

Plantations, Poverty and Power

Chris Lang



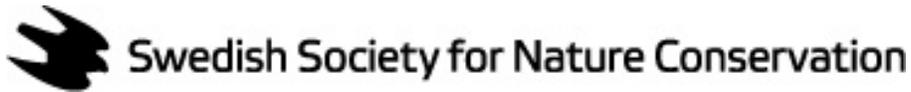
**Europe's role in the expansion
of the pulp industry in the South**

Plantations, poverty and power:

**Europe's role in the expansion
of the pulp industry in the South**

**Chris Lang
<http://chrislang.org>**

December 2008



**World Rainforest
Movement**

The contents of this publication can be reproduced totally or partially without prior authorization. However, the World Rainforest Movement should be duly accredited and notified of any reproduction.

This report was produced within the framework of WRM's project "PLANTATIONS WATCH", with support from the Dutch Ministry of Foreign Affairs' Directorate-General for International Cooperation (DGIS). The production of the publication was made possible thanks to funding provided by the Swedish Society for Nature Conservation and Oxfam Novib. The content of the report may not necessarily express the views of any of them.

CONTENTS

Introduction

1. Plantations do not plant themselves. Nor do pulp mills build themselves

2. The anatomy of five pulp projects

- Veracel (Brazil)
- Sappi (Swaziland)
- Advance Agro (Thailand)
- APP (Indonesia)
- Botnia (Uruguay)

3. Pulp Inc. Profiles of seven pulp industry proponents

- Pöyry: The economic hit men of the pulp industry
- The Confederation of European Paper Industries (CEPI): Expansion at any cost
- Asian Development Bank: Plantations are increasing poverty in Asia
- International Finance Corporation (IFC): Public money for private profits
- European Investment Bank (EIB): Investing in destruction
- The Food and Agriculture Organisation (FAO): Promoting the lie of “Planted Forests”
- Forest Stewardship Council (FSC): Misleading consumers about paper products

4. Future plans for industrial tree plantation expansion and new pulp mills

5. Conclusion and recommendations

Introduction

The area of industrial tree plantations is expanding in the global South. Vast areas of monocultures have been established to feed raw material to the pulp and paper industry. This report investigates the role of European companies and institutions in promoting this expansion and to look at the impacts on local communities and their environments in the South. It demands an end to financing business as usual in the plantations and pulp and paper sector, and an end to development “aid” to the sector.

European companies, aid agencies and institutions play a significant role in promoting the expansion of the industry in the South. The largest pulp and paper machinery exporters are Germany and Finland. In 2005, Germany exported more than US\$2 billion worth of pulp and paper machinery and Finland more than US\$1 billion.¹ European companies and institutions promote the expansion of the pulp and paper industry in the global South not as a form of “development” but because it is beneficial to Europe.

The first section of this report looks at the process by which plantations are established and pulp mills are built. What happens before a pulp mill can be built? Often the first stage is to build the political framework, to convince the public that large scale industrial tree plantations would be beneficial for the country. Plantation proponents, who include elites in the South, as well as Northern actors, repeat a series of lies to justify the expansion of plantations in the global South. Depending on the audience, they tell us that plantations provide jobs, relieve pressure on forests, are only established on degraded land, restore soils, sequester carbon and help meet the global demand for paper. The biggest lie of all is that plantations are forests.

The reality for people living in the areas where plantations have been established is that plantations have destroyed their livelihoods and sucked streams and rivers dry. The few jobs created are dangerous, poorly paid and often seasonal. Plantation proponents do not point out that pulp mills are among the most polluting of industrial processes and that one of the reasons that the South looks so attractive is that regulation is less strict in many countries in the South.

Other reasons for the expansion to the South include the fact that trees grow faster in the tropics, meaning that plantations can be logged on much shorter rotations than in the North. Labour is cheaper in the South and governments provide a series of subsidies to encourage the expansion of the industry in the South. In several countries the area of industrial tree plantations expanded rapidly under brutal military dictatorships, when protest against the impacts of plantations was either extremely dangerous or impossible.

The nature of global finance is another reason for the expansion in the South. To investors looking to finance the pulp industry, a US\$1 billion pulp mill in Brazil is a much more attractive investment than, say, a small scale mill in the UK fed with locally collected waste paper. This is related to the notoriously cyclical nature of the industry. When pulp and paper prices are high, the industry expands, leading to overcapacity and inevitably a price crash. Once the price starts to recover, the industry expands again and the next boom-bust cycle is under way.

¹ “Paper mill and pulp mill machinery, paper-cutting machines and other machinery for the manufacture of paper articles”, Index Mundi website. <http://www.indexmundi.com/trade/exports/?product=725>

New investors have emerged recently, such as “Timber Investment Management Organisations” (TIMOs), that are investing in industrial tree plantations. While these have mainly focussed on plantations and forest operations in the US, they are increasingly looking to invest in the South. Private equity companies are also getting involved in financing the pulp and paper industry.

So far, however, these new investors appear to have played only a minor role in the expansion of plantations in the South. More important in this process is public money handed out as “aid”. Development funds are supposed to be used to relieve poverty. The pulp industry does not relieve poverty. On the contrary, for the rural communities faced with a sea of industrial tree plantations on their land, it increases poverty.

Section 2 of the report looks in detail at five pulp projects, in Brazil (Veracel), Swaziland (Sappi), Thailand (Advance Agro), Indonesia (Asia Pulp and Paper) and Uruguay (Botnia). Each example looks at how industrial tree plantations were established and subsequently pulp mills build, including where funding came from and the impacts on local communities. These examples are not chosen to show the worst five pulp and paper companies in the world but are intended to illustrate the structural problems underlying the global pulp and paper industry.

All of these projects were heavily subsidised with Northern tax payers’ money. In fact, it is unlikely that any of these projects would have gone ahead without these subsidies. All of the projects provided a series of lucrative contracts for European, Nordic and North American consulting firms, machinery companies, chemical suppliers and engineering firms. All of the projects have resulted in serious problems for the people living in the area of the plantations and near the pulp mills themselves.

Section 3 of the report investigates some of the actors involved in promoting the pulp and paper industry. Pöyry is the largest forestry consulting firm in the world and has facilitated (and benefited from) the expansion of the pulp industry in many countries, both North and South. Pöyry’s role in promoting the pulp industry in Indonesia and Russia is looked at in more detail. The Confederation of European Paper Industries supports the European pulp and paper industry regardless of its impacts on people and forests. The Asian Development Bank, the International Finance Corporation and the European Investment Bank provide examples of multilateral aid agency support to the pulp industry. Each institution has different standards which it is supposed to apply to potentially destructive projects such as industrial tree plantations and the pulp industry. In each case, the standards (and the application of the standards) are inadequate to prevent the impacts on local communities and the environment.

The United Nations Food and Agriculture Organisation has for decades supported the expansion of the pulp industry and today continues to provide justification for the expansion of industrial tree plantations to feed the industry. By defining plantations as forests, the FAO helps create the illusion that plantations are not destructive, but simply another form of forest. FAO’s most recent support to the industry comes in the form of voluntary guidelines for “planted forests”. Section 3 ends with a look at the role of the Forest Stewardship Council which supports the pulp industry by certifying industrial tree plantations as well managed. In turn, FSC is supported by the pulp industry leading to questions about its independence from the industry it is supposed to be regulating. FSC has failed to address in any meaningful way the impacts of industrial tree plantations.

Section 4 looks at the pulp industry’s plans for new pulp mills in the global South. With the current

financial crisis, several of these mills may be postponed or cancelled. Nevertheless, the industry has been expanding rapidly in recent years and is planning further expansion in the future. The problems of overproduction and overcapacity are becoming increasingly severe.

The conclusion of the report suggests an alternative way that the pulp industry could develop, which would provide the paper needed to meet local demand, based on small-scale pulp and paper mills using local raw materials. Paper could and should be produced without destroying forests, grasslands and local people's livelihoods. A first step in moving towards a less destructive pulp and paper industry would be to stop the subsidies which help to keep the status quo. No more development funds should be used to facilitate the expansion of the global pulp industry and its associated industrial tree plantations.

1. Plantations do not plant themselves. Nor do pulp mills build themselves

In May 2005, at a meeting in Vancouver, Mario Higinio Leonel, the Executive Director of BRACELPA (the Brazilian Pulp and Paper Association) gave a presentation titled “Forest Plantations in Brazil”. He told his audience that plantations are a “Vector for Sustainable Development”. He illustrated the point with a Venn diagram of three overlapping circles, labelled “Environmental”, “Social” and “Economic”. In the small overlapping area in the centre are the letters “SFM”: sustainable forest management.²

Leonel talked about the importance of a Code of Best Practices for Planted Forests. He talked about how the area of plantations has increased in Brazil. The vast majority of Brazil’s plantations were established between 1965 and 1987, during which period the area increased from 500,000 hectares to 6 million hectares. He explained how the growth rates of plantations (about 60 per cent of which are eucalyptus plantations) increased from about 15 cubic metres per hectare in 1970 to over 60 cubic metres per hectare by 2000. He explained that plantations contributed US\$17.5 billion worth of trade in 2004 and that they provided 1.5 million direct jobs. And he explained how plantations restore degraded land, conserve the soil, use land not fit for traditional agriculture, protect biodiversity and watersheds, sequester CO₂ and relieve pressure on what he described as “natural forests”.

The most interesting aspect of Leonel’s presentation is what he decided not to talk about. Leonel did not point out the difference between forests and industrial tree plantations. Forests are diverse ecosystems which provide a range of goods for people and animals. Industrial tree plantations are monocultures which provide one product: fibre for the pulp and paper industry or charcoal for the steel industry, for example.

The failure to differentiate forests from plantations is the starting point of industry propaganda for industrial tree plantations. By describing their monocultures as reforestation, the industry can fool ignorant audiences in the North that it is doing something good. But the only similarity between a forest and a plantation is that both contain trees.

Leonel did not mention that industrial tree plantations in Brazil are increasingly the target of protests by the land rights movement, farmers and Indigenous Peoples. While the figures describing the contribution of industrial tree plantations to the Brazilian economy look impressive, these figures do not reveal what has been lost: the livelihoods of thousands of people who lived on the land before it was converted to industrial tree plantations. Invisible in Leonel’s presentation are the thousands of people who were left with no option other than to move to the *favelas* surrounding Brazil’s major cities.

Leonel gives figures for the number of people employed in plantations, but he does not describe how dangerous and poorly paid that work is. In fact, plantation operations are heavily mechanised and therefore employ few people. In recent years, many of the jobs on plantations have been contracted out meaning that workers often lose the few benefits they had. A 2001 report for the UN International Labour Organisation notes that in Chile almost all timber harvesting is carried out by contractors. A 1998 survey of forest workers in Chile found that when their jobs were contracted out two-thirds of workers saw a

2 Mario Higinio Leonel (2005) “Forest Plantations in Brazil”, Advisory Committee on Paper and Wood Products - FAO, Vancouver, 31 May 2005. <http://www.fao.org/forestry/media/10549/1/0/>

reduction in pay and benefits and half lost out on pensions.³

In South Africa, Mondi provides only 0.7 jobs for each 100 hectares of land that it owns. But this employment total includes jobs in Mondi's offices and mills. In the rural areas, the employment situation is even worse.⁴ Figures from the Agricultural Census in Uruguay indicate that plantations generate fewer jobs even than extensive cattle-ranching. These few plantation jobs are often very badly paid. World Rainforest Movement has documented the "near-slavery" conditions for workers in plantations in Uruguay.⁵

Leonel does not mention that jobs in plantations are extremely dangerous. "The worst safety and health situation is usually found in forestry," states ILO's 2001 report. "Forestry work is also beset by serious health problems. Few workers reach normal retirement age. The safety and health situation is most problematic among contractors."⁶

In South Africa, wages of manual workers employed by contractors are between US\$50-75 a month compared to US\$75-100 or more for those employed by companies. Company workers are entitled to pensions and medical benefits. Outsourced workers receive neither.⁷

Plantations are often established several years before the associated pulp mill starts up, which means that rural people are forced to move away from the area to look for work. When the pulp mill starts up the few jobs go mainly to people from outside the local area.

Leonel's list of the supposed environmental benefits of plantations is typical of the lies used by plantation proponents to justify their destructive industry.⁸ Plantations do not restore degraded land. Instead plantation companies seek the best land with rich soils where their trees will grow fastest. The plantation industry (and its hired consultants) may well describe the land that they want to take over as "degraded" or "not fit for traditional agriculture", but to local people the land is the basis of their livelihoods.

Plantations do not conserve soil. They suck out nutrients and water. Research in Argentina has shown that they can increase salinisation by bringing salts to the surface of the soil.⁹ That monoculture eucalyptus

3 Poschen, Peter and Mattias Lövgren (2001) "Globalization and sustainability: The forestry and wood industries on the move", International Labour Organisation, Geneva, page 64.

http://www.ilo.org/public/libdoc/ilo/2001/101B09_179_engl.pdf

4 "The sad figures of employment generated by plantation companies", World Rainforest Movement Bulletin no. 50, September 2001. <http://www.wrm.org.uy/bulletin/50/employ.html>

5 "Uruguay: Semi-slave work in plantation forestry", World Rainforest Movement Bulletin no. 74, September 2003. <http://www.wrm.org.uy/bulletin/74/SA.html#Uruguay>

6 Poschen, Peter and Mattias Lövgren (2001) "Globalization and sustainability: The forestry and wood industries on the move", International Labour Organisation, Geneva, page 63.

http://www.ilo.org/public/libdoc/ilo/2001/101B09_179_engl.pdf

7 Poschen, Peter and Mattias Lövgren (2001) "Globalization and sustainability: The forestry and wood industries on the move", International Labour Organisation, Geneva, page 65.

http://www.ilo.org/public/libdoc/ilo/2001/101B09_179_engl.pdf

8 For a detailed response to this sort of pro-plantations propaganda, see Ricardo Carrere (1999) "Ten Replies to Ten Lies", World Rainforest Movement. <http://www.wrm.org.uy/plantations/material/lies.html>

9 Robert Jackson at Duke University has produced a series of reports about the impact of eucalyptus plantations in Argentina. See Chris Lang (2008) "Argentina: Scientists confirm that plantations dry up streams and contaminate groundwater", World Rainforest Movement Bulletin no. 128, March 2008. <http://chrislang.org/2008/04/04/argentina-scientists-confirm-that-plantations-dry-up-streams-and-salinise-groundwater/>

plantations established on grasslands have an impact on water supply is firmly established, in both scientific reports and even pro-plantation reports. A 1999 report by the Australian Bureau of Agricultural and Resource Economics and consulting firm Jaakko Pöyry states that:

“In seasonally dry environments, trees and other land uses compete for water. Some eucalypt plantations which have been established on natural grasslands in Uruguay and South Africa have been found to affect the availability of local water by lowering watertables. Creeks and wells have dried up, requiring local people to travel further to obtain water. Further, insecticide and fertilisers used in plantation management can affect the quality of local water supplies and aquatic fauna.”¹⁰

The vast areas of industrial tree plantations established in Brazil are monocultures – the very opposite of biological diversity. E.O. Wilson, a biologist at Harvard University, describes the effects of plantations on biological diversity as the equivalent of “building a line of Wal-Marts”.¹¹

The industrial tree plantations which feed the pulp and paper industry do not sequester carbon dioxide. The fibre is used to make paper, a hugely energy intensive process to manufacture a product which is often thrown away. The majority of the world’s paper ends up in landfill dumps where it rots and produces methane, a gas which is 21 times as potent a greenhouse gas as carbon dioxide. The largest single source of greenhouse gases from the Canadian forestry industry is methane emissions from rotting paper and other forest products in landfills. In 2005 such emissions accounted for about 46 per cent of the industry’s greenhouse gas emissions.¹²

Plantations do not relieve pressure on native forests. The pulp and paper industry prefers fibre produced from fast growing eucalyptus plantations. As Leonel points out in his presentation, no pulp and paper is produced from native forests in Brazil. But if plantations were really relieving the pressure on native forests, the rate of deforestation should be decreasing as the area of plantations is increasing. This is not happening in Brazil, which has both large areas of plantations and high rates of deforestation. “To date, however, plantations have had no discernible global impact on reducing deforestation,” notes an article by two World Bank staff, Jürgen Blaser and Jim Douglas.¹³ Many of the causes of deforestation – such as road-building, conversion to soya bean or oil palm plantations, or the flooding of forest for large-scale hydropower dams – have nothing to do with supplies of timber. Timber from native forests is often in any case destined for a different market to that from fast-growing industrial tree plantations – for furniture or construction, for example.

And Leonel’s presentation makes no mention of the fact that pulp mills are one of the most polluting of industrial processes. All over the world, local communities have protested about the pollution caused by pulp mills. Health risks include cancer, lung diseases, reproductive and hormone problems, heart disease,

10 Abare and Jaakko Pöyry (1999) “Global Outlook for Plantations”, Abare Research Report 99.9, Australian Bureau of Agricultural and Resource Economics, Canberra, page 35.

11 Ted Williams (2000) “False Forests”, *Mother Jones*, 1 June 2000.
http://forests.org/archived_site/today/recent/2000/falsefor.htm

12 “The Greenhouse Gas and Carbon Profile of the Canadian Forest Products Industry”, Special Report No. 07-09, National Council for Air and Stream Improvement, 2007. <http://www.ncasi.org/publications/detail.aspx?id=3013>
See also Chris Lang (2007) “The paper industry and the ‘business of climate change’”, World Rainforest Movement Bulletin no. 125, December 2007. <http://chrislang.org/2007/12/20/the-paper-industry-and-the-business-of-climate-change/>

13 “World Bank foresters deny that plantations alleviate pressures on forests”, World Rainforest Movement Bulletin no. 41, December 2000. <http://www.wrm.org.uy/bulletin/41/plantations.html>

immune system damage and skin diseases.

Before Celulosa Arauco y Constitución (CELCO) built the Valdivia pulp mill the Cruces River wetlands were home to about 6,000 black necked swans. Pollution from the mill killed hundreds of black necked swans. The company denies that it is responsible, but the evidence is against the company. “They should have never built the plant there in first place,” a World Bank consultant said at an industry conference in Brazil in May 2006.¹⁴

In September 2007, the Chilean State Defence Council (CDE) filed a US\$3.9 million lawsuit against CELCO for the company’s pollution of another river, after 20,000 cubic metres of untreated industrial waste was released from CELCO’s Licancel pulp mill. The waste water polluted the Matauito River, where it resulted in the death of thousands of fish.¹⁵

Pollution from Asia Pulp and Paper’s Indah Kiat pulp mill in Sumatra has killed the fish in the Siak River, destroying the livelihood of people living along the river. A few years ago, German film-maker Inge Altemeier travelled with Trabani Rab, a medical professor who has been monitoring the impacts of Indah Kiat’s mill on villagers’ health for several years. In two days of visiting villages on the Siak River, he diagnosed more than 500 cases of serious skin diseases.¹⁶

It is not only in the South that pulp mills are polluting. In 2005, World Rainforest Movement’s international coordinator, Ricardo Carrere, visited Finland to find out for himself just how clean pulp production in Finland actually is. While the pulp industry is not as polluting as it once was, neither it is by any means pollution-free. In 2003, 7,500 cubic metres of black liquor leaked from UPM’s Kaukas pulp mill into Lake Saimaa. Within a few days the black liquor had spread far into the lake. Half of the fish biomass in the lake was wiped out in a three-kilometre radius area from the pulp mill.¹⁷

Leonel’s presentation is just one example of the propaganda produced by the pulp and paper industry to justify its expansion in the global South. To explain why the industry is so keen on expanding in the South, we need to look at some of the processes and actors involved in promoting industrial tree plantations.

Building the political framework

In many countries in the global South, the first step towards building the political framework for a massive expansion of the pulp and paper sector was a national forestry plan. Many of these were written as part of the Tropical Forestry Action Plan which was established in the mid-1980s, as the world became increasingly concerned about the fate of the tropical forests. Set up by the World Bank, the United

14 The consultant was Neil McCubbin and he said this in May 2006 at RISI’s Latin American Pulp and Paper Outlook Conference in Brazil. <http://pulpinc.wordpress.com/2006/10/02/world-bank-consultant-says-celcos-valdivia-mill-should-never-have-been-built-there/>

15 “CDE sues Celco for Licancel plant contamination”, BNAmericas.com, 11 September 2007. <http://www.tmcnet.com/usubmit/2007/09/11/2929455.htm>

16 Chris Lang (2005) “Indonesia: The health impacts of living near Indah Kiat’s pulp and paper mills”, WRM Bulletin no. 97, August 2005. <http://chrislang.org/2005/08/27/indonesia-the-health-impacts-of-living-near-indah-kiats-pulp-and-paper-mills/>

17 Ricardo Carrere (2005) “On the pulp trial in Finland: the other side of the coin”, Group Guayubira, June 2005. <http://www.guayubira.org.uy/celulosa/Finlandia.html>

Nations Food and Agriculture Organisation (FAO), the UN Development Programme (UNDP) and World Resources Institute the TFAP proved to be a bonanza for forestry consultants, but did little or nothing to prevent the destruction of the forests. On the contrary, it helped accelerate forest destruction.

The TFAP for Cameroon, for example, aimed to turn the country into Africa's biggest timber exporter, with plans for 600 kilometres of roads to open up 14 million hectares of forest in south-eastern Cameroon. The TFAP ignored indigenous people rights and made no mention of any socio-economic issues.¹⁸

TFAP was top-down and had a bias towards investment in commercial forestry. TFAP ignored the root causes of deforestation, such as large scale industrial development plans for dams, roads, mines, oil exploration and plantations. In fact, in many countries TFAP recommended expanding the area of industrial tree plantations and building new pulp mills.

The TFAP received a barrage of criticism from concerned observers, including the World Rainforest Movement.¹⁹ Partly as a result of the criticism, the TFAP wasted away and TFAP reports gathered dust on the shelves of forestry departments around the global South.

But the TFAP was not a failure for the many consulting firms that took part in the process. They were given a valuable insight into how the forestry departments and governments of countries in the South worked. Once established, consulting firms did what they are best at doing: recommending projects on which they can win further contracts. While there may or may not be a memo from head office demanding that the staff of consulting firms "go out and find pulp mills to build", a consultant working for a company that employs a team of highly paid pulp mill engineers who recommends establishing industrial tree plantations in, say, Uruguay, will bring in further contracts for the company and will progress rapidly up the career ladder. Even though the consultant may be fully aware of the problems caused by the pulp industry's tree plantations, the mitigating measures that he or she proposes will require a series of further studies to make sure that they are properly carried out. More benefits to the consulting firm, in other words. Whether these mitigating measures are actually undertaken (or even whether they could be undertaken, given the political and social complexities of the area in which the plantations and pulp project is planned) is beside the point. The consulting firm has suggested a series of mitigating measures, and company staff can always argue that *if only* the mitigating measures had been implemented according to plan then the project *would have* benefited local people.

Once the pulp mill has been built a new series of opportunities opens up for consultants to monitor the pulp mill and to discover new, previously not thought of, problems – with, of course, new recommendations for more studies to resolve these problems.

The largest and most notorious of these consulting firms is Finland-based Pöyry. Section 3 looks in more detail at Pöyry's activities in promoting the expansion of the pulp industry in the global South.

The pulp industry's move to the South

18 Korinna Horta (2008) "Forests and Climate Change", presentation given during the UN Climate Change talks in Accra, Ghana, 18-20 August 2008.

19 See, for example, Larry Lohmann and Marcus Colchester (1990) "Paved with good intentions: TFAP's road to oblivion", *The Ecologist*, Vol. 20, No. 3, May-June 1990.

“Were it not for labour unions at home, we would be moving all of our production capacity to countries like Brazil,” a Stora Enso official told the *Financial Times* in 2005.²⁰ Since 1996, 73 per cent of global growth in global pulp production capacity has taken place in Brazil, Chile and Indonesia. Between 1996 and 2003, pulp capacity in North America reduced by 1.6 per cent, while in Latin America capacity increased by 27.2 per cent and in Asia by 76.4 per cent (in Indonesia, capacity increased by a staggering 118.7 per cent over this period).²¹

There are several factors that are driving the expansion of the pulp and paper industry in the global South. A key factor is that it is cheaper to produce pulp in the South than in the North. It costs US\$120 a tonne to produce pulp at Veracel’s new pulp mill in Brazil, compared to US\$320 in North America and US\$400 in Scandinavia.²²

Every year, PricewaterhouseCoopers produces a report on the pulp and paper industry. The reports do not comment on the social impacts of the industry, but they do provide an insight into the motivations of the industry and the reasons for the move to the South. Not surprisingly, it has nothing to do with the development of countries in the South. It has to do with the requirements of global finance to invest in new projects and the requirements of corporations to make a profit:

“With the suboptimal returns realised by traditional regions (North America, Western Europe and Japan) for several years, investment dollars have been reallocated to the higher return regions of the emerging markets. This impacts both capital allocation decisions by producers, as well as equity investment decisions by portfolio managers.”²³

Finland’s economy is heavily dependent on the pulp and paper sector. During the late 1980s, an economic recession in Finland led to heavy losses, cost cutting and lay-offs in the forestry industry. “[T]he deterioration of the Finnish economy is a cause for great concern. It is obvious that if our labour costs continue to go up faster than in those countries we compete against, our competitiveness will deteriorate,” Casimir Ehrnrooth, then-chief executive of Finnish company Kymmene told the *Financial Times* in 1989. Ehrnrooth’s solution was “going global”, expanding the company’s operations in the South.²⁴ In the mid-1990s, Kymmene merged with Repola Ltd and its subsidiary United Paper Mills to form UPM-Kymmene. The company subsequently expanded its operations to China and Uruguay (through its subsidiary, Botnia).²⁵ UPM-Kymmene’s Changsu paper mill in China is supplied with pulp from APRIL in Indonesia²⁶ and the Botnia pulp mill in Uruguay.

20 Raymond Colitt (2005) “Brazil is top of the tree in tale that is no pulp fiction: Faster-growing wood and lower production costs are luring paper-makers from Europe and North America”, *Financial Times*, 21 June 2005.

21 Machteld Spek (2006) “Financing pulp mills: an appraisal of risk assessment and safeguard procedures”, Center for International Forestry Research (CIFOR), Bogor, Indonesia, page 6.
http://www.cifor.cgiar.org/publications/pdf_files/Books/BSpek0601.pdf

22 Raymond Colitt (2005) “Brazil is top of the tree in tale that is no pulp fiction: Faster-growing wood and lower production costs are luring paper-makers from Europe and North America”, *Financial Times*, 21 June 2005.

23 “Global Forest and Paper Industry Survey: 2006 Edition - Survey of 2005 Results”, PricewaterhouseCoopers, 2006, page 5.

24 Enrique Tessier (1989) “Exporters’ cause for concern - Problems for Finnish manufacturers”, *Financial Times*, 13 December 1989.

25 UPM-Kymmene today has about 100 production facilities in 14 countries. For a detailed history of UPM-Kymmene, see “Company History: UPM-Kymmene Corporation” Hoover’s Profile. <http://www.answers.com/topic/upm-kymmene-corporation-adr?cat=biz-fin>

26 “UPM-Kymmene and APRIL: The Chinese-Indonesian connection”, World Rainforest Movement Bulletin no. 38,

Another reason for the move to the South is that energy is often cheaper there. Pulp production is extremely energy intensive. In Finland, for example, the importance of cheap energy to the pulp and paper industry is indicated by the fact that UPM-Kymmene and Stora Enso own shares in Pohjolan Voima, Finland's second biggest energy company. Pohjolan Voima is a major shareholder and founder of Teollisuuden Voima which is building the 1,600 MW Olkiluoto 3 nuclear plant.²⁷

“Energy is the biggest single issue affecting the competitiveness of European industry today, including the paper industry”, notes Frits Beurskens, chairman of the Confederation of European Paper Industries (CEPI).²⁸ While the amount of energy needed to produce one tonne of pulp has declined in most countries in the North, the costs of energy have increased.²⁹ Although increases in the price of oil lead to increases in transportation costs, the transport costs of exporting pulp from, say, Uruguay to China is small compared to the costs of energy for pulp production.

The major costs involved in pulp and paper production, apart from energy, are capital, fibre and labour. Trees grow faster in the South than in the North. Companies today can choose where they want to establish their plantations based on the growth rates of trees. The faster that trees grow in any particular country, the cheaper the fibre produced from the plantation. Decades of research and development into fast growing trees in plantations means that companies in Brazil are at the forefront of research into selecting species and managing industrial tree plantations.³⁰

Meanwhile in many countries in the North, it is becoming increasingly unacceptable to continue logging on the scale that the timber and pulp industries would prefer. In Canada, for example, many accessible forest areas have been logged. Environmental protests and increased regulation has made it more difficult for the industry to continue destructive clearcutting (although clearcutting has not been eliminated). In Finland, the industry faces protests against the logging of old-growth forests in northern Lapland. Greenpeace has documented timber logged from old-growth forests arriving at Stora Enso's Veitsiluoto paper mill.³¹ In March 2007, Greenpeace protested at the Botnia pulp mill and the Stora Enso paper mill at Kemi in northern Finland, demanding a stop to the destruction of ancient forests in Lapland.³²

September 2000. <http://www.wrm.org.uy/bulletin/38/China.html>

27 Päivi Munter (2005) “Finland stomachs nuclear growth”, *Financial Times*, 31 October 2005.

Construction of the Olkiluoto 3 nuclear plant started in 2005. In 1986, Finland was about to order a new nuclear power plant. The Chernobyl catastrophe put paid to those plans, for almost twenty years. Enrique Tessier (1989) “Exporters’ cause for concern - Problems for Finnish manufacturers”, *Financial Times*, 13 December 1989.

28 Frits Beurskens (2007) “Editorial”, *European Pulp and Paper*, CEPI's external newsletter, Issue 19, January/February 2007.

29 Adrian Whiteman (2005) “Recent trends and developments in global markets for pulp and paper”, Paper presented at Paperex 2005 – International Technical Conference on Pulp and Paper Industry, 3-5 December 2005, New Delhi, India, page 42.

30 Adrian Whiteman (2005) “Recent trends and developments in global markets for pulp and paper”, Paper presented at Paperex 2005 – International Technical Conference on Pulp and Paper Industry, 3-5 December 2005, New Delhi, India, page 3.

31 “Stora Enso: pulping old-growth forests – old-growth forest wood route documented by Greenpeace, 10 January, 2007”, <http://www.forestinfo.fi/forestlapland/storaenso.html>

In January 2008, Greenpeace photographed clearcut old-growth forests in eastern Finland. Trees up to 400 years old were logged. The wood was sold to Stora Enso's pulp and paper mill in Oulu and to UPM's paper mill in Kajaani.

<http://www.flickr.com/photos/greenpeacefinland/sets/72157604007222744/>

32 “Greenpeace reveals that production of magazines and packaging linked to destruction of Europe's last ancient forests”, Greenpeace, 22 March 2007. <http://www.greenpeace.org/international/press/releases/greenpeace-reveals-that-produce>

Campaigners in Tasmania and Japan succeeded in persuading Japanese importers of wood chips from Tasmania not to use wood chips from old-growth forests. As a result, exports of wood chips from Tasmania to Japan have dropped in recent years. However, the decrease in exports from Tasmania is matched by an increase in exports to Japan of wood chips from industrial tree plantations in South Africa. The pulp and paper industry's global demand for cheap wood fibre has shifted the destruction from Tasmania's old-growth forests to South Africa's grasslands.

Government regulation of pollution from pulp mills is often less stringent in the South. Standards in countries in the North are "essentially the same", according to International Paper's Thomas Jorling, who has spent almost 30 years working in the paper industry. "There are differences, however, in some of the developing countries where they don't have regulations yet for some types of substances that Westernized countries do," he said in a 2004 interview, with *Paper Watch*.³³

An important difference, for example, is the length of time it can take to get government permission to build a massive new pulp mill. "Permits can be achieved in a much more rapid time outside the U.S.," says Jorling. "The average time now for a major capital permit in the U.S. is three years, whereas in Europe it's probably six months and in Brazil it's a couple of weeks. In those countries, you don't tie up capital waiting for permits."³⁴

Subsidies and dictatorships

"Land is cheap in both Brazil and Chile, generous government subsidies encourage reforestation (sic), and trees grow faster there than almost anywhere else in the world," explained an article in the *Financial Times* in 1992.³⁵ In several countries, these "generous government subsidies" were implemented under military dictatorships or extremely repressive regimes. In addition to financial subsidies, the use of force by governments to remove local people from their land is a subsidy little discussed by the industry itself, for obvious reasons.

In Thailand, a massive expansion of industrial tree plantations was planned in the late 1980s, by an alliance of the pulp and paper industry, the Royal Forestry Department and the army. The Green Isaan Project started in 1987, which included plans for the army to solve the drought problems in north-east Thailand by building dams and "regreening" by planting eucalyptus trees. The British company Biwater carried out the feasibility study and co-wrote the Master Plan for the project. The project also received support from the British government.³⁶ A second project started in 1990, the Land Distribution Programme for the Poor Living in Degraded National Forest Reserves in North-east Thailand, known by the Thai initials, *Khor Jor Kor*. Despite the project's benign-sounding name the project was carried out by the military's Internal Security Operations Command and aimed to evict five million villagers from National Reserve Forests and planting 1.37 million hectares of industrial tree plantations.³⁷

33 "Environmental Balancing Act", *Paper Watch*, BILT Corporate Communications, Issue no. 52, 5 July 2004, page 4.
Paper Watch is the Indian company BILT's corporate publication.

34 "Environmental Balancing Act", *Paper Watch*, BILT Corporate Communications, Issue no. 52, 5 July 2004, page 4.

35 Leslie Crawford (1992) "Cheaper land, faster trees - Regional report: Latin America", *Financial Times*, 14 December 1992.

36 Oliver Pye (2005) *Khor Jor Kor Forest Politics in Thailand*, White Lotus Press.

37 Ricardo Carrere and Larry Lohmann (1996) *Pulping the South Industrial Tree Plantations and the World Paper Economy*, Zed Books, page 237.

In his book, “*Khor Jor Kor, Forest Politics in Thailand*”, Oliver Pye notes that, “The Khor Jor Kor Project represented a pinnacle of state-directed authoritarian forestry. It was closely connected with the return to military dictatorship in Thailand.”³⁸ The plan was defeated by large scale rural protests and when a broad-based movement resulted in the end of the military junta in May 1992, the scheme was dropped.³⁹

South Africa’s plantation boom took place during the apartheid regime, under which black people lost all their rights, including rights to land. The South African pulp and paper company Mondi was formed in 1967, during the apartheid regime. The company expanded its plantations rapidly during the 1980s, buying up hundreds of farms to become one of South Africa’s largest land-owners. According to Mondi 48 per cent of its land is currently under land claims.⁴⁰

The Finnish consulting firm, Jaakko Pöyry, it seems, had no qualms about working for Mondi during the brutal apartheid regime. Mondi’s Richards Bay pulp mill was commissioned in 1984,⁴¹ at the height of the company’s apartheid-backed land grab. Pöyry won a series of contracts from Mondi on its Richards Bay mill going back to the start of the project.

The expansion of the area of industrial tree plantations in Chile took place under Pinochet’s brutal neo-liberal dictatorship. Under the Chilean Decree Law 701, the Chilean government reimbursed companies most of their development and management costs for establishing industrial tree plantations.⁴²

The area of Brazil’s plantations expanded as the result of a generous series of tax breaks for companies which established plantations. The subsidies ran from 1967 to the early 1980s,⁴³ implemented under Brazil’s military dictatorship.

Uruguay’s plantations also expanded in part during a military dictatorship, with the foundations for the country’s plantations boom being laid in 1951, when a joint FAO and World Bank mission made a series of recommendations for the country’s forestry sector, which, taken together with those of a later FAO mission, formed the basis for forestry laws adopted in 1968 and 1987.⁴⁴

When a company has covered thousands of hectares of land with tree monocultures, the next step is often to build a pulp mill. More government subsidies are available, such as Free Trade Zone status for the mill (thus avoiding the need to pay taxes or duties on imported machinery to build the mill). Other subsidies might include the building of roads or ports to transport fibre to the mill and to export the pulp. International treaties can also be a form of government subsidy – covering topics such as insurance and

38 Oliver Pye (2005) *Khor Jor Kor Forest Politics in Thailand*, White Lotus Press, page 109.

39 Ricardo Carrere and Larry Lohmann (1996) *Pulping the South Industrial Tree Plantations and the World Paper Economy*, Zed Books, page 237.

40 “Land claims and indigenous people”, Mondi’s website: <http://www.mondigroup.com/desktopdefault.aspx/tabid-1153/>

41 Graham Ferreira (2005) “Richards Bay expansion: Higher capacity, improved environmental performance”, *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2005.

42 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

43 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

44 “Uruguay: Either with the people or with pulp mills and tree plantations”, World Rainforest Movement Bulletin no. 83, June 2004. <http://www.wrm.org.uy/bulletin/83/Uruguay.html>

even public demonstrations against the plant.

For example, before construction of Botnia's pulp mill in Uruguay, the Government of Uruguay and the Government of Finland signed an agreement "regarding the promotion and protection of investment". This was in effect an agreement assuring Botnia of the Uruguayan Government's constant support. The agreement even forces the government to pay compensation to Botnia for any losses, caused by, among other things, riots.⁴⁵ In 2006, the Uruguayan government sent police and the army to keep protesters away from the pulp mill building site, as a result of massive organised opposition in neighbouring Argentina, bringing back memories of the dictatorship for activists in Uruguay.⁴⁶

In Indonesia the rapid expansion of the pulp industry during the 1990s was preceded by a series of studies funded by, among others, the World Bank and the Asian Development Bank. Subsidies and tax concessions, implemented under the Soeharto dictatorship, encouraged the establishment of hundreds of thousands of hectares of industrial tree plantations. The result has been massive deforestation. Much of this was fraudulent: companies took the subsidies, logged the forest and did not establish plantations.⁴⁷ Today, more than two decades after the pulp industry's expansion in Sumatra was planned, there are not enough plantations to provide raw material to the pulp mills, which remain dependent on timber from Sumatra's rapidly-shrinking rainforests.⁴⁸

While production of pulp is moving South, much of the advice that governments, companies and financiers rely on comes from northern-based consulting firms. Much of the financing for pulp and paper mills comes from the North. The machinery and equipment for pulp and paper machines is manufactured in the North. The manufacture and export of pulp and paper machinery is often backed by export credit and guarantee agencies.

