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## Latin America is also booming on paper

EUROPEAN PULP MULTINATIONALS ARE DISCOVERING THE LATIN AMERICAN CONTINENT

'Bio ethanol' from sugar cane or sugar cane molasses, biodiesel from soy or palm oil, soy or maize as foodstuff, clearing primary rainforest for meat production: the booming agricultural sector in Latin America has, on the one hand, brought about exorbitant profits for the transnationals and big domestic landowners. As seen in July 2008 in Argentina, attempts at levying a noteworthy tax on agricultural exports have failed. On the other hand, land concentration is driving small-scale farmers from their arable land, food supply is threatened and serious environmental problems such as water shortage, the extensive use of pesticides and the spread of genetically modified crops (in Argentina 99 percent of soy production is genetically modified) are jeopardizing the social and ecological equilibrium. Immerhin

In this structural change which is being pursued by the agro-business, relatively little attention has been paid to the role of (mainly) European forestry corporations and pulp manufacturers who are being welcomed with open arms as direct investors by the central left governments of Argentina, Brazil and Uruguay, all currying for their favour. Whereas Brazil has so far been the favourite target country for pulp production<sup>1</sup>, the 'small' Uruguay (even so half as big as Germany) is rapidly catching up. In recent years three European corporations have been lured into the country, and in total there are proposals to open seven mega factories for pulp production. Latest to sign a Memorandum of Understanding with the Uruguayan government for the construction of the largest pulp factory in the world with an annual production of 1.3 million tons was the Portuguese company *Portucel* at the beginning of September 2008 (currently, the largest factory worldwide is the Finnish company *Botnia*'s plant in the Uruguayan Fray Bentos with an annual production of one million tons. This has been in operation since November 2007). Uruguay is not the only country

in which one mega factory after another is being built, pulp production is being transferred more and more to the countries of the South and increasingly to South America. As recently as in 2005, 40 percent of the raw material was cultivated in North America and 29 percent in Europe. Asia produced 22 and Latin America 9 percent. By 2010, 25 percent are to come from Latin America, an amount that has almost tripled within five years. Where until a few years ago Latin American companies such as *Arauco Celulosa* (Chile), *Aracruz Celulose and Suzano Papel e Celulose* (both Brazil) dominated the market, due to rapidly growing demand today European pulp giants such as *Stora Enso* (Sweden-Finland), *ENCE* (Spain), *Portucel* (Portugal) und *Botnia* (Finland) are discovering Latin-American.

### Favourable climatic and economic conditions – accidents, displacement and illegal clearing

Tighter environmental laws and the inclusion of energy intensive industries into the CO<sub>2</sub>-emissions trade in the EU in 2012 on the one hand, and favourable climatic conditions in Latin America on the other, entice pulp companies to buy up huge areas of land in sparsely populated regions of Latin America. Eucalyptus trees for example on the Rio de Plata grow to a height of 20 metres within just eight years and may then be 'harvested' (in Finland, the widespread pine tree has a felling cycle, which is the time between planting and cutting down of the tree, of about 80 years). An additional incentive is the inexhaustible supply of water.<sup>2</sup> In the 'left' governed countries Brazil, Chile and Uruguay for example, the economic conditions are extremely inve-

<sup>1</sup> Lured by support programmes of the former military government, local companies have already been producing pulp in Brazil for about 35 years.

<sup>2</sup> Acuífero Guaraní is one of the largest underground fresh water reserves in the world. The geological formation covers 1.2 million square kilometres and is assumed to contain a total volume of 55,000 cubic kilometres of water (Thimmel 2004).

