FIBRIA

Case Study: Cultivating Shared Value in Brazil's Forestry Sector

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The world leader in eucalyptus pulp production, Fibria strives to meet - in a sustainable manner - the growing global demand for forestry products. Its annual pulp production capacity of 5.3 million tons is spread across industrial units located in Aracruz (Espírito Santo), Jacareí (São Paulo) and Três Lagoas (Mato Grosso do Sul), as well as in Eunápolis (Bahia), where it operates Veracel in a joint operation with Stora Enso. Fibria has approximately 1 million hectares of forest, including 633,000 hectares of planted forests, 364,000 hectares earmarked for environmental preservation and conservation, and 59,000 hectares allocated for other uses. The pulp produced by Fibria is exported to more than 40 countries. In May 2015, Fibria announced the expansion of its Três Lagoas unit, which will receive a new line with annual pulp production capacity of 1.95 million tons and is slated for startup in the third quarter of 2017.

Learn more at www.fibria.com.br

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Fibria and shared value

"I was a thief," says Cláudio Olímpio. "I would steal wood to produce charcoal. I did it because it was a means of survival, but it was an illegal means of survival." In 2009, wood theft cost Fibria, Brazil's largest producer of eucalyptus pulp, nearly US$ 20 million and created tensions with surrounding communities. "Fibria was scared of coming here," says Olímpio. "They built a road so that they wouldn't have to go through the community."

Fibria realized that people were turning to wood theft in the absence of alternative economic opportunities. The company asked community members what could be done to change the situation. According to Olímpio, "we said, 'bring back to us what our grandparents worked on: agriculture.'" In response, Fibria created the Rural Land Development Program (PDRT) to help develop local farmer associations. Because of PDRT, "we left charcoal and started working on agriculture… Now we have this partnership between the company and the community," says Olímpio. "We are working together. We help them and they help us."

By 2016, Fibria's PDRT program was working in over 50 communities and wood theft had declined by 90 percent from 2009 levels. PDRT is an example of Fibria recognizing the link between business challenges and the social and environmental issues that surround the company's operations. By addressing the root cause of wood theft—a lack of alternative economic opportunities—Fibria made a meaningful difference in the lives of community members, while enhancing its own competitiveness and profitability.

Fibria's history

Fibria's origins date back to the 1968 founding of Aracruz Celulose,[1] one of the pioneers of the Brazilian pulp industry. While there were few pulp producers in Brazil at the time, the country offered several natural advantages for the industry, including one of the world's most favorable climates for growing eucalyptus.[2] In 1978, operations started at Aracruz's first pulp mill in Espírito Santo, and the company soon became one of the lowest-cost producers of wood pulp in the world.[3]

To fuel pulp production, Aracruz acquired vast holdings of land for eucalyptus cultivation, at times putting the company into conflict with indigenous communities, landless workers' movements, and *quilombolas,* the descendants of escaped African slaves who settled in the region. These communities and others often pressured Aracruz through actions—including wood theft, road blockages, land occupation, and forest arson—that negatively impacted company operations.

Fibria was established when Aracruz Celulose and Votorantim Celulose e Papel merged in 2009. The 2009 merger made Fibria the world's leading market eucalyptus pulp producer with five percent of global output.[4] Today, Fibria produces its pulp at mills in four Brazilian states: Três Lagoas, Mato Grosso do Sul; Aracruz, Espírito Santo; Jacareí, São Paulo; and Eunápolis, Bahia, where Veracel, a joint operation with Stora Enso, is located.

Leading up to the merger, social conflict around the municipality of Aracruz put the company's relationship with communities in jeopardy. The new leadership of Fibria wanted to try a different approach. "We saw an opportunity to reimagine the relationship between the pulp industry and Brazilian society," explains Fibria CEO, Marcelo Castelli. The company's chief operating officer, Aires Galhardo, elaborates further. "We decided to take a proactive approach to engaging with communities," says Galhardo, "to openly discuss mutual challenges with an understanding of the crucial link between

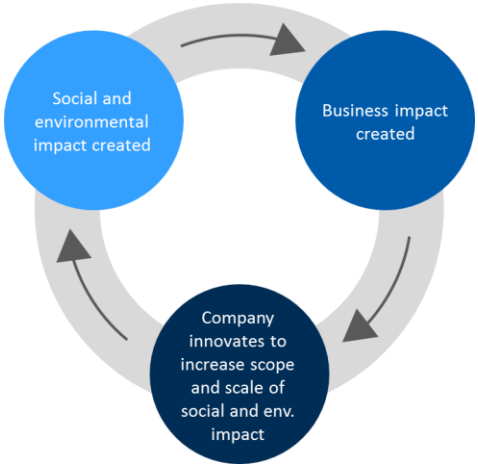
Fibria's success and that of the communities where it operated. Without this shift in social engagement, it would be impossible to have a thriving business."