The expansion in the South is as much a factor of structural problems within the pulp industry, and the North's "need" to expand its industry and gain access to raw materials as it is a question of economics. Certainly, it has nothing to do with "development".

The pulp sector in Europe

The pulp and paper sector in the North may not be expanding as fast as in Latin America or south-east Asia but the North still plays a large role in the industry. According to PricewaterhouseCoopers, more than three-quarters of the 100 biggest companies in the forestry, packaging and paper sector, are from North America, Europe and Japan. 27 have their headquarters in the US, 11 are from Canada, 26 are from Europe and 12 are from Japan.⁴⁹

45 "Uruguay: Either with the people or with pulp mills and tree plantations", World Rainforest Movement Bulletin no. 83, June 2004. <http://www.wrm.org.uy/bulletin/83/Uruguay.html>

46 "Uruguay: Though not yet in operation, Metsa Botnia's pulp mill already smells rotten", World Rainforest Movement Bulletin no 113, December 2006. <http://www.wrm.org.uy/bulletin/113/Uruguay.html>

47 The most notorious example is Bob Hasan, a close friend of Indonesian dictator Soeharto. Hasan was jailed for corruption after Suharto's fall. Chris Lang (2006) "Indonesia: Deutsche Bank pulls out of UFS pulp project", World Rainforest Movement Bulletin no. 102, January 2006. <http://chrislang.org/2006/01/24/indonesia-deutsche-bank-pulls-out-of-ufs-pulp-project/>

48 See, for example, my post on Pulp Inc: "APP and APRIL still cannot legally supply their pulp mills", 10 April 2008. <http://pulpinc.wordpress.com/2008/04/10/app-and-april-still-cannot-legally-supply-their-pulp-mills/>

49 "Global Forest and Paper Industry Survey: 2006 Edition - Survey of 2005 Results", PricewaterhouseCoopers, 2006.

Between 1991 and 2006, the number of pulp and paper companies in Europe decreased from 1028 to 801. The number of people employed decreased from 390,600 to 259,100. However, the total capacity of the pulp industry in Europe increased from 38.7 million tonnes in 1991 to 46.8 million tonnes in 2006. Just over one-quarter of world pulp production takes place in Europe. North America produces 42 per cent, Asia 21 per cent, Latin America 8 per cent and the rest of the world 3 per cent.⁵⁰

Global pulp consumption approximately reflects the production figures: Europe consumes 29 per cent, North America 36 per cent, Asia 28 per cent, Latin America 5 per cent and the rest of the world 2 per cent.

In 2006, European countries imported 7.6 million tonnes of pulp while they exported 2.2 million tonnes. The trends are interesting. Imports from North America to European countries fell from 4.6 million tonnes in 2001 to 3.4 million tonnes in 2006. Imports from Latin America to European countries increased from 2.0 million tonnes in 2001 to 3.1 million tonnes in 2006.

Well over half of pulp production in Europe is in Sweden and Finland (28.1 per cent and 30 per cent respectively). For comparison, Germany's pulp production (the next biggest country) is only 6.8 per cent of the total.

China – driving the boom in the South?

China's booming economy has long been described as the driving force for the pulp and paper industry's expansion in the South. "Paper makers' confidence in the future rests mainly on the assumption that fast-growing demand in newly-industrialising countries, especially China and south-east Asia, will more than make up for slackening consumption in the developed world," wrote the *Financial Times* back in 1994. "Consumption in China is currently only about 20 kg a person every year, about 5 per cent of the level in North America."⁵¹

China's paper consumption is increasing rapidly, up from 23.95 kilogrammes per capita in 1994 to 44.66 kilogrammes per capita in 2005. While this is still only 15 per cent of the per capita consumption in the US, China's total paper production is catching up with that of the US. In 2005 China produced 53 million tonnes of paper, compared to 81 million tonnes in the US. Currently paper production in China is doubling every ten years. If the expansion continues at this rate, by the end of this decade China will produce more paper than the US.⁵²

Certainly, China's economy is growing fast. But much of the paper produced in China is packaging for

50 The statistics in this section come from "Key Statistics 2006 European Pulp and Paper Industry", Confederation of European Paper Industries, 2007.

The statistics refer to CEPI member countries, which in 2006 included Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, The Netherlands, United Kingdom.

51 Bernard Simon (1994) "Survey of World Forest Products (2): Paperwork expands - Forest products fight for survival in the electronic age", *Financial Times*, 17 May 1994.

52 The statistics come from World Resources Institute's Earthtrends website:

http://earthtrends.wri.org/searchable_db/index.php?action=select_variable&theme=9. WRI's source is the UN Food and Agriculture Organization's 2007 FAOSTAT on-line statistical service: <http://faostat.fao.org/default.aspx>

consumer goods which are manufactured cheaply in China and exported to North America, Europe and Japan. A large part of the driving force is the North's over-consumption – not just of paper products but packaging for flat screen plasma TVs, fridges, cheap jeans, iPods, washing machines, laptops and computers.

Over-consumption and under-consumption

Paper consumption is massively skewed worldwide. One issue of the *New York Times* newspaper covers an area of more than 50 square metres if it is laid out on the ground. Meanwhile schoolchildren in Zambia have no choice other than to take notes in the sand, because they have neither pencils to write with nor paper to write on.⁵³

Globally, the average per capita paper consumption is 54.48 kilogrammes per year. Per capita consumption of paper and board in high income countries (227.82 kilogrammes per year) is about 55 times as high as that in low income countries (4.11 kilogrammes per year). In Brazil, in 2005, per capita consumption of paper and board was 39.49 kilogrammes. In Germany, the figure was 231.65 kilogrammes.⁵⁴

The amount of waste paper produced each year is staggering. Every year in the US, 100 billion pieces of junk mail are posted.⁵⁵ In the UK, the newsprint industry produces 13 billion newspapers and magazines. To do so, in 2002, it imported 1.65 million tonnes of paper, double the amount of domestic paper (or recycled paper) which went into newspapers.⁵⁶

Meanwhile, paper companies are constantly looking for new uses for paper, precisely to increase consumption of paper (and, of course, to increase their profits). Just some of these new uses include cardboard bicycles (which need new frames, forks and wheels every six months); cardboard furniture, cardboard houses and paper clothing.⁵⁷

“Papers are essential vehicles for our culture, lifestyles, and industries,” Nobuaki Shoichiro Suzuki, Oji Paper's president, wrote on the company's website. “Therefore, we believe that it is our mission to satisfy the growing paper demand in many possible ways.”⁵⁸ During the mid-1990s, Swedish company SCA measured its managers' performance by how many new products they had launched.⁵⁹

Tissue paper provides a good example of how the industry promotes demand for its products. “Manufacturers argue that retailers mainly want non-recycled products because this is what consumers

53 Chris Lang (2006) “Zambia and paper”, Pulp Inc., 11 September 2006. <http://pulpinc.wordpress.com/2006/09/11/zambia-and-paper/>

54 The statistics come from World Resources Institute's Earthtrends website: http://earthtrends.wri.org/searchable_db/index.php?action=select_variable&theme=9. WRI's source is the UN Food and Agriculture Organization's 2007 FAOSTAT on-line statistical service: <http://faostat.fao.org/default.aspx>

55 “ForestEthics Launches ‘Do Not Mail’ Campaign to Stop Junk Mail”, ForestEthics press release, 11 March 2008. <http://donotmail.org/article.php?id=51>

56 Fiona Harvey (2004) “The green bins as a last resort”, *Financial Times*, 14 December 2004.

57 Justin Toland (2008) “Inventing more uses for paper”, RISI blog. <http://www.risiinfo.com/blogs/Blog-Inventing-more-uses-for-paper.html>

58 Oji Paper's website: <http://www.ojipaper.co.jp/>

59 Bernard Simon (1994) “Survey of World Forest Products (2): Paperwork expands - Forest products fight for survival in the electronic age”, *Financial Times*, 17 May 1994.

are asking for”, notes WWF.⁶⁰ In 2005, I took part in a meeting with Procter and Gamble in Germany. Shortly before the meeting, Brazil’s Aracruz, which was then supplying pulp for P&G’s *Tempo* brand paper tissues, had violently evicted Tupinikim and Guarani indigenous peoples from villages on traditional land that they had reclaimed from Aracruz’s plantations. During the five-hour-long meeting we discussed land rights, Indigenous Peoples’ rights, the impact of industrial tree plantations on water, soil and local livelihoods and the ethics of importing pulp from a company such as Aracruz. But the only time the P&G staff really became animated was when we suggested that P&G could use recycled fibre to make its tissue. This was out of the question, according to P&G. “Our customers *need* soft tissue paper,” was the response. Millions of dollars of P&G research has revealed that the softest, fluffiest tissue paper can be manufactured from eucalyptus pulp, with layers of tissue paper manufactured from softwood pulp to provide strength.

Tissue paper companies have huge budgets for advertising, aimed precisely at convincing consumers how soft their products are and how super softness is an essential quality for tissue paper. Yet much of the tissue paper that people use day-to-day is recycled. In hotels, schools and offices, most toilet paper is made from recycled paper.⁶¹

Paper can be recycled

In fact, the paper industry is perfectly happy to use recycled paper for some uses. “Recycled paper has been the fastest growing fibre source for paper industry already for over 15 years, it has substituted gradually for wood-based pulp in fibre furnish,” explained Pöyry’s Petteri Pihlajamäki to Finnish researcher Tove Selin in 2004.⁶²

Between 1991 and 2006, the use of recycled paper in member countries of the Confederation of European Paper Industries increased from about 26 million tons to about 49 million tons.⁶³ In 2000, the European paper industry launched a “European Declaration on Paper Recycling” which set a series of voluntary standards and targets for the paper industry. In 2006, the industry launched a second Declaration aiming to increase the paper recycling rate in Europe to 66 per cent by 2010.⁶⁴

However, while the proportion of paper manufactured from recycled paper has more than doubled since the 1960s (from about 20 per cent in 1961 to 46 per cent in 2005), the overall production of paper is still increasing.⁶⁵ In other words, the total amount of paper manufactured from trees increases each year.

60 “Forests flushed down the toilet”, WWF press release, 21 November 2005.

61 “Forests flushed down the toilet”, WWF press release, 21 November 2005.

62 Tove Selin (2004) “Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region”, *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

63 “Key Statistics 2006 European Pulp and Paper Industry”, Confederation of European Paper Industries, 2007.

64 “European Declaration on Paper Recycling 2006-2010”, European Recovered Paper Council, c/o CEPI, 2006. The following European associations are Signatories to the European Declaration on Paper Recycling:

CITPA – International Confederation of Paper and Board Converters in Europe

ERPA – European Recovered Paper Association

ETS – European Tissue Symposium

INGEDE – International Association of the Deinking Industry

INTERGRAF – International Confederation for Printing and Allied Industries

65 The statistics come from World Resources Institute’s Earthtrends website:

http://earthtrends.wri.org/searchable_db/index.php?action=select_variable&theme=9. WRI’s source is the UN Food and Agriculture Organization’s 2007 FAOSTAT on-line statistical service: <http://faostat.fao.org/default.aspx>

And using recycled paper is not by itself a solution to the problems caused by the pulp and paper industry. One problem is that in recent years, paper recycling has been globalised. An increasing amount of used paper from Europe has been exported to Asia, particularly to China. In 2006, European countries exported a total of 7.7 million tonnes of recycled paper to Asia, more than double the amount exported to Asia in 2002.⁶⁶ Exporting used paper to China to manufacture cardboard packaging to import goods to Europe might make sense on a purely economic level. But the greenhouse gas emissions from transporting waste paper around the world can no longer be ignored. Neither can the fact that if used paper is exported from Europe that means that it is not available to be recycled in Europe – precisely where the demand for paper products is high.

Another problem with recycled paper is that there is often little regulation of the labels used on recycled paper products. A recent scandal in Japan revealed that even when the industry says that it is using recycled paper, there may be little guarantee that it is actually doing so. In January 2008, the Japan Paper Association announced that 17 of its 38 member companies (including Oji Paper and Nippon Paper) had lied about the amount of used paper contained in their products that they sold as “recycled paper”.⁶⁷

Using recycled paper is one way of reducing the impact of the North’s paper consumption. But it still doesn’t address the issue of over-consumption. The only way to address over-consumption is by reducing consumption.

Journalist Richard Tomkins clearly explains the implications of Northern over-consumption in a 2006 article in the *Financial Times*:

“If . . . people really wanted to make an impact on greenhouse gas emissions, they would have to make big sacrifices – so big that it is hard to imagine any government having the courage to advocate them.

“People’s top priority, for example, would need to be a reduction in their consumption of goods. Recycling bits of packaging is as nothing compared with the vast savings in energy and resources that could be made if people bought fewer products. The biggest source of greenhouse gas emissions is the energy used to manufacture and deliver the goods that end up in our homes – furniture, kitchen equipment, televisions, toys, computers, clothes and food. You do not need to recycle if you do not buy anything in the first place.”

Tomkins then rejects his own suggestion: “The implications of lower consumption, however, hardly bear thinking about. . . . we would very likely be looking at the prospect of perpetual recession or worse – anathema to governments for which the annual rate of economic growth is a virility symbol.”⁶⁸

The implications of runaway climate change also “hardly bear thinking about”. Consuming less would be an important contribution to avoiding climate change – and one of the ways of consuming less paper is to

66 “Key Statistics 2006 European Pulp and Paper Industry”, Confederation of European Paper Industries, 2007.

Some of CEPI’s statistics reflect the crazier side of globalisation. In 2005, CEPI countries imported 6 million tons of recycled paper from Latin America while they exported 4 million tons back to Latin America. “Annual Statistics 2005 European Pulp and Paper Industry”, Confederation of European Paper Industries, May 2006.

67 “17 papermakers falsified data: report”, Kyodo News, 26 January 2008.

<http://search.japantimes.co.jp/rss/nb20080126a1.html>

68 Richard Tomkins (2006) “Is recycling utter rubbish?”, *Financial Times*, 8 July 2006.

consume fewer goods. Less advertising, less packaging and less waste. In June 2008, a group of more than 50 NGOs in Europe launched the “Shrink” campaign, which is aimed at reducing paper consumption in Europe by at least half.⁶⁹

Last year, Mandy Haggith, the co-ordinator of the Shrink campaign, travelled by train and boat from her home in Scotland to Sumatra, Indonesia.⁷⁰ “I was horrified by how destructive our paper footprint is,” Haggith says.

“I met Indonesian villagers fighting a land-claim with a paper company that is growing acacia on their community land to make copy paper for sale in European and North American markets. I asked them what I could do to help their fight, and they told me to ask people in Europe to use less copy paper. To show real solidarity with people struggling with multinational extractive industries, it is not enough for us to shift our consumption from one brand to some other, hopefully slightly less obnoxious, brand. That only displaces the problem. Consuming differently is not good enough, we need to consume less AND differently.”⁷¹

Financing overcapacity

Part of the problem lies in the way the pulp and paper sector finances its expansion. The industry is notoriously cyclical. When paper prices are high, profits are up and the industry invests in expansion – banks are happy to lend to an industry that is growing. The result is overcapacity and eventually a price collapse. A drop in demand linked to a slow down in global economic growth has the same effect on pulp and paper prices. Overcapacity exacerbates the problem. In both cases, the result is that the industry has to run its mills at less than capacity or start closing down mills.

A quick look at the recent history of booms and busts in the pulp and paper industry indicates what the industry might have in store in the next few years as the financial crisis causes a slow down in paper consumption and a squeeze on loans for new pulp mills.

The pulp and paper industry expanded rapidly in the 1980s, followed by a crisis at the end of the decade – a direct result of the overcapacity in the sector. In 1992, the *Financial Times* described the problems faced by the paper industry:

“Pulp and most grades of paper represent classic examples of cyclical industries. And they are becoming more and more classical as each down-draught of the cycle appears to become increasingly deep and long.

“One reason is the growing size of paper machines. A world-scale competitive paper plant now has a capacity of at least 200,000 tonnes a year, and sometimes more than 300,000 tonnes, explains Mr Denis Christie, paper, pulp and packaging analyst at James Capel.

69 For more information and to sign the pledge to use less paper, see <http://www.shrinkpaper.org>

70 Mandy Haggith’s book based on her trip: *Paper Trails: from trees to trash, the true cost of paper*, was published by Virgin Books on 3 July 2008.

71 I interviewed Mandy Haggith by email, 3 June 2008.

See Chris Lang (2008) “‘Shrink’: A new campaign to stop the madness of paper over-consumption”, World Rainforest Movement Bulletin 131, June 2008. <http://chrislang.org/2008/06/27/shrink-a-new-campaign-to-stop-the-madness-of-paper-over-consumption>

“Each time a new plant comes on-stream it adds a significant chunk to regional capacity. Most paper groups demonstrate lemming-like behaviour when the economic cycle is at its peak. Unwilling to lose market share, they invest in these new increasingly large plants simultaneously, aggravating the subsequent imbalance of supply and demand.”⁷²

Since 1992, the scale of pulp and paper mills has increased dramatically. Modern pulp mills can produce about one million tons of pulp a year and cost more than US\$1 billion to build. To repay the debts incurred, companies aim to run the pulp mills 24 hours a day, seven days a week.

The industry’s justification for the ever-increasing scale of pulp and paper mills is simple. “Economies of scale ensures lower costs per unit produced,” says Petteri Pihlajamäki, of forestry consulting firm Pöyry. “I agree that if you would build many small mills you would employ more, but these are private companies and they prefer the economy of scale.”⁷³

A quick look at the past 15 years of pulp prices illustrates the problems that the industry creates through its rapid expansion and over-supply. In 1993, the price for one ton of market pulp was US\$390. The price shot up to more than US\$1,000 a ton in 1995.⁷⁴ As the price increased, the industry expanded rapidly. Orders for paper machinery went up. “For investors in the pulp and paper sector, none of this is good news,” commented the *Financial Times* in 1995. Share prices in companies fell when they announced major expansions. Investors were worried that the industry was repeating the previous cycle where over-investment created over-capacity that led to a collapse in paper prices when demand weakened.⁷⁵

Sure enough, the price of pulp fell to US\$610 a tonne in 1997,⁷⁶ leading to a series of mergers and lay-offs, particularly in North America. In 1997, International Paper announced that it was cutting 9,000 jobs (10 per cent of its workforce) and selling US\$1 billion in assets. Canada’s Abitibi-Price and Stone-Consolidated merged to form the world’s biggest newsprint producer, Abitibi-Consolidated.⁷⁷

The price of pulp peaked in September 2000 at US\$710 a tonne. A global recession starting in 2001 led to a reduction in the amount of paper consumed globally. The price of pulp fell to a low of US\$440 in December 2002. Since then, it has increased steadily. In June 2004, it stood at US\$661.⁷⁸ During the summer of 2008, pulp prices were around US\$900 a ton, but fell to US\$600 a ton in October as a result of the global financial meltdown.⁷⁹

There are several factors that are likely to affect the pulp and paper industry in the coming years. The

72 Paul Abrahams (1992) “Leaving the roller-coaster - Merchanting and added-value papers”, *Financial Times*, 14 December 1992.

73 Tove Selin (2004) “Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region”, *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terrapeer.org/pic_water/Watershed%209\(3\).pdf](http://terrapeer.org/pic_water/Watershed%209(3).pdf)

74 Deborah Hargreaves (1997) “Helsinki exchange to launch first pulp futures”, *Financial Times*, 24 January 1997.

75 Christopher Brown-Humes, Bernard Simon and Wolfgang Munchau (1995) “Machinery makers paint a far brighter picture”, *Financial Times*, 23 November 1995.

76 Deborah Hargreaves (1997) “Helsinki exchange to launch first pulp futures”, *Financial Times*, 24 January 1997.

77 Bernard Simon (1997) “Pulp industry shake-out gathers pace”, *Financial Times*, 10 July 1997.

78 Kevin Morrison (2004) “Nybot sees future in pulp trading”, *Financial Times*, 22 December 2004.

79 Gordon Hamilton (2008) “Global crisis ends plans for B.C. pulp mill”, *Vancouver Sun*, 8 October 2008.

<http://www.canada.com/vancouvernews/business/story.html?id=612d022b-d1d4-4a86-bded-bc741c113458>

credit crunch, unstable oil prices (which were high earlier in 2008, but are currently low) and the threat of a world recession will affect how easy it is for companies to raise capital. Economic recession means reduced consumption of paper globally. However, pulp and paper companies don't only raise money when they plan new projects such as new pulp mills or new plantations. Much of the finance that pulp companies raise is not directly project finance. Financing comes from issues of shares or bonds as well as general corporate financing.

Private equity funds have started buying up pulp and paper companies. Madison Dearborn Partners one of the biggest private equity companies in the US owns stakes in Boise Cascade, Buckeye Cellulose, Graphic Packaging Corporation, Packaging Corporation of America and Smurfit Kappa.⁸⁰ In 2005, Cerebus Capital Management bought MeadWestvaco's paper business for US\$2.3 billion⁸¹ setting up a new company called NewPage. Stora Enso subsequently sold off its north American operations to NewPage.⁸²

Since 2004, Finnish consulting firm Pöyry has organised a yearly event for private equity investors in London. During Pöyry's "private equity breakfast", representatives of private equity companies meet at Claridges Hotel to eat a traditional English breakfast while listening to Pöyry's "views and perspectives on the opportunities emerging throughout the forest industry value chain".⁸³

Private equity is based on capital raised from private sources rather than on the public stock exchange. Private equity firms aim to buy companies cheaply, asset strip and sell as quickly as possible for as large a profit as possible. Or, as Pöyry puts it, "The ownership time horizon of private equity is limited and there is always an exit strategy in mind. Compared to traditional investment companies, private equity is not a silent investor and actively influences the performance and strategic direction of management."⁸⁴

If private equity firms were to start taking over large scale pulp operations and industrial tree plantations in the global South, running them purely for short term profit, the social and environmental impacts could be even more severe than at present.

Increasingly though, pulp and paper companies are selling off assets as a way of raising finance. In 2005, for example, International Paper started to sell off the forests and plantations which provided its raw material. Before the sale, International Paper was the world's second largest private land owner.⁸⁵

International Paper's sale of its forests and plantations reflects an industry trend. Pulp and paper industry analyst Dennis Neilson notes that

"In recent years there have been many new investment funds and companies from Europe and North

80 Bernard Simon (2005) "Sector that's suffered a bit of a pulping", *Financial Times*, 28 June 2005.

"Portfolio", Madison Dearborn Partners website, <http://www.mdcp.com/portfolio.asp>

81 James Politi (2005) "Cerberus to buy MeadWestvaco paper arm", *Financial Times*, 19 January 2005

82 Vidya Ram (2007) "Stora Enso Finds American Exit Route", *Forbes*, 29 September 2007.

http://www.forbes.com/markets/2007/09/21/stora-enso-newpage-markets-equity-cx_vr_0921markets04.html?partner=links

83 Cormac O'Carroll and Aestan Orstadius (2007) "Private equity breakfast with Pöyry in London", *Know-How Wire*, Pöyry Client Magazine, 2/2007.

84 Cormac O'Carroll and Aestan Orstadius (2007) "Private equity breakfast with Pöyry in London", *Know-How Wire*, Pöyry Client Magazine, 2/2007.

85 Jeremy Grant and Dan Roberts (2005) "Oil prices pump up costs", *Financial Times*, 25 July 2005.

America that have invested in planted forest [sic] investments around the world, including in developing countries and those with economies in transition, where subsidies or incentives for investment exist and social and environmental prerequisites less rigid. When investment conditions become less favourable investors demand that their funds are invested elsewhere.”⁸⁶

The trend of investing in plantations started in the 1980s, with institutional pension and endowment funds investing in plantations purely for financial returns (as opposed to pulp companies which invest in plantations as a means of ensuring supplies of cheap raw material – in order to maximise their financial returns). This investment drive was partly a result of the fact that the value of plantations owned by forest products companies was not reflected in the companies’ share prices. Companies, especially those based in the US, which were facing financial difficulties, decided to cash in on this value by selling their plantations. Meanwhile, many financial institutions were looking to diversify their investment portfolios to include plantations.⁸⁷

In 1981, forest products companies owned some 23.5 million hectares of managed forests in the US. By the end of 2007, the figure had fallen to about 6 million hectares. Meanwhile, investment by institutional funds in global plantations and managed forests has increased from less than US\$1 billion in 1985, to more than US\$30 billion in 2007. Since 2005, several European based private and listed funds have set up to invest in plantations – some formed specifically to invest in plantations where carbon trading is a possibility.

A new type of organisation, “Timber Investment Management Organisations” (TIMOs) has emerged to manage these investments in plantations. The number of TIMOs has increased from two or three in the 1980s, to more than 25 today. Investors can buy up very large areas of land and divide it up for resale, in the hope of attracting higher bids for smaller blocks of land. Plantations can be subdivided and sold off as hunting and recreational blocks, or for residential or industrial use. In 2005, a hedge fund bought all of Boise Cascade’s plantations in the US and within 18 months had split up the plantations and resold them to TIMOs.⁸⁸

TIMOs have invested about US\$40 billion in plantations worldwide: 91% in North America; 5% in Australia; 2% in South America and 2% elsewhere.⁸⁹ TIMOs establish funds which invest for about 10 years, raising finance from institutional investors. Those TIMOs investing outside North America have developed funding mechanisms which allow them to avoid most (or all) taxes.⁹⁰

86 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

87 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

88 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

89 Renata Mercante (2008) “Global investors look for timberland opportunities in Latin America”, RISI blog, 13 March 2008. <http://risiinfo.com/blogs/Global-investors-look-for-timberland-opportunities-in-Latin-America.html>

90 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

Investment in plantations in the South could be set to increase. In March 2008, more than 100 potential investors in plantations took part in the “Timberland Investing Latin America Summit” in Sao Paulo, Brazil. According to a recent survey of US pension funds and university endowments, more than US\$8 billion is available to be invested worldwide in forest and plantation operations.⁹¹

Another type of investment institution investing in plantations are called “Timberlands Real Estate Investment Trusts (T-REIT)”. These have grown rapidly since 2000. The largest private plantation owner in the world is a T-REIT called Plum Creek.⁹² TIMOs and T-REITs tend to invest in plantations rather than native forests. They have invested in plantations in Oceania, Chile, Brazil, South Africa and Uruguay. One US based-fund is establishing plantations in Tanzania.

Another new development in plantations investment is the development of specialist country funds. In 2007, a Colombian plantation investment fund was launched, and a Japanese plantation fund may start up in 2008.⁹³

Sovereign Wealth Funds (SWFs) are yet another new source of funding which could start investing heavily in plantations. They certainly have enough money to do so. At the end of 2006, these funds held a total of US\$2.5 trillion. This figure could grow to US\$5 trillion by 2010 and US\$12 trillion by 2015. In September 2007, a new SWF, China Investment Corporation was launched, with US\$200 billion to invest.⁹⁴

So far, these new investment vehicles have had little influence on the way that pulp mills and plantations are established in the South, as the profiles of pulp projects in Section 2 of this report illustrate. Pulp mills and plantations have been established in the South, with more traditional sources of funding – and the help of generous subsidies from public institutions in Europe and the North.

Carbon trading

Carbon trading could provide a massive new subsidy for the pulp industry’s expansion in the South. Companies attempt to claim that the trees they are planting in the South are absorbing carbon from the atmosphere and thus helping to reduce climate change. Awkward facts, such as the impossibility of predicting what would have happened if the tree plantation had not been established, are brushed aside.

Botnia, for example, is taking advantage of the Clean Development Mechanism (CDM) under the Kyoto Protocol of the United Nations Convention on Climate Change. The CDM allows companies to offset their greenhouse gas emissions by buying carbon credits from projects in the global South which are

91 Renata Mercante (2008) “Global investors look for timberland opportunities in Latin America”, RISI blog, 13 March 2008. <http://risiinfo.com/blogs/Global-investors-look-for-timberland-opportunities-in-Latin-America.html>

92 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

93 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

94 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

supposed to reduce greenhouse gas emissions. Botnia hired two consulting firms: Carbosur from Uruguay, and Finland's Pöyry to investigate the possibilities of gaining financing through the CDM.

Botnia's CDM project involves burning black liquor from the pulping process to generate electricity. The pulp mill generates more electricity than it needs, and sells surplus electricity to the public electricity network in Uruguay. Botnia thus claims to be reducing emissions in Uruguay. In addition to selling electricity, Botnia will sell carbon credits. But to qualify for the CDM, a project must be able to prove that it is "additional". That is, it must prove that carbon credits are not being granted to a project that would have been carried out anyway – without carbon financing. In fact, Botnia's CEO Erkki Varis said in 2005, "I expect the factory to be very competitive, with estimated production costs of about half of those of modern Finnish pulp factories."⁹⁵ There is no evidence to show that Botnia would not have used waste products from the pulping process to produce electricity if it were not financed through the CDM. The CDM is simply a way for Botnia to increase its profits.

Oji Paper hopes to get financing for its plantations in Laos through the Clean Development Mechanism. To do so, it will have to convince CDM's board that it is planting on "degraded land" and that it is not clearing forest in order to establish its plantations. But researchers in Laos have documented that Oji Paper has in fact cleared forest, including large trees, to make way for its plantations. It is also planting on villagers' land, currently being used for swidden agriculture or cattle grazing.⁹⁶ Oji Paper will also have to convince the CDM's board that the project is "additional". Since Oji Paper started planting trees in Laos in 2004, and the area of plantations has expanded each year since then, arguing that the project is "additional" and could only go ahead with carbon financing, would simply be a lie.⁹⁷

By selling carbon credits from plantation projects and pulp mills, the industry is not addressing climate change. Even if we assume that the project is genuinely additional and would not have taken place without CDM financing, the net result is not a reduction in emissions. The CDM is in fact making things worse by allowing emissions of greenhouse gases to continue.

No more subsidies!

The generous subsidies handed out to the pulp and paper industry raises the question of why industrial tree plantations are established in the South and for whose benefit. In 1993, Ricardo Carrere wrote that

"The economic convenience of tree crops for Third World countries must be questioned. Despite the obvious contradiction in a world ruled by the neo-liberal ideology, tree plantations are being subsidised in a number of countries with support from a wide range of agencies, including the World Bank.

"The question is why? If investment in plantations were great business, subsidies would not be necessary. The answer lies in the industrialised countries' wish to secure the supply of this raw material at the lowest

95 "Uruguay: The Botnia pulp mill project intends to profit from climate change", World Rainforest Movement Bulletin no. 109, August 2006. <http://www.wrm.org.uy/bulletin/109/Uruguay.html>

96 Keith Barney (2007) "Power, Progress and Impoverishment: Plantations, Hydropower, Ecological Change and Community Transformation in Hinboun District, Lao PDR. A Field Report", Probe International, York Centre for Asian Research, Centre for International Forestry Research, Rights and Resources Initiative, YCAR Paper No. 1, June 2007. http://www.probeinternational.org/catalog/pdfs/Power_Progress_and_Impoverishment_Barney.2007.pdf

97 Chris Lang (2006) "Laos: Indian and Japanese pulp giants move in", World Rainforest Movement Bulletin no. 104, March 2006. <http://chrislang.org/2006/03/25/laos-indian-and-japanese-pulp-giants-move-in/>

possible price. Subsidies, linked to credits and support, at the present price levels make this investment profitable.”⁹⁸

While subsidies provided by governments in the South are perverse, even more perverse are the subsidies in the form of cheap loans and political support from multilateral and bilateral aid agencies, which supposedly have a mandate of reducing poverty. These international subsidies play a vital role in encouraging commercial investors to invest. Because of the political risk of the countries involved, or the financial risk of investing in a cyclical industry such as pulp and paper, the support of the World Bank, regional development banks or the European Investment Bank is often necessary before commercial banks will risk investing in pulp mill projects.

In a 2006 report, Andy White of the Rights and Resources Group, Gary Bull of the University of British Columbia and Stewart Maginnis of IUCN looked at the impact of subsidies to industrial plantations. They found that direct subsidies to industrial plantations amount to US\$2 billion per year. This is small compared to the US\$400 billion in subsidies paid each year for agriculture, but the authors note that it is more than four times the amount of development aid spent on forest conservation each year.⁹⁹

“[T]he market distortions caused by these subsidies diminish incentives to invest in and conserve natural forests,” White, Bull and Maginnis pointed out. “Top plantation companies have dramatically captured a growing share of the global forest products market over the past 40 years, contributing to a major price decline for almost all forest product categories.” They recommend (among other things) that “Technical and financial support to community and other small-scale forest businesses – since they are such strong contributors to local employment and economic development.” Industrial tree plantations are the exact opposite of this – large scale, poor providers of employment and disastrous for rural economies.

Dennis Neilson, a pulp and paper industry analyst and proponent of industrial tree plantations, confirms the importance of subsidies for plantations in his 2007 report for the FAO: “There has been one very important factor which has linked almost all successful planted forest (sic) expansion projects internationally. That has been the application by governments of generous direct subsidies, and/or tax concessions to planted forest establishment and management.”

Neilson acknowledges the problems caused by such subsidies:

“There is always a lot of criticism about providing free handouts, or tax concessions to any project. Such schemes invariably attract ‘fast money’ investors who are only motivated by greed and not by the worthiness of the project itself; and it also invariably means that planted forests get established in the wrong areas, outside sensible guidelines for suitable soils, rainfall and other factors necessary to grow a successful tree planted forest crop.”¹⁰⁰

Further evidence of the perverse nature of subsidies for industrial tree plantations comes from a 2003

98 Ricardo Carrere (1993) “The dangers of monoculture tree plantations”, *Third World Resurgence*, 40, December 1993. <http://www.wrm.org.uy/plantations/information/danger.html>

99 Andy White, Gary Bull and Stewart Maginnis (2006) “Subsidies for industrial plantations: turning controversy into opportunity”, *Arborvitae*, The IUCN/WWF Forest Conservation Newsletter, September 2006.

100 Dennis Neilson (2007) “Corporate Private Sector Dimensions in Planted Forest Investments”, Forestry Department Food and Agriculture Organization of the United Nations Planted Forests and Trees Working Paper Series, Working Paper FP/40E, October 2007. <http://www.fao.org/forestry/site/10368/en/>

study produced by the Centre for International Forestry Research (CIFOR) titled *Fast-Wood Forestry*. CIFOR notes in the report that subsidies to the pulp industry and industrial tree plantations create distortions to the economy, both internationally and locally. Subsidies make plantations viable on land which may be better put to other uses, such as agriculture, community forestry, forest conservation or logging. Companies that do not receive subsidies are put at a disadvantage. Subsidies reduce the cost of raw material to the pulp industry, thus making paper cheaper and encouraging the consumption of paper products.¹⁰¹ CIFOR cites a submission by IUCN and WWF to the World Bank in 2002 which argued that “Large amounts of money that could have been better invested, either within or outwith the forest sector, have gone to support ill-conceived planting schemes.”¹⁰²

CIFOR concluded its *Fast-Wood Forestry* report with the recommendation to phase out subsidies to industrial tree plantations: “The sooner subsidies to commercial plantations are phased out, or at least dramatically reduced, the better. Subsidies create economic distortions and make plantations viable in situations where other land uses might make better economic and environmental sense.”¹⁰³

101 Christian Cossalter and Charlie Pye-Smith (2003) “Fast-Wood Forestry. Myths and Realities”, Center for International Forestry Research (CIFOR), Bogor, Indonesia. <http://assets.panda.org/downloads/fastwood.pdf>

102 IUCN/WWF (2002) “The role of plantation”, Note to the World Bank reacting to P.D. Hardcastle (2001) “Plantations: Potential and limitations”, cited in Christian Cossalter and Charlie Pye-Smith (2003) “Fast-Wood Forestry. Myths and Realities”, Center for International Forestry Research (CIFOR), Bogor, Indonesia, page 38. <http://assets.panda.org/downloads/fastwood.pdf>

103 Christian Cossalter and Charlie Pye-Smith (2003) “Fast-Wood Forestry. Myths and Realities”, Center for International Forestry Research (CIFOR), Bogor, Indonesia, pages 43-44. <http://assets.panda.org/downloads/fastwood.pdf>

2. The anatomy of five pulp projects

This section looks at how five pulp projects in Brazil, Swaziland, Thailand, Indonesia and Uruguay were built, where the financing came from and what the impacts were for local people.

Veracel, Brazil: A failed and destructive model of “development”

Veracel started up its massive new pulp in June 2005 near Eunápolis in the state of Bahia in Brazil. Two years later, almost 350 organisations and individuals signed on to a statement about the Veracel pulp mill and its plantations. The statement clearly explains what is wrong with this sort of project:

“We consider that a company such as Veracel Celulose, one of the symbols of the ‘development’ model imposed in an arbitrary, illegal and violent way, giving rise to serious negative consequences and causing violence, poverty and hunger to the people of the Extreme South of Bahia, cannot be environmentally responsible, socially beneficial or economically viable.

“For the traditional peoples and member organizations of the Socio-Environmental Forum of the Extreme South of Bahia and the Alert against the Green Desert Network, large-scale monoculture eucalyptus plantations are ecologically disastrous, socially unjust and economically perverse for the region.”¹⁰⁴

The 900,000 tonnes a year pulp mill cost US\$1.25 billion and was built with financing from the European Investment Bank (EIB), the Nordic Investment Bank and Brazil’s development bank (BNDES).¹⁰⁵

The company is a joint venture between two giants of the pulp and paper industry: the world’s largest producer of paper, Stora Enso (Finland-Sweden), and the world’s largest producer of bleached eucalyptus pulp, Aracruz (Brazil). Pulp from the mill is to be exported, mainly to Europe, the USA and Asia.