stor friendly for the companies. Free trade zones are established; subsidies are paid for the forestry monocultures, and the World Bank and Co. give multi-billion grants. The consequence of this boom is that whole ecosystems are destroyed in order to manufacture cellulose virgin pulp from eucalyptus trees that were originally only native to Australia and Indonesia. Thus, on the Rio de la Plata the ecological equilibrium of the 'Praderas', the grasslands<sup>3</sup> colloquially called Pampa, is threatened, and thousands of people are losing their land rights and thereby their livelihood. In Brazil, Aracruz Celulose is the largest producer of bleached eucalyptus pulp<sup>4</sup> worldwide with over three million tons annually. Almost 95 percent of Aracruz's production, in which the state development bank BNDES also has a share, is determined for export. Aracruz has expanded the eucalyptus monocultures that it owns in the Brazilian states Rio Grande do Sul, Bahia and Espirito Santo to over 250,000 hectares, which has also resulted in the displacement of local indigenous peoples such as the Tupinikim and the Guaraní in Espirito Santo.<sup>5</sup> The Chilean Celulosa Arauco (CELCO), controlled by the Italo-Chilean billionaire Anacleto Angelini, owns four factories in Chile and one in both Argentina and Brazil, likewise with an annual production of over three million tons in total<sup>6</sup>. Since 2004, the Río Cruces in the Chilean Valdivia has been contaminated by several accidents in the CELCO plant. Most recently, on 2nd June 2007, there was an accident in the Mataquitos plant in the south of the country. 50,000 litres of contaminated effluent were discharged illegally into the Mataquitos River. The string of accidents, a general disregard of obligations and illegal clearing continues. As recently as September 2008, the Spanish company ENCE in Uruguay illegally cleared 80 hectares of a 'Monte Indígena' designated area (a unique, very diverse ecosystem in Uruguay). According to company representatives this was a mistake. For the Uruguayan Minister of Agriculture, Ernesto Agazzi, it was an 'ecological disaster'.

## Cellulose boom – about paper, 'bio-fuel' and genetically modified trees

The demand for cellulose mass for manufacturing paper is growing worldwide and prices continue to rise. The boom is fuelled by the rapid economic development in China and Russia. It is however sustained by the still increasing consumption of paper in the industrialised nations. The biggest buyer of pulp is Europe with 60 percent. Here, demand is the greatest. The Finns take the lead with a per capita consumption of 352 kilograms a year, whereas in Uruguay 40 kilograms are consumed per citizen every year. In Germany, where the same amount of paper is consumed as in the whole of the African and Latin American continents together, demand has increased sevenfold since 1950 (apart from writing paper, the most important fields of application are packaging such as cardboard, tissue such as toilet paper and special paper for instance wallpaper). Currently, Germans use 233 kilograms per person and the annual rate of increase is three percent. Cellulose mass from Brazilian (and presumably before long, Uruguayan) factories in Germany is made into paper tissues of the label 'Tempo', and Charmin and Hakle toilet paper<sup>7</sup>, for example by the Swedish company SCA<sup>8</sup> and the US company *Kimberly-Clark*, one of the leading manufacturers of hygiene articles worldwide. Ahead of England and the USA, Germany is the largest market for SCA. The company trades in over 90 countries and has about 50,000 employees. An ever-increasing consumer culture needs paper and the raw material for manufacturing paper is still cellulose mass. Around 2.2 tons of wood are needed to produce one ton of paper and thus nowadays every fifth tree felled worldwide already ends up in a cellulose plant, and the trend is rising. Industrial tree cultivation is also gaining in appeal due to other developments besides the paper boom. The realisation of the ever decreasing crude oil supply, exploding prices for resources and fear of dependency for energy supplies give rise to ever new ideas. As one energy crisis follows another, one new, modern, creative, sustainable solution after another sweeps like a craze through the global village. The newest beacon of hope is so-called bio-petrol, which companies such as Royal

3 The Praderas on the Rio de la Plata cover an area of 70 million hectares in Argentina, Uruguay and the south of Brazil and are one of the most extensive natural grasslands in the world. Alone in Uruguay they cover about 76 percent of the country's total area.

4 On the company website [www.aracruz.com.br](http://www.aracruz.com.br) the enterprise discloses the aim of delivering 25 percent of the worldwide demand for cellulose by 2015. "A Aracruz tem como objetivo estratégico atingir 25% da demanda global de celulose de fibra curta de mercado, cerca de 7 milhões de toneladas por ano em 2015."

5 See Robin Wood: [www.umwelt.org/robin-wood/german/trowa/urwaldpapier/brasilien/TempoFlyer.pdf](http://www.umwelt.org/robin-wood/german/trowa/urwaldpapier/brasilien/TempoFlyer.pdf)

6 Celulosa Arauco processes part of production directly in the country, for instance into raw material and building material, and thereby, as opposed to the other purely export oriented producers of cellulose, at least creates jobs in the country.

