

A Brazilian Model of Sustainability Seeks Markets Overseas

Contributed by Geovana Pagel
Tuesday, 16 September 2008

Over 5,000 hectares of dryland woods were preserved in the semiarid region of Pernambuco state, in the Brazilian Northeast, in less than one year. This preservation was only possible due to the use of sustainable wood promoted by the gypsum hub of Araripe, located 700 kilometers (435 miles) away from state capital Recife.

This new raw material comes from areas of native vegetation (caatinga) but with plans of forestry management approved by the Brazilian Environment and Renewable Natural Resource Institute (Ibama-PE) and the Pernambuco State Agency for the Environment and Water Resources (CPRH).

The Native Woods program was responsible for the solution found for the ancient environmental problem the hub had, which placed businessmen and environmental organisations in conflict. Ibama proposed the complementation of forestry management for the extraction of wood in an environmentally correct way.

"It is not a question of not using wood, but of having a management plan so that we may count on the caatinga for the rest of our lives," stated João Arnaldo Novaes, Ibama-PE superintendent.

As a result, a program was developed to make the gypsum hub comply with the legislation, which generated the intermediation of 41 companies since last year.

"The energy question is a problem in the region, but there are alternatives. They include the use of branches pruned from cashew trees in Rio Grande do Norte, Ceará and Piauí. After Ibama operation, most of the companies in the sector now have environmental licenses. There are figures showing that between 80% and 90% of the wood comes from legal plantations," he pointed out.

Sustainable firewood reduces the environmental impact on the caatinga and also the number of environmental fines in the region. "The plan of forestry management has become an important tool for environmental management," pointed out Novaes.

According to a study by the Ibama-Pernambuco, the gypsum hub in Araripe consumes around 1.5 million cubic meters of firewood per year. After the adoption of the sustainable forestry management plan, 15% of the companies are already using wood from the hub itself approved by the Ibama-PE and CPRH. Nine months ago, they were just 3%.

The authorized firewood, originally from cashew and carob trees from other regions of the caatinga, is used by 65% of the companies. The others use firewood originally from native woods knocked down for alternative use of the land

(agriculture and livestock farming).

"The hub is close to reaching 100% use of sustainable firewood. The idea is to stimulate the adoption of a plan for sustainable forest management, including areas where firewood comes from the pruning of cashew and carob trees," believes the superintendent.

The state of Pernambuco has 30% of the gypsite reserves of the country and produces 95% of the gypsum consumed. Production is 2.8 million tons a year in an activity that counts on over 600 companies. The region includes the cities of Araripina, Bodocó, Ipubi, Ouricuri and Trindade, as well as cities in the states of Ceará and Piauí.

The hub generates 12,000 direct jobs and around 64,000 indirect ones, according to figures by the do Gypsum Industry Union (Sindugesso). Company revenues total approximately 640 million reais (US\$ 357 million) a year.

Gypsite serves as raw material for several industries. The ore may be used in agriculture, as a corrective for soil, and, once calcinated, the product is used in the production of cement and gypsum for the civil construction, ceramic model, jewelry, automotive, medical and dentistry industries, among others.

Despite all these possibilities, in Brazil the product is still little used if compared to Europe and the United States. Whereas here it is 15 kilograms per inhabitant per year, in Europe, this proportion is 80 kilograms per inhabitant per year and in the United States, the largest consumer of gypsum in the world, it reaches 118 kilograms per inhabitant per year.

"Our building culture is Portuguese, using stone, of houses that may last 100 years. In the United States and Europe there is greater mobility. But perspectives are for the new technology to make it possible to find greater space in the civil construction industry, which currently still makes very heavy walls," stated the president at Sindugesso, Josia Inojosa Filho.

According to Inojosa, expectations are for consumption to grow between 15% and 20% this year. "The Southeast consumes 45% of the gypsum produced in Brazil. Per capita consumption should rise to 17 kilograms per inhabitant per year. In Pernambuco, it should rise from 4% to 7% of the total, due to the greater use of civil construction in other activities," he pointed out.

According to the president at Sindugesso, one of the great bottlenecks to growth of the gypsum hub is the difficulty of production. "The great future is going to be the Transnortheastern Railway. With the railway, the companies may transfer the production in an easier way. The cost with transportation is very high and it hinders the sector from being more competitive," he evaluates.

With the Transnortheastern railway connecting regions and bringing multimode transportation, using trains and ships, the tendency is to triple production. "The current production of between 400,000 and 600,000 tons a year may rise to

between 1.8 million tons a year, for the cement industry alone. We take between seven and ten days from the date of order to delivery of the product in the Southeast. With the railway we could have a distribution center," says Inojosa.

When ready, the Transnortheastern highway should cover 1,860 kilometers, connecting the ports of Pecém, in Ceará state, and Suape, in Pernambuco, to Eliseu Martins, in Piauí. The delivery of 1,100 kilometers is expected by 2010.

Anba