Veracel planted its first eucalyptus tree in May 1992¹⁰⁶ and construction of the pulp mill started eleven years later.¹⁰⁷ Before the pulp mill was constructed, eucalyptus from Veracel’s plantations was shipped to Aracruz’s pulp mills in Espirito Santo.

The Veracel project is part of Stora Enso’s plans to move a large part of its production to the Global South. In May 2005, Kari Vainio, executive vice-president of communications at Stora Enso, told the *Financial Times*, “With time, production will shift from North America and Scandinavia to the southern hemisphere.”¹⁰⁸

Veracel already has plans to expand. According to *Pulp and Paper International* magazine, much of the

104 “Arguments to show that Veracel should not receive certification”, Letter sent to FSC to show that Veracel should not receive certification, 14 August 2007, signed by 347 organisations and individuals.

http://www.wrm.org.uy/countries/Brazil/Letter_Veracel.html

105 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 5.

<http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Veracel.pdf>

106 Veracel (2002) “Veracel 10 years”, Veracel company booklet, 2002.

107 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 24.

<http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Veracel.pdf>

108 Raymond Colitt (2005) “Brazilian plant may prompt lower pulp prices”, *Financial Times*, 27 May 2005.

infrastructure necessary for the two new lines was installed when the pulp mill was built.¹⁰⁹ In 2004, Aracruz's Chief Marketing and Sales Officer Joao Philippe Carsalade told investors that Veracel was looking to expand its operations. "There are plenty of land bases," Carsalade said. "It's a question of building up a forest [sic] base for that. Also, there are some other alternatives that we will start looking at, in terms of areas in which we can build forest [sic], and with a future plan of putting up a pulp mill."¹¹⁰

In 2005, Stora Enso's then-CEO Jukka Härmälä described the Veracel pulp mill as "the most cost competitive short fiber pulp mill in the world".¹¹¹ But these cheap production costs are only possible because of a series of subsidies and cheap loans. In October 2001, EIB approved a US\$30 million loan to Veracel. The loan covered establishing 26,000 hectares of eucalyptus plantations, buying forestry equipment and building and upgrading hundreds of kilometres of roads.¹¹²

Veracel invested about US\$26 million in infrastructure, including roads and its own port. "There was nothing but trees when we arrived here," Jorma Kangas, Veracel's project manager, told the *Financial Times* in 2005.¹¹³

In December 2003, EIB approved another loan to Veracel, this time a US\$80 million loan for construction of the pulp mill.¹¹⁴ The Nordic Investment Bank provided a loan of US\$70 million.¹¹⁵ The Brazilian Development Bank (BNDES) also financed the pulp mill project to the tune of US\$500 million.¹¹⁶

The European Investment Bank's process for approving its loans was not transparent. In October 2003, representatives from four Brazilian NGOs and three European NGOs met with EIB officials in Brussels to urge the bank not to finance the Veracel project. During the meeting, the EIB stated that it wanted "hard facts" from NGOs. Yet the Bank offered no reports, documents and no concrete information about the project. Marcelo Calazans from the Brazilian NGO FASE Espirito Santo asked to see the documents that EIB has produced in its evaluation of the Veracel project. Werner Schmidt, a Senior Economist at the EIB, replied,

"We look at the social and market aspects of the project. We look at employment. What was the situation before the project and with the project? Our evaluation is a continuous process. We look at market aspects, whether the project is financially and economically viable. This is all part of the due diligence process."¹¹⁷

109 Patrick Knight (2004) "Investments in the billions: Brazilian mills expect to supply 50% of world's additional pulp needs", *Pulp and Paper International*, August 2004.

110 "Q4 2003 ARACRUZ CELULOSE S A Earnings Conference Call – Final", FD (Fair Disclosure) Wire, 14 January 2004.

111 "Q2 2005 Stora Enso Earnings Conference Call – Final", FD (Fair Disclosure) Wire, 27 July 2005.

112 "EIB loan for reforestation in Brazil", European Investment Bank press release, 18 October 2001.
<http://www.eib.eu.int/news/press/press.asp?press=130>

113 Raymond Colitt (2005) "Brazil is top of the tree in tale that is no pulp fiction", *Financial Times*, 21 June 2005.

114 "Veracel Pulp Mill Project, Brazil", European Investment Bank, press release, 30 March 2004.
<http://www.eib.eu.int/news/News.asp?news=73&cat=10>

115 "Fast-growing forest is Veracel's trump card", *Bulletin*, Nordic Investment Bank, July 2004.

116 "Brazil President To Attend BNDES Veracel Loan Ceremony", *JB Online, Latin America News Digest*, 21 January 2005.

117 I took part in the meeting. The quotations are from my notes taken during the meeting.

However, while the Bank confirmed that it had produced reports during its evaluation process, none of these documents are available to the public. The Bank even declined to release the date when the Bank's Board would meet to discuss the Veracel project.

EIB later described this meeting as “the occasion for a useful exchange of information and open and candid discussions”.¹¹⁸ The Bank's web-site described the meeting as “a dialogue” with NGOs and stated that EIB had “conducted extensive correspondence on the project with interested NGOs”. After Urgewald and CEE Bankwatch sent a letter (signed by 169 NGOs) to EIB President, Philippe Maystadt, complaining about this misrepresentation of the facts, EIB withdrew these claims from its web-site.

At the end of the meeting Marcelo Calazans asked the Bank officials how they felt about supporting the overconsumption of paper in the North. Philippe Guinet, who works on technical assessments of EIB projects, replied, “You're asking personally. I can't answer. My feelings cannot influence my work at the Bank. . . . This is a question of global trade and economics.”

Exactly.

The Veracel project led to a series of lucrative contracts for European and Nordic companies. Pöyry produced a range of feasibility studies¹¹⁹ and an environmental impact assessment.¹²⁰ Pöyry's Brazilian subsidiary Jaakko Pöyry Tecnologia Ltda subsequently won US\$16 million in engineering contracts on the construction of the Veracel pulp mill.¹²¹

Andritz (Austria) won a US\$230 million contract to plan and build the fibreline and a white liquor plant.¹²² Eka Chemicals (Sweden) won a US\$58 million contract to supply chemicals.¹²³ Degussa (Germany) expanded its hydrogen peroxide plant at Barra do Riacho in Espírito Santo to supply the Veracel pulp mill.¹²⁴ Invensys Systems Brazil, (part of the UK-based Invensys Group) won the contract to supply automation systems.¹²⁵ Aker Kvaerner (Norway) won a US\$110 million contract to build Veracel's boilers.¹²⁶ Metso Automation (a subsidiary of Finnish company Metso Corporation) won a US\$7 million order to supply valves and online analysers¹²⁷ and Metso Paper won a US\$28 million

118 Letter from GabrielLauerermann and Yvonne Berghorst (EIB) to Magda Stoczkiewicz (CEE Bankwatch Network/Friends of the Earth International), 29 June 2004.

119 “Combined effort reaps reward as Veracel starts”, *Printing World*, 2 June 2005.

120 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 25. <http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Veracel.pdf>

121 “Veracel awards engineering contract to Jaakko Pöyry Group”, press release, 30 July 2003.

http://www.paperloop.com/db_area/archive/pponews/2003/wk07_28_2003/29.html

“Jaakko Poyry Group Oyj subsidiary wins engineering contracts in Brazil”, *Nordic Business Report*, 30 July 2003.

122 “Veracel picks Andritz to supply world's largest fiberline”, press release, 9 July 2003.

http://www.paperloop.com/db_area/archive/pponews/2003/wk07_07_2003/37.html

“Andritz: Results for the first three Quarters of 2004”, AFX News Limited, 8 November 2004.

123 “Eka Chemicals to operate ‘chemical island’ for Veracel”, press release, 7 August 2003.

http://www.paperloop.com/db_area/archive/pponews/2003/wk08_04_2003/57.html

Peter Mitchell (2003) “Akzo unit Eka begins construction of Brazil silica sols plant”, *Chemical News & Intelligence*, 11 December 2003.

124 Anna Jagger (2003) “Degussa to expand Brazil H2O2 plant 50% to 60 kt/yr”, *Chemical News & Intelligence*, 21 October 2003.

125 “Invensys to automate pulp mill in Brazil”, *Control Engineering*, 1 August 2004.

126 “100 mln eur island contract from Veracel Pulp Mill”, AFX News Limited, 11 July 2003.

127 “Metso to Supply Valves and Analyzers for Veracel Pulp Mill Project in Brazil”, Metso Corporation press release, 1

contract to supply a complete timber yard system.¹²⁸ Partek Forest (Finland) won a US\$25 million contract, its largest ever, to deliver harvesting equipment to Aracruz and Veracel.¹²⁹ Norsul (part of Norway's Lorentzen Group which owns 28 per cent of shares in Aracruz) built three specially designed ocean-going ships and seven barges to transport pulp bales from Veracel to Aracruz's port Portocel in Espírito Santo.¹³⁰

Veracel controls more than 164,600 hectares of land. Of this total about 78,000 hectares is industrial tree plantations.¹³¹ In addition, Veracel has contracts with farmers to grow eucalyptus on an area covering a total of 10,000 hectares.¹³² Just under half of Veracel's land is set aside for what the company describes as "environmental recovery and preservation".¹³³

Veracel's vast area of plantations exacerbates the problems of land concentration and landlessness in the south of Bahia state, where large numbers of rural people have no land, or too little land to earn a livelihood. Veracel bought much of its land from large landowners, many of them cattle ranchers, but more than 800 people had to leave their homes to make way for Veracel's operations.¹³⁴

José Koopmans, a priest and human rights activist in the South of Bahia, has documented the impact of eucalyptus on local livelihoods for many years. Koopmans states that at least one-eighth of the land that Veracel bought was used for small-scale agriculture. According to Brazilian law, land that the government has distributed through its land reform process cannot be resold. While Veracel denies allegations of any wrong-doing in its land purchases, Koopmans explains that Veracel used people to buy up land on their behalf: "I even got to know a person in 1995 who was used as a front by Veracruz in order to buy land for the company that subsequently was transferred to the corporation," he told researchers from the Swedish NGO Swedwatch.¹³⁵

Veracel and its backers at the EIB claim that the project is environmentally friendly. "The project will have a significant positive impact on the environment," according to the EIB. "It will help to reverse tropical rain forest destruction, to reduce the pressure for logging on natural forests and to maintain biodiversity."¹³⁶ EIB appears to have forgotten Veracel's record.

In February 1993, one year after Veracel started its plantation operations under the name Veracruz Florestal, the Brazilian authorities temporarily suspended operations after local NGOs and the Union of Forestry Workers documented how the company was clearing the Atlantic Forest (Mata Atlântica) to

June 2004.

128 "Metso wins timber yard system order from Stora/Aracruz jv worth 25 mln eur", AFX European Focus, 23 July 2003.

129 "Partek's biggest", *Forestry & British Timber*, 2 January 2001.

130 "Brazil BNDES Finances Construction of Norsul Ships", *O Globo*, Latin American News Digest, 21 June 2005.

131 "Land Occupation", Veracel website: <http://www.veracel.com.br/web/en/florestais/>

132 "Forestry partners program", Veracel website: <http://www.veracel.com.br/web/en/florestais/fomento.html>

133 "Land Occupation", Veracel website: <http://www.veracel.com.br/web/en/florestais/>

134 De'Nadai, Alacir, Winfridus Overbeek, Luiz Alberto Soares (2005) "Promises of Jobs and Destruction of Work: The case of Aracruz Celulose in Brazil", World Rainforest Movement, page 37.

<http://www.wrm.org.uy/countries/Brazil/fase.html>

135 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 22.

<http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Vercel.pdf>

136 "EIB loan for reforestation in Brazil", European Investment Bank press release, 18 October 2001.

<http://www.eib.eu.int/news/press/press.asp?press=130>

make way for its tree plantations.¹³⁷

Veracel acknowledges that it cleared 64 hectares of forest in 1993. “That was the only time in Veracel’s history when it acted against good environmental practice,” according to Veracel’s Vitor da Costa.¹³⁸

In fact, Veracel does not know how much forest it cleared to make way for its plantations. At an NGO meeting in Sweden in October 2003, I asked João Fernando Borges, Veracel’s Corporate Planning Manager, exactly how much forest Veracel cleared to make way for its plantations and other operations. Borges did not answer the question, instead explaining that there were areas of forest, bush and shrub in the area before Veracel started its operations. Ricardo Carrere, World Rainforest Movement’s international coordinator, repeated the question. Borges did not answer the question. I tried again. Carrere tried again. Borges still did not answer the question. This went on for some time, much to the amusement of the others at the meeting. Eventually Borges promised to investigate and to send us the details of the area of forest, bush and shrub that was cleared. WRM is still waiting for Borges’ answer.

There are several documented cases since 1993 where Veracel has cleared forest. In 2003, two researchers with SwedWatch, a Swedish NGO, photographed an area where Veracel had cleared forest to make way for a timber standing area.¹³⁹ In December 2003, officials from the federal environmental bureau, IBAMA, pointed out that a large area of forest had been logged to make way for eucalyptus plantations for Veracel. Two years later, IBAMA fined Veracel US\$136,000 for preventing “regeneration of the Atlantic Rainforest on 1,200 hectares”. The company denies the allegations.¹⁴⁰

Veracel often refers to its Veracruz Station, a 6,000 hectare forest conservation area, to show how environmentally friendly its operations are. The forest area was part of the land that Veracel bought for its plantation operations in the south of Bahia state. In fact, Veracel would be in breach of Brazilian law if it did anything other than protect this area of forest.¹⁴¹

Veracel also makes a big deal of its programme to restore areas of the Mata Atlântica. Its plantations cover less than half of the area the company owns. However, much of the area not planted with eucalyptus is in valleys, gullies and on slopes – land which in any case would be difficult to harvest mechanically.¹⁴²

“Within Veracel’s area it is very hard to find pieces of good forest, but it is those good parts that Veracel show on their homepage and in their publications,” says Pedro Rocha, who works in the biology department at the Federal University of Bahia in Salvador, conducting research into the relationship

137 “Brazil: The short memory of Veracel and the power of Aracruz”, World Rainforest Movement bulletin no. 39, October 2000. <http://www.wrm.org.uy/bulletin/39/Brazil.html>

138 Hannu Pesonen (2004) “Right as rain forest”, *Tempus*, Stora Enso Quarterly Magazine, 1, 2004, page 24.

139 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 34. <http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Vercel.pdf>

140 “Veracel’s position regarding a news item published on the IBAMA web site”, Veracel website: <http://www.veracel.com.br/web/en/outros/noticias0064.html>

141 “Brazil: The short memory of Veracel and the power of Aracruz”, World Rainforest Movement bulletin no. 39, October 2000. <http://www.wrm.org.uy/bulletin/39/Brazil.html>

142 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 36. <http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Vercel.pdf>

between eucalyptus plantations and natural forest.¹⁴³

In June 2008, the federal court in the city of Eunápolis passed a sentence ordering Veracel to plant with native trees 96,000 hectares of land covered in licences granted between 1993 and 1996 for planting with eucalyptus. Veracel was also fined US\$12.5 million for deforesting areas of Atlantic forest. Once again, the company denies the charge and plans to appeal.¹⁴⁴

Veracel claims that its guidelines which are supposed to prevent planting close to water sources or streams prevent any impact on local water sources. Yet farmers interviewed in 2003 by SwedWatch said that the water level in creeks, ponds and lakes was significantly lower than before Veracel started planting. In some cases, watercourses have completely disappeared. Fishing and irrigation of agricultural farmland became impossible.¹⁴⁵

In November 2005, I visited the Veracel area with colleagues from the Brazilian NGO network Alert Against the Green Desert Movement. A local government official in Eunápolis told us how several thousand people had moved into the area to work on the construction of the pulp mill. When the construction work was finished, about five thousand people were left unemployed. Many of them stayed in the area. The local authorities have to provide services for them, but Veracel contributes little in taxes. Under a 1996 Brazilian law, exports are exempt from state sales tax. Veracel exports almost all its pulp. The government official suggested that a law insisting that pulp companies sell at least 30 per cent of their produce in Brazil would at least mean that the local authorities saw some benefits from pulp mills.

We visited the community of Maneco, not far from Eunápolis and spoke to villagers about how things had changed since Veracel started planting its eucalyptus. “People have moved away since the eucalyptus arrived,” one man told us. “In one commune everyone has moved away.”

This used to be a very rich area, villagers told us. One of the villagers we spoke to used to plant papaya and passion fruit and had employed many people on a small area of land. But since Veracel arrived, “There are no jobs here now and no money from the eucalyptus,” a villager said. The village shop owner told us that business was down by about 80 per cent. The river near the village is drying up, and is increasingly polluted by agrochemicals from the plantations. Plantation workers clean their tractors in the river which further pollutes the water. Fish and even cattle have died as a result.

“Animals and birds have disappeared from the area, but now there are many snakes in the village,” a villager told us.

The villagers from Maneco took us to see their cemetery. It is now completely surrounded by eucalyptus plantations. We had to drive between the rows of trees to get there. Villagers told us of people getting lost in the plantations on their way to a funeral. Veracel has even planted trees on part of the cemetery.

143 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 31-32. <http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Veracel.pdf>

144 Winnie Overbeek (2008) “Brazil: Historic federal court decision sentences Veracel Celulose (Stora Enso-Aracruz) for environmental violations”, World Rainforest Movement Bulletin 132, July 2008. <http://www.wrm.org.uy/bulletin/132/viewpoint.html#Veracel>

145 Måns Andersson and Örjan Bartholdson Swedish Pulp in Brazil: The case of Veracel, Swedwatch, 2004, page 37. <http://www.swedwatch.org/swedwatch/content/download/157/721/file/Rapport%20Swedwatch.Veracel.pdf>

In April 2004, about 2,000 families¹⁴⁶ from the Brazil's Landless Peasant Movement (MST – Movimento dos Trabalhadores Rurais Sem Terra) occupied 25 hectares of land and cut down four hectares¹⁴⁷ of Veracel's eucalyptus trees.¹⁴⁸ "Nobody eats eucalyptus," they shouted as they occupied the land¹⁴⁹ and started planting corn, manioc and beans.¹⁵⁰

Veracel wrote immediately to Brazil's President, Lula da Silva, demanding "a more energetic action" from the President.¹⁵¹ "It's a very bad sign for investors. The government can't lose control like this," Vitor da Costa, then Veracel's president, told the *Financial Times*.¹⁵²

After five days, the MST decided to avoid what would probably have been a violent confrontation with the state police and accepted an offer from the federal governmental agency for land reform in an area covering 30,000 hectares.

Six months later another protest against Veracel took place. This time, 300 indigenous Pataxó blocked the BR-101 highway for 19 hours to protest against the fact that Veracel had planted eucalyptus on their traditional lands.¹⁵³

In 2004, the Brazilian NGO FASE Espirito Santo explained the contradiction between the enormous amounts of money invested in the pulp mill compared to the amount spent on addressing the problem of landlessness in Brazil – a problem much more immediate to millions of Brazilians than producing pulp for the international paper industry:

"The occupation of the Landless Peasant Movement, the MST, shows the huge contradiction between two policies that are priority for the Federal Government but, in practice, cause very different results: on the one hand, billions of dollars of investments is at the disposition of the export-oriented plantation industry that will create few concrete jobs and perspectives for the majority of the local people. The Veracel pulp mill, in construction right now, an investment of US\$1.25 billion, will create around 500 direct jobs in the pulp mill; on the other hand, the MST had to pressure the government with tens of occupations over the past few weeks, so that a total amount of about US\$1 billion will be finally spent this year by the government, less than the total investment of Veracel, but enough to settle directly around 60 thousand families, according to the federal government, by the end of 2003. But, while the Veracel pulp mill is in fact being constructed, the land reform, even with the intended budget, deals with all types of problems that are causing the present dissatisfaction among the MST and the social movements in Brazil in general, resulting in a paralysed land reform."¹⁵⁴

146 "Multiple setbacks erode support for Lula", *Brazil Report*, 20 April 2004.

147 "MST occupies eucalyptus area of Veracel Cellulose", FASE Espirito Santo, 7 April 2004.

148 Raymond Colitt (2005) "Brazil is top of the tree in tale that is no pulp fiction", *Financial Times*, 21 June 2005.

149 "Ninguém come eucalipto", *O Globo*, 6 April 2004.

Paulo Prada (2004) "Landless, and Restless. Brazil's poor grow more aggressive in property grabs", *The Boston Globe*, 24 April 2004.

150 "MST occupies eucalyptus area of Veracel Cellulose", FASE Espirito Santo, 7 April 2004.

151 "'Red April' kicks up a gear", *Latinnews Daily*, 7 April 2004.

152 Raymond Colitt (2004) "Brazil's landless in widespread protests", *Financial Times*, 7 April 2004.

153 "Brazilian Indians in the War of Eucalyptus", *Brazzilmag*, 4 November 2004.

<http://www.brazzilmag.com/content/view/612/41/>

"Indigenous people block a highway – Stora Enso involved", Conselho Indigenista Missionário, 21 October 2004.

<http://www.cimi.org.br/?system=news&action=read&id=632&eid=142>

154 "MST occupies eucalyptus area of Veracel Cellulose", FASE Espirito Santo, 7 April 2004.

In March 2008, Veracel's plantations were certified as well managed under the Forest Stewardship Council system. SGS Qualifor, FSC's certification body, awarded the certificate despite the impacts on land rights, despite the impacts on local livelihoods, despite the fact that Veracel has established parts of its plantations on land converted from forest – all of which is in breach of FSC's standards. WRM declared the Veracel certificate as the “death of FSC”.¹⁵⁵

The June 2008 Eunápolis court ruling ordering Veracel to pull up its eucalyptus plantations must surely lead to the withdrawal of the FSC certificate. It should also lead to investigations within the banks that lent to Veracel (in particular the European Investment Bank) to find out how their due diligence process failed to alert the banks to the fact that Veracel was illegally destroying areas of the Atlantic Forest.

155 “Veracel: FSC's ‘Death Certificate’”, World Rainforest Movement, March 2008.
http://www.wrm.org.uy/actors/FSC/Veracel_Death_Certificate.html

Sappi, Swaziland: 50 years of industrial forestry fails to bring benefits for local people

Sappi, a South African pulp and paper company, rents almost 70,000 hectares of land from the Swaziland state, of which 54,212 hectares are planted with exotic pine trees. Sappi's plantations in Swaziland are the epitome of what is wrong with industrial tree plantations. Species-rich grasslands were destroyed and people moved to make way for the plantations.

Every year, Sappi clearcuts a total area of 3,000 hectares of plantations, leaving vast scars on the landscape. When the clearcuts are replanted, the trees suck up water, drying up streams and reducing flow in rivers. Sappi's plantations and nurseries can only be managed through the use of chemical pesticides.

What are today Sappi's industrial tree plantations arrived in Swaziland as the result of an "aid" project funded by the UK's Colonial Development Corporation. In 1948, Sir Evelyn Baring, then-High Commissioner for Swaziland, commissioned Dr Ian J. Craib to produce a study to look at the possibility of converting 55,000 hectares of grassland in the Great Usutu valley to tree plantations. Craib was a forester and managing director of Peak Timbers, another plantations operation in Swaziland.¹⁵⁶ Not surprisingly, given his background, Craib favoured expanding the area of industrial tree plantations.

CDC funded the land purchase and planting started in 1950. By 1958, Swaziland had the largest continuous area of plantations in Africa. In 1959, Courtaulds, a UK company, formed a joint venture with CDC to build a pulp mill. The mill opened in 1962, with a capacity of 90,000 tons a year.¹⁵⁷ The mill now produces about 200,000 tonnes of unbleached kraft pulp a year.

Set up as the Colonial Development Corporation in 1948, CDC's initial brief was "to develop resources of Britain's colonies". In 1963, it changed its name to the Commonwealth Development Corporation. Now called the CDC Group, it invests UK tax-payers' money in the Global South through a series of finance houses.¹⁵⁸ A bizarre privatisation process allowed the directors of CDC to earn huge amounts of money, by selling CDC's fund management arm to themselves for a pittance, renaming it Actis and running it as a private equity company.¹⁵⁹ CDC's only shareholder is the Department for International Development, the UK's bilateral aid agency.¹⁶⁰

In the late 1980s, despite having been involved in a series of disastrous aid projects, Peter Eccles, CDC's general manager, described CDC as the "jewel in the British aid crown". CDC held up its involvement in Swaziland as a success story. In Swaziland, as well as the Usutu pulp mill and its associated pine plantations, CDC has supported sugar plantations.

156 Julian Evans (1988) "The Usutu forest: Twenty years later", *Unasylva*, Vol. 40, No. 159, Food and Agriculture Organization of the United Nations.

<http://www.fao.org/docrep/s5780e/s5780e04.htm#the%20usutu%20forest:%20twenty%20years%20later>

157 Julian Evans (1988) "The Usutu forest: Twenty years later", *Unasylva*, Vol. 40, No. 159, Food and Agriculture Organization of the United Nations.

<http://www.fao.org/docrep/s5780e/s5780e04.htm#the%20usutu%20forest:%20twenty%20years%20later>

158 "Who we are: History", CDC Group website: <http://www.cdcgroup.com/history.asp>

159 "Actis & the consultants: The big buy-out sell-out", *Private Eye*, No. 1206, 21 March - 3 April 2008, page 29.

"The Actis scandal: The price is frightful", *Private Eye*, No. 1210, 16-29 May 2008, page 29.

"Actis: False Profits", *Private Eye*, No. 1212, 13-26 June 2008, page 27.

160 "Who we are: Corporate Structure", CDC Group website:

http://www.cdcgroup.com/~archive/corporate_structure.asp

Swaziland's main industries are sugar and forestry. Both require large areas of land. "They are a disaster for a country like Swaziland, where there are still feudal social relations," said Nhlanhla Msweli of the Swaziland Campaign Against Poverty and Economic Inequality (SCAPEI) at a meeting in South Africa in 2003.¹⁶¹ In a country where the majority of people are landless, industrial tree plantations cover almost 10 per cent of the land.¹⁶²

Since 1988, Sappi has owned a majority share in the Usutu Pulp Company. In 1982, negotiations to sell Usutu to the South African pulp and paper company Mondi fell through. Six years later Sappi bought 50 per cent of the Usutu pulp company from Courtaulds and a further 30 per cent from CDC. The remaining 20 per cent is held by the Swaziland government.

In September 2001, Sappi threatened to close the Usutu pulp mill, unless it could find a way of reducing costs by US\$8.3 million within three months. In 2002, Sappi battled with the Swaziland Agricultural and Plantation Workers' Union about laying off 650 people from the pulp mill. Sappi's then-executive chairman Eugene van As told investors that Sappi came "fairly close" to closing down the pulp mill. "The mill is highly competitive, but not with 650 people more than it needs," van As said.¹⁶³

The town of Bhunya was built to house workers at the pulp mill. It is a one company town. As a resident put it, "If SAPPI closes, this place is a ghost town tomorrow."¹⁶⁴

When Sappi took over the firm, it employed 2,700 people. Today, Sappi Usutu has outsourced most of its work. It now employs only 43 people directly. The company employs a further 1,400 people on a contract basis.¹⁶⁵

A 2004 report by Wally Menne of the South African Timberwatch Coalition, based on interviews with community members, environmentalists as well as government and industry representatives, documents how industrial tree plantations have damaged ecosystems and caused loss of biodiversity. Menne explains that plantations have been planted on the land with the most productive potential, at the expense of other agricultural land uses. "The potential benefits of having allowed the area to remain as it was originally could exceed those derived from the current use," Menne notes. "Other agricultural land uses that might otherwise have become established there could possibly have produced greater benefits for the people and the natural environment of Swaziland."¹⁶⁶

In July 2006, Sappi's plantations in Swaziland were given the Forest Stewardship Council's "green" label

161 Nhlanhla Msweli (2003) "Impacts of timber plantations on rural people of Swaziland", Paper delivered at the 'Timber Plantations: Impacts, Future Visions and Global Trends' Conference, Nelspruit, November, 2003

162 Wally Menne (2004) "Timber Plantations in Swaziland: An investigation into the environmental and social impacts of large-scale timber plantations in Swaziland", Timberwatch Coalition and World Rainforest Movement, December 2004. <http://www.wrm.org.uy/countries/Swaziland/Plantations.pdf>

163 "South Africa; Half Of Sappi Shares In The US", *Business Day*, 29 January 2002.

164 James Hall (2000) "Swaziland: Some traditions harmful to the environment", Interpress Service, 12 May 2000.

165 "Woodmark Forest Certification Public Report, Sappi Usutu", Woodmark, Soil Association, July 2006. [http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/\\$file/Usutu%20FM%20S1%20report%20FINAL.xls](http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/$file/Usutu%20FM%20S1%20report%20FINAL.xls)

166 Wally Menne (2004) "Timber Plantations in Swaziland: An investigation into the environmental and social impacts of large-scale timber plantations in Swaziland", Timberwatch Coalition and World Rainforest Movement, December 2004, page 24. <http://www.wrm.org.uy/countries/Swaziland/Plantations.pdf>

after an assessment by the Soil Association's Woodmark. In the UK, the Soil Association is well known as a promoter of organic agriculture. It is difficult to imagine a form of land management which is further removed from the Soil Association's aim of promoting organic agriculture than Sappi's industrial tree plantations.

More greenwashing of Sappi's plantations comes from Professor Julian Evans, a British forester, often considered to be one of the world's leading plantation experts. Evans has made his career based in part on his studies of the pine plantations established to feed the Usutu pulp mill. Professor Evans is apparently oblivious to the social and environmental impacts of industrial tree plantations. For example, at the 2004 meeting of the International Union of Forest Research Organizations, Evans said that

"Productive plantations, whether for industry or energy, need not be ecological deserts devoid of wildlife or an unwanted landscape, but efficient wood-growing crops managed so as to enrich diversity, development and their desirability as a land use. With plantation forests [sic] 'you can have your cake and eat it', generating win-win situations. This, I believe, is the future direction for the great bulk of planted forest [sic]."¹⁶⁷

Evans started monitoring the long-term productivity of the Usutu plantations in 1968. In a 1988 article in FAO's *Unasylva* magazine, he reported on the results of twenty years of studies, and assessed "the various environmental consequences of converting some 52000 ha of high veld grasslands into what is essentially a pine monoculture."¹⁶⁸ His description of the plantations as monocultures is accurate. Unfortunately, little else that Evans has written about Swaziland shows similar insightfulness.¹⁶⁹

"Virtually no Swazi villagers were displaced," according to Evans. Yet, according to Woodmark's public summary of their assessment for FSC,

"The majority of Usutu's land-holdings were previously private title deed portions, belonging to sheep and cattle farmers requiring grazing for only part of the year, or non-resident land-owners who rarely visited the land. The afforestation drive of the 1950s was preceded by negotiations with local chiefs, after which assistance was given with relocation to beyond the Company's property."¹⁷⁰

A total of 48,000 hectares was bought of which 42,000 hectares was planted, "the remainder being unplantable ground, fire-breaks, roads and land for villages", notes Evans. By 1988, the company held 67,000 hectares of which 55,000 hectares were planted with pine monocultures.

167 "Economics and Management of High Productivity Plantations", International Union of Forest Research Organizations meeting Lugo, Spain, 27-30 September 2004. <http://www.iufro.org/download/file/1357/3661/40402-archive-pastevents.doc>

168 Julian Evans (1988) "The Usutu forest: Twenty years later", *Unasylva*, Vol. 40, No. 159, Food and Agriculture Organization of the United Nations. <http://www.fao.org/docrep/s5780e/s5780e04.htm#the%20usutu%20forest:%20twenty%20years%20later>

169 For a more detailed critique of Julian Evans' work on plantations in Swaziland, see Wally Menne and Ricardo Carrere (2007) "Swaziland: The myth of sustainable timber plantations", World Rainforest Movement, March 2007. <http://www.wrm.org.uy/countries/Swaziland/book.html>

170 "Woodmark Forest Certification Public Report, Sappi Usutu", Woodmark, Soil Association, July 2006. [http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/\\$file/Usutu%20FM%20S1%20report%20FINAL.xls](http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/$file/Usutu%20FM%20S1%20report%20FINAL.xls)

Evans argues that replacing grassland with pine plantations created “a large area of ‘new’ habitat, structurally much more diverse than grass veld”. He adds that by excluding humans from the ecosystem, “the large area of forest [sic] is now excellent wildlife cover”. While he admits that no systematic monitoring of wildlife has been carried out, Evans reports that since 1968, the numbers and varieties of animals have increased, “and today greatly exceed those of the pre-existing grassland”. Evans explains that this is “because the large plantations provide shelter and refuge from man.” He continues,

“In the Usutu forest [sic], hunting is forbidden, man [sic] finds the monoculture relatively unattractive for recreation, and the distance of sight, hearing, and smell are all reduced; thus animals are safer and more protected.”¹⁷¹

In its 2006 assessment of the Usutu plantations for FSC certification Woodmark came to a different conclusion. In the plantations, “there is very little wildlife,” wrote Woodmark’s assessors. Any wildlife in the plantations is “Due to the close proximity of Usutu to the Mlilwane Game Sanctuary” and “a number of interesting animal sitings [sic] have been noted by foresters and visitors to Usutu.”¹⁷²

In order to produce his optimistic analysis of Sappi’s plantations, Evans introduces the concept of “narrow-sense sustainability”. This refers only to wood yields over several rotations, to determine whether trees “can be grown indefinitely for rotation after rotation on the same site without serious risk to their well being.”¹⁷³ Evans thus excludes the social and environmental impacts of tree plantations from his analysis and is looking only at the technical aspects of industrial tree plantations. Nevertheless, he makes public statements that plantations in Swaziland are “sustainable”, without making any mention of “narrow-sense sustainability”.¹⁷⁴ He has also done so in writing:

“There is no general evidence of declining yields resulting from intensive plantation forestry of cultivation of three crops of the same species on the same site. The prospects for this continuing are good. With good husbandry Usutu’s plantation forestry is demonstrably and wholly sustainable.”¹⁷⁵

Evans fails to mention that what he’s talking about here is “narrow-sense sustainability”. It is nonsense to conclude from measurements of tree growth that Swaziland’s industrial tree plantations are “wholly sustainable”.

Although Woodmark recommended that Sappi should be certified by FSC, in its assessment Woodmark documented several serious problems with Sappi’s plantations. Perhaps the most important was the

171 Julian Evans (1988) “The Usutu forest: Twenty years later”, *Unasylva*, Vol. 40, No. 159, Food and Agriculture Organization of the United Nations.

<http://www.fao.org/docrep/s5780e/s5780e04.htm#the%20usutu%20forest:%20twenty%20years%20later>

172 “Woodmark Forest Certification Public Report, Sappi Usutu”, Woodmark, Soil Association, July 2006.

[http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/\\$file/Usutu%20FM%20S1%20report%20FINAL.xls](http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/$file/Usutu%20FM%20S1%20report%20FINAL.xls)

173 Julian Evans (1999) “Sustainability of Forest Plantations: The evidence. A review of evidence concerning the narrow-sense sustainability of planted forests”, Department for International Development, May 1999.

174 Wally Menne and Ricardo Carrere (2007) “Swaziland: The myth of sustainable timber plantations”, World Rainforest Movement, March 2007, pages 7-8. <http://www.wrm.org.uy/countries/Swaziland/book.html>

175 Julian Evans (1995) “A Further Review of Third Rotation Productivity in the Usutu Forest, Swaziland”, UPCO Forest Research Report 16/95, cited in Peter Whitfield (1996) “Usutu Pulp Company Limited, Swaziland. A successful Integrated Industrial Forestry Project”, Case study prepared for the UNEP/World Bank Africa Policz Forum, 29-30 August 1996, Nairobi. http://www.worldbank.org/afr/afr_for/fulltext/swazlnd.doc

impact of the plantations on water supply. Woodmark found that Sappi's replanting procedures did not comply with national regulations requiring a 30-metre-wide strip along streams. In one place trees had been planted too close to a stream. In another, a stream was channelled across a road instead of under it.¹⁷⁶

In his 2004 report, Wally Menne of Timberwatch found that the plantations are affecting the flow of water. Menne interviewed Rex Brown of Environmental Consultancy Services, a Swaziland consulting firm which works for the government and private companies. Brown told him that he considers plantations to be one of the causes of water shortages in the country. "The plantations occur in important upland catchments – essential areas for the provision of water for equally important irrigation activities in the Swaziland Lowveld," Brown said.¹⁷⁷

During their assessment, Woodmark spoke to a local farmer, Peter George, whose land is next to one of Sappi's plantations. "Due to the planting of pine trees since 1989 . . . the natural flow of water in the streams was severely depleted," Peter George told Woodmark.

Woodmark chose to ignore what Peter George told them during the assessment, because he has taken out a legal case against Sappi. "The issue regarding the reduction of water flow caused by the planting of trees and the subsequent claim is 'sub judice' and is therefore under judicial consideration," Woodmark's assessors wrote in the Public Summary. Under the sub judice (from the Latin, "under judgement") rule in British law it can be an offence to publicly discuss current or upcoming court cases. The rule is intended to protect the right of defendants to a fair trial, but in this case Woodmark is hiding behind the sub judice rule to prevent legitimate debate. When Woodmark's assessors revisited Swaziland in 2007 for their annual audit of Sappi's plantations, they did not invite Peter George to their stakeholder meeting. Neither did they visit his farm.¹⁷⁸

Peter George bought the Elangeni Farm in the mid-1970s and started to farm the land. He grew vegetables and some acacia and eucalyptus trees. When he started farming, there was plenty of water. In the mid-1980s, the Usutu Pulp Company started planting the hills next to his farm with pine plantations. George was forced to stop farming when the streams on his farm dried up.

I visited Peter George's farm in November 2007 with colleagues from the World Rainforest Movement. George showed us where the Usutu Pulp Company had planted trees right through the streams which had provided his farm with water. Several years ago, Sappi cleared the plantations and the streams started to recover, although it was 18 months before one of the streams started to flow again. Sappi has not replanted right up to the streams, but neither has it kept the 30-metre-wide strips along the streams which are required under Swaziland's regulations.¹⁷⁹

176 "Woodmark Forest Certification Public Report, Sappi Usutu", Woodmark, Soil Association, July 2006.