Fibria's leaders decided that they needed to better integrate the consideration of social and environmental problems into their business strategy. By doing so, Fibria could decrease costs, diminish risks, and develop new sources of revenue. Fibria's Board of Directors played a critical role in this evolution. The Board established a Sustainability Committee to provide expert advice on sustainability matters, including long-term risks related to social and environmental issues. The Board also advocated for Fibria to adhere to a principle of admired profit, or *lucro admirado* in Portuguese. Explains Castelli, "At Fibria, we know we have a fiduciary duty to maximize profit. But we have always wanted to be sure that it would be admired profit. We wanted people to say, 'they deserve to make profit because they are doing it in the right way.'"

Shared value

Fibria's efforts to integrate its social and environmental investments into its business strategy is part of a movement of leading companies around the world that are starting to recognize the link between their financial success and the prosperity of society around them. These companies are introducing "shared value" strategies into their business plans. Harvard Professor Michael Porter and Mark Kramer defined shared value in their 2011 *Harvard Business Review* article "Creating Shared Value." Shared value strategies "enhance the competitiveness of a company while simultaneously advancing the economic, environmental and social conditions in the communities in which it operates."[5] Porter and Kramer point out that by "identifying and expanding the connections between societal and economic progress," companies can create value for both the company and society. At the core of successful shared value strategies is the need to develop a **virtuous cycle** by which the company increases profit by helping to solve a social or environmental problem (Figure 1).

Figure 1. Virtuous cycle



The menu of shared value possibilities is broad, from increasing the prosperity of smallholder farmers by helping them become suppliers, to tackling community health problems in a way that decreases absenteeism. For example, **Anglo Gold Ashanti,** a gold mining company, launched a health project in the communities around its mine in Obuasi, Ghana. Some 2,500 employees were being treated for malaria each month, severely compromising productivity. By partnering with the government and other companies, Anglo Gold Ashanti was able to take a systems-based approach to tackling the problem. The

project decreased malaria cases in Obuasi by over 70 percent and was later scaled to 40 other districts in Ghana. For Anglo Gold Ashanti, the project decreased absenteeism due to malaria by 98 percent and saved the company US$ 600,000 annually.[6]

Another example is **Nespresso**, one of Nestle's fastest growing divisions. A critical element of Nespresso's business model is to provide specialized coffees to its demanding consumers. It is hard to have a dependable supply of specialized coffee, however. Many coffee growers are poor, relatively uneducated, and plant their crops on degraded soils. Nespresso redesigned its policies to to provide critical technical and financial support to coffee farmers. As farmer productivity goes up, their incomes go up and Nespresso has access to more dependable supply of its key raw material.

Shared value at Fibria

Pulp companies face myriad social and environmental challenges. They are frequently the targets of land disputes and are criticized for degrading native vegetation. Conflicts with communities sometimes result in road blockages and land occupations. Low quality transportation infrastructure raises costs, while climate change threatens the productivity of eucalyptus.

To address these challenges, Fibria is building on past successes and seeking new ways to engage with communities. The company is extending its "admired profit" strategy that focused on responsible corporate citizenship to create a more comprehensive shared value strategy that allows it to address social and environmental problems at greater scale. Thousands of families benefit from Fibria's shared value initiatives, and the company is adding millions of dollars to its bottom line.

Fibria is creating shared value through a number of activities and initiatives across its operations. In the following pages, we profile four key initiatives:[i]

1. The Forest Savings Program
2. PDRT: The Rural Land Development Program
3. Local Supplier Development
4. Sustainable Forestry

The Forest Savings Program

Bringing local farmers into Fibria's supply chain

Florisberto José dos Santos and his family used to depend on income from cassava, a low value crop. That all changed in 2004, when the family became part of Fibria's Forest Savings Program, which helps local farmers cultivate eucalyptus for pulp production. "I stopped planting cassava," says Santos. "Thanks to eucalyptus, today I have a house and I have expanded my property."[7]

Santos' story is not unique. Launched in 1990 in an effort to diversify Fibria's access to eucalyptus while creating deeper connections to local farmers, Fibria's Forest Savings Program has integrated thousands

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[i] In addition to the programs profiled here, Fibria is creating shared value through local government capacity building.

of farmers into a core element of the Fibria's business—wood production. Landholders increase their incomes by providing the company with wood, meaning that Fibria's success and growth lead to the increased prosperity of its neighboring communities.

