmer with the company is converted into timber, not money. Since it was created, the company invested around US \$ 120 million dollars in this program. Aracruz claims the Forest Partners program has generated 5,000 jobs in rural areas, minimizing the migration of rural workers to urban areas⁷².

Others have a different view about who benefits from projects such as the Forestry Partners program. Members of the Agriculture Workers Movement in Brazil, argue that in the year 2000 the Brazilian government donated R \$ 600 million Reais, approximately US \$ 300 million dollars to small rural workers in support of family agriculture⁷³. At the same time, Aracruz received from the Brazilian National Development Bank, BNDES R\$ 1 billion Reais (equivalent of 500 million USD) to build its third paper factory that will generate only 173 jobs, according to the Agriculture Workers Movement⁷⁴.

The Agriculture Workers Movement is concerned about Aracruz's practices such as incentives to plant eucalyptus because of the possible environmental and social impacts resulting from these practices. Some local residents have argued that the use of pesticides in nearby eucalyptus plantations has destroyed their organic crops. At the same time, rural communities argue that small producers are rushing to sell their properties to Aracruz, hoping to be employed in the new factory that is being built in the state of Bahia. Others are considering participating in the Forestry Partners program. Small landowners are concerned that although Aracruz promises to provide the seeds and technical assistance, the profits will not be enough for these families to make a living⁷⁵.

Managers' perceptions of the economic benefits of CSR practices explain why the company developed the Forestry Partners program. The program helped the company to secure supply of eucalyptus, the main raw material used in pulp production. In addition, stakeholder pressure may also explain why Aracruz created the program. Aracruz recognizes that community pressure can affect the company's operations through negative publicity.

⁷² Aracruz Annual Report (2003).

⁷³ Available at: www.seculodiario.com.br

⁷⁴ Ibid.

⁷⁵ Rocha, Michelle (2002). "Agricultores Relatam Destruição Causada pelo Eucalipto e Relatam Táticas da Aracruz para Comprar Terras." <http://www.seculodiario.com.br>

Developing a program to merely secure supply of timber would send the wrong message. As a result, the company found innovative ways to expand its eucalyptus supply and make better use of under productive land while helping local farmers to earn a living. In addition, Aracruz has generated thousands of new jobs in the nearby rural areas⁷⁶, minimizing the migration of rural workers to urban areas⁷⁷.

⁷⁶ The Forestry Partners Program has generated 5,000 jobs since it was created.

⁷⁷ Aracruz Annual Report (2003).

Table 3. Aracruz: Main Social Practices

Project	Managing Entity	Motivations	Outcomes
Formar	Aracruz, Interdisciplinary Ed. Network (RIED), and Ministry of Education and Culture (MEC)	1) Managers' social values: to improve education; 2) Manager's perceptions of the economic benefits of CSR: greater access to an educated and trained labor force.	762 teachers completed the training program. The program has certified 3,481 teachers since 1997.
University for All	Federal University of Espirito Santo (UFES) and Fundacao Ceciliano Abel de Almeida	1) Managers' social values: to prepare low-income students for the college entrance exam; 2) Managers' perceptions of the economic benefits of CSR: access to an educated labor force	800 students from several regions in ES were benefited. The program approves 30% of the candidates
Vila do Riacho and Barra do Riacho	Neighborhood Residents' Association	1) Managers' social values: provide health, education to communities 2) Community Pressure	The construction of a community center was finalized.
Fiberline C	Aracruz	1) Managers' social values: investing in infrastructure projects, health and education is as important as job generation for a sustainable community	Projected to generate more than 11,000 new jobs and tax revenues; project benefit health facilities
Indigenous Communities	Aracruz and Fiberline C Project suppliers and the Association of Alternative Technology (APTA)	1) Stakeholder pressure: good relations with stakeholders prevents community conflicts	Aracruz built a school for more than 100 indigenous school-age children of the Comboios community; donated R \$ 278,500 in 2001
Community Nursery of Aparaju	Aracruz and Community Association of Aparaju, Bahia	1) Stakeholder pressure: good relations with communities prevents conflicts	Production of 40,000 native species seedlings
Forest Partners Program	Aracruz	1) Stakeholder pressure: to minimize conflicts that emerged from environmental and social impacts of industrial activities; 2) Managers' perceptions of economic benefits: to expand eucalyptus plantations while helping communities to be self-sufficient	113 municipalities benefited in 3 Brazilian states; 5,000 jobs provided; \$ 120 million USD invested by Aracruz