[http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/\\$file/Usutu%20FM%20S1%20report%20FINAL.xls](http://www.organicweek.org/web/sa/saweb.nsf/librarytitles/22D0E.HTML/$file/Usutu%20FM%20S1%20report%20FINAL.xls)

177 Wally Menne (2004) "Timber Plantations in Swaziland: An investigation into the environmental and social impacts of large-scale timber plantations in Swaziland", Timberwatch Coalition and World Rainforest Movement, December 2004, page 24. <http://www.wrm.org.uy/countries/Swaziland/Plantations.pdf>

178 Chris Lang (2007) "Swaziland: Woodmark and Sappi ignore the lessons from a neighbouring farmer", World Rainforest Movement Bulletin 125, December 2007. <http://chrislang.org/2007/12/20/swaziland-woodmark-and-sappi-ignore-the-lessons-from-a-neighbouring-farmer/>

179 For more information about Peter George, see "Just Add Water", a leaflet that Peter George wrote in November

In addition to the impact of the plantations on water supply, Woodmark's inspectors found several breaches of FSC standards. Woodmark's inspectors visited a logging area, where more than 40 hectares was being clearcut. They found that there was no first aid provision, no designated area for equipment and provisions, no drinking water provided for workers and no fire fighting equipment. There were no records of training for workers and no training schedules for 2006. For a work force of 120, the contractor had only two first aiders. And both of their certificates had expired.

Oil was leaking from a storage area owned by one of the contractors. The oil separator pit was not built in accordance with Sappi's specification requirements. A chemical store operator was not trained in health and safety issues handling toxic chemicals. Not all contractors had written safe work procedures including risks and hazards associated with the various tasks. Woodmark found that Sappi was using a fungicide which is prohibited in FSC-certified operations.

In spite of these breaches of FSC's standards, Woodmark issued the FSC certificate along with a series of corrective action requests which Sappi was supposed to meet before Woodmark's next visit to Swaziland in July 2007. After this visit, Woodmark issued a new series of corrective action requests.

In May 2007, I wrote to Kevin Jones, a manager at Woodmark and pointed out some of the problems associated with SAPPI's plantations. I sent him an article I'd written describing some of the problems.¹⁸⁰ Jones replied, but he declined to let me make his response public. When I asked him for an on-the-record response to my article, he replied, "I will be away for the next week and a half. I will try to respond after I get back." That was in June 2007. I'm still waiting for his on-the-record response.

More than fifty years of British-backed industrial forestry has not benefited the people of Swaziland. Unemployment in Swaziland stands at 40 per cent. More than two-thirds of the people in Swaziland live on an income of less than US\$1 a day. About one third of the people in Swaziland rely on food aid to survive. Nearly 40 per cent of the population is infected with HIV – one of the highest rates in the world. Life expectancy has fallen to 30 years for men and 35 for women.¹⁸¹ While not all Swaziland's woes can be blamed on tree plantations, neither can it be claimed that covering tens of thousands of hectares with monoculture tree plantations is "development".

2007, available here: http://www.fsc-watch.org/archives/2007/12/11/How_Woodmark_certifi

180 Chris Lang (2007) "Swaziland: Woodmark and SAPPI ignore the lessons from a neighbouring farmer", World Rainforest Movement Bulletin no 125, December 2007. <http://chrislang.org/2007/12/20/swaziland-woodmark-and-sappi-ignore-the-lessons-from-a-neighbouring-farmer/>

181 "Swaziland", Wikipedia. <http://en.wikipedia.org/wiki/Swaziland>

Advance Agro, Thailand: Deforestation, debt and a murky corporate structure

Advance Agro is Thailand's biggest pulp and paper company. The company has two pulp mills with a total production capacity of 580,000 tons a year and three paper plants with a total capacity of 600,000 tons a year.

Advance Agro was founded in 1989 by the Dumnernchanavit family. The company is part of the agribusiness Soon Hua Seng (SHS) Group, which was founded in the 1950s by members of the Dumnernchanavit family. Soon Hua Seng started growing eucalyptus on a commercial scale in the late 1980s. Advance Agro was listed on the Stock Exchange of Thailand in 1995. In 2006, Advance Agro's profit amounted to 1.97 billion Baht.¹⁸²

In addition to pulp and paper, Advance Agro also generates a total of 108 MW of electricity, using wood waste and black liquor as fuel.¹⁸³ The company does not generate all its own energy and buys some electricity from a coal-fired power station.¹⁸⁴

The company exports 60 per cent of its paper to Hong Kong, China, Australia, and Europe.¹⁸⁵ In 2003, Advance Agro used 50 per cent of its pulp to produce paper. Five per cent was sold in Thailand and the remainder exported to Australia, China, Korea, and Malaysia among others.¹⁸⁶

The company claims not to have any impact on native forests in Thailand, conveniently forgetting that in 1990 company employees were caught red-handed clearing forest to make way for eucalyptus plantations.¹⁸⁷ Advance Agro's plantations have been one factor leading to the deforestation of large areas of eastern Thailand. Other factors include road building (partly built during the war in Indochina to link bases for US troops with the port at Chon Buri and also to access Cambodia's forests), and promotion of large-scale industrial agriculture by the government with support from the World Bank. One of the beneficiaries of these policies was Soon Hua Seng, Advance Agro's parent company.¹⁸⁸

When Advance Agro's subsidiary Agro Lines started establishing its eucalyptus plantations, villagers found they could no longer grow rice in neighbouring fields. The company bought villagers' farmland in Prachinburi to convert the land to plantations. Allegations of intimidation of villagers surrounded the

182 "Advance Agro Public Company Limited", Stock Exchange of Thailand, website accessed 6 December 2007.

<http://www.set.or.th/set/companyinfo.do?type=profile&symbol=AA&language=en&country=US>

183 "Opinions of Independent Financial Advisor for the delisting of AA", 30 November 2007.

<http://www.set.or.th/set/newsdetails.do?filename=dat%2Fnews%2F200712%2F07043448.e07+++++++&headline=Opinions+of+IFA+for+the+delisting+of++AA&type=H&symbol=AA&time=1196925840000&language=&country=>

184 "Environmental Benefits of Double A Paper", Access Economics, May 2007.

<http://www.accesseconomics.com.au/publicationsreports/showreport.php?id=125>

185 "Thailand's Advance Agro rating raised to 'B-' after completion of debt restructuring", Thai Press Reports, 10 June 2004.

186 "TRIS rating assigns 'BBB' rating to 'Advance Agro' with 'stable' outlook", Thai Press Reports, 20 October 2004.

187 Keith Barney (2005) "At the Supply Edge: Thailand's Forest Policies, Plantation Sector, and Commodity Export Links With China", Forest Trends, Center for International Forestry Research, The York Center for Asian Research, pages 1-2. <http://www.forest-trends.org/documents/publications/Thailand%20Report%20New.pdf>

188 Chris Lang (2003) "Thailand: Eucalyptus, encroachment, deforestation and pollution linked to pulp and paper company", World Rainforest Movement Bulletin no 70, May 2003. <http://chrislang.org/2003/05/10/thailand-eucalyptus-encroachment-deforestation-and-pollution-linked-to-pulp-and-paper-company/>

company's plantations in eastern Thailand throughout the 1990s.¹⁸⁹ Canadian academic Keith Barney notes that "Thai NGOs have organized in opposition to the land displacement resulting from eucalyptus farming in eastern Thailand associated with the mill".¹⁹⁰

Villagers living near Advance Agro's pulp mill complain of ash from factory chimneys being deposited in their gardens. Some villagers have developed itchy skin and the pulp mill often smells. In August 2000, black, stinking water from piles of wood and charcoal in Advance Agro's factory compound leaked into a neighbouring canal killing a large number of fish. The cause was a collapsed dyke inside the factory compound.¹⁹¹ The company routinely pours its waste water from pulp mill between the rows of eucalyptus trees. The water is filthy and green and lies in channels in the stony infertile soil.¹⁹²

In 2007, the company announced that it would be delisting from the Stock Exchange of Thailand and that Yothin Dumnernchanavit would buy up all the shares in the company.¹⁹³ Having bought the company, Yothin intends to restructure it, at which point he may list the company once again on the SET or any other stock exchange.¹⁹⁴ Before the delisting, the four biggest shareholders in Advance Agro were all banks: UBS AG Singapore (21%), Citibank Nominees Singapore (10%), BNP Paribas Hong Kong (7%) and Deutsche Bank Singapore (6%).¹⁹⁵

The announcement of the delisting led to a drop in Advance Agro's credit rating. Standard & Poor's lowered the company's long term credit rating, saying that AA's liquidity position is weak and its 2007 financial performance has been below expectations.¹⁹⁶

The drop in credit rating could perhaps have something to do with Yothin's record. Yothin is the eldest son of Kittu Dumnernchanavit and majority shareholder in Soon Hua Seng and Advance Agro. In August 2003, Yothin was forced to resign as managing director of Advance Agro after he failed to settle a 99 million baht debt guarantee with Bangkok Bank.¹⁹⁷ The Central Bankruptcy Court ordered the

189 Keith Barney (2005) "At the Supply Edge: Thailand's Forest Policies, Plantation Sector, and Commodity Export Links With China", Forest Trends, Center for International Forestry Research, The York Center for Asian Research, page 2. <http://www.forest-trends.org/documents/publications/Thailand%20Report%20New.pdf>

190 Keith Barney (2005) "At the Supply Edge: Thailand's Forest Policies, Plantation Sector, and Commodity Export Links With China", Forest Trends, Center for International Forestry Research, The York Center for Asian Research, page 30. <http://www.forest-trends.org/documents/publications/Thailand%20Report%20New.pdf>

191 "Power plant sparks protest: Villagers suffer from lignite dust pollution", *Bangkok Post*, 9 August 2000.

192 Chris Lang (2003) "Thailand: Eucalyptus, encroachment, deforestation and pollution linked to pulp and paper company", World Rainforest Movement Bulletin no 70, May 2003. <http://chrislang.org/2003/05/10/thailand-eucalyptus-encroachment-deforestation-and-pollution-linked-to-pulp-and-paper-company/>

193 "Opinions of Independent Financial Advisor for the delisting of AA", 30 November 2007. <http://www.set.or.th/set/newsdetails.do?filename=dat%2Fnews%2F200712%2F07043448.e07+++++++&headline=Opinions+of+IFA+for+the+delisting+of++AA&type=H&symbol=AA&time=1196925840000&language=&country=>

194 "Opinions of Independent Financial Advisor for the delisting of AA", 30 November 2007. <http://www.set.or.th/set/newsdetails.do?filename=dat%2Fnews%2F200712%2F07043448.e07+++++++&headline=Opinions+of+IFA+for+the+delisting+of++AA&type=H&symbol=AA&time=1196925840000&language=&country=>

195 "Advance Agro Public Company Limited", Stock Exchange of Thailand, website accessed 6 December 2007. <http://www.set.or.th/set/companyinfo.do?type=profile&symbol=AA&language=en&country=US>

196 "Advance Agro ratings placed on negative watch on restructuring plans – S&P", CNNMoney.com, 12 November 2007. <http://money.cnn.com/news/newsfeeds/articles/newstex/AFX-0013-20903603.htm>

197 Somluck Srimalee (2003) "Soon Hua Seng's debt plan on hold", *The Nation* (Thailand), 22 August 2003.

confiscation and liquidation of Yothin's assets after he failed to settle the debt guarantee with Bangkok Bank.¹⁹⁸

Several European and international banks have been involved in financing Advance Agro's activities. When the company launched its initial public offering in 1994, the international lead manager was Barclays de Zoete Wedd. The project's main backers were three Thai banks: Bangkok Bank, Thai Farmers' Bank and Krung Thai Bank. Further financial support came from the UK's Commonwealth Development Corporation (*see Sappi Swaziland, above*).¹⁹⁹ In 1994, the World Bank's International Finance Corporation lent Advance Agro US\$10 million.²⁰⁰ A series of export credits guaranteed by Thai banks helped finance the machinery supply for the new pulp mill.²⁰¹

Advance Agro was hard hit by the 1997 economic crisis, when the value of the Thai Baht collapsed. Advance Agro was left with debts of 22.6 billion baht, only 7 billion of which was baht-denominated debt.²⁰² Advance Agro subsequently breached the financial covenants on its loans.

In November 1997, the company became the first Thai company to issue high-yield bonds with a US\$111.35 million bond offering on US markets.²⁰³ The company raised more money by selling 19.9 per cent of its shares to Enso (which merged with Stora in 1998 to become Stora Enso) and 5.5 per cent to Japan's Oji Paper.

In 2000, Advance Agro entered into a debt restructuring agreement with the Thai Banks. Advance Agro defaulted on export credit debt repayments leading to Bangkok Bank, Krung Thai Bank and the Thai Farmers Bank paying out more than US\$100 million in guarantees.²⁰⁴

In June 2001, Advance Agro failed to pay US\$28 million of its convertible bonds when they matured.²⁰⁵ The company repaid the debentures within six months, however.²⁰⁶

The company's problems deepened in August 2002, when DBS Thai Danu filed bankruptcy suits against Kitti and Trirat Dumnernchanavit. Kitti had borrowed 20 million baht from the bank in May 1998.²⁰⁷

In March 2003, Advance Agro was in default on repayments of 2.5 billion baht of debt from Thai banks.²⁰⁸ Later in 2003, Advance Agro entered into another debt restructuring agreement, the "Master

198 Somluck Srimalee (2003) "Court orders liquidation of Yothin's assets", *The Nation* (Thailand), 21 August 2003.

199 Victor Mallet (1994) "Thai group seeks to raise Dollars 80m in IPO", *Financial Times*, 23 November 1994.

200 "Annual Report - Investment Portfolio 1999", International Finance Corporation, 2000.

201 "Advance Agro Overview", Advance Agro web-site, <http://www.advanceagro.com> accessed 8 July 2000.

202 Somluck Srimalee (2002) "Damnernchanvanich family: DTDB files against Kitti, Trirat", *The Nation*, 19 August 2002.

203 E. Luce and T. Bardacke (1997) "International Capital Markets: Sterling debut for property developer", *Financial Times*, 11 November 1997.

204 Cholada Ingsrisawang (2000) "Deadline set for Advance Agro's plan", *Bangkok Post*, 21 November 2000.

205 A convertible bond is a long-term debt instrument which companies use to obtain funds. The company owes the bond holders a debt and has to pay the principal and interest at a later date, termed the maturity. The bonds can be converted to shares of stock in the issuing company.

206 "TRIS rating assigns 'BBB' rating to 'Advance Agro' with 'stable' outlook", Thai Press Reports, 20 October 2004.

207 Somluck Srimalee (2002) "Damnernchanvanich family: DTDB files against Kitti, Trirat", *The Nation*, 19 August 2002.

208 "Thailand, Business Briefs Column", *Bangkok Post*, 4 August 2003.

Override Agreement” with the Thai banks. Under this agreement, the maturity of Advance Agro’s 16 billion baht debt (including the export credit guarantee facilities made available by the Thai banks) was extended by nine years to 2012. Advance Agro also received a one year grace period on an instalment due in 2007 when the company had to retire US\$48.72 million of high-yield notes.²⁰⁹

At the end of 2005, ABN AMRO and Deutsche Bank led a US\$250 million share offering by Advance Agro. Some analysts thought that the shares might be difficult to sell, because Advance Agro was technically in default on its US bonds²¹⁰ and the company was (at the end of 2005) in negotiations to re-finance 14 billion baht debt.²¹¹

However, in the bizarre world of corporate finance, the fact that Advance Agro couldn’t repay its debts meant that it was more likely to have a successful share offering. Mark Leahy, head of syndicate for Asia at Deutsche Bank in Singapore, explains that

“Partly because Advance Agro went through a restructuring of its domestic debt – although with no haircut – and was in a technical default situation with its SEC-registered 2007 notes, they have become familiar to a number of investors, including distressed debt investors.

“This familiarity certainly helped create demand for this deal which provided a solid base of well educated demand upon which to build.”²¹²

Euroweek magazine later described the deal as “highly successful”.²¹³

In July 2007, Advance Agro restructured its debt once again.²¹⁴

In 2001, the *South China Morning Post* published an article asking critical questions about the way Advance Agro had spent the money it had raised up to that point. For example, Advance Agro’s second pulp mill, which cost at least US\$800 million, features a “Space Dome”, which is used for corporate presentations. Advance Agro describes it as “beautiful both inside and outside”.²¹⁵ The *South China Morning Post* describes it as a “carbuncle on the side, about 15 metres off the ground”. The Space Dome was the idea of the wife of one of Advance Agro’s executives. She happens to be an interior designer. No one from the company could tell the *South China Morning Post*’s journalist how much the Space Dome had actually cost the company.²¹⁶

The Space Dome may be the tip of a very large iceberg. The *South China Morning Post* quoted analysts of the company who described Advance Agro’s operations as “opaque”. In 2001, Advance Agro’s

209 “TRIS rating assings ‘BBB’ rating to ‘Advance Agro’ with ‘stable’ outlook”, Thai Press Reports, 20 October 2004.

210 “ABN, DB see off Thai banks to bring Advance Agro CCC hit”, *Euroweek*, 16 December 2005a.

211 Timothy Cuffe (2005) “Advance Agro ends the year on a high-yield note”, Finance Asia, 13 December 2005.

<http://www.financeasia.com/article.aspx?CIID=32418>

212 “ABN, DB see off Thai banks to bring Advance Agro CCC hit”, *Euroweek*, 16 December 2005.

“Advanced Agro pcl” *Euroweek*, 16 December 2005.

213 “Deutsche finds victory in versatility; Best bank at overall capital raising in Asia; Investment banks’ poll – Deutsche Bank”, *Euroweek*, 3 March 2006.

214 Somluck Srimalee (2007) “Paper firm looks back on decade of recovery”, *The Nation* (Thailand), 25 July 2007.

215 “Visit our Factory”, Advance Agro website: <http://www.advanceagro.com/en/about/visitfactory.asp>

216 “Thai tale told by default on bond issue”, *South China Morning Post* (Hong Kong), 19 June 2001.

management was facing a bankruptcy suit over a debt of more than 100 million baht. Three members of the Dumnernchanavit family (Yothin, Anurat and Siriwan) were included in the suit, which was filed by Thai institution National Finance.²¹⁷

In November 2002, the Securities and Exchange Commission of Thailand fined Trairat Dumnernchanavit 1.2 million baht for manipulating the price of Advance Agro stock between April and August 1998. Trairat used companies in his group to buy and sell shares in Advance Agro creating the impression that trade volume had increased significantly. Trairat was put on the Stock Exchange Commission's black list and was not allowed to act as manager, director or major shareholder of any listed company "for at least five years".²¹⁸ Today, Trairat is once again on the board of directors of Advance Agro.

In 2006, Stora Enso sold its shares in Advance Agro to private investors based in Hong Kong for US\$80 million.²¹⁹ The relationship between Advance Agro and Stora Enso had been a stormy one. Stora Enso had first offered to sell its shares in October 2001. A Thai newspaper, *The Nation*, reported that Stora Enso was "unable to work with the management of Advance Agro".²²⁰

In 2004, Stora Enso questioned Advance Agro's 2003 financial results, particularly the transactions between Advance Agro and affiliated companies. Shortly afterwards, Advance Agro dismissed one of Stora Enso's representatives from the company's board. *The Nation* quotes sources as saying that Stora Enso had questions about Advance Agro and its business transactions, "particularly those with entities controlled by the Dumnernchanavit family". Agro Lines is owned by the Dumnernchanavit family and supplies fibre to Advance Agro. National Power Supply supplied electricity. Logistics system is supported by Hi-Speed Trans Co Ltd – all these companies are affiliated with Advance Agro.²²¹

Three years earlier, the *South China Morning Post* reported analysts as saying that "Advance Agro was forced to buy some of its wood and other raw materials from the Soon Hua Seng Group at a premium to the market price of up to 15 per cent." The *South China Morning Post* notes that "The company failed to respond to questions about these claims."²²²

Stora Enso may also have had concerns about the social and environmental impacts of Advance Agro's plantations. In 2001, Stora Enso carried out a survey of the social and environmental impacts of all their plantation operations in the global South, including Advance Agro.²²³ But despite several requests for a copy of the report, Stora Enso has declined to make the report public.

In April 2007, Advance Agro announced plans to build a new 420,000 tonnes a year paper mill at its existing site in Prachinburi, at a cost of 12 billion baht. The new mill will increase Advance Agro's capacity to one million tonnes a year. Construction was planned to start in 2007 and the plant is planned to start production in 2009. Half of the money is to come from capital funds and loans. The remainder coming from the company's working capital. Finnish consulting firm Pöyry produced a feasibility study

217 "Thai tale told by default on bond issue", *South China Morning Post* (Hong Kong), 19 June 2001.

218 "SEC fines two investors and four companies for stock manipulation", fnWEB.com, 4 November 2002.

219 "Stora Enso Interim Review January-September 2006", *Canadian Corporate Newswire*, 26 October 2006.

220 Nareerat Wiriyapong (2001) "Enso offers to sell stake in pulp firm", *The Nation* (Thailand), 8 October 2001.

221 "Advance Agro: Boardroom row erupts over deals", *The Nation* (Thailand), 28 April 2004.

222 "Thai tale told by default on bond issue", *South China Morning Post* (Hong Kong), 19 June 2001.

223 Chris Lang (2002) "The Pulp Invasion. The international pulp and paper industry in the Mekong Region", World Rainforest Movement, December 2002. <http://chrislang.org/2002/12/01/the-pulp-invasion-thailand/#storaenso>

for the project.²²⁴

In May 2008, *Pulp and Paper International* reported that Advance Agro had decided to scale back its new paper mill from 420,000 tons a year to 220,000 tons a year.²²⁵ According to a company statement on the Stock Exchange of Thailand website, the capacity of the new paper plant will be 200,000 tonnes a year. From 2010, the company plans to stop selling pulp and to use all pulp produced for its own paper production. The company plans to borrow 3 billion baht to finance the new paper mill. The total cost of the proposed plant is 6.6 billion baht.²²⁶

Advance Agro is also planning to build an ethanol biofuel plant in Prachinburi province. Construction is planned from March 2008 to June 2009.²²⁷ The company has set up a company called Double A Ethanol Co. , which is 99.99% owned by Advance Property Synergies Public Company Limited.²²⁸

Where the company will get its raw material from to feed these expansions is not clear. When asked, Thirawit Leetavorn, regional senior executive vice-president at Advance Agro, did not answer my questions about how the company plans to supply raw material to these new developments.²²⁹

One possible source of new raw material for Advance Agro could be from plantations in Laos and Cambodia, where Advance Agro is expanding its operations. However, little information seems to be available about these plans. Sayo AA, a subsidiary of Advance Agro, requested 200,000 hectares for tree plantations in Laos. According to a survey by the German Agency for Technical Cooperation (GTZ), provincial authorities offered 12,000 hectares. GTZ reports that in November 2005, Sayo AA transferred this land to Indian pulp giant Grasim, which is developing a plantation and pulp project in Laos.²³⁰ Sayo AA has applied for permission to plant a further 10,000 hectares in Laos – the investment was authorised on 11 January 2007, although the land allocation has not yet been approved. In May 2007, Prime Minister Bouasone Bouphavanh announced that no more large-scale land concessions would be approved “on an indefinite basis, or until a more comprehensive strategy could be devised,” the *Vientiane Times* reported.²³¹ Meanwhile, Advance Agro trucks are reported to be carrying eucalyptus from Laos, presumably to feed Advance Agro’s pulp operations in eastern Thailand.

224 “AA to build Bt12-bn paper plant”, *The Nation* (Thailand), 20 April 2007.

225 “AA revises planned expansion scheme”, *Pulp and Paper International*, Vol. 50, No. 5, May 2008, page 8.

226 “Opinions of Independent Financial Advisor for the delisting of AA”, 30 November 2007.

<http://www.set.or.th/set/newsdetails.do?filename=dat%2Fnews%2F200712%2F07043448.e07+++++++&headline=Opinions+of+IFA+for+the+delisting+of++AA&type=H&symbol=AA&time=1196925840000&language=&count ry=>

227 “Project manager of ethanol bio diesel project. Advance Agro public company limited”, Job advert on naukri.com.

http://corp.naukri.com/mynaukri/mn_newminnernew.php?filename=060907001024&othersrcpjobs=company_page&othersrcp=&id=&searchloc=jobsearch

228 “Thailand AA reports on sale of lands to Double A Ethanol Co, Ltd”, Thai Press Reports, 11 May 2007.

229 Email from Thirawit Leetavorn, Advance Agro, to Chris Lang, 22 June 2007.

230 Gunda Schumann, Pheuiphanh Ngaosrivathana, Bouakham Soulivanh, Somboun Kenpraseuth, Khamdeng Onmanivong, Khamthanh Vongphansipraseuth, Chithasone Bounkhong (2006) “Study on State Land Leases and Concessions in Lao PDR”, Land Policy Study No. 4 under Lao Land Titling Project II, Lao-German Land Policy Development Project, June 2006, page 84.

231 “Govt suspends land concessions”, *Vientiane Times*, 9 May 2007.

Indah Kiat, Asia Pulp and Paper, Indonesia: Deforestation, debt and destruction of livelihoods

In the late 1980s, the province of Riau in central Sumatra was 80 per cent covered in forest. Today, only 30 per cent is left. “The main driver of deforestation and peat-bog draining here is the voracious appetite for timber, and the big players are two giant pulp mill owners”, reports Fred Pearce in *New Scientist* magazine. “One company is Asia Pacific Resources International (APRIL), part of RGM International, an empire owned by Singapore-based magnate Sukanto Tanoto. APRIL’s rival is the Sinar Mas Group dynasty founded by Eka Tjipta Widjaja, which owns Asia Paper and Pulp (APP).”²³²

APP boasts on its website that it is the largest pulp and paper producer in Asia outside Japan.²³³ APP’s products include printing and writing papers, coated and uncoated sheets, photocopy paper, stationery, carbonless paper and tissue paper products.²³⁴ Although APP doesn’t say this on its website, the company is also one of the most controversial and destructive pulp and paper companies on the planet.

Construction of APP’s Indah Kiat pulp mill started in 1994. At the time, it was the largest single-line pulp mill in the world. In the previously small village of Kerinci, four thousand Indonesians worked day and night to build the mill. The pulp mill was designed by the Finnish consulting firm Jaakko Pöyry. A soda boiler was supplied by Finland’s Tampella. More machinery came from Finland’s Kone, Valmet, Ahlstrom, Sunds Rauma and Outokumpu, Sweden’s Sunds Defibrator, Noss and Asea Brown Boveri Flakt; Japan’s Mitsubishi Heavy Industries and Nippon Sanso; Canada’s Chemetics and Bailey; the USA’s Cranston and Solarturbines; Germany’s Siemens and Voith; Britain’s ICI; Taiwan’s Teco; and India’s Ion Exchange.²³⁵

Today, APP’s Indah Kiat pulp mill has a capacity of 2 million tonnes a year. Indah Kiat also has a 1.5 million tonnes a year paper mill. Since starting operations in Sumatra in the 1980s, WWF estimates that APP has pulped about one million hectares of natural forest in Riau province.²³⁶

APP is ultimately owned by the Widjaja family, one of Indonesia’s largest business families, through a complex series of shareholdings.²³⁷ The man who established the Sinar Mas Group, Eka Tjipta Widjaja, was the fifth richest business person in Indonesia in 2007, according to *Forbes* magazine.²³⁸ Apart from pulp and paper the Sinar Mas Group is involved in agribusiness (including palm oil – another massively destructive plantation crop), property and finance. In 1990, Eka Tjipta Widjaja was reported as saying,

232 Fred Pearce (2007) “Bog barons: Indonesia’s carbon catastrophe”, *New Scientist*, 1 December 2007.

<http://www.newscientist.com/channel/opinion/mg19626321.600-bog-barons-indonesias-carbon-catastrophe.html>

233 APP website <http://www.asiapulppaper.com/>

234 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33.

<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

235 Ricardo Carrere and Larry Lohmann (1996) *Pulping the South: Industrial Tree Plantations in the World Paper Economy*, Zed Books, page 211.

236 “Asia Pulp & Paper (APP) Hiding Destruction Behind False Advertisements: APP continues to ignore calls for conservation beyond ‘legal compliance’, and even fails on the latter”, WWF Monitoring Brief October 2006.

<http://www.wwf.or.id/index.php?fuseaction=newsroom.detail&id=NWS1161151678&language=e>

237 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 2.

<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

238 “#5 Eka Tjipta Widjaja & family”, *Forbes*, 13 December 2007.

http://www.forbes.com/lists/2007/80/07indonesia_Eka-Tjipta-Widjaja-family_EGES.html

“Once I decide to do something, I will pursue it at any cost.”²³⁹ This could be APP’s motto.

Transfer pricing in Sinar Mas’s corporate maze

The Sinar Mas conglomerate includes hundreds of companies. The ultimate owners are in a position to run the various companies for their own interests and to capture profits for themselves. The losers in this arrangement are shareholders (when the price falls), creditors (when loans are not repaid)²⁴⁰ and local people who are left to find new livelihoods after their environment is destroyed to make way for Sinar Mas’s monocultures.

The vast number of companies and the almost complete lack of transparency allows Sinar Mas to control of sales prices between companies in the group. Transactions between companies controlled by the Widjaja family include “wood supply, energy supply, chemicals supply, the marketing of pulp and paper products both to domestic and international markets, insurance, the construction of infrastructure, finance, etc.”²⁴¹ For example, APP’s Indah Kiat pulp mill has an agreement with the Arara Abadi plantation company. Both companies are part of the Widjaja family conglomerate. Under the agreement Indah Kiat finances the plantation company. Payments from Indah Kiat to Arara Abadi appear in financial reports as “non current advances to related parties”.²⁴² The agreement allows Arara Abadi to operate at very low costs (even lower if the loans from Indah Kiat are not repaid). The transactions between the companies are not transparent and profits generated by Arara Abadi are impossible to calculate accurately.²⁴³

In 2006, the Center for International Forestry Research (CIFOR) published a report looking at APP. They chose APP because the company highlights many of the problems in the pulp and paper sector in Indonesia: rapid expansion; massive deforestation; and huge debts.²⁴⁴ The CIFOR report includes a matrix illustrating the links and transactions between the various companies controlled by the Widjaja family. The report points out that “The impressive list of these transactions tends to show that the ultimate owners made use of transfer pricing to move profits, as they have total power of decision.”²⁴⁵ Transfer pricing is a mechanism whereby the price of a transaction between related companies is based on where

239 Ed Matthew and Jan Willem van Gelder (2001) “Paper Tiger, Hidden Dragons: The responsibility of international financial institutions for Indonesian forest destruction, social conflict and the financial crisis of Asia Pulp & Paper”, Friends of the Earth. http://www.foe.co.uk/resource/reports/paper_tiger_hidden_dragons.pdf

240 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 3. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

241 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 4. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

242 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 4. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

243 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 4. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

244 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 1. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

245 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, pages 11-12. <http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

company owners want profits to be realised. For example, a plantation company might sell wood fibre to a related pulp mill at a highly inflated cost, in order to transfer profits from the pulp mill (which may have, say, run up enormous debts which creditors are trying to reclaim by seizing the company's profits) to the plantation company, which formally at least is a separate company. If the pulp mill meanwhile pours money in the form of interest-free loans into the plantation company this will also help hide the profits.

CIFOR's researchers, Romain Pirard and Rofikoh Rokhim, note that the prices of wood supply to APP's pulp mills increased in a "spectacular way" from 2001 onwards. APP explains that this is because the company is increasingly using plantation wood, which is more expensive than clearcutting natural forests. Pirard and Rokhim point out that the mills have transferred tens of millions of dollars to the wood suppliers in recent years and that a more convincing reason for the wood price hike is the fact that during the 1990s APP attracted investors by advertising the company's access to very cheap raw materials from native forests. After 2001, the agreements were changed: presumably so that the profits were transferred from the pulp mills to the wood supplier companies. Although the wood supplier companies are also controlled by the Widjaja family, they do not owe vast amounts of money to international investors.²⁴⁶

The banks lending to the Widjaja family companies in the 1990s made little effort to investigate the nature of the companies they were investing in. "When we approved the credit for millions of US dollars, we just signed and never asked in detail about the risks of the business", a former director of corporate finance of a major financial institute told CIFOR's researchers in an off-the-record interview in 2004.²⁴⁷

The banks allowed APP to run up colossal debts, totalling an estimated US\$13.9 billion. Even after the Asian economic crisis, investors remained optimistic. "Asia Pulp & Paper: Here Comes the Cash Flow!" exclaimed Morgan Stanley in November 1999.²⁴⁸ When it became clear that APP was having difficulty repaying its debts, investors continued to pour money into Widjaja family companies, including in the pulp and paper sector, in the hope that some of the new debt would be used to repay existing debts.²⁴⁹

Part of APP's expansion was financed by Bank Internasional Indonesia, which is also part of the Sinar Mas Group. In 1999, the bank ran into difficulties because of its non-performing loans. The amount of loans that the bank gave to related parties was higher than allowed under Indonesian law. The case was never brought to court and the Indonesian Bank Restructuring Agency (IBRA) took over the bank's non-performing loans on behalf of the Government of Indonesia. IBRA ended up with US\$1.3 billion of APP's debts.²⁵⁰ Ultimately, Indonesia's taxpayers have ended up bailing out APP. In November 2001, the

246 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 9.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

247 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 4.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

248 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 5.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

249 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 5.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

250 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 5.

Widjaja family agreed with IBRA to give personal guarantees against APP and Sinar Mas debts. The following year, the IMF stepped in and, acting on behalf of international creditors, pressured IBRA to work on a restructuring involving all creditors at the same level. In the process, Widjaja's personal guarantees of repaying IBRA debts disappeared.²⁵¹

None of this financial, social and environmental mess would have been possible without the financial support of a range of financiers, predominantly from the North.²⁵² Banks involved include Goldman Sachs, J.P. Morgan Chase & Co., Franklin Templeton, Morgan Stanley Dean Witter, Capital Group, Merrill Lynch, Bank of America (USA), UBS, Credit Suisse First Boston (Switzerland), ABN AMRO Bank (Netherlands), Deutsche Bank, Dresdner Bank, Norddeutsche Landesbank, Commerzbank, Bayerische Vereinsbank (Germany), DBS Bank (Singapore), Bank Internasional Indonesia (Indonesia), Barclays Bank, NatWest (UK), and Bank of China (China).²⁵³

APP's expansion during the 1990s was also supported by export credit agencies. The export credit agencies of Germany, Austria, Canada, Spain, Sweden, Italy, Japan, the US, France, Denmark and Finland guaranteed export credits to suppliers of pulp and paper machinery from their own countries.²⁵⁴ The Swedish Export Credit Guarantee Board (EKN), for example, supported equipment exports from the following Swedish companies to Indah Kiat: ABB, Hägglunds Drives, Kvaerner Pulping, Noss and Sunds Defibrator (now owned by Metso Paper).²⁵⁵ EulerHermes, Germany's export credit guarantee agency, guaranteed several loans to APP from ABN Amro.²⁵⁶ APP's four Indonesian subsidiaries (Indah Kiat Pulp & Paper, Pabrik Kertas Tjiwi Kimia, Pindo Deli Pulp & Paper Mills, Lontar Papyrus Pulp & Paper Industry) ran up a total debt of about US\$1 billion to the various ECAs.²⁵⁷

In March 2001, APP appointed Credit Suisse First Boston (Switzerland) to coordinate a restructuring of its debt.²⁵⁸ A week later, APP defaulted on its loan repayments. APP's debt was divided into three parts with separate restructuring deals:

- US\$6.7 billion owed by four APP subsidiaries;
- US\$2.8 billion owed by APP China; and

<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

251 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 6.

<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

252 Jan Willem van Gelder (2001) "German banks and palm oil and pulp & paper in Indonesia. A research paper prepared for WWF International", Profundo, December 2001, page 100.

253 Ed Matthew (2001) "Asia Pulp & Paper", Friends of the Earth Briefing, 22 June 2001.

Jan Willem van Gelder (2001) "German banks and palm oil and pulp & paper in Indonesia. A research paper prepared for WWF International", Profundo, December 2001, page 100.

254 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 4.

255 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 10.

256 Jan Willem van Gelder (2001) "German banks and palm oil and pulp & paper in Indonesia. A research paper prepared for WWF International", Profundo, December 2001, page 100.

257 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 4.

258 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 4.

- US\$4.5 billion owed by APP itself.²⁵⁹

Complex debt restructuring negotiations between APP and more than 200 creditors (mainly from the US, Europe and Japan) resulted in a debt restructuring package covering US\$6.7 billion which was signed by 93 per cent of APP's creditors in 2005. APP restarted interest payments in April 2005. But the "Master Restructuring Agreement" (MRA) was biased in favour of Widjaja, rather than the creditors. Debts were to be repaid over a period of more than 15 years. Interest that had already accrued was not included. Control of operations remained exactly as it was before the restructuring agreement. "In short," conclude CIFOR's researchers, "the MRA did not make a substantial modification to the core reasons why the group followed a rationale that already badly impacted on Indonesian natural forests, on Indonesian natural forests, on Indonesian taxpayers, and on investors from around the world."²⁶⁰

Many bondholders (which included insurance companies, fund managers, pension funds and individual investors) sold their APP bonds, at a heavy loss, to "distressed debt funds". These secretive funds buy up securities cheap, in the hope of large profits after the company restructures its debt.²⁶¹ Two of these distressed debt funds, Gramercy and Oaktree Capital Management went to court to attempt to be repaid in full. Gramercy and Oaktree Capital Management bought large numbers of APP bonds cheap and stand to win considerable profits if they win.²⁶² In April 2007, the New York State Supreme Court ordered APP to repay the creditors. Most of APP's creditors oppose legal action against APP and its subsidiaries, because they know that the company simply cannot repay its debts and would go bankrupt if it were forced to do so. Even the repayment of US\$335 million (which amount to less than 2.5 per cent of APP's debt) to Gramercy and Oaktree Capital Management would leave APP's subsidiaries in a weak financial position.²⁶³ Gramercy and Oaktree are also seeking an order, through the courts of Singapore and New York, which would allow them to seize payments made by APP's subsidiaries to their creditors.²⁶⁴

In September 2008, Reuters reported that APP said it had reached "full and final settlement" of all litigation and disputes outstanding with Oaktree Capital Management. No terms of the agreement were released.²⁶⁵

Expansion to China

Astonishingly, APP still manages to raise money on international credit markets. Some of the same financiers that invested in APP in Indonesia, have supported APP's expansion to China. In 2004, when

259 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 4.