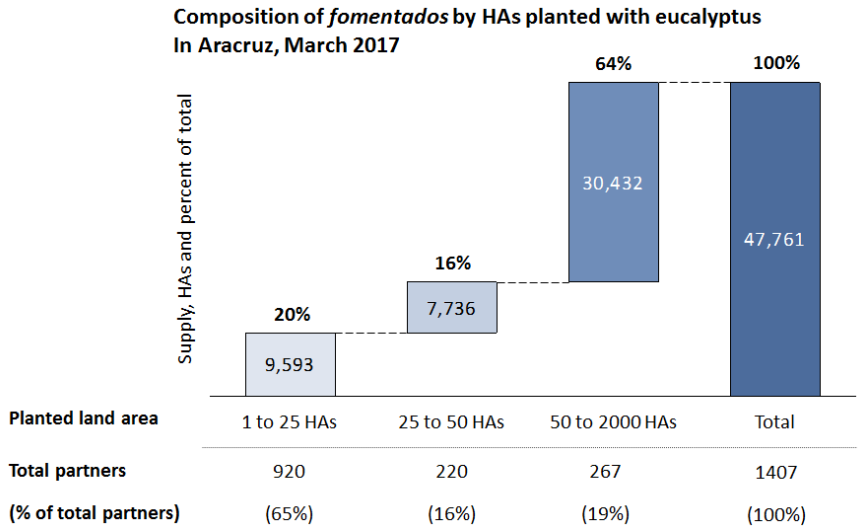
As Fibria's operations have grown, the program has come to represent an important alternative source of eucalyptus for pulp production. Carlos Nassur, Forestry General Manager at the Aracruz unit, says, "Local farmers are part of our supply chain. We cannot succeed without them." While the program began with the objective of meeting five percent of the Aracruz mill's timber needs,[8] its contribution has grown to an average of 20 percent.[9] In 2016, Fibria saved over R$ 100 million (roughly US$30 million) by integrating local farmers into its supply chain.

Developing *fomentados*

The Forest Savings Program supports nearly 2000 farmers.[10] Program participants, known as *"fomentados,"* receive support in the form of seedlings, training, and technical assistance to ensure they are maximizinh yields while applying sustainable forest management practices. A wood purchase guarantee commits Fibria to buying the eucalyptus when it matures.

The program and the long-term contracts it offers farmers increase overall income and income stability for many *fomentados*. Farmers in the Aracruz region earn roughly R$ 470 per hectare raising cattle, but they can make over R$ 1,200 per hectare in a typical year growing eucalyptus. While some crops, such as coffee, are more profitable than eucalyptus in some years,[ii] eucalyptus is less sensitive to changing climactic conditions, less labor intensive, and has lower price volatility.[11] Combined with Fibria's guaranteed purchase agreements, eucalyptus can be a more secure source of income. In Aracruz, 65 percent of *fomentados* grow 1 to 25 hectares of eucalyptus, while an additional 16 percent cultivate 25 to 50 hectares (Figure 2).

Figure 2. Production by *fomentado* farm size[12]



[ii] For example, coffee averages R$3,450 per hectare.

In addition to offering support for *fomentados*, the Forest Savings Program plays an important role in land restoration. In the state of Espírito Santo, *fomentados* are limited by law to planting no more than 40 percent of their land with eucalyptus .[13] Most use their remaining land for other productive activities. Fibria insists that *fomentados* comply with the Brazilian Forest Code on all their property, and provides technical assistance on sustainable land management. By fostering a sustainable approach to land management, the company amplifies its positive environmental impact. Furthermore, by helping farmers generate a livable income and encouraging farmers to grow eucalyptus only on land that is already under cultivation, Fibria reduces the pressure to clear native forests.

Capturing business value from the Forest Savings Program

Bringing local farmers into Fibria's supply chain has been good for Fibria's business. Most recently, the greatest source of business value has been the decrease in Fibria's wood costs. In 2016, drought conditions forced the Aracruz mill to seek external sources of eucalyptus. *Fomentado* plantations filled part of the shortfall. With the cost of acquiring and transporting wood from the Minas Gerais spot market almost 1.5 times the cost of using *fomentado* wood, the Forest Savings Program saved the company over US$30 million in 2016. Fibria's commitment to work with smallholders, notwithstanding the higher levels of technical support needed, accounted for more than US$ 6 million of savings. "With climate change, increased volatility is the new normal," says Nassur, Forestry General Manager. "We need to be prepared. Working closely with *fomentados* is an important part of that preparation."