Describing Aracruz's Environmental Practices

Biodiversity Monitoring Project

This project was developed to monitor biodiversity in the Espirito Santo region where Aracruz' properties are located. It also monitors the private properties of partnering farmers of the *Forestry Partners program*, and uses the results as indicators for environmental quality. Aracruz experts monitor bird populations and their interaction with the local environment. The project aims at evaluating the interaction between wildlife and exotic tree species such as the eucalyptus. In 2003, Aracruz reported that it found 124 native species in the eucalyptus areas, showing no competition between eucalyptus monocultures and native species. The report also reveals that parrots, an endangered species in Brazil use eucalyptus plantations as a wildlife corridor.

The Watershed Program

The Watershed program conducted by Aracruz, started in 1993 to monitor the eucalyptus growth cycle in the region, and its interaction with the native forest. The program is a partnership with universities and research institutions in Brazil and abroad (U.S. Department of Agriculture and the Australian National University). The Watershed Project is being conducted in a 286 hectare – of which 189 ha are eucalyptus plantations and 88 ha are native forests (Aracruz Annual Report, 2001).

Cereais

The Project *Cereais* (Wildlife Preservation Center) was created in 1993 and developed to preserve the local fauna by rescuing and treating injured wild animals. The project is an initiative of Aracruz, the Federal Environmental Agency IBAMA and 16 Aracruz service suppliers to help reintroduce captured wildlife into their habitat (Aracruz Annual Report, 2000). The Center occupies an area of 11.5 hectares donated by Aracruz. Since its foundation, the Center has received 46 thousand animals, out of which 36 thousand were released back to their habitat (Aracruz Annual Report, 2003).

Stakeholder pressure affected Aracruz's decision to adopt the environmental programs discussed above. Conflicts between the company and communities emerged from strong opposition to eucalyptus plantations. The Biodiversity and the Watershed projects are particularly significant. These programs show how the company has responded to environmental concerns by developing programs to monitor the interaction between the eucalyptus and native forests. Aracruz's annual reports describe the positive outcomes of the projects, by emphasizing the environmental benefits of the eucalyptus, or simply by stating that the species poses no threat to the local environment. In addition, managers' perceptions of economic benefits of CSR played a role in the decision to adopt these programs. Aracruz's managers view these initiatives as opportunities to improve the company's environmental reputation.

Caboclo Bernardo Project

The "Caboclo Bernardo" project was designed to increase water availability in two municipalities in the state of Espirito Santo and areas close the Aracruz pulp mill. These regions have had severe drought during 1998 and 1999. River water is diverted 16 km from the mouth of the Rio Doce River into a built 2 km long canal that connects with an existing drainage system, comprising of 42 km of canals. Water runs through the canal by the force gravity⁷⁸.

Managers' social and environmental values may explain why Aracruz has undertaken the Caboclo Bernardo project. According to Aracruz's manager, Ricardo Mastroti, "developing social programs that address basic needs such as health and access to water are important for the sustainability of local families and the success of the company."

⁷⁸ Aracruz Annual Report (2000).