260 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse ", CIFOR, Working Paper No. 33, page 7.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

261 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 4.

262 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 5.

263 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 5.

264 Jan Willem van Gelder (2005) "The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)", Profundo, October 2005, page 5.

265 "Indonesia's APP units say settle with creditor Oaktree", Reuters, 14 September 2008.
<http://www.reuters.com/article/marketsNews/idUSJAK6498520080915>

APP's dismal financial status was well known, Germany's Euler Hermes decided to provide export credit insurance for APP's expansion in China, apparently having learned nothing from the company's massive debt default and horrendous environmental track record.

Hermes defends its guarantees covering machine exports to APP with two main arguments. First it points out that other export credit agencies also supported APP's expansion. This is the well-known "race to the bottom" argument, in which ECAs argue that if they did not support a project, another ECA would do so. The net effect would be jobs lost in the country whose ECA did not support the project and the project would go ahead anyway.²⁶⁶ This may be true, but it does not mean that ECAs supporting a project can simply ignore the financial, environmental and social impacts directly caused by the company they are supporting.

Second, Hermes argues that most of the Hermes guarantees were for paper production, which would not in itself require more raw material as the pulp capacity was already in place. The argument is disingenuous since Hermes knows full well that some of the raw material feeding the pulp mill comes from APP's destruction of the forests of Sumatra, at least part of which is illegal. Hermes also knows that the pulp and paper mill has polluted the Siak River destroying fisheries and leading to serious health problems for local communities. Hermes, however, denies such arguments, citing APP's own data to prove its case.^{267 268}

Hermes did not talk to local people affected by the pollution from Indah Kiat. Hermes rejected a measurement of AOX based on a water sample taken by German film-maker Inge Altemeier as "not comprehensible" ("*nicht nachvollziehbar*"). Altemeier's sample revealed an AOX value of 7.8 mg/l (the maximum allowed under German regulations is 0.1 mg/l). Regarding the supply of raw material to Indah Kiat, Hermes argues that Arara Abadi is certified to ISO 14001 and will attempt in the future to achieve Forest Stewardship Council certification. Hermes argues that claims of illegal logging against Arara Abadi could not be proven.²⁶⁹

In 2007, APP managed to get FSC Chain of Custody certification for part of its pulp mill operations. The audit was carried out by SGS-Qualifor's Salahudin Yaacob, a Malaysia-based SGS executive. He told journalists writing in the *Wall Street Journal*, that his role was limited to checking that APP legally owned its almost 200,000 hectares of industrial tree plantations. The chain of custody certificate allowed APP to use its pulp mixed with fully FSC-certified pulp to manufacture paper that could be labelled with the FSC "mixed sources" logo.²⁷⁰ Two months later, FSC issued a statement saying that it had "dissociated from working with Indonesian based Asia Pulp and Paper (APP) in October 2007". FSC

266 "Ausfuhrgewährleistungen der Bundesrepublik Deutschland auf PT Indah Kiat Pulp & Paper, Corp., Indonesien", Hermes Kreditversicherungs AG, no date.

267 "Ausfuhrgewährleistungen der Bundesrepublik Deutschland auf PT Indah Kiat Pulp & Paper, Corp., Indonesien", Hermes Kreditversicherungs AG, no date.

268 In 2006, I took part in a meeting with Uwe Heinbruch who is in charge of overseeing Export Credit Guarantees/Guarantees for Direct Investments Abroad at the German Ministry for Economic Development and Cooperation (BMZ). See Chris Lang (2006) "APP is destroying forests", Pulp Inc., 18 October 2006.

<http://pulpinc.wordpress.com/2006/10/18/app-is-destroying-forests/>

269 "Ausfuhrgewährleistungen der Bundesrepublik Deutschland auf PT Indah Kiat Pulp & Paper, Corp., Indonesien", Hermes Kreditversicherungs AG, no date.

270 Tom Wright and Jim Carlton (2007) "FSC's 'Green' Label for Wood Products Gets Growing Pains", *Wall Street Journal*, 30 October 2007. Available at: http://www.fsc-watch.org/archives/2007/10/30/Wall_Street_Journal

explained that “association with APP would threaten the good will and faith invested in the name Forest Stewardship Council and the years of support and participation by companies that are truly committed to the pursuit of responsible forest management globally”.²⁷¹ Setting aside, for the moment, the fact that FSC has certified several industrial tree plantation companies which are clearly not “committed to the pursuit of responsible forest management”, FSC’s statement makes nonsense of Hermes’ arguments justifying its decision to support APP. Unfortunately, the damage is already done.

APP China’s debt of about US\$2.8 billion was restructured in November 2003. The debt-for-shares deal left Chinese state-owned banks as co-owners of APP China, but the largest shareholding is the Widjaja family, which had been buying up APP China bonds at a discount before the restructuring. APP owns only 0.1% of APP China meaning that APP China’s operations are out of reach of APP’s creditors. But APP China, APP and Sinar Mas are all still firmly under the control of the Widjaja family.²⁷²

APP China is expanding rapidly. The company’s projects in China include Gold East Paper Co. Ltd in Jiangsu, on the Yangtze River. By 2005, APP had invested US\$1,823 million in its three paper machines at Gold East Paper.²⁷³

Another APP China project is Hainan Jinhai Pulp and Paper, the world’s largest single line pulp production facility. Pulp production started in November 2004. The mill produces 3,200 metric tonnes per day. Raw material comes from APP’s eucalyptus and acacia plantations, but the company is also buying wood chips, because the plantations are not sufficient to supply the mill. About 23 per cent of the mill’s wood is bought. 80 per cent of the pulp is sold to other APP mills, with the rest sold on the market.²⁷⁴

Yet another APP China project is Ningbo Asia Pulp and Paper, which produces paperboard. The mill runs on a mixture of recycled paper and virgin pulp.²⁷⁵

What was the money for?

One of the extraordinary aspects of the APP story is that the company managed to run up debts of US\$13.9 billion. After all, the company only runs a handful of pulp and paper mills and related forestry operations. Until 2001, it made large profits – CIFOR’s researchers estimate profits of US\$1.5 billion for the four main APP companies between 1993 and 1999. Yet by April 2001 according to APP, APP’s flagship pulp mill, Indah Kiat, had run up a debt of US\$2.7 billion.²⁷⁶

Why did the banks never ask what all that money was actually for? Indah Kiat managed to arrange loans

271 “Forest Stewardship Council dissociates with Asia Pulp and Paper December 2007”, Forest Stewardship Council statement, December 2007. Available at: http://www.fsc-watch.org/archives/2008/01/10/FSC_dumps_Asia_Pulp_

272 Jan Willem van Gelder (2005) “The financing of the Riau pulp producers Indah Kiat and RAPP, A research paper prepared for Jikalahari (Indonesia)”, Profundo, October 2005, page 2.

273 “Bigger by the second”, RISI, 1 December 2005. <http://www.risiinfo.com/content-gateway/pulpandpaper/magazine/dbareaarchiveppmag2005001202.html>

274 “Bigger by the second”, RISI, 1 December 2005. <http://www.risiinfo.com/content-gateway/pulpandpaper/magazine/dbareaarchiveppmag2005001202.html>

275 “Bigger by the second”, RISI, 1 December 2005. <http://www.risiinfo.com/content-gateway/pulpandpaper/magazine/dbareaarchiveppmag2005001202.html>

276 Ed Matthew and Jan Willem van Gelder (2001) “Paper Tiger, Hidden Dragons. The responsibility of international financial institutions for Indonesian forest destruction, social conflict and the financial crisis of Asia Pulp & Paper”, Friends of the Earth - England, Wales & Northern Ireland, May 2001, pages 18-19.

to refinance loans that it had failed to repay. When it failed to repay the new loan the company arranged yet another loan.²⁷⁷ The Widjaja family has managed to pocket the profits, delay paying its debts, avoided repossession of its assets, avoided any meaningful restructuring of its corporate empire and, so far at least, Widjaja family members have avoided going to jail.

CIFOR's researchers point out that APP's financial collapse had little to do with the Asian economic crisis, which happened four years before APP defaulted on its debts. When the exchange rate of the rupiah collapsed against the dollar, this was to some extent to APP's advantage – production costs were in rupiah and export oriented sales were mainly in dollars. CIFOR's report explains that the losses were related

“to the global oversupply of pulp and paper products on the international market, an increase in production costs (for unclear reasons), losses due to foreign exchange rates (registered in the financial reports but not always realized), and other unspecified reasons (the financial reports specify ‘other costs’ without being any more precise).”²⁷⁸

Environmental destruction and violence

The worst aspect of APP's operations, however, is not the fact that the company has managed to obtain large amounts of money which it will not, and probably cannot, repay. The company has devastated the environment and livelihoods of thousands of people in Sumatra.

When Nordea provided a loan to Arara Abadi, APP's plantation company, the bank provided no environmental or social demands on the company as part of the deal.²⁷⁹ It would be unfair, however, to single out Nordea. The bank is just one of APP's many financiers that failed to carry out adequate due diligence before giving loans to APP. Having handed over the cash, none of the banks has made serious attempts to limit the social and environmental damage carried out by APP or its subsidiaries.

Large areas of Indah Kiat's concessions in Riau are on the land of the indigenous Sakai people, who were evicted to make way for the pulpwood operations.²⁸⁰ In 2001, villagers won the land rights to 70,000 hectares of APP's concession. APP lost one quarter of its concession area. A report produced in 2001 by consulting firm AMEC notes that “The existing level of claim disputes can have a large impact on sustainable wood supply plans. If the number of successful claims escalates, it will have a further severe impact”.²⁸¹

277 For a dizzying overview of the loans that Indah Kiat managed to secure, see Ed Matthew and Jan Willem van Gelder (2001) “Paper Tiger, Hidden Dragons. The responsibility of international financial institutions for Indonesian forest destruction, social conflict and the financial crisis of Asia Pulp & Paper”, Friends of the Earth - England, Wales & Northern Ireland, May 2001, pages 29-31.

278 Romain Pirard and Rofikoh Rokhim (2006) “Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse”, CIFOR, Working Paper No. 33, page 11.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

279 Mats Valentin and Kristina Bjurling (2004) “Swedish involvement in the Indonesian paper and pulp industry”, SwedWatch, October 2004, page 12.

280 Ricardo Carrere and Larry Lohman (1996) *Pulping the South Industrial Tree Plantations and the World Paper Economy*, Zed Books, page 222.

281 Christopher Barr (2004) “Risk Analysis and Impact Assessment for Pulp and Plantation Investments: The Case of Indonesia”, presentation at International Forum on Finance and Investment in China's Forestry Sector, Center for International Forestry Research (CIFOR), Beijing, 22-23 September 2004.

Indah Kiat faces a series of land claims and land conflicts. According to AMEC's 2001 report, the company does not control large parts of its concession area and has underestimated the extent of potential land claims and conflicts.²⁸² Arara Abadi employs its own private security guards. A 2003 report by Human Rights Watch documents violence carried out against villagers.²⁸³ For example, when Arara Abadi started to acquire land near the village of Mandiangan in the 1980s, it simply seized land from the indigenous Sakai and Malay people without compensation. Armed police and military officials took part in meetings between the company and villagers. One villager told Human Rights Watch, "We often heard about people being arrested or just disappearing. So when they came here wearing their guns, we just kept our mouths shut."²⁸⁴

In February 2001, 700 Arara Abadi employees supported by paramilitary and police forces attacked villagers in Betung. Homes were destroyed and 58 villagers arrested. Five villagers were injured, two of them seriously.²⁸⁵ There are numerous similar examples. Villagers in Suluk Bongkal have been trying to establish their right to 2,900 hectares of land since 1997. But even with written proof of their tenure rights dating back to 1940, they have been unable to convince the authorities and APP of their land rights. Villagers complain that every time they have come to an agreement with Arara Abadi, the company has violated the agreement.

In each case, rather than attempting to resolve the conflicts, Indah Kiat denies allegations of violence.

"Every step in this chain is illegal"

In 2007, police in Sumatra clamped down on illegal logging, stopping the supply of illegal logs to pulp mills. The Indonesia Pulp and Paper Association threatened that pulp production may be forced to decrease by as much as 75 per cent as a result.²⁸⁶ This figure gives some idea of how important illegal logging is to the supply of raw material to pulp mills in Sumatra. As it was, the police clampdown was lifted, and business as usual was allowed to resume.

After APP appropriated villagers' land for plantations, villagers' livelihoods were destroyed. One of the few opportunities they have to earn income is through selling timber to the company. In some cases, villagers log in areas that the company has set aside for conservation. While the company turns a blind eye to the fact that the timber it is buying from villagers is illegally logged, this puts villagers in direct conflict with conservation organisations.

The Swedish NGO, Swedwatch, describes the process by which illegal timber becomes legal. Villagers

282 "APP Pulp Mills & Sinar Mas Group Forest Companies Preliminary Sustainable Wood Supply Assessment Executive Summary", AMEC Simons Forest Industry Consulting with Asia Pacific Systems Engineering, 21 November 2001, page 4.

283 "Without Remedy: Human Rights Abuse and Indonesia's Pulp and Paper Industry", Human Rights Watch, Vol. 15, No. 1 (C), January 2003. <http://www.hrw.org/reports/2003/indon0103/>

284 "Without Remedy: Human Rights Abuse and Indonesia's Pulp and Paper Industry", Human Rights Watch, Vol. 15, No. 1 (C), January 2003. <http://www.hrw.org/reports/2003/indon0103/Indon0103-04.htm>

285 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 14.

286 Chris Lang (2008) "APP and APRIL still cannot legally supply their pulp mills", Pulp Inc., 10 April 2008. <http://pulpinc.wordpress.com/2008/04/10/app-and-april-still-cannot-legally-supply-their-pulp-mills/>

transport the logs to the local town and contact a broker of illegal timber. The broker supplies documents that certify that the timber is from an area with a permit to be logged and is legal. The broker pays the villagers and transports the timber to the pulp mill. The pulp mill pays the owner of the logging permit, who then pays the broker for his services.²⁸⁷

In 2001, John Aglionby, a *Guardian* journalist, reported on illegal logging to supply Indah Kiat. He describes an illegal logging team's work cutting an area of forest. "Every step in this chain is illegal," he reported.

"The loggers have no permits to destroy the rainforest and take the wood to Perawang, a small town half-way up Sumatra. [The loggers] have no right to buy it and sell it on to the pulp factory, for whom it is a serious offence to buy illegally felled timber."²⁸⁸

The pulp mill in Perawang that Aglionby refers to is APP's Indah Kiat mill. The logging team are villagers whose previously earned their living fishing in the Siak River. "Now there are no fish left," one of them told Aglionby. "They have all been poisoned by the factory, so chopping down the forest is the only way we can make money."²⁸⁹

"What shall we do?" one of the villagers now involved in illegal logging asked Swedwatch's researchers. "There is nothing left for us to live on, they have taken our land, killed the fish and we would die if they stopped buying the wood from us. Indah Kiat has to buy! It is because of them that we lack possibilities to support ourselves."²⁹⁰

In 2006, WWF reported that APP used timber from Libo forest for its pulp mills in Riau. Libo forest is part of the Balai Raja Wildlife Sanctuary, one of the few remaining habitats of the Sumatran elephant. Balai Raja contained about 39,000 acres of forest when it was declared a Wildlife Sanctuary in 1986. By 2006, only 650 acres remained.²⁹¹

APP is fully aware that it is buying illegally logged timber. In 2004, Anil Raina, from the corporate marketing department of Sinar Mas, told Swedwatch's researchers that "If illegal logging is stopped it will be a hard blow against the local communities, however, since some of them may depend on this activity. Until we find some way to provide either some jobs or support for villagers, so they can survive, we will not enforce a total ban on logging."²⁹²

APP's forestry operations in Riau were halted in 2006 as a result of a police investigation into illegal

287 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 20.

288 John Aglionby (2001) "Fisherman driven to illegal logging as pulp factory poisons river. Sumatran communities put at risk", *The Guardian*, 26 June 2001. <http://www.guardian.co.uk/paper/story/0,10581,512597,00.html>

289 John Aglionby (2001) "Fisherman driven to illegal logging as pulp factory poisons river. Sumatran communities put at risk", *The Guardian*, 26 June 2001. <http://www.guardian.co.uk/paper/story/0,10581,512597,00.html>

290 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 20.

291 "Indonesian Government Ignores Own Rules, Places Endangered Elephants in Peril", WWF Press Release, 24 March 2006. <http://www.worldwildlife.org/who/media/press/2006/WWFPresitem843.html>

292 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 12.

logging. While the investigation is long overdue, APP simply expanded its logging operations in Jambi province, cutting 50,000 hectares of Bukit Tigapuluh Forest. WWF Indonesia notes that “some of the clearing seems to be in violation of Indonesian law”. Part of the area cleared is a proposed Specific Protected Area. The forest is habitat to Sumatran orangutans, tigers and elephants. The forest is also home to two tribes of Indigenous Peoples, one of which is found nowhere else in Sumatra. APP has plans to build a new road through the Bukit Tigapuluh Forest, to facilitate transport of timber to its pulp mills.²⁹³

Pollution and pulp production

As well as destroying forests, APP has polluted the Siak River. Indah Kiat started its first pulp mill at Perawang in 1984, with an outdated factory imported from Taiwan. The 100,000 tonnes a year pulp mill used elemental chlorine and wastes were discharged into the Siak River. Protests from local villagers led to an agreement in 1992, mediated by Indonesia’s Environmental Impact Management Agency, BAPEDAL, under which Indah Kiat agreed to meet the villagers’ demands. The company, however, failed to do so. Indah Kiat’s pulp and paper mills have expanded to cover an area of 400 hectares and now use a mixture of chlorine and elemental chlorine free bleaching.²⁹⁴

Six years ago, German film-maker Inge Altermeier visited Indah Kiat to produce a film about the impacts of pulp production on local communities. She found and filmed an illegal outlet from Indah Kiat’s mill, which the company used at night. During the day the output was not in use, but the air stank and dead fish floated in the river.

In a village near Indah Kiat’s mill, people complained about the bad smell and told the film-maker that they were suffering from itching, headaches and vomiting. A villager called Tasjudin showed Altemeier his garden. Since Indah Kiat arrived, there are no more coconuts on his trees. The fruit on his trees is covered in black spots and it rots before it ripens. “Indah Kiat is ruining our lives. But what am I to do? This is my home, I have to live here,” Tasjudin said.

Before Indah Kiat built its pulp mill, people could fish in the Siak River. They used the river for drinking water and for bathing in. Since villagers can no longer drink from the river, they demanded that Indah Kiat provide them with clean water. The company gave them a water pump. But villagers found that the ground water was also polluted and smelled bad. Villagers are forced to buy bottled water to drink. Many still wash in the river because there is not enough pumped water especially in the dry season.²⁹⁵

In 2005, Rully Syumanda, Forest Campaigner with WALHI, and Rivani Noor, from the Community Alliance for Pulp Paper Advocacy, interviewed people in villages near to Indah Kiat’s mill in Perawang. They also spoke to people living in Perawang. Villagers told them their vegetables, chillies and flowers did not grow normally, especially in the dry season. During the rainy season, a many of the villagers’ hens and ducks die. They told the researchers they were sure that the cause was the smoke containing harmful chemicals from Indah Kiat’s mill.

293 “Highway Planned by Paper Giant Asian Pulp and Paper Will Destroy Sumatran Forests, says WWF”, Press Release, 7 January 2008. <http://www.worldwildlife.org/who/media/press/2008/WWFPresitem4905.html>

294 Mats Valentin and Kristina Bjurling (2004) “Swedish involvement in the Indonesian paper and pulp industry”, SwedWatch, October 2004.

295 Chris Lang (2005) “Indonesia: The health impacts of living near Indah Kiat’s pulp and paper mills”, World Rainforest Movement Bulletin 97, August 2005. <http://chrislang.org/2005/08/27/indonesia-the-health-impacts-of-living-near-indah-kiats-pulp-and-paper-mills/>

From 1987 to 1996, the air smelled very bad, villagers said. It has improved since Indah Kiat installed a filtering system on factory chimneys. But the air is still polluted and still causes respiratory problems, especially for visitors.

Villagers told Syumanda and Noor that before the mill started operations, fishers could catch 40 to 50 kilogrammes of fish a day in the Siak River. Today, they are lucky to catch four or five kilogrammes. Sometimes, they said, the river smells really bad and they cannot catch anything. Every month, the river gives off a bad smell for a week.²⁹⁶

APP's monoculture tree plantations

APP's Indah Kiat pulp mill gets its raw material mainly from Arara Abadi, which is, as mentioned above, also part of the Sinar Mas Group. Arara Abadi has a concession area of just under 300,000 hectares. About 60 per cent of this area was previously covered with forest. By 2003, about 228,000 hectares had been planted with *Acacia mangium*.

Despite the impact of APP's operations in Sumatra, the company continues to receive support from professional foresters. In 2000, an Australian forester called Stephen Midgley visited Sumatra to look at "some commercial forest plantations", as he calls Arara Abadi's industrial monocultures. At the time of his visit to Sumatra, Midgley was Portfolio Manager, Tree Improvement and Genetic Resources Program at the Commonwealth CSIRO. A photograph accompanying his article in the *Australian Tree Resources News* (published by CSIRO) shows an aerial view of the plantations. The monoculture stretches to the horizon. Midgley's report of his visit to Sumatra makes no mention of the forests cleared to make way for these plantations. Neither does he mention the impact of the forest clearance and plantations on local people's livelihoods. Midgley wasn't in Sumatra to look at forests or talk to people affected. Instead he was interested in one tree species only: *Acacia crassicaarpa*. Arara Abadi has planted about 40,000 hectares with this species.²⁹⁷

Midgley calculates that Arara Abadi's 40,000 hectares of *Acacia crassicaarpa* represented an asset worth more than US\$1 billion, based on the current world price for kraft pulp. Midgley claims that the plantations are "offering opportunities for employment and economic development for many Indonesians, and industrial opportunities for larger companies".²⁹⁸ Six months after Midgley's visit, APP defaulted on its debts. The "economic development" that Midgley described was little more than a sham.

The company frequently overstates the growth rate of its plantations. According to Arara Abadi's Research and Development Unit the plantations have an annual growth rate of 30-35 cubic metres per hectare. The target is 45 cubic metres per hectare. CIFOR points out that these figures come from

296 Rivani Noor and Rully Syumanda (2006) "Social conflict and environmental disaster: A report on Asia Pulp and Paper's operations in Sumatra, Indonesia", World Rainforest Movement, August 2006.

<http://www.wrm.org.uy/countries/Indonesia/book8.html>

297 Stephen Midgley (2000) "Acacia crassicaarpa: a tree in the domestication fast lane", *Australian Tree Research News*, Forestry and Forest Products, CSIRO, Number 6, October 2000.

Midgley has now set up a consulting firm called Salwood, which recently won a contract with Stora Enso in Laos. Stora Enso aims to plant an area of 35,000 hectares with eucalyptus to feed its operations in China.

298 Stephen Midgley (2000) "Acacia crassicaarpa: a tree in the domestication fast lane", *Australian Tree Research News*, Forestry and Forest Products, CSIRO, Number 6, October 2000.

experimental areas and not from the company's actual tree plantations.²⁹⁹ A 2001 report by consulting firm AMEC found that average annual growth rates were 28 cubic metres per hectare on mineral soils and 23 cubic metres per hectare on peat soils. About 70 per cent of APP's plantations are on peat soils.³⁰⁰ In its 2004 Sustainability Action Plan, APP revised its annual growth rates downward to 23.2 cubic metres per hectare on mineral soils and 19.6 cubic metres per hectare on peat soils.³⁰¹

By 2001, according to AMEC, Arara Abadi, had converted about 217,000 hectares to industrial tree plantations. Of this, about half was forested, although AMEC acknowledges that this is little more than a guess.³⁰² Arara Abadi also has licenses to log a further 290,000 hectares of forest and convert it to plantations up to 2011.³⁰³ AMEC blandly states that "there will need to be careful consideration of the international market acceptability" of clearcutting this forest and replacing it with monoculture tree plantations.

"Several billion tonnes of carbon"

Arara Abadi has caused irreparable damage to large areas of Riau's swamp forest by cutting canals and draining the swamp. The Kampar peninsula is the latest target to meet APP's voracious appetite for timber. Covered in 400,000 hectares of peat swamp forest, the Kampar peninsula is the world's second largest tropical peat swamp. It is an important habitat for the Sumatran tiger.³⁰⁴ In 2004, WWF estimated the population of Sumatran tigers at less than 500.³⁰⁵ Three years ago, APP announced its plans to clearcut 180,000 hectares of forest on peatlands.³⁰⁶

"Until five years ago," reports Fred Pearce in *New Scientist*, "Kampar was a true bog with water at the surface, and it was covered by a rich rainforest in which Sumatran tigers roamed. A huge dome of peat, up to 15 metres deep, had built up over the past 6000 years as woody debris fell into the swamp. It contains several billion tonnes of carbon."³⁰⁷

299 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 13.

300 Christopher Barr (2004) "Risk Analysis and Impact Assessment for Pulp and Plantation Investments: The Case of Indonesia", presentation at International Forum on Finance and Investment in China's Forestry Sector, Center for International Forestry Research (CIFOR), Beijing, 22-23 September 2004.

301 Chris Barr (2008) "Indonesia's Pulp & Paper Industry: Overview of Risks and Opportunities", presentation at Roundtable on Indonesia's Pulp and Paper Industry, New York, 10 April 2008.
<http://www.environmentalpaper.org/documents/Chris%20Barr%20-%20CIFOR.pdf>

302 "APP Pulp Mills & Sinar Mas Group Forest Companies Preliminary Sustainable Wood Supply Assessment Executive Summary", AMEC Simons Forest Industry Consulting with Asia Pacific Systems Engineering, 21 November 2001, page 4.

303 "APP Pulp Mills & Sinar Mas Group Forest Companies Preliminary Sustainable Wood Supply Assessment Executive Summary", AMEC Simons Forest Industry Consulting with Asia Pacific Systems Engineering, 21 November 2001, page 4.

304 "Asia Pulp & Paper (APP) Hiding Destruction Behind False Advertisements: APP continues to ignore calls for conservation beyond 'legal compliance', and even fails on the latter", WWF Monitoring Brief October 2006.
<http://www.wwf.or.id/index.php?fuseaction=newsroom.detail&id=NWS1161151678&language=e>

305 "Sumatran Tiger on Brink of Extinction", WWF Press Release, 16 March 2004.
<http://worldwildlife.org/news/displayPR.cfm?prID=64>

306 Romain Pirard and Rofikoh Rokhim (2006) "Asia Pulp & Paper Indonesia: The business rationale that led to forest degradation and financial collapse", CIFOR, Working Paper No. 33, page 11.
<http://www.robinwood.de/german/trowa/sumatra/appcifor2006.pdf>

307 Fred Pearce (2007) "Bog barons: Indonesia's carbon catastrophe", *New Scientist*, 1 December 2007.

A recent study by WWF, Remote Sensing Solution GmbH and Hokkaido University found that the forest destruction in Riau province for conversion to oil palm and pulpwood plantations generates more annual greenhouse gas emissions than the total emissions in the Netherlands. Riau's peatlands probably hold South-east Asia's largest store of carbon. WWF notes that "[Riau] also has Indonesia's highest deforestation rate, substantially driven by the operations of global paper giants Asia Pulp & Paper (APP) and Asia Pacific Resources International Holdings Limited (APRIL)."³⁰⁸

WWF's report found that more than four million hectares of forest has been destroyed in Riau province in the last 25 years.³⁰⁹ Driving this destruction are two plantation industries: oil palm and pulpwood. Indah Kiat alone requires 9.8 million cubic metres of wood a year, to keep its two million tonnes pulp mill operating. In 2004, according to CIFOR's Chris Barr, APP's plantations supplied only between 50 and 60 per cent of Indah Kiat's raw material needs.³¹⁰

APP frequently puts out statements claiming that its operations are harmless: "APP is committed to purchasing wood fiber for its pulp-making operations from sustainably-managed forestry sources, which conserve areas of outstanding habitat and which operate in harmony with local communities."³¹¹

WWF Indonesia attempted to work with APP to ensure that the company surveyed their concessions for High Conservation Value Forests. But after WWF Indonesia had signed an agreement with the company, APP's Anil Raina told researchers from Swedwatch that preserving High Value Conservation Forests in APP's concessions would be difficult. "There is a limit to how much we can conserve", he said. "Then we would need alternative sources!"³¹²

APP produced a Sustainability Action Plan, which "shows that APP has integrated some of WWF's demands but disappointingly has not addressed some of the conservation organisation's basic concerns," notes WWF Indonesia. Among the issues not addressed was protection of forests with high conservation value. By mid-2004, the WWF-APP agreement had unravelled and WWF wrote to APP's major buyers in Asia, the US and Europe asking them to "immediately review their relationships" with APP.³¹³

Several companies have stopped buying paper from APP, including Woolworths in Australia³¹⁴ and

<http://www.newscientist.com/channel/opinion/mg19626321.600-bog-barons-indonesias-carbon-catastrophe.html>

308 "Destruction of Sumatra forests driving global climate change and species extinction: WWF", WWF US press release, 26 February 2008. <http://www.worldwildlife.org/who/media/press/2008/WWFPresitem7039.html>

309 "Deforestation, Forest Degradation, Biodiversity Loss and CO₂ Emissions in Riau, Sumatra, Indonesia", WWF Indonesia Technical Report, 27 February 2008.

<http://www.worldwildlife.org/who/media/press/2008/WWFBinaryitem7625.pdf>

310 Christopher Barr (2004) "Risk Analysis and Impact Assessment for Pulp and Plantation Investments: The Case of Indonesia", presentation at International Forum on Finance and Investment in China's Forestry Sector, Center for International Forestry Research (CIFOR), Beijing, 22-23 September 2004.

311 "APP Refutes Allegations by Eyes on the Forest", APP Official Statement, 5 July 2007.

312 Mats Valentin and Kristina Bjurling (2004) "Swedish involvement in the Indonesian paper and pulp industry", SwedWatch, October 2004, page 14.

313 James Rose (2004) "WWF asks APP's customers to buy their paper elsewhere", Ethical Corporation, 23 July 2004. <http://www.ethicalcorp.com/content.asp?ContentID=2424>

314 Helen Morris (2008) "APP defiant despite losing Woolworths contract over environmental allegations", [printweek.com](http://www.printweek.com), 8 August 2008. <http://www.printweek.com/paper/news/838307/APP-defiant-despite-losing-Woolworths-contract-environmental-allegations/>

Staples and Office Depot in the US. When Staples stopped buying paper from APP in February 2008, Staples' Vice President for Environmental Issues Mark Buckley told the *Wall Street Journal* that a decision to continue selling APP products would be "at great peril to our brand."³¹⁵

315 "That was easy", Grist, 8 February 2008. <http://www.grist.org/news/2008/02/08/staples/>

Botnia, Uruguay: Monocultures, pollution fears and an international dispute

The US\$1.2 billion Botnia pulp mill is the largest single foreign investment in Uruguay's history.³¹⁶ Built on the Uruguay River at Fray Bentos, the plans for the pulp mill led to massive protests in Argentina and Uruguay. Spanish company ENCE also planned to build a pulp mill near Fray Bentos, but relocated its pulp mill to Colonia in the south-west of Uruguay, as a result of the protests.³¹⁷

The Argentinian government was so concerned about pollution from the mill that it took Uruguay to the International Court of Justice (ICJ) in the Hague. In July 2006, the ICJ ruled against Argentina. But this first ruling only stated that the court could not order a halt to construction of the pulp mills because there was no immediate danger. In other words, any pollution would happen once the pulp mill starts operations and the court cannot rule on something that has not yet happened.³¹⁸ It will take the ICJ several years to reach a decision about whether the construction of the pulp mill violates the 1975 Uruguay River Treaty. Under the treaty, either country has to inform the other about any developments which might have an impact on the river, before the project starts. In the case of the Botnia pulp mill, Uruguay did not do so, claims Argentina.

The pollution from the pulp mill has received much attention internationally. Less discussed is the fact that the pulp mill sources its raw material from thousands of hectares of eucalyptus plantations, which are drying up streams and leaving communities without water supplies.

Botnia is a Finnish company, owned by the Metsäliitto Group (a cooperative of Finnish forest owners, 53 per cent) and UPM Kymmene (47 per cent).³¹⁹ Despite the controversy, the pulp mill received a series of subsidies from European bilateral institutions as well as from the World Bank. In November 2006, the International Finance Corporation agreed to finance the project, giving a green light to other financiers to get involved.

Lavish international subsidies

Financing for Botnia's pulp mill comes from the following sources of public money:

- US\$170 million from the International Finance Corporation;
- US\$350 million guarantee from the Multilateral Investment Guarantee Agency;
- US\$100 million reinsurance from Finnvera of MIGA's guarantee;
- US\$70 million from the Nordic Investment Bank;
- US\$230 million buyer credit guarantee from Finnvera;
- US\$7 million from Finnfund to Botnia's plantation subsidiary Forestal Oriental.

When IFC announced its support for the pulp mill, Erkki Varis, Botnia's CEO and President, wrote that

316 "URUGUAY: World Bank gives go ahead to Botnia mill", Brazil Report, 24 October 2006.

317 "Ence's Relocation of New Uruguay Mill Settles Dispute with Argentina", TAPPI, 13 December 2006.
http://www.tappi.org/s_tappi/doc.asp?CID=183&DID=553739

318 "Uruguay welcomes World Bank report on paper mills bordering Argentina", *Xinhua General News Service*, 14 October 2006.

319 "Oy Metsä-Botnia Ab", Botnia website: <http://www.botnia.com/en/default.asp?path=204,208,225>

“the exhaustive studies have clearly endorsed the benefits the mill will bring. We hope that today’s decision can contribute to convincing the various stakeholders that the mill will comply with relevant environmental standards and not compromise the wellbeing of the inhabitants in the area.”³²⁰

But research by World Rainforest Movement in the areas of Botnia’s industrial eucalyptus monocultures shows that IFC’s studies were far from “exhaustive”. Instead they played down the problems and most importantly, failed to take into account the views of local people living near the plantations.

One of the IFC’s own reports illustrates problems. In April 2006, IFC hired Hatfield Consultants, a Canadian firm, to review Botnia’s (and Ence’s) environmental impact assessments. Hatfield’s report, written by Wayne Dwernychuk and Neil McCubbin, was critical of the assessments (which had already been accepted by the Uruguayan government). For example, Dwernychuk and McCubbin point out that in the previous assessments, “The reference to dioxins/furans in mill discharges appears to be handled in a rather cavalier manner.” Dwernychuk and McCubbin noted that “These compounds are of significant concern to the general public, and should be discussed fully. Setting the issue aside by concluding that dioxins/furans will be at ‘undetectable levels’ is unacceptable.”³²¹

Nevertheless, the IFC reported on its website that “Studies by independent university and international research centers have shown that wastewater from ECF bleaching is virtually free of toxic chlorinated compounds such as dioxin.”³²² IFC fails to explain what the phrase “virtually free” means in the context of dioxins, how this differs from “undetectable levels”, or even whether this poses a risk.

Botnia is well aware of the risks of pollution from pulp mills. In 2003, a UPM pulp mill in Finland spilled 7,500 litres of black liquor into Lake Saimaa. A town called Bay of Hauki (named after a fish) is now known as “Pulp” because of the smell from the nearby pulp mill.³²³

Once the IFC loan was in place, other financiers jumped on board – without carrying out their own studies of the project. MIGA’s guarantee covers the investments for a period of up to 15 years, “against the risks of expropriation, war and civil disturbance, and breach of contract.”³²⁴

In April 2007, the Nordic Investment Bank (NIB) signed an agreement with the government of Uruguay to allow NIB to grant a loan to Botnia for its pulp mill. The agreement includes tax exemption to NIB and its debtors in Uruguay. It also provides legal and administrative immunity for representatives of NIB.³²⁵

Finnvera is Finland’s official export credit agency and is 100 per cent state-owned. In March 2007,

320 “Botnia’s project approved by the boards of IFC and MIGA”, Botnia’s website: <http://www.botnia.com/en/default.asp?path=204;210;211;1097;1456>

321 Diana Cariboni “Uruguay: Environmental tweaks recommended for paper mills”, Inter Press Service, 13 April 2006.

322 “FAQs: Uruguayan Pulp Mills”, IFC website: http://www.ifc.org/ifcext/lac.nsf/Content/Uruguay_PulpMills_FAQ

323 Romina Picolitti, “Complaint on behalf of citizens affected by proposed paper mills in Fray Bentos, Uruguay”,

CEDHA, no date. <http://www.cedha.org.ar/docs/papermill-presentation.ppt>

Ricardo Carrere, “Tras la huella de la celulosa en Finlandia. La otra cara de la moneda”, Grupo Guayubira, Junio de 2005. <http://www.guayubira.org.uy/celulosa/Finlandia.html>

324 “Project: Botnia South America S.A.”, Multilateral Investment Guarantee Agency website.