7 [www.umwelt.org/robin-wood/german/trowa/urwaldpapier/brasilien/TempoFlyer.pdf](http://www.umwelt.org/robin-wood/german/trowa/urwaldpapier/brasilien/TempoFlyer.pdf)

8 Tempo' was bought up in 1994 by the US-American company Procter & Gamble. In March 2007 it was sold by this company for 512 Mio EUR to its Swedish competitor Svenska Cellulosa Aktiebolaget (SCA). The company, awarded as the second greenest company in the world in June 2007, has committed to only process certified wood in future. This is only a public relations announcement, claim several Swedish organisations. During clearing, SCA has removed forest and species worthy of protection and turned them into paper, which is especially scandalous as these pieces of forest were FSC certified and thereby pro rainforest ([www.fsc-watch.org](http://www.fsc-watch.org)).

Dutch Shell and technology companies like Virent Energy Systems are currently working on. Using a new process, plant sugars are converted into different hydrocarbons instead of ethanol and can then be combined to form bio-petrol. Wood above all is suitable along with husk, straw and sugar cane bagasse. This is how the belief that competition with food production no longer exists is promoted. Biopetrol can, according to Virent, be added to conventional fuel to up to 50 percent. Neither a new infrastructure at petrol stations nor engine modification of vehicles is necessary.

Parallel to this, the future has long since arrived in the wood industry. Pulp giants and the agricultural fuel lobby, which was unnerved by the 'food not fuel' campaigns, have both discovered trees, and are investing in genetically modified trees. Market leader in this development is the US company *ArborGen* with areas under cultivation from New Zealand to Brazil. *ArborGen* is part of a consortium that has for years been sequencing the eucalyptus genome and on its website campaigns with the promise: "ArborGen trees will allow growers to cultivate more wood on less land in less time with fewer inputs, which will protect our native forests and ecosystems."<sup>9</sup> The company, together with the state-run Brazilian Enterprise for Agricultural Research, the Catholic University of Brazil and others, is part of the project 'Genolyptus', the Brazilian network for eucalyptus gene research. Here, euphoria reigns as it did in the case of agricultural fuel made from maize, soy and sugar cane etc., which until recently was euphemistically named biofuel. "Sequencing the *Eucalyptus* genome will help us overcome many of the major obstacles toward achieving a sustainable energy future," says Alexander Myburg, the South African head of the international Eucalyptus Genome Network. In 2007, *ArborGen* was given permission to cultivate genetically modified eucalyptus plantations for research purposes in Brazil, they are now waiting for authorisation for commercial use. Massive potentials tempt: industrial wood manufacture and the cultivation of plantations has, in the meantime, expanded to 200 million hectares worldwide, an area almost corresponding to the area for worldwide wheat cultivation. Industrial society's immense hunger for wood, nowadays mainly as a raw material for the production of pulp and in future certainly also for the production of 'bio-petrol', must be satisfied. Therefore, it is only logical that 'Genolyptus' dreams of faster, stronger growing trees. Genetically modified eucalyptus will in effect be a 'Selfish tree'<sup>10</sup>, which draws large amounts of nutrients and water from the soil so that other plants barely have any chance of surviving in the vicinity of the eucalyptus.

9 [www.arborgen.com](http://www.arborgen.com)