Table 4. Aracruz: Main Environmental Practices

Project	Managing Entity	Motivations	Outcomes
Biodiversity Monitoring	Aracruz	1) Stakeholder pressure: addressing environmental concerns by monitoring local biodiversity and use as indicator for ecosystem degradation; 2) managers' perception of economic benefits of environmental practices : reinforcing image of environmentally responsible company, committed to sustainable management and the preservation of native forests	43 new species of fauna found; 124 new species of flora; no competition between eucalyptus and native; no loss of biodiversity identified in eucalyptus plantations areas
Watershed Program	Aracruz, U.S. Dept. of Agriculture, Australian National University	Stakeholder pressure: addressing environmental concerns by monitoring the eucalyptus tree and how it interacts with the Atlantic Forest	Reports show there is a balance between eucalyptus plantations and the native forest reserves
Project Cereais (Wildlife Preservation Center)	Aracruz, Federal Environmental Agency (IBAMA) and 16 Aracruz service suppliers	1) Stakeholder pressure: addressing environmental concerns by preserving the local wildlife; 2) Managers' environmental values: wildlife preservation	35.705 out of 45.617 wild animals were released since 1993
Cabloco Bernardo Project	Aracruz	Managers' social and environmental values: to meet basic local needs (e.g. water)	2 municipalities in Espirito Santo and communities near the paper mill benefited

Summary

As discussed earlier, Aracruz has responded to stakeholder pressure by creating programs that address environmental and social concerns. Examples of these initiatives include the Biodiversity Monitoring and the Watershed projects, the Cerais program, the Indigenous Community project and the Forestry Partners program. Managers' environmental and social values also played a role in Aracruz's decisions to undertake CSR practices. The Caboclo Bernardo program was created to provide water to local communities. The Formar project was developed to improve education in rural Espirito Santo, and the University for All program emerged out of a need to prepare students for college. Aracruz's managers recognize that in addition to education and jobs, communities need better places to live.

The Vila do Riacho/Barra do Riacho project provides financial assistance to infrastructure projects in nearby communities. The Fiberline C project helps to improve the health system in Espirito Santo by donating ambulances and computers to hospitals. Also, managers' perceptions of the economic benefits of CSR initiatives has affected the company's decision to undertake environmental and social programs. The Formar and University for All projects are good examples. Through these programs, the company has greater access to skilled and educated workers. Furthermore, the environmental projects undertaken by Aracruz help to enhance the company's image, by showing the company's commitment to improving the environment. A positive reputation differentiates the company from its competitors, increasing Aracruz's competitive advantage.

Comparing the Two Companies

There is a misconception that if two companies in the same sector produce the same goods or have adopted CSR programs at an early stage of their operations, their CSR practices are similar. In fact, only a small number of the managers in Aracruz and Riocell consider the CSR practices between the two companies significantly different. For instance, Aracruz has invested more extensively in social programs than Riocell; environmental initiatives were not found to be significantly different between these two companies. Data regarding the companies' CSR practices, besides their annual reports and companies' newsletter are rare, which has been my main motivation for investigating the topic. By examining the companies' annual reports, by reading articles on CSR, speaking with representatives of local NGOs, and by communicating with managers of these two paper mills, I discovered two factors that may explain some of the variations in the CSR practices of Aracruz and Riocell. The first is *company size*. The second is *political and economic context* of the regions where the paper factories operate. These factors are not mutually exclusive, and may overlap.

Company size

In general, bigger companies tend to invest more in CSR because they are more visible and more prone to public scrutiny. This is the case of Aracruz and Riocell – Aracruz produces 2 million tons of pulp and paper/year, while Riocell produces 400,000 tons/year. Also, larger companies that enjoy large economies of scale and produce higher levels of economic profits seem more likely to commit to CSR practices than smaller firms (Cottrill, 1990). The Competitiveness Report of Brazilian Industry⁷⁹ shows that motivations for firms to undertake environmental practices depend on the size of the company. While 41% of small firms surveyed did not perceive any gain through investing in environmental practices, only 4.4% of the biggest firms perceive this to be the case (Cappellin and Giuliani, 2002). Managers of Aracruz explain that the public tends to demand more from larger companies because the population perceives these corporations to be more profitable and to cause more environmental and social impacts than smaller firms.

⁷⁹ The Study was conducted in 2000 by the Brazilian Development Bank (BNDES) and the Brazilian Agency for Small Business Development (SEBRAE).