<http://www.miga.org/sitelevel2/level2.cfm?id=1078&proj=690&ghol=514>

325 “Repercussions of Agreement Signed Between Uruguay and Nordic Investment Bank”, Broadcast on radiomundoreal.fm, 20 April 2007. <http://www.radiomundoreal.fm/rmr/?q=en/node/22316>

Finnvera and Botnia signed a Buyer Credit Guarantee agreement of US\$230 million. The guarantee is insurance for a 10-year export credit issued to Botnia – if the guarantee were to be called, the beneficiaries would be the commercial banks that financed the export credit. The export credit was used to buy equipment from Andritz Oy.³²⁶

Finnfund describes itself as “a Finnish development finance company that provides long-term risk capital for private projects in developing countries.”³²⁷ Its majority shareholder is the Finnish state (79.9 per cent directly and 20 per cent through Finnvera; the remaining 0.1 per cent is owned by the Confederation of Finnish Industries). In 2004, Finnfund gave a loan of US\$7 million to the Forestal Oriental (FOSA) plantation company whose majority shareholders are Botnia and UPM.³²⁸

In addition to this public finance, two private banks, Nordea and Calyon, are involved in financing the Botnia project. Nordea Bank is the mandated lead arranger for the project – which means that it is organising syndicated loans from a series of private banks. Nordea is the largest financial group in the Nordic countries. Calyon is the corporate and investment banking arm of the French Crédit Agricole Group. The crucial role of the IFC in assessing this project can be seen from an article in the *Financial Times* quoting a source at Calyon as saying that Calyon would pull out of the project if the IFC’s EIA proved to be negative.³²⁹

In April 2006, another private bank, the ING Bank, pulled out of the Botnia project. ING Bank was acting as advisor to Botnia and was working to arrange a US\$480 million loan package. Before announcing the pull out, ING had been subject to sustained pressure from NGOs, who argued that supporting the mills was in conflict with the bank’s commitment to invest responsibly,³³⁰ although a letter from ING Bank to Argentinian NGO CEDHA said that the decision to pull out was “not based on the assessment of the project’s compliance with Equator Principles”.³³¹

“ING didn’t like the negative publicity around this project and nobody likes it,” Ville Jaakonsalo, Botnia’s finance director told the *Financial Times*. “It’s important for the banks that are involved that they know the industry and can differentiate facts from the nonsense and outright lies used by some of the opponents in this case. Perhaps ING weren’t able to do that.”³³²

After ING Bank pulled out and Botnia hired Calyon, the protests moved to Calyon. In May 2006 nine NGOs complained to Calyon that its involvement in the Botnia pulp mill was in breach of the Equator Principles.³³³

326 “Finnvera guarantees an export credit for Botnia’s pulp mill project in Uruguay”, Finnvera press release, 12 March 2007. <http://www.finnvera.fi/index.cfm?id=1930&nid=1818>

327 “Finnfund in brief”, Finnfund website. http://www.finnfund.fi/yritys/en_GB/brief/

328 Tarja Myllymäki, Director, Business Development, Finnish Fund for Industrial Cooperation Ltd. (FINNFUND), email to Chris Lang, 15 May 2007.

329 “‘With or without IFC support’, Botnia’s mill goes ahead”, Mercopress, 14 June 2006. <http://www.mercopress.com/vernoticia.do?id=8137&formato=HTML>

330 Oliver Balch, “Uruguay mills act as test case”, *Financial Times*, 12 June 2006.

331 Letter from ING Bank to CEDHA, 12 April 2006.

http://www.cedha.org.ar/en/initiatives/paper_pulp_mills/ing-pullout-letter-april-12-2006.pdf

332 Benedict Mander “‘Green’ dispute means trouble for investors at Uruguay mills”, *Financial Times*, 10 June 2006.

333 “Equator Principles Compliance Complaint”, The Center for Human Rights and Environment (CEDHA), Eco La Paz, Amigos de la Tierra (Argentina); Banktrack (Netherlands); Maan Istavaat (Friends of the Earth, Finland); Guayubira, REDES, Movimiento Mundial p/los Bosques, Amigos de la Tierra (Uruguay); Amis de la Terre (France), Friends of the

CEDHA has also filed complaints with the OECD against Finnvera³³⁴ and Nordea,³³⁵ claiming that the Finnish export credit agency and the bank failed to comply with the OECD Guidelines for Multinational Enterprises in its support of Botnia.

Decades of subsidies

The international support for the pulp industry in Uruguay is not a one-off case of helping to cover a private company's risks with public money. For more than 50 years, plantation proponents have helped to build the political and physical infrastructure to enable the development of large scale industrial tree plantations in Uruguay.

In 1951, a joint FAO and World Bank mission made a series of recommendations for the development of forestry in Uruguay. Among the recommendations was the promotion of suitable species for the timber industry. In 1985, the Japanese International Cooperation Agency funded a study of the feasibility of building a chemical pulp mill in Uruguay. JICA produced a "Master plan study for the establishment of tree plantations and use of planted wood in the Oriental Republic of Uruguay", which promoted the establishment of pine and eucalyptus plantations. The 1988 Uruguayan National Forestry Plan is based on the JICA master plan.

In 1989, the World Bank provided a forestry loan to Uruguay, which enabled a series of benefits to the industry, including: "tax exemptions, partial refund of plantation costs, long-term soft loans, duty cuts on the import of machinery and vehicles, construction of roads and bridges, equal benefits for foreign investors."³³⁶

By 2000, the Uruguayan government had provided more than US\$400 million in subsidies to the plantations industry, through direct subsidies, tax breaks, cheap loans and investments in infrastructure.³³⁷

Monocultures and water shortages

Botnia and its subsidiaries in Uruguay now own over 180,000 hectares of land, of which almost 100,000 hectares is to be planted with monoculture eucalyptus plantations. The plantations have caused serious problems for communities in rural Uruguay.³³⁸

Earth International, 18 May 2006. http://www.cedha.org.ar/en/initiatives/paper_pulp_mills/compliance-complaint-calyon.pdf

334 "Commentary by CEDHA regarding the case of the Finnvera Specific Instance to Finnish NCP Rebuttal to Finnvera's Commentary", CEDHA, 30 August 2006.

http://www.cedha.org.ar/en/initiatives/paper_pulp_mills/commentary-cedha-finnvera-specific-instance.pdf

335 "OECD Guidelines for Multinational Enterprises Specific Instance Regarding Nordea's involvement in Pulp Paper Mill Investment in Fray Bentos Uruguay by Botnia S.A.", CEDHA and The Bellona Foundation, 28 June 2006.

http://www.cedha.org.ar/en/initiatives/paper_pulp_mills/nordea-specific-instance.pdf

336 "Uruguay: Either with the people or with pulp mills and tree plantations", World Rainforest Movement Bulletin 83, June 2004. <http://www.wrm.org.uy/bulletin/83/Uruguay.html>

337 "Uruguay: The absurd injustice of promoting tree plantations", World Rainforest Movement Bulletin 68, March 2003. <http://www.wrm.org.uy/bulletin/68/Uruguay.html>

338 Raúl Pierri (2006) "Uruguay: Pulp Factions: Uruguay's Environmentalists v. Big Paper", CorpWatch, 16 January 2006. <http://www.corpwatch.org/article.php?id=13111>

Botnia, of course, denies the impacts and issues statements such as this:

“All of Forestal Oriental’s plantations have received FSC certification
There are no rain forests in Uruguay
Only planted eucalyptus is used for pulp production”³³⁹

What Botnia does not mention is that the consultants responsible for the IFC studies and the FSC assessment (carried out by SGS Qualifor) failed to listen to what rural people are saying about the plantations. In its EIA, Botnia didn’t even look at the plantations. IFC’s Cumulative Impact Study notes that: “The EIA Study prepared by Botnia did not address specific impacts relating to plantations.”³⁴⁰ While IFC noted this omission, it did nothing to remedy it.

IFC’s consultants point out that Forestal Oriental knows that its fast growing tree plantations have an impact on stream flows. In 2000, Forestal Oriental hired a South African consulting firm, CSIR Division of Water in South Africa, which found that Forestal Oriental’s eucalyptus plantations resulted in reduced stream flows by an average of around 25 per cent. Nevertheless, the study concluded that as long as the plantations did not cover too large an area in a given watershed the impact should not be a problem. Whether CSIR spoke to any local people about the problems is not documented in IFC’s Plantations Annex. IFC’s consultants make no mention of any discussions with local people.³⁴¹

While FSC certification should include taking local people’s problems into consideration, SGS failed to do so. Even when its assessors talked to local people SGS avoided dealing with what they told them. One villager told SGS that “the eucalyptus plantations consume a lot of water that in the long term can affect neighbouring populations.” SGS’s response was to explain that “The area is subject to prolonged droughts affecting the water table,” and that Forestal Oriental is carrying out a study into the impacts of plantations on water.

In April 2006, World Rainforest Movement published a study written by Ricardo Carrere. The study is based on a visit to the plantation areas by a team of WRM researchers and interviews with the people living there.³⁴²

Residents of Algorta (Río Negro), told WRM’s researchers that “because of the eucalyptus trees the Arroyo Negro stream dried up, it used to be the town beach.” Forestal Oriental, Botnia’s plantations company, owns plantations in this area.

A farmer in Guichón whose land is now surrounded by plantations owned by Forestal Oriental, complained that as a result of the plantations the Boyado stream, which runs though his farm, has completely dried up.

SGS’s public summary of their assessment of Forestal Oriental’s plantations fails to deal with the impacts

339 “Botnia’s Fray Bentos pulp mill project”, Botnia, Company presentation, May 2007.

340 “Annex B: Plantations”, International Finance Corporation Cumulative Impact Study, prepared by Ecometrix Incorporated, September 2006. http://www.ifc.org/ifcext/lac.nsf/Content/Uruguay_Pulp_Mills_CIS_Final

341 “Annex B: Plantations”, International Finance Corporation Cumulative Impact Study, prepared by Ecometrix Incorporated, September 2006. http://www.ifc.org/ifcext/lac.nsf/Content/Uruguay_Pulp_Mills_CIS_Final

342 Ricardo Carrere (2006) “GREENWASH: Critical analysis of FSC certification of industrial tree monocultures in Uruguay”, World Rainforest Movement, April 2006. <http://www.wrm.org.uy/countries/Uruguay/book.html>

of converting grasslands to industrial tree plantations, stating instead that “Natural forests are not converted to plantations.” Carrere notes that “The certifiers appear to be totally uninterested in the fact that . . . grassland areas would lose their original characteristics.”

One of the problems associated with the plantations in Uruguay is an increase in wild boars, foxes and venomous snakes. For sheep farmers this is a serious problem. The snakes have also killed pigs, calves, cows and even horses.

WRM spoke to two ex-workers of Forestal Oriental who had developed allergic skin reactions to the chemicals they were employed to spray on the plantations. A current worker said that Forestal Oriental gave workers protective equipment, but most workers did not use it because it was uncomfortable. “With this heat, you try working with gloves on!” he said.

WRM’s report notes that Forestal Oriental is among the most highly regarded employers in the plantation sector in Uruguay. But this is a result of government legislation, not FSC certification. Several people pointed out that working conditions had improved because the Ministry of Labour was monitoring compliance with labour legislation much more closely under the new government that came into power in March 2005. They commented that since 2005 workers could form unions whereas “before they weren’t allowed to form unions”.

WRM’s researchers visited an area called Paraje Pence in the department of Soriano to investigate the impact of the plantations on water supply. “All the people here have been left with no water,” one of the local men told them. “I have a little bit but the well is dirty. Close to here where my father lives there’s no water at all.”

Another villager told WRM, “I’ve lived here my whole life, and we never had any problems with water until they established all these plantations around eight years ago. Now we depend on the local government to bring us water.”

A local nurse explained how the lack of water has serious health impacts:

“The thing is that here, aside from the fact that people have been left without water in their wells, all of the freshwater ponds have disappeared too. So sometimes, when people have no water to wash their kids before bringing them to see the doctor, they just don’t bring them. There’s a girl who’s had lots of operations, and is still really weak. Last week she was supposed to come and see the doctor, but because the local authorities hadn’t delivered water for two weeks, she didn’t even have enough to wash her hands, so she didn’t come.”

FSC responded to WRM’s report not by investigating these problems, but by asking for a response from the certifying organisation, SGS. Under the FSC system, SGS is paid by the company it is certifying, in this case Forestal Oriental. Clearly it is not in SGS’s interest to delve too deeply into any of these issues.

SGS’s response to FSC is not available to the public, but it was apparently enough to reassure FSC. “FSC guarantees peace of mind to consumers” was the headline of FSC’s press release.³⁴³ While this may or

343 Ricardo Carrere (2006) “Certified plantations in Uruguay: Can the FSC really guarantee peace of mind to consumers?” World Rainforest Movement Bulletin 108, July 2006.

may not be enough for consumers, it is little consolation to the people living near the plantations in Uruguay.

The chairman of the town council of Guichón reflects the local perception of the way Forestal Oriental and other plantation companies address environmental problems. “To get this famous certification, the companies leave a pond and three ducks and then claim that they’re protecting the environment,” he said.

More subsidies through carbon trading

Botnia has received approval under the Kyoto Protocol’s Clean Development Mechanism to further subsidise its operations in Uruguay through carbon trading.³⁴⁴ The company argues that by generating electricity through burning black liquor from the pulping process it will be able to sell 32 MW of electricity to the state electricity utility, UTE. Botnia argues that this will replace electricity generated from fossil fuel and therefore “the release of greenhouse gases . . . will be reduced.” Botnia does not explain how it knows that UTE will not use wind or solar energy in the future. In addition, even assuming some greenhouse gas emissions would be saved, by trading the carbon credits, Botnia ensures that the emissions will be released somewhere else. Further, the company fails to take into account the greenhouse gas emissions associated with its operations: carbon loss from soils, building the pulp mill, fuel consumption by forest machinery, logging trucks, and shipping the pulp to China once it has been produced.³⁴⁵ Pöyry won the contract from Botnia to produce the CDM project documents, to carry out “stakeholder consultation” in Latin America and to make the arrangements for validation and registration of the project.³⁴⁶

The millions of dollars of “aid” and subsidies to the Botnia pulp mill are benefiting a series of Finnish companies including Botnia, Andritz Oy, Pöyry and Kemira. The pulp produced at the mill will be exported, along with the profits. The pulp will be shipped to UPM’s Changshu paper mill in China. The impacts of the industrial tree plantations, like the pollution from the pulp mill, are left in Uruguay.

Botnia’s Managing Director in Uruguay, Ronald M. Beare, says that “Botnia is a great opportunity, both for Uruguay and for the wider region.”³⁴⁷ But many in Uruguay and Argentina disagree with this assessment. The Uruguayan writer, Eduardo Galeano, describes the development of the pulp industry in Uruguay as being “in the purest Colonial tradition: vast artificial plantations that they call forests, converted into pulp in an industrial process that dumps chemical waste into rivers and makes the air impossible to breathe.”³⁴⁸

<http://www.wrm.org.uy/bulletin/108/viewpoint.html#Uruguay>

344 “Uruguay: Botnia Clean Development Mechanism Project”, *Pulp and Paper International*, July 2008, page 8.

345 “Uruguay: The Botnia pulp mill project intends to profit from climate change”, World Rainforest Movement Bulletin 109, August 2006. <http://www.wrm.org.uy/bulletin/109/Uruguay.html>

346 Sari Siitonen (2006) “Innovative Clean Energy Solutions in Practice”, Carbon Consultancy and Emissions Reductions”, Pöyry Energy Oy company presentation, Nairobi, 12 November 2006.

347 “View of MD in Uruguay”, Botnia website: <http://www.botnia.com/en/default.asp?path=204,1490,1496,1636>

348 “Uruguay: The Botnia pulp mill project intends to profit from climate change”, World Rainforest Movement Bulletin 109, August 2006. <http://www.wrm.org.uy/bulletin/109/Uruguay.html>

3. Pulp Inc. Profiles of seven pulp industry proponents

There is a range of actors who actively promote the expansion of industrial tree plantations in the global South. These include consulting firms, UN organisations, “aid” agencies, research institutions, industry associations, industry publications and some NGOs. This network of actors, sometimes works together, sometimes in competition, but all tending towards keeping the status quo: an increasingly large scale, wood-based, globalised pulp industry.

The pulp and paper industry today looks the way it does to a large extent because it has relied on the advice of northern-based consultants. Thirty years ago, Ken King, then-head of forestry at the FAO, pointed out that developing countries very often could not afford to borrow the huge amounts of money required to build a modern pulp mill. King described the “international clubs of consultants” who travelled the world recommending precisely such large scale developments. This section starts with a profile of the largest and most notorious of these forestry consulting firms: Pöyry.

Most industries form associations and alliances to promote their interests and in the case of the pulp and paper industry these organisations can be extremely powerful. In Europe, the Confederation of European Paper Industries (CEPI) constantly supports the interests of the European pulp and paper industry, issuing press releases, lobbying at a European level, commissioning research and publishing industry-friendly reports.

Aid agencies continue to play a crucial role in promoting the expansion of the pulp and paper industry and its industrial tree plantations in the South. This role is illustrated by looking at the way the Asian Development Bank, the World Bank’s International Finance Corporation and the European Investment Bank support the industry.

The United Nation’s Food and Agriculture Organisation supports the pulp and paper industry in several ways. Its definition of plantations as “planted forests” allows companies and governments to claim that they are reforestation, when in fact, they are establishing vast areas of industrial tree monocultures. No one would describe a sugar plantation as a “planted grassland”, yet this is precisely what the industry and its supporters do when they describe industrial tree plantations as “planted forests”.

FAO recently produced a set of “voluntary guidelines on planted forests”. The guidelines may include some useful statements, but they are voluntary, there is no enforcement mechanism and no penalty for companies which choose to ignore the guidelines entirely. Ultimately the guidelines are a sham which will do nothing to prevent the expansion of industrial tree plantations in the South. On the contrary, the guidelines promote this expansion.

This section ends with a look at the Forest Stewardship Council (FSC), an organisation which is effectively greenwashing the spread of industrial tree plantations in the South. FSC has certified millions of hectares of monoculture tree plantations as “well managed”. By doing so, FSC is undermining local struggles in the South. By remaining members of the FSC, NGO members of FSC also risk undermining these struggles. By promoting paper products manufactured from FSC-certified plantations as “environmentally friendly”, they are also guilty of misleading the public.

Pöyry: The economic hit men of the pulp industry

Pöyry is the world's largest consulting firm. Based in Finland, the company was formed in 1958, by Dr. Jaakko Pöyry, as a two-man business to carry out the engineering work on Metsäliitto Oy's pulp mill at Äänekoski in Finland.³⁴⁹ Since then, Pöyry has worked on projects in more than 100 countries and now has offices in 45 countries, employing 7,300 professionals.³⁵⁰

The company was owned by Dr. Pöyry until 1985 when he sold half of the company to Henrik Ehrnrooth, who became President and CEO the following year. In 1995, Finnvest Plc, a Finnish "development and investment company" bought the Jaakko Pöyry Group. Under the deal, senior management of Pöyry became shareholders in Finnvest. The Jaakko Pöyry Group was publicly listed in 1997.³⁵¹ In January 2008, Pöyry announced that it would be appointing Heikki Malinen as the company's new President and CEO. Malinen's previous job was executive vice president of strategy at UPM-Kymmene.³⁵² Malinen started his new job in June 2008, taking over from Erkki Pehu-Lehtonen, the President and CEO for the past 10 years.³⁵³

Pöyry describes itself as a "growth oriented company". Over the past ten years Pöyry has expanded its sales three-fold.³⁵⁴ In 1999, 4,000 people were employed at Pöyry. The company had net sales of €259.7 million and profits of €20.6 in 1998.³⁵⁵ By 2007, the company's net sales amounted to €718 million with profits of €73.8 million.³⁵⁶ Today, Pöyry employs 8,000 people.³⁵⁷

Pöyry is organised in three sectors: energy; forest industry; and infrastructure and environment sectors.³⁵⁸ The Pöyry Group is the result of a huge number of takeovers and mergers. Some of the recent takeovers include Electrowatt (Switzerland), Interforest (Sweden), Scancontrol (Sweden), Inframan (Finland), GWK Holding (Germany), IGL Consultants (Scotland), ECON Analyse (Norway) and Giprobium Engineering (Russia). In 2006, the Jaakko Pöyry Group rebranded itself as "Pöyry" with a new company logo. All the companies in the group were given names to include the word "Pöyry" and the group got a new slogan: "Competence. Service. Solutions."³⁵⁹

Whether it is hydropower in Laos, roads in Austria, a railway in Venezuela, a biomass power station in

349 "Jaakko Pöyry (1924-2006) Founder and Chairman Jaakko Pöyry Group Consulting Engineers Vantaa, Finland", Paper Industry International Hall of Fame. http://www.paperhall.org/inductees/bios/1995/jaakko_poyry.php

"Jaakko Pöyry 40 years in Sweden", *Know-How Wire*, Jaakko Pöyry Magazine, June 2002.

350 "Heikki Malinen appointed president and CEO of Pöyry", Pöyry press release, 22 January 2008.

http://www.poyry.com/press/press_1_08.html?Id=hex_1184000.html

351 "Jaakko Pöyry, August 6, 1924 - September 8, 2006, Biography", Pöyry website.

http://www.poyry.com/group/group_7_1.html

352 "Heikki Malinen appointed President and CEO of Pöyry", *Know-How Wire*, Pöyry Client Magazine, 1/2008.

353 "Heikki Malinen appointed president and CEO of Pöyry", Pöyry press release, 22 January 2008.

http://www.poyry.com/press/press_1_08.html?Id=hex_1184000.html

354 "Heikki Malinen appointed president and CEO of Pöyry", Pöyry press release, 22 January 2008.

http://www.poyry.com/press/press_1_08.html?Id=hex_1184000.html

355 "Jaakko Pöyry Group At a Glance", Pöyry website. <http://www.poyry.com/txten/glance.html> (accessed 18 October 1999).

356 "Pöyry Business Review 2007", Pöyry Plc. http://www.poyry.com/linked/en/press/Business_review2007.pdf

357 Pöyry's website: <http://www.poyry.com/en/index.html>

358 "Heikki Malinen appointed president and CEO of Pöyry", Pöyry press release, 22 January 2008.

http://www.poyry.com/press/press_1_08.html?Id=hex_1184000.html

359 "Jaakko Pöyry Group adopts Pöyry brand", Pöyry press release, 7 March 2006.

Thailand, a power plant for a Nestlé baby milk factory in the Philippines, a nuclear power plant in Finland, a styrene monomer and propylene oxide wastes oxidation plant in Spain, developing software to manage electrical project documents, rewriting water policies in Egypt, Ethiopia and Sudan, or a massive plantation project and pulp mill in Indonesia, Pöyry will provide services, from pre-feasibility studies to design and construction supervision.

Pöyry and pulp

Pöyry has worked on more than 400 pulp and paper mills.³⁶⁰ During the 1970s and 1980s, the company expanded internationally, promoting the same model of industrialised forestry wherever it went. The company's first contract in the global South was in Brazil, for Aracruz's first pulp mill, which was completed in 1978.

One of Pöyry's important roles in shaping the pulp and paper industry is through providing information, particularly through forecasts of paper consumption worldwide. These forecasts are almost invariably optimistic. In 2002, the company produced a report titled "World Paper Markets up to 2015", which Pöyry describes as "essential business information for pulp and paper companies, machinery, equipment and related suppliers, investors, financiers, institutions, traders and other interest groups".³⁶¹ Pöyry anticipated that between 2005 and 2015, demand for paper and paperboard would increase by 120 million tons, with 35 million tons increase in China.³⁶² In January 2006, Pöyry published its "World paper markets up to 2020" report, which predicts more growth: 2.1 per cent growth a year in world demand for paper reaching a total of 490 million tons by the year 2020.³⁶³

In a similar vein, Pöyry's Ilkka Kuusisto wrote in 2004 that "World demand for paper and paperboard continues to grow. With an average growth rate of 2.2 percents (sic) a year, it will reach 450 million tons by the year 2015."³⁶⁴

Of course, Pöyry has an interest in predicting that paper consumption will increase. New pulp and paper mills are needed to meet the predicted demand and Pöyry looks forward to winning contracts studying, designing and building these mills.

Neither is Pöyry's predicted demand inevitable. The current over-consumption in the North could be reduced, with a redistribution of paper consumption worldwide. And Pöyry's estimates of future growth are not always accurate. For example, in 1994, Pöyry predicted that paper use per capita in the US would increase by 1.6 per cent a year until 2005.³⁶⁵ In fact, paper consumption in the US peaked in the late 1990s and fell by 12.75 per cent between 1999 and 2005.³⁶⁶

360 Tove Selin (2004) "Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region", *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

361 *Know-How Wire*, Jaakko Pöyry Magazine, December 2002.

362 "FFIF says Finnish pulp & paper sector must adjust to globalization", RISI, 20 December 2005.

<http://www.risiinfo.com/content-gateway/pulpandpaper/news/pp20051219102.html>

363 Timo Suhonen (2006) "World Paper Markets 2020", *Know-How Wire*, Jaakko Pöyry Client Magazine, January 2006.

364 Ilkka Kuusisto (2004) "Trends and Developments in the Chinese Pulp and Paper Industry", International Forum on Investment and Finance in China's Forestry Sector, 22-23 September 2004, Beijing, China.

365 Bernard Simon (1994) "Survey of World Forest Products (2): Paperwork expands – Forest products fight for survival in the electronic age", *Financial Times*, 17 May 1994.

366 The statistics come from the World Resources Institute's Earthtrends website: <http://earthtrends.wri.org>

Nevertheless, pulp and paper companies rely on Pöyry's knowledge of paper markets for information on their business decisions. "As we focus on our core business we need Pöyry's expertise in engineering and consultancy all the more," notes Einar Agnaess of Norske Skog. "If we're thinking about expanding in India, for example, they know what's happening in the market. We simply don't."³⁶⁷

Technology "to help the environment"

Dr. Jaakko Pöyry's public statements provide a good insight into Pöyry's role in promoting the pulp and paper industry. For example, at the *Financial Times* World Pulp and Paper Conference in 1989, Dr. Pöyry said: "Re-establishing the image of pulp and paper as environmentally acceptable products is a necessity." His solution did not involve considerations about the way the pulp and paper industry is structured, or an attempt to address the massive amounts of wood that the industry needs each year. Instead, his solution was the use of technology, "to help the environment".³⁶⁸ Dr. Pöyry's firm would be happy to provide further advice on the technology. For a fee, of course.

The Phoenix Pulp and Paper Company's misnamed "Project Green" in the north-east of Thailand provides one example of the sort of technology that Pöyry promotes, supposedly to "help the environment". Project Green was designed to address the pollution from the Phoenix pulp mill, which was facing increasing criticism from local people and the Department of Industrial Works over its pollution of the Phong River. Instead of pouring the effluent into the river, Pöyry came up with "Project Green", a scheme to use the water to irrigate eucalyptus plantations. Under "Project Green", yellow-brown frothy water from the pulp mill is piped into irrigation channels in nearby eucalyptus plantations. From there it spreads into farmers' adjoining fields, ruining the rice crop. When it rains heavily, the water overflows into the Phong River. The effluent seeps into the ground water. Local people complain that the water is now salty and undrinkable. When I visited the pulp mill in 1998, villagers complained that their rice harvest in fields near to Project Green had failed.³⁶⁹

While Pöyry sometimes acts as consultant on paper mills using recycled paper, its main area of interest is in promoting large scale pulp mills and industrial tree plantations. Pöyry lobbies behind the scenes and in public for the continued expansion of the industry. In 1995, Pöyry's Per Jerkeman told the *Financial Times* that "public opinion about the desirability of recycling as much paper as possible should be changed. Utilisation of recycled fibres should be high, 'but not so high that reforestation is diminished or prevented and paper quality impaired'".³⁷⁰

Pöyry explains that the company's technical expertise can be applied anywhere in the world, regardless of history, politics or culture:

"[A]ny paper machine, in spite of sophisticated software control systems, is operating according to the same papermaking principles around the world. Papermaking is a universal art. This gives JP Operations

367 Satu Jussila (2008) "Cementing partnerships", *Know-How Wire*, Pöyry Client Magazine, 2/2008.

368 Maggie Urry (1989) "Eastern European market beckons. Political changes open opportunities for pulp and paper makers", *Financial Times*, 14 December 1989.

369 Chris Lang (1998) "Phoenix pulp mill: The polluter pays?" *Watershed*, Vol. 4 No. 2, November 1998 – February 1999, page 54.

370 Deborah Hargreaves (1995) "Forestry status boost forecast", *Financial Times*, 26 January 1995.

Management's experts the possibility to operate successfully worldwide in different environments, sharing their hands-on expertise for the client's benefit."³⁷¹

Consultants and conflict of interest

Pöyry describes its work in the South as "sustainable forestry development"³⁷² It is, of course, nothing of the sort. Pöyry's activities illustrate the conflict of interest faced each time the company is employed to carry out a study of a proposed pulp and paper development.

"Consulting firms have a conflict of interest as long as they themselves may benefit from one outcome over another," a Nordic consultant speaking on condition of anonymity told journalist Ann Usher in the 1990s. "For example," he continued,

"if they find that a certain project is feasible, they are often in a good position to undertake the subsequent studies, design work and construction supervision associated with further project phases (which is often more profitable than the initial feasibility study). . . . This conflict could be avoided if the evaluation were carried out by an impartial party which was aware that it would not subsequently receive any further project-related work, regardless of evaluation outcome."³⁷³

Pöyry's role in Indonesia illustrates this conflict of interest. In the 1980s, when Pöyry's "experts" started to work in Indonesia, they could have explained that a massive expansion of the pulp and paper industry in Indonesia would bring with it billions of dollars of debt, land conflicts, destroyed forests, destroyed livelihoods and polluted rivers. They might have suggested that perhaps it would be better not to expand the pulp and paper industry. Had they done so, however, there would have been nothing more for industrial forestry consultants like Pöyry to do. As it was, Pöyry won contracts on several of the pulp mill projects that they had recommended should be built. Local communities and their environments end up paying the price for this conflict of interest.

Economic hit men

Pöyry can perhaps best be described as the "economic hit men" of the forestry world. The phrase comes from John Perkins' book, "Confessions of an Economic Hit Man". In the book, Perkins describes how he worked as a consultant in the 1960s in Indonesia. He and his colleagues produced reports aimed at persuading the Indonesian government that it needed massive investment in electricity generation to power the industrial development of the country. Perkins and his colleagues over-estimated the anticipated demand for electricity. A raft of US-based companies, with funding from the World Bank, came in to build the necessary infrastructure.³⁷⁴

Pöyry started working in south-east Asia in the early 1970s and played a key role in setting up deals in the pulp and paper industry, benefiting from a range of aid-funded consultancies. David Sonnenfeld, an

371 Patrick Sundholm (2002) "Mill performance improvement through close teamwork with the client", *Know-How Wire*, Jaakko Poyry Magazine, December 2002.

372 Tove Selin (2004) "Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region", *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

373 Ann Danaiya Usher (Ed.) (1997) *Dams as Aid: A political anatomy of Nordic development thinking*, Routledge. page 68.

374 John Perkins (2004) *Confessions of an Economic Hit Man*, Berret-Koehler Publishers Inc.

academic at Washington State University, notes that “the Jaakko Pöyry group played a critical role in brokering the sale of pulp and paper technology in Southeast Asia.”³⁷⁵ Sonnenfeld adds that almost all bleached kraft pulp mills built in Southeast Asia between 1981 and 1996, used Nordic pulping and bleaching technology. Pöyry won the contracts as consulting engineer for around two-thirds of these projects.³⁷⁶

Pöyry goes global: Aracruz, Brazil

In 1973, Pöyry won a contract to work on a 400,000 tons a year pulp mill for the Norwegian-Brazilian pulp company Aracruz Celulose at Barra do Riacho in the state of Espírito Santo.³⁷⁷ “Jaakko Pöyry has given Aracruz the broadest technical support since the first steps of our company”, notes Aracruz’s Renato Guéron.³⁷⁸ Pöyry carried out the engineering work, including wood supply planning and construction management for Aracruz’s first pulp mill. The US\$600 million mill was at the time the biggest ever investment in the pulp and paper industry in the South.³⁷⁹ Pöyry set up a Brazilian subsidiary in 1974 to work on the company’s first Aracruz contract.³⁸⁰

“It was a highly rewarding period for our staff and their families,” says Dr. Jaakko Pöyry, about his company’s work in Brazil in the 1970s and 1980s.

“As a result of our assignments in Brazil, we have today a large group of Finnish specialists with broad experience of Brazilian conditions and, in many cases, with a fluent command of Portuguese. I stayed in Brazil for long periods myself and thoroughly learned the conditions and ways of the country.”³⁸¹

Pöyry has worked won several further contracts with Aracruz since the 1970s. In 1991, for example, Pöyry carried out engineering work on the expansion of the pulp mill, increasing Aracruz’s capacity to one million tons a year.³⁸²

In May 2002, Aracruz opened its third pulp mill in Espírito Santo province. Pöyry was involved in the project from prefeasibility and feasibility studies to conducting technical negotiations with machinery suppliers and writing the contracts for the machinery supply. Pöyry also managed the contracts for civil construction, mechanical, electrical and automation erection companies.³⁸³

375 David Sonnenfeld (1999) “Vikings and Tigers: Finland, Sweden, and adoption of environmental technologies in Southeast Asia’s pulp and paper industries”, *Journal of World-Systems Research*, Vol. 5, No. 1, Spring 1999, page 31. <http://jwsr.ucr.edu/archive/vol5/number1/v5n1a2.php>

376 David Sonnenfeld (1999) “Vikings and Tigers: Finland, Sweden, and adoption of environmental technologies in Southeast Asia’s pulp and paper industries”, *Journal of World-Systems Research*, Vol. 5, No. 1, Spring 1999, page 36. <http://jwsr.ucr.edu/archive/vol5/number1/v5n1a2.php>

377 “Brazil honours Dr Jaakko Pöyry”, *Know-How Wire*, Jaakko Pöyry Client Magazine, December 2003.

378 Mario Retamal (2002) “Aracruz Fiberline C on stream”, *Know-How Wire*, Jaakko Pöyry Client Magazine, December 2002.

(Retamal was Project Director for Aracruz’s Fiberline C project.)

379 “Jaakko Pöyry (1924-2006) Founder and Chairman Jaakko Pöyry Group Consulting Engineers Vantaa, Finland”, Paper Industry International Hall of Fame. http://www.paperhall.org/inductees/bios/1995/jaakko_poyry.php

380 “Brazil honours Dr Jaakko Pöyry”, *Know-How Wire*, Jaakko Pöyry Client Magazine, December 2003.

381 “Brazil honours Dr Jaakko Pöyry”, *Know-How Wire*, Jaakko Pöyry Client Magazine, December 2003.

382 “Jaakko Pöyry (1924-2006) Founder and Chairman Jaakko Pöyry Group Consulting Engineers Vantaa, Finland”, Paper Industry International Hall of Fame. http://www.paperhall.org/inductees/bios/1995/jaakko_poyry.php

383 Mario Retamal (2002) “Aracruz Fiberline C on stream”, *Know-How Wire*, Jaakko Pöyry Client Magazine, December

A year after Aracruz's third pulp mill in Espírito Santo started up, Pöyry won yet another contract from Aracruz, to provide engineering services on the Veracel pulp mill (*see* section on Veracel, above).³⁸⁴ In 2006, Pöyry won another contract with Aracruz to provide engineering services for the "optimisation" of Aracruz's pulp mills in Espírito Santo, increasing the capacity from 2.13 million tons a year to 2.33 million tons a year.³⁸⁵

"We don't operate anything"

Aracruz's operations in Brazil are among the most controversial pulp operations anywhere in the world. The company's vast monoculture eucalyptus plantations have taken land from Indigenous Peoples, destroyed areas of the Atlantic Rainforest and led to the drying up of streams and water sources over a huge area in Espírito Santo province. Pöyry has played a key role in helping the company to establish and to expand its operations. Yet when activists and Indigenous People protested outside Pöyry's office in Espírito Santo against the company's support to Aracruz, Pöyry staff claimed to be surprised that they were the target of the activists. "We only provide technical services to Aracruz, advising them where the machinery should go, and so on", a Pöyry representative told the protesters.

This response is typical. Pöyry routinely denies any responsibility for its actions. Norman Lord, head of Pöyry's Canadian operations, says the company is just following orders. "We don't own operate anything, we don't operate any assets in the industry. We are advisors to the industry," Lord told Radio-Canada in 2003.³⁸⁶

Petteri Pihlajamäki, head of the Jaakko Pöyry Management Consulting, said more or less the same thing in an interview with Finnish researcher Tove Selin: "It needs to be emphasised that we are a consulting organisation, not a project implementer, the projects are always implemented by governments, companies or other organisations which also make final decisions as to applied policies, technologies and methods."³⁸⁷

Larry Lohmann, of the UK-based solidarity and research organisation, the Cornerhouse, gives another example of Pöyry's denial of the impacts the company creates:

"When Poyry Chief Executive Officer Henrik Ehrnrooth and Poyry Consulting Division president Jouko Virta were publicly criticized in Finland about Poyry's involvement in a plantation project in the Dominican Republic, they simply denied that the firm had even been in that country, despite being shown Dominican newspaper clippings and photographs reporting Virta's negotiation of a Dominican plantation contract."³⁸⁸

2002.

384 "Jaakko Pöyry Group Oyj subsidiary wins engineering contracts in Brazil", Nordic Business Report, 30 July 2003.

385 "Pöyry to provide EUR 20 million EPCM and owner's engineering services for Klabin and Aracruz mills in Brazil", Pöyry press release, 18 August 2006.

386 "Wood supply hearings begin", CBC/Radio Canada, 18 November 2003.

http://nb.cbc.ca/regional/servlet/View?filename=nb_woodhearings20031117

387 Tove Selin (2004) "Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region", *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

388 Larry Lohmann (no date) "Briefing on Finnish Consultancy Firm Jaakko Pöyry", World Rainforest Movement, <http://www.wrm.org.uy/plantations/material/JP.html>

As well as designing the pulp mills and providing technical expertise on establishing plantations, Pöyry (along with other industrial forestry consulting firms) also design the political infrastructure which enables the pulp and paper industry to expand. As Larry Lohmann points out, Pöyry's work involves "lobbying governments, evaluating forest and land resources, lining up contracts from close colleagues in aid agencies, subcontracting lucrative work out to potential local allies, doing feasibility studies or market surveys, mapping out logging roads, establishing tree nurseries, and designing or engineering factories."³⁸⁹

Pöyry explains that its "business concept is based on early involvement in its clients' business development".³⁹⁰ Indeed, Pöyry's business concept is based on as much involvement as possible. By working as a consultant to governments, Pöyry sets the political framework for the projects on which it can sell its services. In the pulp sector, Pöyry convinces governments that producing pulp for export equals "development", that planting monocultures of exotic tree species is "reforestation", that the few and dangerous jobs that will be provided will address unemployment and that the land to be planted is "degraded" – usually as a result of the farmers living there, according to Pöyry.