Fibria's forestry team, realizing the significant cost savings of the Forest Savings Program and the positive impact it has on local farmers, plans to expand the initiative. They are unsure, however, whether they should make a specific effort to expand their work with small farms. One group notes that working with a greater number of small farms will be less cost-efficient. "Smaller farms require more assistance and support, and they are less productive," one member of the group notes. "We don't see a clear business case." The other group, however, disagrees. Jairo Dal'Col, the Harvest and Forest Savings Manager, says "Given the high potential for savings, we should consider all farmers who are willing to participate. Over one third of the wood volume produced by *fomentados* comes from farmers cultivating between 1 and 50 hectares of eucalyptus. If we were able to engage the right partners," he adds, "we could potentially reach more farmers, increase their yields, and even market our pulp as a product of smallholder families."

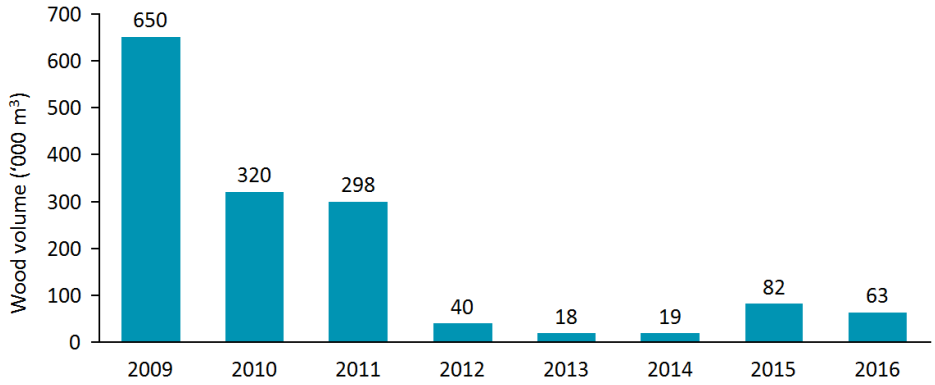
PDRT: The Rural Land Development Program

A dire situation

In 2009, approximately 650,000 m^3 of eucalyptus, representing nearly US$ 20 million were stolen from Fibria-owned or -managed land around the Aracruz unit. Community unrest, often pre-dating the company's founding, sometimes led to arson and road blockages. To protect against these disruptions, Fibria spent millions of dollars guarding its forests and operations.

By 2013, the situation had changed dramatically. Wood theft in the region decreased by over 90 percent (Figure 3) and disruptions caused by fires and road blockages fell sharply. Many attribute this turnaround to PDRT. By helping communities generate alternative economic activities, the program discourages illicit activities like wood theft and fosters improved relationships with the community.

Figure 3. Wood theft by volume, Aracruz unit, 2009-2016



The PDRT program is based on creating and strengthening agricultural associations. Fibria provides tools, inputs, and technical assistance to improve communities' ability to produce and commercialize a wide range of products, from cheese to vegetables.

PDRT currently includes more than 56 communities and 5,000 families across Fibria's three primary mill sites. Vanderlea Couto Siqueira Paixão, the president of her community's PDRT association says, "Before the association first started, we had trouble commercializing our products. After we built the association, with Fibria's help, we were able to gain access to new neighboring markets and grow incomes for members in the association." She continues, "One member, who was very humble and had 8 children, relied on subsistence farming before she joined the association, and had a very small income. By becoming a member of the association, she sold R$ 6,000 worth of fruit to the Food Acquisition Program (PAA). With that she was able to change her life." Vanderlea's story is in line with the outcomes experienced by many PDRT participants: The average family in the program sees its income increase by R$3,750-4,700 per month, equivalent to 4-5 times the minimum wage.[iii]

PDRT makes the creation of local institutional capital a central part of the program. Fibria consistently emphasizes the importance of helping agricultural associations develop the ability to manage their own affairs, with the intention that associations will operate independently of Fibria support after five years. Luis Claudio Bona, an external consultant for PDRT explains, "Ideally, in the long-term, we can gradually reduce investments in the longest-standing associations." Bona noted that this allows Fibria to direct PDRT resources to associations that are just starting in the program, while providing technical follow-up support for the network of all participating associations. PDRT has also yielded benefits for Fibria's relationships with government officials and customers, who see PDRT as an example of Fibria's effective approach to community engagement. "Fibria has responded to their social challenges, like wood theft, with new forms of engagement," reports one of Fibria's customers. "That stands out. They are proactively, instead of reactively, managing their risks."