“Aracruz made millions of dollars last year,” community members argue. “A little donation is like a drop in the ocean compared to the company’s profits,” local residents add. Here is the response of Ricardo Mastroti, Aracruz’s manager⁸⁰: “sure, we profit millions of dollars, we are a big company, we must stay competitive.” The manager explains that if the company does not show results and does not boost pulp exports and increase revenues, shareholders will stop investing, and Aracruz will not be able to produce and sell its products. “The community will also lose because we might have to close operations,” the manager argues. “Here is how communities may lose”, Mastroti continues: “if the factory closes, there is no profit, and no money to invest in social and environmental programs.”

The above statements raise important questions. If it can be inferred that in general, larger firms are more likely to adopt CSR practices than small firms, does it mean that the Brazilian society will increasingly hold small and medium size firms less accountable for their environmental and social impacts? Also, does it mean that the Brazilian government will demand more from big companies and tighten environmental regulations? One policy implication concerns a shift in responsibilities from the local government to corporations. For instance, the local government may create policies that require large companies to invest in community development (job generation, education, health and basic infrastructure projects) and environmental improvement as conditions to relocate. In fact, the local government in the state of Bahia requires corporations to invest in social programs as a condition to start operating⁸¹.

Economic and Political Context

Economic and political contexts also explain the variations in the CSR practices of Aracruz and Riocell and why these two companies respond differently to different stakeholder pressure. A study entitled “Economic Integration, Poverty and Regional Inequality in Brazil” reports Rio Grande do Sul with lowest poverty gap in Brazil⁸². Although Espirito

⁸⁰ Mastroti, R. Interview by Author. Telephone (June, 2004).

⁸¹ Borges, R. Interview by Author. Telephone (July 2004).

⁸² Ferreira Filho, J. et al. [2004]. “Economic Integration, Poverty and Regional Inequality in Brazil.” Sao Paulo University. Sao Paulo, Brazil.

Santo does not show the highest poverty levels among Brazilian states, it has a higher regional poverty gap compared to Rio Grande do Sul⁸³. In the state of Espirito Santo, social inequalities are greater than in the Rio Grande do Sul. Thus, the needs of the population in Espirito Santo are also greater. The *economic context* of the two states produces two different views about the role of the local government: able to meet local needs and lacking the resources to meet public demands. These different views lead to variations in the CSR practices. For example, in Espirito Santo, the social programs adopted by Aracruz are a response to local demands that the local government is unable to meet.

“When the local government is unable to provide public goods, the population demands from businesses,” explains Ricardo Mastroti, Aracruz’s manager. “The external pressure is proportional to the financial situation of the local government,” the manager argues. “It is not surprising that Aracruz and Riocell have different CSR practices; they are located in different states, with distinct political and economic realities, where the needs of citizens are significantly different,” he continues. “In the Espirito Santo state, especially in rural areas, the population is poorer than in Rio Grande do Sul, and the state has no money to invest in social programs,” Mastroti reiterates. “Here, community requests range from new ambulances for the local hospital to financial help for urgent health care,” the manager adds. “That is not to say that we deny that our role is to improve the livelihoods of low-income communities; we are glad we are able to help,” he explains.

Another possible explanation for why the CSR practices of Aracruz and Riocell vary concerns *political context*. For instance, in the Espirito Santo state, where Aracruz operates, there is a longer tradition of social and political conflicts, compared to the Southern state, Rio Grande do Sul, where Riocell is located. Most of the conflicts that arose between local communities and Aracruz are related to the siting of the company and the environmental and social impacts of its operations. Opponents argue that the paper mill in Espirito Santo was built in land that belonged to indigenous groups. Studies estimate that approximately

⁸³ The study shows that the regional average poverty gap in Rio Grande do Sul is 0.073; while in Espirito Santo it is 0.144. As the number increases, the average poverty gap gets bigger.

7,000 families had to relocate⁸⁴. Local families either migrated to other rural regions, or to slums in urban areas.

