

Veracel Celulose
Conserving the Atlantic rainforest
in Brazil



Overview

Veracel has set aside around half its land – more than 100,000 hectares – for conservation as part of a mosaic landscape approach that combines eucalyptus plantations with restoration of native Atlantic rainforest.

Background

Veracel Celulose, a joint venture between Stora Enso and Fibria, is a state-of-the-art pulp mill and tree plantation in the south of Bahia, Brazil. When its predecessor, Veracruz Florestal, planted its first trees in 1993, less than 7 per cent of the original Atlantic rainforest (Mata Atlântica) remained. During the 1960s and 70s, logging of valuable tree species and the subsequent clearing of the land for cattle grazing rapidly destroyed the area's forests. When Veracel arrived in southern Bahia the landscape was dominated by pasture lands converted from the Atlantic rainforest. As the land had been so heavily modified and degraded, in many areas the original vegetation could no longer regenerate naturally.

More than 97 per cent of Veracel's tree plantations are on lands which had previously been used for cattle grazing – the remainder was mostly used for growing papaya or already planted with eucalyptus.

Veracel carries out careful studies before acquiring any properties and has committed not to convert natural forest or protected areas to plantations. When establishing new plantations, the properties are always checked with the help of aerial photographs or satellite images to ensure that no Atlantic rainforest has been felled within the property since 1994. Veracel also checks whether the property in question is being officially evaluated as a potential future conservation area. The company also applies a number of social conditions: land claimed by indigenous peoples or assigned for land reform is excluded.



Veracel's mosaic landscape approach combines eucalyptus plantations with restoration of native Atlantic rainforest.

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The project

Today Veracel owns around 210,000 hectares of land in the south of Bahia. It has planted close to 92,400 hectares with eucalyptus and more than 100,000 hectares is set aside for conservation. The remaining area consists of infrastructure, such as roads and the nursery, or is available for planting eucalyptus.

In Brazil, a proportion of the land owned (depending on the state) has to be set aside for conservation. Around 30 per cent of Veracel's land consists of legal reserves and permanent preservation areas. In addition to this, Veracel has voluntarily protected some 16 per cent of its property. This large area for conservation is a consequence of Veracel's decision to plant eucalyptus in plateaus, reserving valleys, riversides, steep slopes and other areas with special characteristics for environmental preservation.

This results in a land-use pattern where eucalyptus covers less than half of the total area; the non-planted areas are destined for conservation and regeneration of remnants of the Atlantic rainforest. These areas mainly regenerate naturally, but the most degraded areas are restored through active planting of native Atlantic rainforest species.

Every year Veracel replants some 400 hectares with native tree species. At the end of 2011, it had actively restored over 4,300 hectares of Atlantic rainforest. Veracel also works to protect remnants of the natural forest and connect them through forest corridors. These activities are aligned with national conservation initiatives to protect the main rainforest corridors in Brazil.

Benefits

Environmental

The impacts of plantations on the environment depend on what they replace and how they are managed. Through its unique plantation set-up Veracel has been able to contribute significantly to biodiversity conservation in the region. At the landscape level the plantations have had positive effects by stabilizing land use and reversing gradual forest degradation caused by cattle grazing. They have created conditions for the protection and regeneration of the Atlantic rainforest. The mosaic landscape approach has increased landscape connectivity by building native forest corridors between isolated remnants of the Atlantic rainforest. Satellite and aerial image analyses show that there is more rainforest in the area now than when the first trees were planted in 1993.

Previously, when cattle grazing was the dominant land use in Veracel's current areas, vegetation by riversides and in valleys with watersheds would be illegally cleared to allow cattle to access the water for drinking. This resulted in both poorer water quality as the vegetation protecting the watercourses was removed and the loss of valuable habitats typical around water courses. Under Veracel's land-use model such areas are protected and the riparian forests are being restored.

Cattle grazing, especially on slopes, can also cause erosion. When soils are compacted and heavily degraded, native vegetation is unable to regenerate naturally. Protecting areas such as riversides, valleys and slopes stabilizes the soils and limits erosion.

Another important feature helping to improve biodiversity is the forest corridors connecting the remaining rainforest patches. These green pathways are vital for wildlife as the increased connectivity helps both animal and plant species spread from one area to another and reproduce.

In addition to the biodiversity benefits, protecting and regenerating the Atlantic rainforest creates a significant carbon store. Veracel's positive carbon balance helps limit climate change and reinforces the company's long-term commitment to sustainability.

Social

Protecting and bringing back the original vegetation also has social benefits. Veracel supports income generation projects based on teaching local people how to use native plants and forest resources in a sustainable manner. Examples of such projects include using piacava palm, a locally important and previously over-exploited tree, for handicrafts, and using eucalyptus for building and craftsmanship. This takes the pressure off the remnants of the native forest, where the locals otherwise go looking for wood.

Such initiatives help communities to stay vibrant by building their capacity to run their own ecologically sustainable businesses. Veracel also works together with NGOs and rural schools to support environmental education and increase environmental awareness in local communities.

4,300

HECTARES OF ATLANTIC RAINFOREST
HAD BEEN ACTIVELY RESTORED BY
VERACEL AT THE END OF 2011



Economic

Veracel's voluntary Atlantic rainforest restoration work incurs notable costs, from investing in the land to raising seedlings, tending and monitoring conservation areas. So far, the ecosystem services provided by these protected/restored forests have not brought market rewards, leaving the company to carry the full costs of these activities.

However, there are significant benefits for the company. Veracel depends on nature to do business in the long term: it needs clean water and good soils for its tree plantations to be healthy and productive. Protecting the environment in and around its plantations is vital for Veracel's long-term business success.

Demonstrating high environmental standards in its plantations has also helped Veracel to achieve forest management certification from both CERFLOR (the PEFC-endorsed Brazilian forest certification programme) and the Forest Stewardship Council (FSC). Credible third-party certification provides an independent confirmation to external stakeholders that the company meets high environmental and social standards.

Next steps

In addition to the areas set aside for conservation and regeneration, Veracel owns and manages Veracel Station, one of the region's largest private natural heritage reserves, protecting over 6,000 hectares of Atlantic rainforest. Veracel Station has a key role in rainforest preservation by providing a natural seed source for native species and serving as a laboratory for the rainforest ecology. The reserve is open for visitors, and many groups, especially from local schools and communities, come to learn about the local flora and fauna. Veracel Station also receives researchers from all around the world conducting studies in the reserve.

Veracel has prepared a comprehensive management plan for the reserve in collaboration with Conservation International, which has also helped conduct inventories of species living in the area. Veracel Station is among the 20 places with the highest tree species diversity in the world, with over 300 species found in the reserve. Vertebrate diversity is also high with over 440 species, of which 37 are endangered and 53 endemic to the Atlantic rainforest in the south of Bahia.



Plantations supply Veracel's paper mill (above) but native forest is being restored around watercourses and hillsides (below).

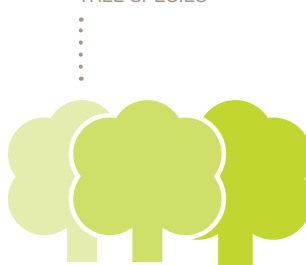
VERACEL STATION NATURE RESERVE:

IN THE TOP 20

WORLD LOCATIONS
 WITH THE HIGHEST TREE
 SPECIES DIVERSITY



OVER 300
 TREE SPECIES



OVER 440 SPECIES

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 ENDANGERED AND 53 ENDEMIC TO
 THE ATLANTIC RAINFOREST