Focusing on priority communities

PDRT improves the lives of thousands of people and, in doing so, saves Fibria millions of Brazilian Reais. To maximize the link between the social and business impact of the program, Fibria developed a

[iii] As of January 1, 2017, Brazil's minimum wage was R$937 per month.

prioritization matrix that focuses the company's efforts among the thousands of communities surrounding its forestry and industrial operations. Fibria surveyed the communities and used the results to consider three prioritization criteria:

1. Social and economic vulnerability of a community
2. Impact of Fibria's operations on a community
3. Regional and local importance for Fibria

Knowing that deeply impoverished populations often have no other source of income than stealing wood and selling it on the black market, Fibria targeted communities that scored high on a combination of the three criteria. This approach increased the likelihood that Fibria's social investments would have a positive impact on the company's bottom line. Indeed, approximately 80 percent of participating communities in PDRT were engaged in wood theft when they were selected for PDRT. Giordano Automare, Sustainability Manager for the Aracruz mill site, says, "With these three dimensions, we establish our high priority communities. When we work together with them, they start to migrate from activities like wood theft and illegal charcoal production to agriculture."

Pushing further

Fibria is considering ways in which to build on PDRT's success. The company is tracking highly engaged families and exploring ways to encourage them to become informal technicians themselves, sharing best practices and resources with those not in the PDRT program. Fibria is also exploring how to bring indigenous communities and *quilombolas* into the program.

One dilemma the company faces is how to best deploy PDRT at its mill sites in Jacareí and Três Lagoas. Maria Luiza de Oliveira Pinto e Paiva, Fibria's Director of Sustainability, Corporate Relations, and Communications, believes that the PDRT program near these mill sites should be different than in Aracruz because the contexts and risks in each area are different. She notes, for example, that given negligible wood theft in both regions, it is difficult to make a business case for PDRT based on reductions in wood theft alone, as in Aracruz. In Jacareí and Três Lagoas, Pinto e Paiva wonders if Fibria should focus more on urban development.

Fausto Camargo, Fibria's Sustainability General Manager, on the other hand, believes that Fibria should continue to implement the current PDRT model in Jacareí and Três Lagoas. Camargo argues that PDRT delivers important—but difficult to measure—intangible returns in Jacarei and Tres Lagoas. PDRT, he says, prevents future social conflicts. The program is a vital part of Fibria's Forest Stewardship Council (FSC) certification and it builds good will for Fibria in its operating environment.

Local supplier development

A lack of local suppliers

In 1990, few local firms were capable of meeting Aracruz Celulose's wide-ranging supply needs. The company was forced to seek suppliers outside its home state of Espírito Santo for approximately 80 percent of procurement. A malfunctioning boiler, for example, could shut down mill operations for 12 days before skilled repairmen could arrive from Paraná, which is about 1,500 kilometers from Aracruz.[14] "We had many challenges associated with the lack of suppliers in Aracruz," says Paulo Edson, Fibria's

Supply Chain Manager. Delays, transport costs, and higher inventory needs given the greater distance from suppliers could cost the company millions of Brazilian Reais per year.

In 1995, Aracruz launched a pilot initiative called *Parceria Capixaba* focused on developing local suppliers. Participating companies received training in financial and administrative management and strategic planning. To increase the impact of the program while sharing costs and training responsibilities, Aracruz decided to partner with Instituto de Euvaldo Lodi – Espírito Santo (IEL-ES), an initiative of Brazil's National Confederation of Industry. Aracruz and IEL-ES mobilized 12 major companies in the region, including Vale and Cesan, to build a more robust local supplier base. In 1997, the partnership was launched as the *Programa de Desenvolvimento de Fornecedores,* or "Prodfor."[15]

Building a local industrial base

Twenty years later, Prodfor has had a transformative impact. Twenty-four sponsoring partners have signed on and Prodfor has certified 650 local companies, of which 232 are Fibria suppliers. Today, local suppliers account for 70 percent of procurement for the Aracruz unit, producing significant cost savings for the company while generating employment and income growth in the region.[16]

One source of savings comes from reducing the potential for stoppage time. Consider the case of a conveyor belt breakdown that halts production. When no repairmen were available locally, such an interruption would stop mill operations for ten days. With a local supplier nearby, the most recent stoppage lasted only five days, avoiding millions of Brazilian Reias in lost pulp production. Another source of savings is the reduction in maintenance, repair, and operations (MRO) inventory costs when Fibria works with suppliers who have local distribution facilities. By working with NORPEM, an Aracruz-based logistics company, instead of with a more remote supplier, Fibria was able to reduce its inventory costs by approximately R$2 million over a five-year period. Reduced transportation costs are also significant. With local suppliers, Fibria is able to reduce its MRO freight costs by 3 percent, which saves the company nearly R$4 million annually.[17]

Many industrial companies, including Brazilian forestry companies, have participated or invested in supplier development initiatives. However, Fibria is notable for the close partnerships it has developed with at least 20 local strategic suppliers. Fibria and these suppliers have long-standing relationships that enable them to collaborate and innovate. As an illustration, when margins were squeezed during a time of low pulp prices, Wellington Giacomin, Fibria's Logistics and Supply Chain Officer, and his team convened strategic suppliers and delivered a tough message. "We told them Fibria, along with the rest of the sector, was in a difficult place financially. Because we see them as our partners, we approached them to see if we could work together to find a solution." In partnership with Fibria, the suppliers identified ways to reduce costs. According to Giacomin, "We innovated together. They reduced their own costs and were able to pass along some of the savings to us."