It is surprising that although the percentage of devastation of the native forest is similar in both states – 5.4% in Rio Grande do Sul and 5.5 % in Espirito Santo – resistance to eucalyptus plantations is stronger in Espirito Santo than in the Rio Grande do Sul state. “People in Espirito Santo associate the eucalyptus tree with the siting of Aracruz in this region,” explains Sebastiao Pinheiro, a Forest Engineer⁸⁵. “In the South the situation is different because the public does not perceive the eucalyptus as causing the destruction of the native forest,” Pinheiro adds. “When Riocell was built in Rio Grande do Sul, the eucalyptus tree was already here and considered part of the Southern culture,” he explains. The eucalyptus is an exotic tree, brought to Brazil from Australia in the late 1800s, replacing native vegetation. Some argue that large plots of land are necessary for eucalyptus cultivation, which turns the practice into a monoculture and prevents small farmers from utilizing land for crops, thereby removing the opportunity to earn a living. The Landless Movement in Brazil awarded the Brazilian NGO, Rede Alerta contra o Deserto Verde, the “Fight for Land” prize in recognition for its efforts to increase awareness about the eucalyptus plantations in the Espirito Santo region. The NGO produced a documentary showing the environmental and social impacts of the activity⁸⁶.

Both Aracruz and Riocell utilize large extensions of land for eucalyptus plantations, the main raw material for pulp and paper production. Aracruz’s eucalyptus plantations increased from 25 to 35 m³/hectare/year between 1995 and 1991⁸⁷ in the state of Espirito Santo. In 1967, with the support of its business partner, the influential consulting firm ECOTEC, Aracruz was able to persuade the federal government to develop a law that provided fiscal incentives for forestation projects. The consulting company convinced government officials in the state of Espirito Santo to promote and support eucalyptus plantations. In 1974, the state government approved a forestation program, and 80,000 hectares of land were planted with eucalyptus. In the mid 1980s, the public opinion in Espirito Santo started to pressure the

⁸⁴ Carrere, R. (1992).

⁸⁵ Pinheiro, S. Interview by author (June 2003).

⁸⁶ Available at: www.fase.org.br

⁸⁷ Carrere, R. et al. (1992).

state government to prevent Aracruz from acquiring more land. Aracruz developed two strategies to increase its eucalyptus plantations. First, the company started to buy land in the neighboring state of Bahia. Second, the company helped to develop the *Fomento Florestal* Program, promoting eucalyptus plantations in private properties through agreements with local farmers.

Furthermore, given the political context of the Espirito Santo state, it has been crucial for Aracruz to maintain good relations with the local government and local communities. For instance, permits for infrastructure projects – construction of a new paper factory, ports, and roads – are granted by the state environmental protection agency. In addition, Aracruz is required to organize public meetings to discuss social and environmental impacts of proposed expansion projects. Conflicts with the local government and communities may delay the expansion of Aracruz’s business operations, and may prompt the government to tighten environmental regulations, as in 2001, when new state laws restricted eucalyptus plantations in Espirito Santo. Also, improving relations with the local government and communities has been important to Riocell’s survival, a company that failed to address community concerns in the early 1970s, and had to be closed down by the local government.

CONCLUSIONS

The purpose of selecting these two cases was to better understand the CSR practices of Aracruz and Riocell, their motivations for adopting CSR programs, and explain why their CSR initiatives vary. Although Aracruz and Riocell have undertaken different CSR programs, and Aracruz has invested more extensively in social programs, both companies share many of the same motivations for adopting CSR practices – stakeholder pressure, manager’s perceptions of the economic benefits of CSR, and managers’ social and environmental values. These two illustrative examples reveal that company size and economic and political context explain the variations in the companies’ CSR practices. In several CSR programs, managers’ perception of the economic benefits of CSR was the main motivator and most cited as the reason for both companies to certify to FSC and ISO 14001. Managers believe

certification schemes such as the FSC and the ISO 14001 increase the companies' competitive advantage. Managers' social values played an important role in Riocell's decision to adopt Education programs such as the Cellulose and Pulp Training course, which prepares workers for the paper sector. The University for All program helps students to pursue their college degrees. Stakeholder pressure explains why Riocell adopted the Air Quality Monitoring project. Community pressure also played a role in Aracruz's decision to undertake environmental programs such as Biodiversity Monitoring, the Watershed project, and the Wildlife preservation (Cereais) program.