In recent years, Pöyry has pulled out of aid-financed forestry consulting, selling its company JP Development to the Helsinki Consulting Group (HCG), leaving foresters only with engineering or economic expertise in the forestry section of Pöyry. "If we need the so called 'soft' competence in our industrial projects the deal is that the HCG provides us such expertise," explained Petteri Pihlajamäki, head of the Jaakko Pöyry Management Consulting in a 2004 interview with Tove Selin.³⁹¹ Pihlajamäki told Selin that "development consulting had very limited synergies with [Pöyry's] core business which is management consulting mainly for corporate sector."³⁹² At least now there can be no doubt about where Pöyry's true loyalties lie – the corporations.

Some recent Pöyry projects

Pöyry's recent projects in the forestry industry include the implementation of VCP's pulp mill in Mato Grosso do Sul, Brazil, a paper machine rebuild for Stora Enso at Wisconsin Rapids in the US, the rebuild of two paper machines for Billerud AB in Sweden, Holmen Paper's plant upgrade at the Braviken mill in Sweden, a containerboard production line project with Mondi Packaging Paper and a new paper mill project for Portucel in Portugal.³⁹³ Pöyry won a € million contract to build the chemical plants associated with Botnia's pulp mill in Uruguay.³⁹⁴ Pöyry also worked on the pre-engineering phase of Botnia's pulp mill and on detailed engineering services.³⁹⁵

389 Larry Lohmann (no date) "Briefing on Finnish Consultancy Firm Jaakko Pöyry", World Rainforest Movement, <http://www.wrm.org.uy/plantations/material/JP.html>

390 "Jaakko Pöyry Group At a Glance", Pöyry website: <http://www.poyry.com/txten/glance.html> (accessed 18 October 1999).

391 Tove Selin (2004) "Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region", *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

392 Tove Selin (2004) "Jaakko Pöyry and the Fin(n)ished Forests of the Mekong Region", *Watershed*, Vol. 9, No. 3, March-June 2004. [http://terraper.org/pic_water/Watershed%209\(3\).pdf](http://terraper.org/pic_water/Watershed%209(3).pdf)

393 "Pöyry reports pre-tax profit of Euro 53.2 million in 3Q 2007", Pöyry press release, 30 October 2007. <http://www.risiinfo.com/content-gateway/pulpandpaper/news/Poyryreports-pre-tax-profit-in-3Q-2007.html>

394 "Pöyry awarded site management services contract for Kemira's chemical plants in Uruguay", Pöyry press release, 7 June 2006.

395 Olof Andersson (2007) "Botnia's open book approach: Good cooperation between all project parties key to success",

In January 2003, Pöyry announced that it had been hired by UPM-Kymmene to provide engineering services on UPM's new 450,000 tons a year fine-paper mill in Changshu, China. Pöyry was also engineering consultant to APRIL for the construction of the first paper mill in Changshu in 1998.³⁹⁶ In 2007, Pöyry was commissioned by Ningxia Meili to oversee the start up of the company's new coated board line in Zhongwei, China. Pöyry employs about 160 people in China, with offices in Beijing, Shanghai and Jinan.³⁹⁷

Also in China, Pöyry has been working with Sino-Forest since 1997. Sino-Forest is the largest foreign-owned industrial tree plantation operation in China, managing about 350,000 hectares of plantations. Pöyry has worked on contracts looking at the expansion of the plantation area and looking for possible pulp and paper processing ventures for the company.³⁹⁸

In virtually every country with a pulp and paper industry, Pöyry has played a key role in shaping that industry. The following sections look at Pöyry's role in Indonesia and Russia to provide examples of how the company works.

Pöyry in Indonesia

Between 1979 and 1993, Pöyry won more than one hundred contracts in Indonesia, covering a wide range of issues, from industrial tree plantation projects to a contract for overseas training for Indonesian foresters in Brazil. In a series of reports, Pöyry recommended a massive expansion of Indonesia's pulp industry.

In 1983-84, Pöyry worked on a Master Plan for Indonesian Pulp and Paper Industry, funded by the World Bank. Pekka Hemmi worked for the company as a consultant in Southeast Asia. Hemmi describes the work in an interview with the website Asia Paper Markets:

“We worked on several feasibility studies concerning green field pulp mills. We looked at the industry from all angles when we were carrying out a World Bank funded Master Plan for Indonesian Pulp and Paper Industry in 1983-84. We visited all the mills and took in macro economic considerations.”³⁹⁹

According to Hemmi, little came from these reports.

“At that time it was too difficult to raise the funding so the projects never went forward. . . . We at Jaakko Pöyry didn't fully realize the boom that was about to come in the pulp and paper industry even though we knew well the potential.”

But Hemmi is candid about the benefits (to him) of the studies carried out in the early 1980s: “Doing

Know-How Wire, Pöyry Client Magazine, 2/2007.

396 “Jaakko Pöyry Group awarded EUR 10 million engineering assignment for UPM-Kymmene's new fine paper machine in China”, Jaakko Pöyry Group Stock Exchange Notice, 9 January 2003.

http://www.poyry.com/press/press_1_03.html?Id=hex_200301091400.html accessed 3 February 2003

397 Kim Lucander (2008) “Mission completed”, *Know-How Wire*, Pöyry Client Magazine, 2/2008.

398 “A glance at Asia”, *Know-How Wire*, Pöyry Magazine, 1/2007.

399 Floyd Cowan (no date) “Pekka Hemmi's Nordic Adventures in Asia Pacific”, Asia Paper Markets.

http://203.81.45.43:8080/apm/apm/common/interviews_arch12.jsp

those studies and sales contracts in Indonesia in the 80s gave me a great insight into the industry, the region and the country. I've learned the language. It has been a very fruitful time.”⁴⁰⁰

Once the Widjaya (Sinar Mas Group, including APP) and Tanoto (RGM International Group, including APRIL) families started investing in the pulp and paper industry, the boom arrived and Pöyry was well placed to benefit. Having recommended the construction of several massive pulp projects, Pöyry won contracts to design and build these pulp mills. Pöyry won contracts to work on the Indorayan, Indah Kiat, Riau Andalan and PT-TEL pulp mills in Sumatra. “Pöyry has provided consulting and engineering services for the [RGM International] Group since 1983, including complete development of their pulp operations in Sumatra,” boasts Pöyry.⁴⁰¹

As described above (*see* section on APP), the impact on the forests of Sumatra of these massive pulp and paper projects has been devastating. WWF estimates that APP, which runs the Indah Kiat pulp and paper mill, is responsible for 80,000 hectares of deforestation every year. Pollution from the pulp mills has caused serious skin diseases for villagers living downstream of the mills. Villagers rely on the water from the river for washing and previously for drinking.

Pöyry won at least 10 contracts from Indah Kiat in the ten years after 1987 when Pöyry carried out a contract to produce a preliminary study for a pulp mill in Sumatra. Pöyry's involvement continued with a plan for establishing fast growing tree plantations, technical assistance for the pulp mill, assistance with the nursery and plantation establishment and technical studies on the machinery used at the mill.⁴⁰²

Indah Kiat has missed several targets for running the mill entirely on plantation wood. According to a 1993 article in *Pulp and Paper International*, Indah Kiat was to run on plantation wood by 1998.⁴⁰³ In fact, Indah Kiat still uses timber from rainforests to keep its pulp mills running. In March 2007, APP announced plans to expand production in Sumatra by 800,000 tons a year by the end of 2007, meaning that the destruction of the rainforests will continue.

Jouko Virta set up Jaakko Pöyry's Jakarta office in 1983. He was project leader on a contract that Pöyry won from the World Bank in the early 1980s, aimed at “strengthening the structure of the Indonesian pulp and paper industry.” I interviewed Virta in 1996. He was then based in England and was the chairman of Jaakko Pöyry Consulting. I asked him how he felt about the way the rate of deforestation in Sumatra had increased dramatically since the pulp mills started up. He laughed and told me not to worry about deforestation when the forests would be replaced by acacia plantations. To Virta, there is no difference between Sumatra's massively biodiverse lowland rainforests that provided habitat for hundreds of species and livelihoods for local communities and an acacia monoculture that does neither.⁴⁰⁴

Pöyry's New Zealand subsidiary, Groome Pöyry, won another contract with the Asian Development

400 Floyd Cowan (no date) “Pekka Hemmi's Nordic Adventures in Asia Pacific”, Asia Paper Markets.
http://203.81.45.43:8080/apm/apm/common/interviews_arch12.jsp

401 “A glance at Asia”, *Know-How Wire*, Pöyry Magazine, 1/2007.

402 Pöyry (no date) “Experience in Asia Pacific”, Jaakko Pöyry International, 2-7(10).

403 R.A. Pappens (1993) “Sinar Mas: Growth won't stop at home”, *Pulp and Paper International*, Vol. 35, No. 8, August 1993, page 21.

404 The interview was carried out as part of the research for my MSc thesis: *see* Chris Lang (1996) “Reforestation in Vietnam in the context of the globalization of the pulp and paper industry”, MSc thesis, Oxford Forestry Institute, Oxford University, September 1996. <http://chrislang.org/1996/09/09/the-globalization-of-the-pulp-and-paper-industry-introduction/>

Bank in the early 1990s. Groome Pöyry's report, titled "Institutional Strengthening for Timber Plantation Development", looked at ways of achieving the Indonesian government's target of 4.4 million hectares of industrial tree plantations outside of Java. Pöyry recommended "enhancing the [Forestry] Ministry's control over its land base", technical research, forestry education and training, institutional strengthening and support for the private sector. "The prospects for pulpwood production in Indonesia are considered to be good," wrote Groome Pöyry's experts. They noted that increasing the area of industrial tree plantations (Hutan Tanaman Industri, HTI in Bahasa Indonesian) would increase the pressure on Indonesia's rainforests. To Groome Pöyry, however, this is not a problem. On the contrary, it will provide a source of wood and therefore money for pulp companies:

"HTI development for pulp projects are likely to place the strongest pressure on conversion of natural forest to plantations, as 'unproductive forests', which may legally be harvested, provide a significant opportunity for an early wood flow. This in turn will produce an early cash flow some of which can be invested in HTI development."⁴⁰⁵

Pöyry has also played an important role in supporting United Fiber System's plans to build a 600,000 tons a year pulp mill in South Kalimantan. UFS hired Pöyry in 2004 to produce a "Review of Wood Supply for Proposed South Kalimantan Pulp Mill". The following year, Pöyry produced a report for RZB Singapore to look the environmental impacts of UFS's Wood Chip Mill on Pulau Laut. CIFOR points out that "UFS has not produced a detailed and accountable forest management plan that ensures protection of the natural forest areas that currently remain."⁴⁰⁶ In spite of the pulp industry's record of forest destruction in Indonesia, Pöyry concluded that the pulp mill and the wood chip mill could supply their raw material from plantations. Yet a series of independent studies document the fact that UFS cannot show that it has sufficient raw material supplies to keep its pulp operations running without using timber from native forests and illegally harvested timber.⁴⁰⁷

Pöyry in Russia

Pöyry has been involved in many projects shaping the Russian pulp and paper sector. Pöyry's consultancies⁴⁰⁸ include the following:

- Syktyvkar (2008): a €10 million contract to provide engineering services for the rebuilt of Mondi's Syktyvkar pulp and paper mill.⁴⁰⁹

405 Groome Pöyry (1993) "Institutional Strengthening for Timber Plantation Development", Asian Development Bank Advisory Technical Assistance 1244-INO, January 1993.

406 Emile Jurgens, Christopher Barr and Christian Cossalter (2005) "Brief on the planned United Fiber System (UFS) Pulp Mill Project for South Kalimantan, Indonesia", Forest Governance Programme No. 3, CIFOR and Forest Trends. http://www.cifor.cgiar.org/publications/pdf_files/Books/BJurgens0501.pdf

407 See Daniel Hausknost (2006) "The 'United Fiber System' (UFS) Case: How Austrian companies help to destroy the Last Indonesian Rainforests", Global 2000, May 2006. http://www.global2000.at/files/UFS_study_en_final.pdf

Betty Tio Minar (2006) "No Chip Mill Without Wood: A Study of UFS Projects to Develop Wood Chip and Paper Pulp Mills in Kalimantan, Indonesia", Down To Earth, August 2006. <http://dte.gn.apc.org/cskal06.pdf>

Emile Jurgens, Christopher Barr and Christian Cossalter (2005) "Brief on the planned United Fiber System (UFS) Pulp Mill Project for South Kalimantan, Indonesia", Forest Governance Programme No. 3, CIFOR and Forest Trends.

http://www.cifor.cgiar.org/publications/pdf_files/Books/BJurgens0501.pdf

408 This is not intended to be an exhaustive list, it is intended to give an impression of number and type of contracts that Pöyry has carried out in Russia.

409 Chris Lang (2008) "Pöyry wins contract for Mondi's Syktyvkar pulp mill", Pulp Inc., 10 April 2008.

- St Petersburg Cardboard and Printing Plant: (2006) a rebuild of a board machine at the plant at Kommunar, Gatchina are in Leningrad Region.⁴¹⁰
- Arkhangelsk (2004): assessing the company's operations at its Novodvinsk mill and a strategic development plan for the company;⁴¹¹
- Syassky (2003): a feasibility study about rebuilding Syassky's mill near St. Petersburg;⁴¹²
- Pioneer Group (1993-1994): a forest management project in the Khabarovsk region;
- Huet Holdings (1993-1994): a forest management project in the Komi Republic;
- Master Plan for Forestry and Forest Industries in the European part of the then USSR (1990-1993): a master plan aimed at increasing production of forest products;
- World Bank: (1992) planning of privatisation of mechanical wood industries in north-western parts of Russia;
- Regional Forestry Master Plan for Karelia (1991-92): including plans for wood production, primary forest industries and nature conservation;
- Enso-Gutzeit Oy (1989): a feasibility study for establishment of forest management company in the Karelian Republic; and
- Krasnojarsklesprom (1988): prefeasibility study of forest management and utilisation project in the Krasnojarsk region.⁴¹³

In the late 1980s, Pöyry was involved in discussions with the USSR about a feasibility study looking at the economic potential of 200 million hectares of forest in the north-eastern regions of Komi, Arkhangelsk, Volgoda, Soviet Karelia, Leningrad and Novgorod. In a one-to-two-year project, Pöyry aimed to chart the infrastructure needs and the potential to set up a forest-based industry, including pulp and paper mills.⁴¹⁴

“The Soviets approached us a year and a half ago on this matter and we have been carrying out talks with the (Soviet) Ministry of Forest Industries and Gosplan,” Jukka Nyrola, then-managing director of Jaakko Pöyry, told the *Financial Times* in 1989. “After this [feasibility] phase is over, we hope to take part in follow-up studies for concrete projects,” Nyrola added,⁴¹⁵ illustrating Pöyry's conflict of interest in advising governments about the pulp and paper industry.

The project started in 1992, and included an assessment of the entire forestry sector in Russia. Pöyry recommended doubling the rate of logging in Russia's forests (increasing the annual cut from 100 million cubic metres to 200 million cubic metres – which Pöyry estimated was still far below the “optimum” harvest level).⁴¹⁶

<http://pulpinc.wordpress.com/2008/04/10/poyry-wins-contract-for-mondis-syktvkar-pulp-mill/>

410 “Poyry awarded board machine rebuild contract in Russia”, Pöyry press release, 16 August 2006.

<http://www.packagingessentials.com/indnews.asp?id=2006-08-16-14.28.27.000000>

411 “Arkhangelsk probes deaths at Russian mill”, Paperloop, 19 October 2004.

http://www.paperloop.com/db_area/archive/pponews/2004/wk10_18_2004/35_key.html

412 “Finland's Stromsdal plans joint venture with Syassky of Russia”, Paperloop, 10 November 2003.

http://www.paperloop.com/db_area/archive/pponews/2003/wk11_10_2003/09_key.html

413 Pöyry (no date) “Experience in Forestry Project Planning and Implementation”, and Pöyry (no date) “Experience in sectoral development of forestry and forest industry”.

414 Enrique Tessier (1989) “Exporters' cause for concern – Problems for Finnish manufacturers”, *Financial Times*, 13 December 1989.

415 Enrique Tessier (1989) “Exporters' cause for concern – Problems for Finnish manufacturers”, *Financial Times*, 13 December 1989.

416 Elisa Peter (2001) “On Jaakko's Tracks”, *Taiga Rescue News*, Issue 37, Winter 2001, page 5.

Pöyry's role in the Baikal Pulp and Paper Mill illustrates how the company works. In 1998 to 2000, Pöyry worked on an EU-funded assessment of the existing Baikal and Selenginsk pulp and paper mills.⁴¹⁷

Since it started operations in 1966, on the shore of Lake Baikal in Eastern Siberia, the Baikal mill has been a disaster, leading to severe pollution in Lake Baikal. A Greenpeace campaign aims to close down the pulp mill. It was also one of the few targets of environmental protests during the Soviet Union period. Before the mill was built, scientists from the Irkutsk State University's Scientific Institute of Biology spoke out against Nikita Khrushchev's plans to build a pulp and paper mill on the shore of Lake Baikal. Marina Rikhvanova, a founder of the NGO Baikal Ecological Wave and the 2008 winner of the Goldman Prize, is among those fighting to close down the mill.⁴¹⁸

Pöyry, of course, did not recommend closing down the Baikal pulp and paper mill. Instead, they recommended expanding and "modernising" the pulp mill, converting it first to elemental chlorine free production and later to totally chlorine free production. Pöyry was critical about the logging that was taking place to supply the mill, but still recommended expanding production. In 1998, timber for the mill was coming from as far as 1,400 kilometres away. Pöyry suggested sourcing timber from old-growth forests between Krasnoyarsk and Irkutsk, about 600 kilometres from the mill.⁴¹⁹

Under pressure from environmentalists, Continental Management and the State Property Committee of Russia, the Baikal plant owners, are looking for a way out. A plan to convert the mill into a Coca-Cola bottling plant fell through when Coca-Cola was put off by the high level of pollution around the mill.⁴²⁰ In December 2007, Russia's environmental protection agency, Rosprirodnadzor, imposed a five-day ban on dumping waste into Lake Baikal and filed a lawsuit against the company for damages of US\$19.9 million. Rosprirodnadzor subsequently increased the legal claim to US\$176 million.⁴²¹ In March 2008, Governor of Irkutsk, Alexander Tishanin demanded that the pulp mill should be relocated.⁴²² The company installed a closed water cycle, at a cost of US\$11.4 million, which started operating in September 2008.⁴²³

The Baikal Pulp and Paper Plant halted production at the beginning of October, "due to a lack of raw materials", according to a report by the Russian News and Information Agency, Novosti.⁴²⁴

<http://www.taigaescue.org/v3/files/taiganews/TN37.pdf>

417 Elisa Peter (2001) "On Jaakko's Tracks", *Taiga Rescue News*, Issue 37, Winter 2001, page 5.

<http://www.taigaescue.org/v3/files/taiganews/TN37.pdf>

418 Mike Eckel (2008) "2 fight to save world's deepest lake in Russia", Associated Press, 10 August 2008.

http://ap.google.com/article/ALeqM5jvw9CirL6lW1KJk_0OVzE2iKRmQgD92FGP400

419 Elisa Peter (2001) "On Jaakko's Tracks", *Taiga Rescue News*, Issue 37, Winter 2001, page 5.

<http://www.taigaescue.org/v3/files/taiganews/TN37.pdf>

420 "Coca-Cola refuses to acquire Russian pulp-and-paper plant", RosBusinessConsulting, 21 April 2008.

<http://www.rbcnews.com/free/20080421095841.shtml>

421 "Russia's Baikal pulp mill launches closed water cycle", Novosti, Russian News and Information Agency, 29 September 2008. <http://en.rian.ru/russia/20080929/117274716.html>

422 "Governor Calls for Pulp Plant on Lake Baikal to Be Moved", *Moscow Times*, 14 April 2008.

423 "Russia's Baikal pulp mill launches closed water cycle", Novosti, Russian News and Information Agency, 29 September 2008. <http://en.rian.ru/russia/20080929/117274716.html>

424 "Baikal pulp mill set to cut staff amid supply problems", Russian News & Information Agency, Novosti, 6 October 2008. <http://en.rian.ru/russia/20081006/117453509.html>

In 2003, an editorial in Pöyry's *Know-How Wire* magazine summed up why Pöyry is interested in Russia. "Russia holds almost half of the world's softwood resources," writes Rainer Häggblom, Chairman and CEO of Jaakko Pöyry Consulting. He estimates that Russia's forests could be logged at a rate of 500 million cubic metres a year, more than three times the current rate. "I trust our investment in being a leading consultant in the forestry sector of Russia will pay off," Häggblom writes.⁴²⁵

Petteri Pihlajamäki has worked for Pöyry in Russia since 1988, working on almost 100 consulting projects in the last 20 years. He estimates that the demand for tissue paper and printing and writing paper in Russia is set to grow at between seven and nine per cent a year until 2020. "Projected demand growth is three to four times higher than the global average," Pihlajamäki says in an interview in Pöyry's magazine, *Know-How Wire*. Pöyry acknowledges that "environmental pressure" for example "related to old-growth forests" is a threat to their plans in Russia, but Pihlajamäki sees Russia as "one of the most active investment regions in pulp and paper worldwide for the next ten to 20 years."⁴²⁶

Pöyry and Climate Change

Climate change to Pöyry is just another opportunity to do business. The company has succeeded in positioning itself to win contracts in several new areas. "Pöyry is in an excellent position in the fight against global warming, as the company has been on the forefront of providing environmentally sound solutions long before the public debate," writes Risto Laukkanen, president of Pöyry's Infrastructure and Environment Business Group.⁴²⁷ The company looks forward to new contracts in "energy efficiency, biofuels, mass transportation, urban planning, water distribution and forestry planning services".⁴²⁸

In 2004, Pöyry took part in the "PulPaper" industry event in Helsinki. The three themes of the event were "Energy and Carbon Management, Coating and Efficiency".⁴²⁹ At the event, Pöyry gave a presentation titled "Does my company have to bother with emission trading?" Predictably, Pöyry's answer is yes. Equally predictably, the presentation describes the various services that Pöyry is offering to guide companies through the possibilities of profiting from climate change. These include Pöyry's Energy, Environment and Costs model, which aims to help pulp and paper companies to analyse "Kyoto-related economic impacts". Combined with another Pöyry model, the Periodic Table of Paper Grades, Pöyry offers to rank a company's various options in terms of "currency, tons of CO₂, energy consumption and actions taken".⁴³⁰

"Pöyry provides a wide variety of carbon-related services," notes Sari Siitonen of Pöyry Energy Oy, in a 2006 company presentation.⁴³¹ These services include an EU Emissions Trading Scheme Model which includes a price forecast for carbon between 2006 and 2012 and an assessment of post-Kyoto options.

425 Rainer Häggblom (2003) "Russia – a hotspot in the world's pulp and paper industry", *Know-How Wire*, Jaakko Pöyry Client Magazine, December 2003.

426 Satu Jussila (2008) "Evolving Russia", *Know-How Wire*, Pöyry Client Magazine, 2/2008.

427 Risto Laukkanen (2008) "Climate change and our role", Pöyry Client Magazine, 1/2008.

428 "Heikki Malinen appointed president and CEO of Pöyry", Pöyry press release, 22 January 2008.

http://www.poyry.com/press/press_1_08.html?Id=hex_1184000.html

429 "Global networking the Jaakko Pöyry way", *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2004.

430 Petri Vasara (2004) "Myths and home truths: Does my company have to bother with emission trading?", *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2004.

431 Sari Siitonen (2006) "Innovative Clean Energy Solutions in Practice , Carbon Consultancy and Emissions Reductions ", Pöyry Energy Oy company presentation, Nairobi, 12 November 2006.

Under carbon financing, Pöyry offers development of Joint Implementation and Clean Development Mechanism projects, estimation of project additionality, preparation of project documents and a purchasing strategy for companies looking to buy carbon credits to allow them to carry on polluting.

Another company in the Pöyry Group, Econ Pöyry, has teamed up with IDEACarbon to produce “The Global Carbon Report”, which is a subscription based report aimed at informing “carbon market participants on key fundamentals and policy developments”. In January 2008, Econ Pöyry and IDEACarbon held a seminar in London titled “After Bali – What’s Next”. The seminar included a presentation by the Vice Chairman of the IDEAGlobal Group, Sir Nicholas Stern.⁴³²

Pöyry’s connections in high places are well illustrated by the role of Harald Dovland, who headed Norway’s climate negotiations team for 12 years.⁴³³ Dovland is an advisor to Econ Pöyry. He is also the chair of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG), which has been meeting since 2006. According to Dovland, what is needed now is “acceptance of long-term goals on a high political level, further development of markets, and innovative financing solutions”.⁴³⁴ An article on Econ Pöyry’s website about the 2007 Bali climate conference states that “Carbon trading is instrumental to achieve sufficient reduction [in greenhouse gas emissions]”.⁴³⁵ As Nicola Bullard of Focus on the Global South points out, it is “rather strange that one of the most important negotiating forums on climate change is under the gavel of an employee of a firm which makes money out of promoting carbon trading.”⁴³⁶

In January 2008, Econ Pöyry produced a report commissioned by the Nordic Council of Ministers looking at how Nordic countries might contribute to the Copenhagen Conference of Parties which will take place at the end of 2009. Econ Pöyry’s report recommends expanding the carbon market, encouraging “more countries to establish [carbon] trading systems” and financing avoided deforestation through a carbon market.⁴³⁷ Harald Dovland is the contact person on Econ Pöyry’s website for more information on this report.⁴³⁸

Pöyry has worked on several Joint Implementation and Clean Development Mechanism projects. The company describes itself as “well equipped to evaluate project eligibility and additionality,” adding that “Pöyry has also established close contacts with buyers in the carbon market and can provide the best buyer candidates and carbon finance structuring for each specific CDM and JI project.”⁴³⁹

432 “After Bali – What’s Next?”, *Know-How Wire*, Pöyry Client Magazine, 2/2008.

<http://www.poyry.com/linked/en/press/KnowhowWire22008.pdf>

433 Nicola Bullard (2008) “Who is Harald?”, *New Internationalist*, Issue 412, June 2008.

<http://www.newint.org/columns/currents/2008/06/01/climate-negotiations/>

434 “After Bali – What’s Next?”, Econ Pöyry website:

http://www.econ.no/modules/module_123/proxy.asp?I=2648&C=13&D=2&mnusel=a185a253a

435 “After Bali – What’s Next?”, Econ Pöyry website:

http://www.econ.no/modules/module_123/proxy.asp?I=2648&C=13&D=2&mnusel=a185a253a

436 Nicola Bullard (2008) “Who is Harald?”, *New Internationalist*, Issue 412, June 2008.

<http://www.newint.org/columns/currents/2008/06/01/climate-negotiations/>

437 “Possible activities to support negotiations on a post-2012 climate change regime”, Econ Pöyry, Report 2007-118, 9 January 2008. http://www.econ.no/stream_file.asp?iEntityId=3720

438 “Climate negotiations post-2012”, Econ Pöyry website:

http://www.econ.no/modules/module_123/proxy.asp?I=2894&C=9&D=2&mnusel=a185a253a277a

439 Sari Siitonen and Michael Haslinger (2007) “Global Carbon Market”, *Know-How Wire*, Pöyry Client Magazine 1/2007.

One of Pöyry's carbon service projects is Botnia's CDM project in Uruguay, which enables the company to profit from selling electricity to the Uruguayan state utility and selling CDM registered carbon credits from its Biomass Power Generation Project.⁴⁴⁰

In 2005, Pöyry completed an expansion of Mondi's Richards Bay pulp mill in South Africa. Pöyry has had a close relationship with the Richards Bay mill, being involved from the start of the project. The mill was commissioned in 1984, since when Pöyry has worked on a series of rebuilds and in 2002 carried out a feasibility study for the Richards Bay mill expansion, followed by pre-engineering studies. Pöyry subsequently won the contract to carry out project management and detailed engineering services, together with the engineering group Murray & Roberts. Under the project, the capacity of the pulp mill increased from 575,000 tons per year to 720,000 tons per year. Meanwhile, water consumption was reduced by 42 per cent and the amount of coal used was almost halved, down from 562 tons a day to 234 tons a day.⁴⁴¹

While this amounts to a reduction in greenhouse gas emissions, it raises several questions. Why did Pöyry not install a closed loop system, reducing the amount of water used and the pollution from the mill even further? Why didn't Pöyry redesign the mill so that it used no coal at all? In May 2007, the Richards Bay mill was registered as a Clean Development Mechanism project.⁴⁴² Carbon credits sold from the project mean that any greenhouse gas emission reductions achieved at Richards Bay were transferred somewhere else.

A year before the Richards Bay project was completed, an article in Pöyry's magazine *Know-How Wire* claimed that Pöyry aims for "integrated pulp and paper mills that operate totally without auxiliary fuels, producing a net surplus of electricity from 100% biomass fuels." Not at Richards Bay, though. The pulp mill will use more than 70,000 tons of coal a year, resulting in emissions of almost 200,000 tons of carbon dioxide emissions each year.⁴⁴³

"The pulp and paper industry is facing a new era," states Pöyry's article. "It is not enough only to reduce emissions. Pulp and paper mills should maximize their bioenergy potential and minimize their electricity consumption."⁴⁴⁴ This sounds good, perhaps, but the biomass has to come from somewhere. In a world where it is cheaper to grow trees in Brazil than in Sweden, this means that the biomass raw material, along with the pulp raw material will come from the global South.⁴⁴⁵

440 Sari Siitonen (2006) "Innovative Clean Energy Solutions in Practice", Carbon Consultancy and Emissions Reductions", Pöyry Energy Oy company presentation, Nairobi, 12 November 2006.

441 Graham Ferreira (2005) "Richards Bay expansion: Higher capacity, improved environmental performance", *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2005.

442 "Project 0966 : Mondi Richards Bay Biomass Project" UNFCCC website: <http://cdm.unfccc.int/Projects/DB/SGS-UKL1172139189.07>

443 One tonne of coal contains 746 kg carbon (*see* http://bioenergy.ornl.gov/papers/misc/energy_conv.html). The molecular weight of carbon dioxide is 3.667 times that of carbon. Therefore the amount of carbon dioxide emitted from the Richards Bay pulp mill is $70,000 \times 0.746 \times 3.667 = 191490.74$. (This calculation method came from George Monbiot's article, "Leave It In The Ground", *The Guardian*, 11 December 2007, footnote 5. <http://www.monbiot.com/archives/2007/12/11/rigged/>)

444 Sebastian Kankkonen, Esa Vakkilainen and Jukka Suutela (2004) "More bioenergy and electricity from pulp mills", *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2004.

445 Chris Lang (2006) "The pulp industry and the biofuels boom", World Rainforest Movement Bulletin 112, November 2006. <http://chrislang.org/2006/11/29/the-pulp-industry-and-the-biofuels-boom/>

Pöyry is working on second generation biofuels such as ligno-cellulosic ethanol and biomass-to-liquid fuel. Pöyry is looking at ways of integrating liquid biofuels production into existing pulp and paper mills. The company is involved in several bioenergy projects for pulp and paper companies. “With its combined know-how in the areas of forest industry, energy, environment and infrastructure, Pöyry is uniquely equipped to serve clients pursuing biomass-based projects,” writes Pöyry’s Peter Fabritius.⁴⁴⁶ Pöyry’s North American offices are benefiting from the agrofuel bonanza in North America, winning several contracts for engineering services for agrofuel projects using corn, wheat and oilseed rape as the raw material. Pöyry is also sending trainees from other parts of the world to work in the company’s North American offices. “Trainees will return to their home office fully capable of taking on biofuel projects in their region of the world,” write Pöyry’s Zennie Lamarre and Otto von Ubisch.⁴⁴⁷ Pöyry is also looking forward to getting winning contracts on wood-based second generation biofuel projects. “The potential for the North American forest industry to become a prime producer of biofuel is promising,” note Lamarre and Ubisch.

One of Pöyry’s “solutions” to climate change is hydropower. Since taking over Electrowatt-Ekono in 1999, Pöyry has become a major player in promoting and building dams worldwide.⁴⁴⁸ Pöyry describes hydropower as “a renewable, emission-free, cost-efficient form of power generation,”⁴⁴⁹ thus ignoring the impacts of dams on fisheries, local communities who must be evicted to make way for the reservoir, emissions from rotting biomass in the reservoir, siltation in reservoirs, cost overruns and massive subsidies.⁴⁵⁰ In March 2004, Pöyry’s Canadian subsidiary, Jaakko Pöyry NLK Inc., organised an energy seminar for British Columbia’s pulp and paper industry. The seminar, which was jointly sponsored with BC Hydro, was held in BC Hydro’s Vancouver office. Pöyry presented Electrowatt-Ekono’s energy projects for the Nordic pulp and paper industry along with case studies and comparisons with the Canadian and US pulp and paper sectors.⁴⁵¹

Inevitably, Pöyry’s “solutions” to climate change also include large-scale industrial tree plantations. According to Pöyry, plantations “represent significant potential to . . . [a]bsorb carbon emissions and act as carbon sinks”.⁴⁵² Writing about the development of plantations in Australia, Pöyry’s Rob de Fégeley noted that although most plantations established in Australia are “primarily commercial”, there “is now increasing interest in dual commercial/environmental plantations which can assist Australia address some of its environmental concerns.” Australia’s “environmental concerns”, according to de Fégeley, include “salinity control, sequestering carbon and improving the biodiversity in rural regions where it has been

446 Peter Fabritius (2007) “Increased energy production based on biomass in the pulp and paper industry”, *Know-How Wire*, Pöyry Client Magazine, 2/2007.

447 Zennie Lamarre and Otto von Ubisch (2007) “Oil-dependence sparks bio-energy boom in North America”, *Know-How Wire*, Pöyry Client Magazine, 2/2007.

448 For more information on Electrowatt-Ekono’s record, see Chris Lang and Nick Hildyard (2003) “Dams Inc 2: Electrowatt-Ekono”, 21 January 2003.

449 Patrick von Essen (2007) “Services and solutions for the fight against climate change”, *Know-How Wire*, Pöyry Client Magazine, 2/2007.

450 See for example, Patrick McCully (1996) “Silenced Rivers: The Ecology and Politics of Large Dams”, Zed Books. For a critique of Electrowatt-Ekono’s involvement in the hydropower sector see: Chris Lang and Nick Hildyard (2003) “Dams Inc. 2: Electrowatt-Ekono”, available here: <http://www.box.net/shared/lfgnckdi5q>

451 Gordon Floe (2004) “Joint energy seminar by Jaakko Pöyry NLK and BC Hydro”, *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2004.

452 Hannu Hynnönen (2008) “Planting the future”, *Know-How Wire*, Pöyry Client Magazine, 1/2008. http://www.poyry.com/linked/en/press/KnowhowWire_1_2008.pdf

depleted as a result of agricultural development”.⁴⁵³

Pöyry’s conflict of interest reaches new levels in its carbon services work. Through its partnership with IDEACarbon, Pöyry is aiming to influence the carbon market, while advising companies on the “Optimisation of [their] carbon portfolio”. Pöyry is also “consulting both Governments and companies in various types of carbon projects worldwide”.⁴⁵⁴ Nowhere in any of Pöyry’s documents that I have read about climate projects does Pöyry even begin to address the fact that there is a glaring conflict of interest in helping to shape the carbon market and simultaneously winning contracts advising companies on how to profit from carbon trading.

Pöyry’s involvement in the carbon market will create more profits for the companies in the Pöyry Group. It will not produce benefits for the climate. Trading carbon, in particular through carbon offset projects, will not reduce greenhouse gas emissions, it simply moves them from one part of the planet to another. As George Monbiot points out, “Even if, through carbon offset schemes carried out in developing countries, every poor nation on the planet became carbon-free, we would still have to cut most of the carbon we produce at home. Buying and selling carbon offsets is like pushing the food around on your plate to create the impression that you have eaten it.”⁴⁵⁵

453 Rob de Fégeley (2004) “Australian forestry coming of age”, *Know-How Wire*, Jaakko Pöyry Client Magazine, June 2004.

454 Sari Siitonen (2006) “Innovative Clean Energy Solutions in Practice”, Carbon Consultancy and Emissions Reductions”, Pöyry Energy Oy company presentation, Nairobi, 12 November 2006.

455 George Monbiot (2006) “Selling Indulgences”, *The Guardian*, 18 October 2006.
<http://www.monbiot.com/archives/2006/10/19/selling-indulgences/>

The Confederation of European Paper Industries (CEPI): Expansion at any cost

The Confederation of European Paper Industries was established to support the interests of the pulp and paper industry. CEPI represents 800 pulp and paper companies in 18 European countries, producing more than one-quarter of world paper production.

CEPI aims to promote the expansion of the pulp and paper industry. Several of the European companies that CEPI represents also have operations in the global South. One of CEPI's key roles is to act as a lobbying organisation on behalf of the industry in the European Commission, aiming for industry-friendly regulation:

“CEPI champions the interests of the pulp and paper industry in Europe, representing those interests towards the European Institutions. It monitors, analyses and acts upon EU legislation and initiatives relevant to industry, communicating on the industry's achievements and the benefits of its products. Through CEPI, the paper industry makes expert and constructive contributions to the official European consultation process with industry.”⁴⁵⁶

CEPI routinely plays down the problems created by the pulp and paper sector, as the following (typical) statement makes clear: “The European paper industry is one of the most competitive and sustainable in Europe producing 100 million tonnes of paper and board and 40 million tonnes of pulp annually. It provides directly 230,000 jobs and indirectly 2,950,000 jobs along the forest and paper chain.”⁴⁵⁷

In May 2008, CEPI organised a side event at the Convention on Biodiversity meeting in Bonn. Titled “Biodiversity protection, not just words on paper but real best practices by the paper industry!” it promised to show “how through best practices the European Pulp and Paper industry supports forest biodiversity protection.”⁴⁵⁸

The presentations, of course, had little to do with biodiversity protection. The first presentation came from Hans Verkerk, of the European Forest Institute (EFI).⁴⁵⁹ Verkerk's presentation was based on a CEPI-funded report he had co-authored, titled, “Impacts of Biological and Landscape Diversity Protection on the Wood Supply in Europe”. Verkerk's presentation looked at how much wood might be removed from Europe's 29.2 million hectares of protected forests if there were no restrictions on logging. The study found that forest protection in Europe resulted in a total of 68 million cubic metres of wood being “unavailable” to the industry.