Fibria's success in developing suppliers is exemplified by the story of Imetame. In 1980, a former pipe-fitter at the Aracruz mill named Etore Selvatici Cavallieri launched his boiler repair company, Imetame. The new company went through the *Parceria Capixaba* program and as it grew, received additional training and support from Aracruz Celulose and then Fibria. In the early years, when Etore was still learning the industry and work, Aracruz accounted for 80 to 90 percent of Imetame's contracts. Today, Fibria accounts for less than half of Imetame's business. Imetame has increased its technical proficiency, as well. Today, the company not only repairs boilers for drying pulp, but also assembles them for the entire sector. Etore credits Fibria for his company's success, saying it "would not have been possible had

Fibria not constantly pushed us to improve." Imetame currently generates R$400 million in revenue annually and employs 3,600 people, making an important contribution to the local economy.

Generating economic development

Fibria's local supplier development activities not only create value for the company but also have a positive benefit for communities in the region. For example, the 650 companies certified through Prodfor have created nearly 58,000 jobs,[18] which have an estimated average income of R$ 3,000 per month, approximately 50 percent greater than the average income in Aracruz.[19] Companies in other states or countries would have supplied many of these services were it not for the Prodfor program. On average, these locally-owned companies grew their sales 78 percent in the first year after receiving their Prodfor certification.[20]

Inspired by the success of Prodfor, Fibria launched *Programa de Qualificação de Fornecedores (PQF) Avançado* to develop local suppliers for its new mills in Três Lagoas. Fibria partnered with the National Confederation of Industry in Três Lagoas as well. PQF Avançado is smaller than Prodfor with just two other corporate sponsors. PQF Avançado has certified 166 suppliers, of which 126 are currently Fibria suppliers.

Looking ahead

As Fibria's executive team considers how to maximize the social, environmental, and business impact of its supplier training program, a number of critical questions have arisen . Pinto e Paiva argues that Fibria can set goals and develop strategies to include underrepresented groups, such as women, indigenous people, or *quilombolas* in its supplier training program. "We can strengthen our supply chain and at the same time create more inclusive growth in Aracruz," says Pinto e Paiva.

Executives also ponder why there are such significant differences between the level of local procurement in Aracruz and Três Lagoas, where local suppliers account for less than 50 percent of procurement. Some leaders point out that Três Lagoas does not have the same entrepreneurial and industrial culture as Aracruz and that it is unrealistic for the company to expect the same results. They also contend that Três Lagoas has few companies that could share the training cost burden with Fibria. Wellington Giacomin, the Logistics and Supply Chain Officer, argues that Fibria needs to be more ambitious. "Aracruz was in the same position more than three decades ago. If we develop a local supplier base, more businesses will move to Três Lagoas. I think we need to set our targets high. I see no reason that we can't have 80 percent of our suppliers be local companies within ten years," says Giacomin.

Sustainable Forestry

An ecosystem under threat

In the early 1500s, the Atlantic Forest of Southeast Brazil covered approximately 133 million hectares, including in the regions around two of Fibria's three mills. Today, after centuries of clearing for livestock pastures, smallholder and commercial farms, and urban development, less than 15 percent of the original forest remains. Hundreds of native species are currently vulnerable or endangered. Meanwhile, climate change brings more volatile weather patterns, impacting agricultural productivity and putting

new stresses on native ecosystems. Home to eight percent of the world's plants, this critical biome is under threat and the impoverished traditional communities who depend on the forest are also vulnerable.

Despite strengthened regulatory protections, forest and biodiversity loss is still occurring as a result of the weak enforcement of existing laws. Illegal logging and land conversion for cattle ranching, agriculture, and urban development are all drivers of continued environmental degradation. [21] In this context, critics say the forestry industry is another driver of local environmental degradation. Some local government authorities and community members accuse the industry of excessive water consumption in a time of deepening drought, despite significant industry efforts to reduce water usage. Meanwhile, customers, particularly in North America and Europe, consistently pressure the industry to reduce its environmental footprint.