Responses of managers of Aracruz and Riocell and local NGOs reveal that variations in CSR practices in both factories depend on the size of the company. Interviewees explain that the public tends to demand more from larger companies because the population perceives these corporations as causing more environmental and social impacts than smaller firms in general, and because the public tends to demand more from profitable companies. The above observations concerning company size raise important questions. First, in countries such as Brazil, where corporations are more likely to undertake CSR practices⁸⁸, what does it mean for the future of CSR to focus on the environmental and social initiatives of large companies? Does it mean that the general public in Brazil will hold small and medium size firms less accountable for their environmental and social impacts? Could one of the implications be that the Brazilian government may increasingly demand more from corporations, and tighten environmental regulations on these companies? At the same time, contribution of researchers, scholars and professionals in the CSR field is crucial to encourage small and medium size firms to adopt CSR initiatives. The data may encourage policy makers to develop a system that rewards environmental and social practices, instead of punishing unsustainable practices.

Given the geographic location of the two paper factories, economic and political aspects are present in all of the cases as the main explanations for why these two companies have responded differently to different circumstances, and why their CSR practices vary. The two stories reveal that Aracruz has concentrated its CSR efforts on the areas in which the company has been under most criticism – the environmental and social impacts of

⁸⁸ BNDES/SEBRAE 2000 Survey.

eucalyptus plantations. At the same time, Riocell has responded to local pressures by investing in environmental technology to control air pollution and odor – two major environmental issues Riocell had faced at early stages of its operations. Managers in Aracruz and Riocell, as well as local NGOs explain that the different political and socio-economic aspects of Espirito Santo (where Aracruz is located) and Rio Grande do Sul (where Riocell is located) produce different community demands. For instance, Espirito Santo is a poorer state compared to Rio Grande do Sul, and it has a longer history of environmental and social conflicts as a result of industrial operations; therefore, the demands of communities are greater.

The economic context of the two Brazilian states produce two different views of the local government: in Espirito Santo (Aracruz) the local government is often perceived as lacking the financial resources to meet local needs, while in Rio Grande do Sul (Riocell), the local government is perceived as having sufficient resources to provide public goods. These different perceptions of the local economy produce different outcomes concerning CSR practices. This may explain why in some cases, Aracruz has invested extensively in poverty reduction in rural Espirito Santo through job generation and education programs. In other instances, managers' perceptions of the local economy has led Riocell to invest less extensively in health and education programs because in the managers' view, the local government is able to meet local needs.

Moreover, managers in both companies believe that the role of the company versus the local government is often misunderstood and reversed. Local communities often lack information about the financial status of governments, forcing them to pressure large companies. On the other hand, company taxes that should be allocated to health and education, job generation, housing and infrastructure projects are often invested in other sectors of the economy by the local government.

Conflicting views about the role of the local government in society and about the views of CSR – in the U.S., compliance with regulations is assumed as an obligation⁸⁹, while for Brazilian companies such as Aracruz and Riocell meeting regulations is also viewed as part of

⁸⁹ Savitz, A. Interview by author (June 9, 2004).

the CSR agenda⁹⁰ - have numerous implications as the Aracruz and Riocell stories show. First, if the definitions and practices of CSR are company specific, and are left to the discretion of top managers, how is it possible to develop and implement a standardized system of CSR? Second, if CSR practices were to expand among companies and across nations, wouldn't be appropriate to have a system that rewards compliance with international CSR standards?

The most important lesson learned about these two case studies concerns CSR standards. At the same time that CSR guidelines are needed to eliminate some of the imbalances in CSR practices across companies, having a more standardized system to guide companies to practice CSR will create implementation problems at the local level. As discussed earlier, one of the main explanations for the variations in CSR practices in Aracruz and Riocell concerns regional political and economic context. Thus, companies respond differently to different community demands. If CSR standards are developed, it may interfere with companies' practices, currently tailored to specific needs. A more standardized system of CSR has an important implication for mergers: the question of which CSR practices the company should adopt, and how the merge will affect the development, implementation and monitoring of CSR programs. After all, companies recognize that the success of their businesses depends on fostering self-sufficient and healthy communities.

⁹⁰ Interviews conducted with several managers of these two companies (2003); follow-up interviews (2004).

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