10 <http://www.cbd.int/doc/external/cop-09/wrm-cop9-en.pdf>

## Climate protection as money printing press

The best comes last: trees and especially forests are regarded as nature, they are a hydrocarbon reservoir and a tactically clever management navigates the jungle of emission rights and certificates, thereby procuring even greater gains for itself. Agro-business as usual! Modern in a green coat. The renewable raw material, wood, uses up CO<sub>2</sub> rather than producing it. So far so good. Due to the worldwide hunger for paper (worldwide consumption in 2006 was 360 million tons annually, the Food and Agriculture Organization (FAO) estimates that it will rise to 560 million tons by 2020), major investors are buying up wood and forest plantations. When the so-called 'bio-petrol' made of wood-fibre product is on the market, this sector's appeal will increase at an explosive rate. Investment in 'real values' that is also secure. Growing demand faced with a supply that cannot be increased in the short-term. The international climate regime supports these developments. At first sight it all makes sense: during growth trees take up more carbon dioxide than they emit. No two forests are the same however and booming forestry monocultures are also fuelling climate change. Not every forest has equal value as a greenhouse vacuum cleaner. Old trees have the greatest storage capacity for carbon dioxide, whilst 'young trees' emit more carbon dioxide than they absorb. Real savings in CO<sub>2</sub> are only achieved if the forest is cultivated so that as much useful wood as possible grows every year and if this wood is used as building material and only secondarily as a source of energy. If the purely profit-oriented monocultures are planted on areas of previously cleared tropical forest, the effect is almost completely lost. Even today, a third of the earth's surface is covered in forest. This forest area is home and existence for about 50 to 90 percent of the animal and plant species that exist worldwide. Forests produce oxygen and store carbon dioxide, hold massive reserves of fresh water and prevent soil erosion. Natural forest increasingly has to yield to commercial forest, carbon dioxide storage to carbon dioxide sinks. Deforestation means that massive amounts of carbon dioxide are set free in a short time, whereas reforestation measures take large periods of time in order to bind the same amount of carbon dioxide again to biomass. A so far little researched area. This becomes clear with the example of Indonesia: according to a study by the World Wide Fund for Nature (WWF) in February 2008, paper, the climate killer, is in many places the cause for the rapid destruction of the rainforest. Alone in the province Riau, 65 percent of the original forests were destroyed within the last 25 years. The massive occurrence of subterranean carbon dioxide in the peat forests and swamps of Sumatra are set free by rainforest

destruction. Peat bog forests are a unique ecological system “they store six to nine times as much carbon dioxide as conventional forests in the trees and soil”, according to environmental economist Fitriani Ardiansyah of the WWF. Due to their rapid growth and regular harvesting, eucalyptus monocultures store next to nothing. Meanwhile, the cellulose and paper industry takes advantage of the CDM, the Clean Development Mechanism, embodied in the Kyoto-Protocol, and profits doubly. Monocultures count in the emissions balance as so-called carbon dioxide sinks, the companies who also run the energy intensive paper factories in the north obtain CO<sub>2</sub>-tradeable emission permits for their plantations in the south which in turn can be transformed into money at climate exchanges such as the European Climate Exchange.

## **A European task: paper consumption, overexploitation, displacement and climate change**

Due to its high per capita consumption, Germany is one of the biggest buyers of raw material for paper manufacture from Scandinavian pulp multinationals. Therefore, all German consumers bear a responsibility. Climate change is the sum total of all mistakes, says the Indian activist Sunita Narain. Ecology and anti-capitalism, global social rights and consumer behaviour, climate equality and a fair world economy are inseparable. The fact that critical discussions can change thinking became clear during the development of the debate about biofuel. Before long it was at least disclosed that the vegetable fuels are not in the slightest ‘organic’ and that they also create new dependencies, lead to environmental catastrophes and a decrease in food production. However, increasing awareness of the link between paper consumption and overexploitation and displacement, between power concentration and the market cartels of multinational corporations and climate change is also a European task. In particular since European pulp companies have been rushing into Latin America in force (whilst at the same time profitable factories with high environmental standards are being closed at home<sup>11</sup>) and there, as is the case for the Finnish company Botnia in Uruguay, praise the natural paradise of Finland and brag about the high technology and high environmental standards in their native country and then, supported by the ‘left’ national governments, slam all doubts about the environmental compatibility of these mammoth plants.

11 As was the case for Botnia: In November 2006, the Finnish company M-Real, joint owner of Botnia, announced the closure of several factories in Finland.

\* *Background paper to the seminar ‘Paper and Sugarcane Monocultures. North and south experiences’ at the European Social Forum in Malmö (18.9 to 21.9.2008). Organisers include the Rosa Luxemburg Foundation, FIAN International, Friends of the Earth International, Skogs- och Träfacket. Contributors from Brazil, Uruguay and Venezuela*

### Further Reading:

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[www.grain.org](http://www.grain.org); [www.pulpmillwatch.org](http://www.pulpmillwatch.org)

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