Managing the environmental footprint

Fibria reduces its environmental footprint in two ways: through sustainable forest management practices and through advances in tree breeding technology. One example of Fibria's approach to sustainable forest management is the creation of "mosaics" of eucalyptus plantations interspersed with native forests. Mosaics, unlike a random arrangement of eucalyptus clones and native species, help create ecosystem synergies. By maintaining contiguous native species areas, or "ecological corridors," biodiversity is protected as wildlife have access to larger habitats. Native forests are placed on hills and along waterways to prevent erosion and protect surface water. Other sustainable forest management practices include the use of conservation techniques in preparing soil, native forest restoration, maintenance of age diversity in eucalyptus plantations to improve water regulation and quality, and the use of integrated pest management.

The other way Fibria limits its environmental impact is through advancements in tree breeding and vegetative propagation technology. Fernando Bertolucci, Fibria's Chief Technology and Innovation Officer, says "By developing and using best-in-class clones that are able to withstand a wider range of climate conditions, our planted forests are better adapted to both current and future climatic conditions. These efforts and other forestry innovations also increase yield, allowing Fibria to make progress toward our goal of producing more wood on less land, with fewer natural resources." Combined, Fibria's breeding program and sustainable forest management practices improve a number of ecosystem services that reduce water utilization, increase carbon sequestration, and protect forests against pests and disease.

Fibria's environmental practices often go beyond the legal requirements. For example, Brazil's Forest Code mandates that at least 20 percent of any property must be conserved for the native forest in the Atlantic Forest region. Fibria exceeds this standard—34.5 percent of its land is native forest.[22] The principal rationale behind this high rate of conservation is the company's commitment to exceed the requirements of FSC Certification and the Programme for the Endorsement of Forest Certification (PEFC). João Augusti says, "We work with FSC and PEFC to continuously raise the bar because this is important for our business. But it's more than that. Protecting the environment and native forests is who we are now. It's become part of our DNA."

The FSC and PEFC certifications are essential to Fibria's business in the North American and European markets. Over 97 percent of Fibria's sales in 2016 were to customers who demanded FSC and/or PEFC certification. Mateus Carmo, Fibria's North America Commercial General Manager, says, "FSC and PEFC

are [essentially required] in Europe and North America… If Fibria loses certification, it would cause a major shift in where we are able to sell. We can add value by going beyond certification and offering something even greater." One Fibria customer echoed this sentiment: "Fibria's sustainable forestry work is very important to us and our partners. I haven't seen this level of work from any other companies."

Fibria's environmental initiatives generate other financial returns. First, improved natural ecosystem services can reduce costs. Control costs for ants, the primary pest for eucalyptus, represent 6 to 25 percent of the investment needed for forest preparation, depending on the region and management regime. Thus, stronger ecosystem services that reduce the need for pest control represent a significant source of cost savings. Second, improved forest management practices, coupled with Fibria's eucalyptus breeding technology, help increase eucalyptus productivity. Fibria aims to increase pulp yields per hectare by over 40 percent between now and 2025. Achieving that level of productivity would reduce the land required for pulp production by a third.

Fibria's commitment to responsible forest management

Fibria's investments in biotechnology and forest management improve both resource management and eucalyptus productivity. While it is difficult to quantify the exact returns, it is clear that Fibria's investments have allowed it to increase market share in a competitive market, reduce costs associated with cultivating eucalyptus, and mitigate risks associated with climate change.

In preparation for an investor meeting, a cross-functional group of Fibria leaders debated how to frame Fibria's sustainable forestry strategy. One group, working in the Fibria Technology Center, contended that the sustainable forestry strategy is primarily a business investment in natural resource management and long-term eucalyptus productivity. "It is about ensuring that our business is successful and that we are being a responsible company," says one member of the team. A second group, focused on sustainable forestry practices, insisted that the sustainable forestry strategy is an example of shared value—it simultaneously generates business and environmental value for Fibria—but the group concedes that many components of the strategy are worthwhile investments based on the business return alone. A third group argued that Fibria's commitment to good environmental practices goes beyond business strategy. "This is who we are now," said Cristiano Oliveira, Fibria's Sustainability Consultant. "Maybe we started our good environmental practices because there were regulations. And it's true that our most important customers are loyal because of the way we manage our forests. But now, I think we would do this at Fibria even if it represented a net cost to the company. We simply believe that this is the right thing to do."

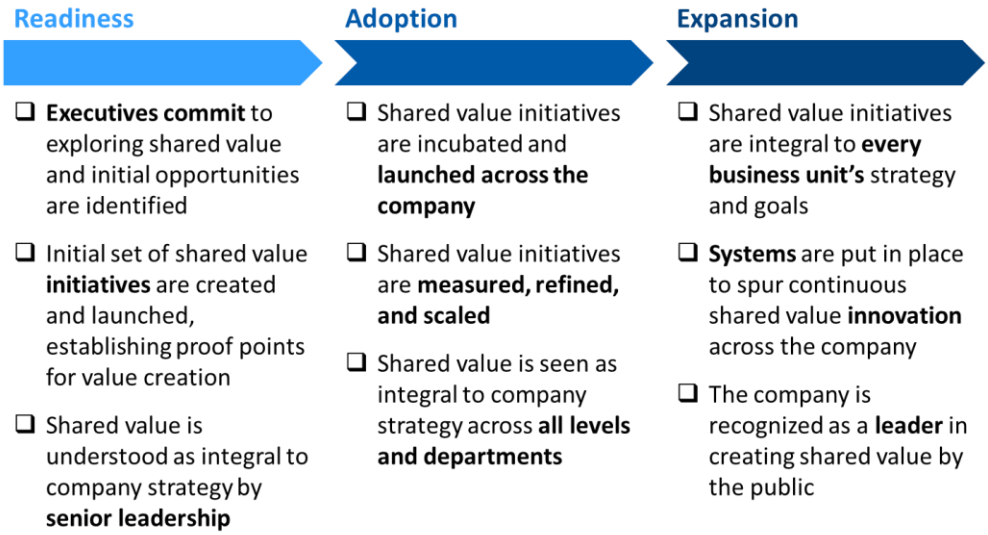
Looking ahead

Deepening shared value creation

Fibria has already demonstrated its ability to create shared value. It is addressing social and environmental problems and, in doing so, increasing the company's profitability. The company's Board of Directors and executives are committed to its approach. Several business units have adopted shared value as a core element of their strategies, and multiple initiatives have reached significant scale and impact. However, Fibria has an opportunity to advance in its shared value journey, going beyond the adoption of shared value through specific initiatives to expanding the practice of shared value

throughout its strategies and activities, while establishing itself as a recognized shared value leader (Figure 4).

Figure 4. The shared value journey



Fibria can consider three specific tactics as it looks to take the next step in its shared value journey:

1) **Focus on strengthening the shared value virtuous cycle, paying close attention to the way that social and environmental improvements can drive business results.** Companies that are committed to shared value have to dedicate themselves to developing a deep understanding of the social and environmental problems that they are trying to help solve. In Fibria's case, the company will never be able to maximize the business and social returns associated with the Forestry Savings Program unless it dedicates itself to understanding the challenges facing smallholders in the Aracruz region. Only then will Fibria be able to design a program that will be compelling to smallholders in the region and maximize the value to both the smallholders and the company.

2) **Invest in deep strategic relationships with partners with complementary capabilities.** Fibria has an opportunity to increase its social, environmental and business impact by developing strategic partnerships. Partners, whether they come from the private sector, public sector, or civil society can expand the reach of existing programs, decrease the required investment, or accelerate impact by incorporating additional technical knowhow. In the case of PDRT, Fibria may be able to find technical partners that could accelerate the development of the farmers' associations or build government partnerships to scale the program further.

3) Work across the industry. Forty percent of global short-fiber pulp is produced in Brazil,[23] with large swaths of land used to produce this volume of pulp. The industry is entering a critical period, when climactic shifts are altering weather patterns, production methods, and resource availability. Fibria has an opportunity to increase its impact by collaborating more extensively with other forest companies in Brazil and around the world. By encouraging the exchange of best practices, encouraging joint investment in cutting edge research, and jointly supporting the development of specialized NGOs, Fibria and other pulp producers can promote practices that

benefit forest companies, residents, and local ecosystems. Coordinating efforts and sharing findings might lead to better conservation methods, more resistant trees that yield higher volumes of pulp, and reduced pressure on the entire forestry industry.

Conclusion

In recent years, Fibria has built on its strong history of "lucro admirado," to create shared value strategies that are helping thousands of impoverished families improve their lives. These strategies have increased Fibria profits by decreasing costs, improving the company's risk management, and sharpening its differentiation among key customers. As Fibria continues its shared value journey, building new cross-sectoral partnerships, and catalyzing more extensive collaboration across the pulp industry, there is an opportunity to offer a powerful model to companies and communities across Brazil. The dominant narrative in Brazil today is that large companies are abusing the trust of Brazilian society, seeking to maximize profit at the expense of society as a whole. Fibria is demonstrating that a different model is possible – that companies can increase profits by helping to solve social and environmental problems. Fibria is already addressing social problems at scale while enhancing its long-term competitiveness. It also has an opportunity to lead a broader transformation in the relationship between business and society for the forestry industry and Brazil.

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