Verkerk's conclusions were predictable and banal: “Forest protection has a clear impact on the

456 “Energy intensive industries need clarity soon in EU ET”, Confederation of European Paper Industries, press release, 24 January 2008.

457 “Energy intensive industries need clarity soon in EU ET”, Confederation of European Paper Industries, press release, 24 January 2008.

458 CEPI's flyer for the side event in Bonn is available here:
<http://www.cepi.org/Objects/1/files/COP9%20side%20event.pdf>

459 Hans Verkerk's powerpoint presentation at the side event is available here:
http://www.cepi.org/Objects/1/files/Verkerk_BiodiversityProtectionImpacts.pdf
 Pieter J. Verkerk, Giuliana Zanchi and Marcus Lindner (2008) “Impacts of Biological and Landscape Diversity Protection on the Wood Supply in Europe”, European Forest Institute, Technical Report 27.

availability of wood,” Verkerk said, with a straight face.⁴⁶⁰ Conversely, if the forest is less well protected, the industry would have a lot more wood available. Verkerk made no mention of what the impact of this might be on the biodiversity of the forests.

CEPI has various sub-groups which focus on supporting the interests of specific types of paper production. CEPIPRINT is the Association of European Publication Paper Producers. CEPIFINE represents Europe’s fine paper producers. CEPI Eurokraft looks after the interests of Europe’s paper sack manufacturers.

Each of these groups produces material supporting the consumption of ever more paper. CEPI Eurokraft, for example, has produced a series of reports on the benefits of kraft paper packaging. A CEPI Eurokraft report produced between 1998 and 2000, for example, looked at a life-cycle analysis of paper sacks. Not surprisingly, CEPI Eurokraft concluded that paper sacks are more environmentally friendly than plastic sacks:

“When comparing the paper sack and plastic sack systems with each other (and comparing all the waste treatment scenarios) the paper sack systems use less primary energy and contribute less to depletion of non-renewable resources and photochemical oxidant creation than the LDPE [low density polyethylene] sack systems.”⁴⁶¹

But CEPI Eurokraft could only come to this conclusion by ignoring the findings of the report that it commissioned to compare the various options. CEPI Eurokraft commissioned Chalmers Industriteknik in Sweden to compare four options for delivering animal feed: paper sacks; plastic sacks; semi-bulk plastic sacks; and transporting in bulk. What Chalmers Industriteknik found in its study was that the best system for transporting animal feed was the semi-bulk option, using large, reusable, woven polypropylene sacks:

“The results of the study indicate that semi-bulk system gives the lowest contribution to all of the studied impact categories, at least in the base case where the big bags are assumed to be used on average three times.”⁴⁶²

The Chalmers Industriteknik report notes that the more often the plastic sacks are reused, the better the system is for the environment, compared to paper sacks. I am not recommending the use of more plastic bags. I am simply pointing out that CEPI Eurokraft distorted the findings of the report that it commissioned, in order to suit its own ends.

The report found that the impact of distributing the animal feed is far higher than the packaging used:

“When including the distribution of the filling goods, the largest environmental profits are probably achieved through making the distribution as efficient as possible and through using the least harmful transportation modes (*e.g.* train) and fuels rather than through the choice of packaging system.”⁴⁶³

460 The quotations of presenters at the side event are from my notes taken during the side event.

461 “LCA of Distribution in Paper Sacks. Executive Summary”, Eurosac and CEPI Eurokraft, 2000, page 11.

462 Anna Ryberg, Tomas Ekvall and Lisa Person (2000) “Life Cycle Assessment of distribution in four different distribution systems in Europe. Third party report”, Chalmers Industriteknik, October 2000, page 4.

463 Anna Ryberg, Tomas Ekvall and Lisa Person (2000) “Life Cycle Assessment of distribution in four different distribution systems in Europe. Third party report”, Chalmers Industriteknik, October 2000, page 4.

CEPI Eurokraft states that “it is clear that the distribution itself gives the highest environmental impact for all of the studied systems”.⁴⁶⁴ But rather than looking at possible ways of reducing the impacts of distributing goods, CEPI Eurokraft distorts the findings of the report it commissioned and promotes the use of paper sacks instead of the semi-bulk system using large reusable plastic sacks.

In 2001, CEPI Eurokraft co-sponsored a school project in the UK, which included information on “growing trees for paper making”, “making paper sacks from paper” and “recycling paper waste by composting”. The project included teacher’s materials, wall posters for the classroom, posters for children to take home, stickers, recycled paper pots, kraft paper to make sacks, compost and tree seeds.⁴⁶⁵

It sounds great. Children even get to plant tree seeds in the compost “hence completing the cycle” as CEPI Eurokraft puts it. But, CEPI Eurokraft’s job is to promote the industry, not to educate. There is no mention in its material for schools of the impacts of the pulp and paper industry’s industrial tree plantations on biodiversity or local people. Neither is there any mention of the vast areas of land that European companies are taking over in the global South to establish their industrial tree plantations.

“PrintSells” is CEPIFINE’s advertising campaign promoting “the use of paper as an extremely efficient marketing tool”.⁴⁶⁶ The campaign urges companies to “Get real with your corporate communication and see the benefits immediately.” PrintSells celebrates paper consumption, pointing out, for example, that between 1954 and 2006, the number of catalogues that IKEA prints each year has increased from 500,000 to 192 million⁴⁶⁷ and that more than 2,860 new magazine titles were launched in 2006.⁴⁶⁸ The PrintSells campaign promotes just about any use of paper: books, calendars, annual reports, brochures, catalogues, magazines, advertising and junk mail.

CEPI is running another paper promotion campaign titled “paperonline”, with the slogan “ideas start with paper”. The website tells us that “Paper is all around us and the demand for paper is increasing,” and “paper is a part of everyday life”.⁴⁶⁹ On paper and climate change, the website notes that under the Kyoto Protocol, the EU committed itself to “a reduction of minus [sic] 8%”, compared to 1990 levels by 2012. “However,” CEPI continues, “the growth in greenhouse gas emissions since 1990, especially from the transport sector, suggests that the Kyoto targets are much more ambitious than was envisaged in 1997.”⁴⁷⁰ The implication that the Kyoto targets are even remotely “ambitious” flies in the face of the scientific evidence about climate change which demands reductions of more than 90 per cent.⁴⁷¹

Once a year, CEPI organises the “European Paper Week”, which it boasts is the “European paper and

464 “LCA of Distribution in Paper Sacks. Executive Summary”, Eurosac and CEPI Eurokraft, 2000, page 4.

465 “ETAPS School Pack”, CEPI Eurokraft website. <http://www.cepi-eurokraft.org/Etaps.htm>

466 CEPIFINE’s website: http://www.cepifine.org/html/index_ns.htm

467 “Instore communication, brochures and catalogues”, PrintSells brochure.

468 “Magazines”, PrintSells brochure.

469 CEPI’s paperonline website: <http://www.paperonline.org/>

470 “Environmental issues”, CEPI’s paperonline website.
http://www.paperonline.org/enviro/level3/issues/issues_frame.html

471 To prevent global warming exceeding 2°C, the world needs to cut emissions to about 15% of the volume in 2000, according to the Intergovernmental Panel on Climate Change. This would require cuts of 94.4% in the UK and 97.7% in the US. For an explanation of the figures, see George Monbiot (2007) “What is Progress?”, Guardian, 4 December 2007. <http://www.monbiot.com/archives/2007/12/04/what-is-progress/>

pulp industry's biggest annual event". In November 2007, about 300 pulp and paper company representatives met for a three day corporate shindig at the Sheraton Hotel in Brussels.⁴⁷²

CEPI acts quickly to defend the industry's interests against any attempts to change it. For example, when more than 50 European NGOs launched the "Shrink" campaign, aimed at reducing paper consumption in Europe, CEPI responded with a press release in which it claimed that the pulp and paper industry is "a unique example of how an industry can avoid producing waste and one that recycles at all stages."⁴⁷³

"By targeting the paper industry these NGOs are promoting other materials that do not have the same environmental credentials," said Teresa Presas, CEPI's Managing Director, in the press release. Presas ignores the fact that the Shrink campaign is not promoting other materials. It is advocating using less paper in the North, not replacing paper with something else.

Presas says that NGOs are "contributing to the relocation of paper production to other areas of the world where environmental standards are less of a concern." She seems oblivious to the fact that the pulp and paper industry has been closing down operations in the North and expanding in the global South for many years. In any case, the NGOs behind the Shrink campaign are not recommending that the industry should relocate to the South, they are recommending that it should shrink.

Presas says that the Shrink campaign would become "responsible for the loss of thousands of jobs in Europe in particular in rural areas." But as CEPI's own data shows, the pulp and paper industry is responsible for the loss of thousands of jobs in Europe. In 1991, CEPI member countries employed 389,300 people in the pulp and paper sector. By 2006, this figure had shrunk by about a third, to 259,100 people. During the same period, pulp and paper production in Europe has actually increased.⁴⁷⁴

In January 2008, CEPI commented on the European Commission's proposals for the EU CO₂ emission trading system (EU ETS). CEPI welcomed the "special considerations for energy intensive industries, like the pulp and paper industry", an unusual admission by the industry that pulp and paper production does in fact require a large amount of energy. CEPI is in favour of a trade in emission credits, which would allow the industry to buy credits instead of reducing its emissions to meet targets. Predictably however, CEPI opposes the auctioning of emission credits, because the industry would have to buy to rights to continue polluting. CEPI argued that the EU ETS would "generate up to 75 billion Euros per year" by 2020, which CEPI describes as the first direct EU tax in history.⁴⁷⁵

CEPI is also lobbying against the targets for reduced greenhouse gas emissions that are needed across all industries to prevent runaway climate change:

"Full auctioning is not needed to ensure a properly functioning carbon market or carbon price and will not help industry to meet the required targets but it will unnecessarily damage European industry. ETS

472 "Welcome to European Paper Week", CEPI website. <http://www.cepi.org/Content/Default.asp?PageId=43>. European Paper Week 2008 is planned for 25-28 November 2008.

473 "Confederation of European Paper Industries (CEPI) Disagrees with 'Shrink Waste and Recycle' Campaign by NGOs in Europe", CEPI Press Release, 12 June 2008.

474 "Key Statistics 2006 European Pulp and Paper Industry", CEPI, June 2007.

475 "Energy intensive industries need clarity soon in EU ET", Confederation of European Paper Industries, press release, 24 January 2008.

sectors need to reduce by 21% compared to 2005, not by 100%.”⁴⁷⁶

CEPI argues that the costs to the industry in Europe would benefit competitors in the South and “will ultimately harm the competitiveness of Europe”. Teresa Presas, CEPI’s Managing Director explained in CEPI’s press release that

“The sector can not pass these extra costs on to final consumers, as it does not set world market prices. Manufacturing costs are already high. The profits and success of European companies is therefore very dependent on their local, European, manufacturing.”⁴⁷⁷

As usual with CEPI, industry profits come ahead of everything. Including the biggest challenge that humankind has ever faced: addressing runaway climate change.

476 “Energy intensive industries need clarity soon in EU ETS”, Confederation of European Paper Industries, press release, 24 January 2008.

477 “Energy intensive industries need clarity soon in EU ETS”, Confederation of European Paper Industries, press release, 24 January 2008.

Asian Development Bank: Plantations are increasing poverty in Asia

The Asian Development Bank was established in 1966. It has 67 members, of which about three-quarters are in the Asia-Pacific region.⁴⁷⁸ The largest shareholders are Japan and the US.⁴⁷⁹ The president of the ADB is always Japanese.⁴⁸⁰

Since its first loan for a forestry project in 1977, the ADB has handed out more than US\$1 billion in loans for forestry projects. Most of the Bank's recent forest projects were rated "partially successful or unsuccessful".⁴⁸¹

More than 80 per cent of the Bank's loans for forestry projects went on establishing plantations. The Bank acknowledges "problems with project design and implementation" and that "its [forest] sector investments have had a minimal positive impact on forest loss and degradation".⁴⁸² Even this "minimal positive impact" is a result of defining a plantation as a forest. According to the Bank, clearing villagers' forests and farmlands and replacing them with monoculture tree plantations is "positive" because the Bank can claim to be reducing "forest loss and degradation".

In fact, the ADB's forestry loans have both increased deforestation and led to increased poverty. Plantations have repeatedly failed due to poor selection of species, fire, disease or because the land on which they are planted is already in use by local people. Many of the ADB's plantation projects were poorly designed and weakly monitored.

The ADB's own documents reveal the problems, as the following selection of Bank-funded plantation projects indicates.

Western Samoa

In Western Samoa, the ADB's Forestry Development Project "fell short of achieving its major objectives", because of "poor plantation results", according to a 1994 ADB report on forestry sector lending. "[T]he design was based on unproven technology and a lack of sociological understanding." The project planned to plant a total area of 2,475 hectares of which only 787 hectares was actually planted. The area planted was subsequently badly damaged by cyclones.

478 "Our Vision - an Asia and Pacific Free of Poverty", Asian Development Bank website.

<http://www.adb.org/About/default.asp>

479 "ADB Basics Asian Development Bank Profile", Asian Development Bank brochure, May 2008.

<http://www.adb.org/Documents/Brochures/ADB-Profile/ADB-profile.pdf>

480 The ADB's charter states that the president must be from a regional member country. All the Bank's past presidents have been men from Japan. "Membership and Staffing", Asian Development Bank website.

<http://www.adb.org/About/FAQ/members.asp>

481 Javed H. Mir (2006) "A 5900-REG: Regional Study on Forest Policy and Institutional Reforms, Project Completion Report", Asian Development Bank, Manila. <http://www.adb.org/Documents/TACRs/REG/33119-REG-TACR.pdf>

482 "Technical Assistance for the Regional Study on Forest Policy and Institutional Reforms", TAR:STU 33119, Asian Development Bank, Manila, December 1999, page 2. <http://www.adb.org/Documents/TARs/REG/33119-REG-TAR.pdf>

The ADB's report notes that the project was delayed "due to prolonged, and sometimes breakdown in the negotiation to secure lease of land owned collectively, and reduction of planting areas, both of which led to postponement of planting activities." The project was rated as "unsuccessful".⁴⁸³

Sri Lanka

A "community forestry project" in Sri Lanka, was rated "generally successful" although less than half the target of 14,000 hectares was actually planted. The Bank's 1994 report on forestry lending notes that a community woodlots component of the project "was termed as a failure and so also the five demonstration woodlots".⁴⁸⁴

Malaysia

Launched in 1982, the "Compensatory Forest Plantation Project" in peninsular Malaysia aimed to cover 188,200 hectares with acacia monocultures by 1995. By the end of 1999, 62,800 hectares had been planted. Many of the plantations failed because of extensive outbreaks of heartrot disease in the Acacia mangium plantations.⁴⁸⁵

The Philippines

The ADB has supported two plantations projects in the Philippines. Both projects created problems. The first, approved in 1983, "suffered from deficiencies in Project design and implementation," according to the Bank's Project Performance Audit Report.⁴⁸⁶ The project was redesigned in 1988, after a typhoon hit the project area. Instead of planting different tree species, as initially planned, "the Project adopted a strategy of near monoculture plantations of *E. camaldulensis*." The plantations were poorly maintained and "were characterized by highly uneven and low tree growth rate."

The Bank failed to monitor the project adequately. Only one socio-economic survey was carried out and only one Bank mission included a visit by a forestry specialist to the project sites. The Project Performance Audit Report notes that "There was little or no assessment of plantation growth performance, review of the appropriateness of Project design, and determination of the adequacy of Project staffing input and technical competency. No technical advice on forestry establishment or assistance in the Project performance management system was provided."⁴⁸⁷

A second ADB project in the Philippines, the Industrial Forest Plantation (Sector) Project also ran into problems. The project started in 1991, and aimed to establish 30,000 hectares of industrial tree

483 "Sector synthesis of post-evaluation findings in the forestry sector", Asian Development Bank, Post-Evaluation Office, August 1994.

484 "Sector synthesis of post-evaluation findings in the forestry sector", Asian Development Bank, Post-Evaluation Office, August 1994.

485 Thai See Kiam (2000) "Forest plantation development in Malaysia and the potential of rubber wood as an important source of timber in the future", in the Proceedings of the International Conference on Timber Plantation Development, 7-9 November 2000 in Manila, Philippines. <http://www.fao.org/docrep/005/ac781e/AC781E09.htm>

486 "Project Performance Audit Report on the Forestry Development Project (Loan No. 677-PHI) in the Philippines", Asian Development Bank, July 1997.

487 "Project Performance Audit Report on the Forestry Development Project (Loan No. 677-PHI) in the Philippines", Asian Development Bank, July 1997.

plantations. In fact 6,100 hectares were planted. The cost of establishing the plantations was far higher than expected, because of “the cost of settling disputes over the land for the plantations” according to Alastair Fraser, an ADB consultant.⁴⁸⁸

Bangladesh

A US\$46.8 million afforestation project in Bangladesh resulted in the establishment of 20,000 hectares of plantations between 1989 and 1996. The Bank’s Project Performance Audit Report notes that “Tree planting was successful, and tree survival rates during establishment were generally high.” However, the report points out, the project was largely a “tree planting exercise, without yielding significant benefits”. Villagers who took part in the project, “received only minimal benefits”. The result was “impatience and a feeling of resignation among participants” and “a potentially hostile social environment.”⁴⁸⁹ Under the project, the Forestry Department had “confiscated lands from the locals without giving any compensation, destroyed standing crops and ignored protests of genuine landholders”, notes the Asian Indigenous & Tribal Peoples Network (AITPN). Land was taken without compensation. When villagers protested in 1994, forest guards opened fire, injuring seven people.⁴⁹⁰

An earlier ADB-financed “community forestry project” in Bangladesh included fuelwood plantations as the largest project component. These “fell short of optimum growth” and some plantations “were damaged by encroachment”.⁴⁹¹

The ADB also funded a Forestry Master Plan for Bangladesh under the Tropical Forestry Action Plan. The Forestry Master Plan proposed an “Integrated Forest Project”, which would have resulted in vast areas of land being planted with trees. The aim was to increase tree cover in Bangladesh from about 8 per cent to 20 per cent. AITPN points out that had proposal been implemented it would have been a disaster, resulting in lost agricultural land, reduced food production and serious problems for indigenous communities.⁴⁹²

The ADB also supported the Chittagong Hill Tracts Development Board which effectively allowed increased government and Bengali control over the indigenous Jumma people. Hill people were forcibly resettled into farms and under a scheme aimed at ending shifting cultivation. In effect, control of the forest was taken from indigenous communities and handed over to the state. The ADB’s loans to the project “support and sustain the conflict until today”, notes AITPN.⁴⁹³

488 Alastair Fraser (2000) “The Role of Financial/Banking Institutions in Timber Plantation Development”, Proceedings of the International Conference on Timber Plantation Development, Manila, Philippines, 7-9 November 2000.

489 “Project Performance Audit Report on the Upazila Afforestation and Nursery Development Project (Loan 956-BAN[SF]) in Bangladesh”, Asian Development Bank, September 2001.

490 “ADB Programs in Forestry Sector in Bangladesh: Identifying Critical Issues for Changes in ADB policy”, presentation by the Asian Indigenous & Tribal Peoples Network at the Indigenous Peoples Forum, 33rd Annual Meeting of the Board of Governors, Asian Development Bank, Chiang Mai, Thailand, 4-8 May 2000.

491 “Sector synthesis of post-evaluation findings in the forestry sector”, Asian Development Bank, Post-Evaluation Office, August 1994.

492 “ADB Programs in Forestry Sector in Bangladesh: Identifying Critical Issues for Changes in ADB policy”, presentation by the Asian Indigenous & Tribal Peoples Network at the Indigenous Peoples Forum, 33rd Annual Meeting of the Board of Governors, Asian Development Bank, Chiang Mai, Thailand, 4-8 May 2000.

493 “ADB Programs in Forestry Sector in Bangladesh: Identifying Critical Issues for Changes in ADB policy”, presentation by the Asian Indigenous & Tribal Peoples Network at the Indigenous Peoples Forum, 33rd Annual Meeting of the Board of Governors, Asian Development Bank, Chiang Mai, Thailand, 4-8 May 2000.

Nepal

In Nepal, the target area for tree planting under the Bank's Sagarnath Forestry Development Project was reduced from 10,000 hectares to 4,140 hectares. Among the problems were "Shortage of staff, inadequate delegation of authority and responsibility, lack of flexibility in administration and overcentralization of decision-making", according to the Bank's 1994 overview of its lending to the forestry sector.⁴⁹⁴

Another ADB project in Nepal, titled "The hill forest development project," initially aimed to plant 30,000 hectares. This was subsequently reduced to 10,000 hectares, but at project completion, "plantations and/or improved management practices" had been established on about 7,000 hectares. A third project aimed to establish fuelwood plantations on two project sites. On one project site, at Nepalganj, 1,737 hectares was planted (compared to a target of 5,000 hectares) "primarily because of encroachment by squatters".⁴⁹⁵ Rather than describing local people as "squatters", it would be more appropriate to describe the Bank's plantations as squatting on the land of local people.

Indonesia

A series of ADB loans have supported the expansion of the pulp and paper industry in Indonesia, the result of which has been massive deforestation and destruction of local livelihoods. In 1988, the ADB awarded a contract to Jaakko Pöyry, to identify sites for the development of the pulp industry in Indonesia. Pöyry went on to win further contracts with Asia Pulp and Paper (APP) and Asia Pacific Resources International (APRIL) to design some of the biggest pulp mills in the world. The resulting demand for timber has led to the destruction of hundreds of thousands of hectares of forest. (*See* section on Pöyry, above.)

In 1990, the ADB agreed a US\$33.3 million loan to Indonesia for a Timber Plantation Project. The project ran into several problems. In the end, only US\$17.33 million was disbursed. Of the target area of 51,000 hectares to be planted with fast-growing tree plantations, 26,920 hectares was established under the project. It turned out that the "unproductive shrubs and grasslands" that the ADB's experts planned to plant with trees were already in use; some areas by local communities, others were allocated for hydropower and irrigation dams. In West Kalimantan, the company carrying out the planting, Inhutani III, clashed with Indigenous People. An Indonesian NGO, the Institute of Dayakology Research and Development, accused Inhutani III of using force in taking over lands from indigenous communities. The Bank hired a consultant for a few weeks and rejected the allegations, although the project area was reduced to exclude "areas where potential land tenure claims could rise".⁴⁹⁶

The ADB's Project Completion Report describes the damage to the plantations by fires and failing species as "staggering". The tree species selected for the project "were not based on proven field trials, and were not sufficiently reassessed during site planning and preparation of plantation site designs."⁴⁹⁷

494 "Sector synthesis of post-evaluation findings in the forestry sector", Asian Development Bank, Post-Evaluation Office, August 1994.

495 "Sector synthesis of post-evaluation findings in the forestry sector", Asian Development Bank, Post-Evaluation Office, August 1994.

496 "Project Completion Report Timber Plantation Project (Indonesia) (Loan No. 1000-INO)", Asian Development Bank, 11 December 1998.

497 "Project Completion Report Timber Plantation Project (Indonesia) (Loan No. 1000-INO)", Asian Development

The Project Completion Report points out an important failure of the ADB's project – the failure to deal with land rights and Indigenous Peoples' rights: "In securing lands for development, issues concerning land tenure, human settlements, and indigenous peoples and their legal implications should be seriously considered. State-owned lands are not necessarily free from land tenure claims by indigenous inhabitants."⁴⁹⁸

Laos

The Bank's Industrial Tree Plantations Project in Laos was a spectacular failure. The project created and increased poverty, according to the Bank's Project Completion Report.⁴⁹⁹ Loans were given to farmers to plant trees which then failed, leaving the farmers with no means of repaying the loans. According to a report by the ADB's Operations Evaluation Department, "Thousands of inexperienced farmers and individuals were misled by prospects of unattainable gains, leaving the majority of farmers with onerous debts, with no prospect of repaying their loans, and with failing plantations."⁵⁰⁰

The project also supported commercial tree plantations. One of the companies involved, BGA Lao Plantation Forestry (now owned by Japan's Oji Paper) used the ADB's loans to bulldoze commons, forest and villager's farmlands to make way for monoculture eucalyptus plantations.⁵⁰¹

As in other ADB-funded plantation projects, Bank monitoring of the project in Laos was weak. The OED reports that Bank missions included few trips outside Vientiane. Between 1996 and 2003 there was no forestry specialist on any of the Bank's project review missions. Between July 2000 and February 2002 there were no ADB review missions at all.⁵⁰²

Despite these problems, shortly after the Project Completion Report was released, the Bank approved a second plantations project which looked set to repeat the mistakes of the first. In its appraisal of the second project, the Bank ignored the findings of its own consultants, who reported that "discussions with farmers (women and men) in the 6 villages revealed that their priorities in livelihood improvement do not include tree plantations of the kind offered by the proposed project."⁵⁰³ The ADB eventually cancelled its

Bank, 11 December 1998.

498 "Project Completion Report Timber Plantation Project (Indonesia) (Loan No. 1000-INO)", Asian Development Bank, 11 December 1998.

499 "Project Completion Report, LAO: Industrial Tree Plantation Project, Project Number: 20067, Loan Number: 1295", Asian Development Bank, November 2005. <http://www.adb.org/Documents/PCRs/LAO/20067-LAO-PCR.pdf>

500 "Sector Assistance Program Evaluation for the Agriculture and Natural Resources Sector in the Lao People's Democratic Republic, SAP: LAO 2005-17", Operations Evaluation Department Asian Development Bank, December 2005. <http://www.adb.org/Documents/Reports/SAPE/LAO/2005-17-LAO-SAP.pdf>

501 Chris Lang and Bruce Shoemaker (2006) "Creating Poverty in Laos. The Asian Development Bank and industrial tree plantations", World Rainforest Movement, April 2006. <http://chrislang.org/2006/04/25/creating-poverty-in-laos-the-asian-development-bank-and-industrial-tree-plantations/>

502 "Sector Assistance Program Evaluation for the Agriculture and Natural Resources Sector in the Lao People's Democratic Republic, SAP: LAO 2005-17", Operations Evaluation Department Asian Development Bank, December 2005. <http://www.adb.org/Documents/Reports/SAPE/LAO/2005-17-LAO-SAP.pdf>

503 Eva Lindskog and Chansamone Phengkhay (2003) "Livelihood Conditions Report", Appendix I, page 143 in "Tree Plantation for Livelihood Improvement Project: Appendices - Final Report Volume I", TA No. 3794-LAO, MIDAS Agronomics, Champa Lao Consulting, Scandiaconsult Natura, CIRAD Foret, October 2003.

loan for the second plantations project after the Lao government declined to agree to the Bank's loan conditions.

The ADB's proposed new forest policy

Given this record, we might welcome the fact that the ADB is working on a new forest policy to replace its 1995 policy. A new forest policy might help to protect the rights of Indigenous Peoples and local communities living in and near forests. It might help to prevent ADB-financed roads, dams and mines from destroying forests and livelihoods. A new forest policy might help to prevent the destruction of forests and commons to make way for industrial tree plantations. It could also create the possibility of an open discussion about its forestry sector lending. In fact, in its forest policy review, the Bank has failed to achieve any of these things.

The Bank started working on the new policy in 2000, aiming to complete the policy by 2002. Eight years later, the Bank has failed to produce a new forest policy. The only version of the draft policy available to the public is dated June 2003 and this version was rejected by the Bank's board in July 2003. Since that time, the preparation of the proposed forest policy has taken place in secret, behind the Bank's closed doors. On several occasions, Bank staff and the Bank's website have promised that new a draft would be released, but none has seen the light of day.

In January 2008, the ADB's Senior Public Information and Disclosure Coordination Assistant, Robert Paul S. Mamonong, promised that a "draft synthesis report is being revised and is expected to be ready by April 2008."⁵⁰⁴ April came and went, without any sign of the "Synthesis Report". ADB's website continued to promise that the report would be released in November 2007, until 19 September 2008, when it was updated. The synthesis report is now expected in the fourth quarter of 2008.⁵⁰⁵

Bank staff have declined to answer repeated requests from civil society for information about the discussions taking place within the Bank about the Forest Policy.

While discussions may (or may not) have moved on within the Bank during the last four years, the 2003 draft version is all we have to judge what the ADB's new policy might look like. It is not reassuring. It promotes tree plantations. An objective of the new forest policy is to: "increase the extent and productivity of plantations and trees on farms to increase wood supply and rural employment opportunities."⁵⁰⁶ The Bank, of course, provides no information to prove that plantations provide rural employment.

In 2002, the ADB's forestry specialist, Javed H. Mir, gave a presentation on the Bank's Regional Study on Forest Policy and Institutional Reforms. He answered his own question, "What not to do?" with "Not to repeat mistakes."⁵⁰⁷ Following his advice would mark a dramatic break with history for the ADB. The ADB, it seems, is determined to continue repeating its mistakes.

504 Email from Robert Paul S. Mamonong (Sr. Public Information & Disclosure Coordination Asst., Public Information and Disclosure Unit) Asian Development Bank, 17 January 2008.

505 "Regional Study on Forest Policy and Institutional Reforms", Asian Development Bank.
<http://www.adb.org/projects/forestpolicy/>

506 "Forest Policy (Working Paper)", Asian Development Bank, June 2003, page 3.
http://www.adb.org/Documents/Reports/Forest_Policy/working_paper_fp.pdf

507 Javed Mir (2002) "Presentation of Proposed ADB Forest Sector Strategic Framework", presentation at Regional

Instead of continuing to promote problems, the ADB should stop financing industrial tree plantations.

Study on Forest Policy and Institutional Reforms. Regional Workshop on Review of ADB Forest Policy, ADB Headquarters, Manila, Philippines, 14-15 February 2002.

http://www.adb.org/Documents/Events/2002/ForestryStrategy/FSSF_Mir.pdf

I'm deliberately ignoring the double-negative in Mir's statement. I'm sure that Mir isn't really suggesting that the Bank should continue to repeat its mistakes.

International Finance Corporation (IFC): Public money for private profits

The International Finance Corporation is the World Bank's private sector lending institution. Founded in 1956, by 2007 it had a total committed portfolio of almost US\$31 billion,⁵⁰⁸ and has worked with more than three thousand companies in 140 countries.⁵⁰⁹

According to its mission statement, IFC exists to “promote sustainable private sector investment in developing countries, helping to reduce poverty and improve people’s lives.”⁵¹⁰ But when talking to industry, IFC staff occasionally let slip the real purpose of IFC. “We are open for business,” announced Tatiana Bogatyreva, a senior investment officer with IFC, at a packaging industry conference in Moscow in June 2005.⁵¹¹ The conference was organised by the Adam Smith Institute, a far right-wing pro-privatisation lobby group, and included sessions such as “Packaging as a marketing tool” and a “Champagne roundtable” with packaging industry executives.⁵¹² Bogatyreva told the conference that IFC is ready to finance more packaging sector projects.

Unlike the rest of the World Bank Group, IFC provides loans directly to companies, rather than to governments. The benefits to companies are clear. As well as providing long-term, cheap financing, IFC provides advice on emerging markets, industry sectors and financial structuring. And IFC can help arrange project funding from commercial banks, as well as providing equity finance for companies.

For several decades, IFC has been a major sponsor of pulp and paper projects around the world. In recent years, IFC has approved loans for pulp and paper projects in Pakistan, China, Brazil, Uruguay, Jordan and Kyrgyz Republic. When IFC decides to invest in a project, commercial banks will follow. For example, financing of the Botnia pulp mill in Uruguay was stalled until the IFC agreed to fund the project.

The following list of projects gives an indication of IFC's involvement in the pulp and paper sector:⁵¹³

- IFC started lending to Kenya's Panafrican Paper Mills in 1974, since when it has made around eight loans to PPM. In 1995, IFC gave a US\$15 million loan to PPM to increase capacity at its mill in Webuye. The pulp and paper mill is massively polluting and has created a series of health problems for people living in Webuye.⁵¹⁴
- IFC provided a total of US\$104.5 in loans to Arauco in Chile.⁵¹⁵ Pollution from Arauco's Valdiva pulp mill killed hundreds of protected black-necked swans and caused thousands to migrate from the Rio

508 “IFC at a glance”, International Finance Corporation Annual Report 2007.

[http://www.ifc.org/ifcext/annualreport.nsf/AttachmentsByTitle/AR2007_v1_IFC_at_a_Glance/\\$FILE/AR2007_IFC_at_a_Glance.pdf](http://www.ifc.org/ifcext/annualreport.nsf/AttachmentsByTitle/AR2007_v1_IFC_at_a_Glance/$FILE/AR2007_IFC_at_a_Glance.pdf)

509 “International Finance Corporation”, Bank Information Center. <http://www.bicusa.org/en/Institution.6.aspx>

510 “International Finance Corporation”, Bank Information Center. <http://www.bicusa.org/en/Institution.6.aspx>

511 Chris Lang (2005) “Open for business: How the International Finance Corporation subsidises the pulp and paper industry”, World Rainforest Movement Bulletin 95, June 2005. <http://www.wrm.org.uy/bulletin/95/Global.html#IFC>

512 “The CIS Packaging Summit 14th - 16th June 2005”, Conference brochure, Adam Smith Conferences.

513 This list was generated by a search for “International Finance Corporation” on 17 June 2005 on RISI's website <http://www.paperloop.com> (now <http://www.risiinfo.com>). The list was updated with an additional search for “pulp” on IFC's website: <http://ifcgoogleext.worldbank.org/>

514 Chris Lang (2007) “Kenya: Pan Paper plans to expand its polluting operations”, World Rainforest Movement Bulletin 123, October 2007. <http://chrislang.org/2007/10/29/kenya-pan-paper-plans-to-expand-its-polluting-operations/>

515 Machteld Spek (2006) “Financing Pulp Mills. An Appraisal of Risk Assessment and Safeguard Procedures”, Center for International Forestry Research (CIFOR), Bogor, Indonesia, page 22.

Cruces nature sanctuary, downstream of the pulp mill.

- In 1989, IFC provided US\$10 million capital to Celulosa del Pacifico (Pacifico), a joint venture between Chile's largest papermaker, Compania Manufacturera de Papeles y Cartones (CMPC) and Simpson Paper of the USA, to build a 315,000 tonnes/year pulp mill. The following year, IFC provided a further US\$147 million. The pulp mill started operations in 1992.⁵¹⁶
- When Klabin Bacell started its 115,000 tons a year pulp mill in the northern part of Bahia state, Brazil, IFC was part of the joint venture. A 2007 report by Ivonete Gonçalves de Souza and João Luiz Monti documents the impact of the company's operations on local people. The company's eucalyptus plantations have dried up water resources, seriously impacting farming in the area.⁵¹⁷
- IFC lent Advance Agro (Thailand) US\$10 million in 1994.⁵¹⁸ Advance Agro's plantations have replaced forests and taken over local people's farmlands. Pollution from the company's pulp mills continues to affect local people. (*See* section on Advance Agro, above.)
- IFC owns shares in Korea's second largest fine paper producer, Shinmoorim Paper and in October 1998 financed the company's new pulp line.⁵¹⁹
- In 1998, IFC gave a US\$20 million loan to United Pulp and Paper Company in the Philippines. IFC also bought US\$7.5 million of shares in the company. UPPC ran into difficulties as a result of the Asian economic crisis and IFC planned to financially restructure the company to help it repay its loans.⁵²⁰
- In 1998, IFC took a 20 per cent stake in Romania's Dunapack Rambox in return for a long-term loan to help finance investment at the plant.
- In 1998, IFC gave a loan of US\$15 million to Bulgaria's Celhart to renovate and modernise the company's pulp and paper mill in Stambolijski.⁵²¹ Four years later, IFC and the European Bank for Reconstruction and Development took over Paper Factory Stambolijski in order to restart operations at the mill.⁵²² Mondi subsequently bought the mill and renamed it Mondi Packaging Stambolijski.⁵²³
- Also in 1998, IFC provided a US\$41 million loan to a Croatian paper and packaging company, Belice-Bel, to increase the capacity of its mill in Belice. The loan included US\$6.5 million equity, giving IFC a stake in the firm.⁵²⁴
- In 2001, IFC awarded a US\$13 million loan to Turkish tissue producer Ipek Kagit, to support the company during a financial crisis in Turkey. In 1998, IFC provided US\$65 million for the company's US\$100 million expansion plan. Ipek Kagit is jointly owned by Georgia Pacific and Turkey's Eczacibasi Holdings.⁵²⁵

516 Amanda Marcus (1993) "Chile: Smooth production for a rough climate", *Pulp and Paper International*, August 1993.

517 "Bahia Pulp S.A. (Brazil)", a report by Ivonete Gonçalves de Souza (CEPEDES) and João Luiz Monti (CDDH-Tx.de Freitas), April 2007. <http://www.pulpmillwatch.org/companies/bahia-pulp-s.a/>

518 "Annual Report - Investment Portfolio 1999", International Finance Corporation.

519 Robert Ryan (2000) "Shinmoorim speeds up as market slows down", *Pulp and Paper International*, Vol. 42, No. 11, November 2000.

520 "United Pulp and Paper Company Inc., project number 9339", IFC Summary of Project Information. <http://www.ifc.org/ifcext/spiwebsite1.nsf/1ca07340e47a35cd85256efb00700cee/6C79AADFB3B2F8208525688E0079648B>

521 "Celhart Pulp and Paper Mill, project number 8969", IFC Summary of Project Information.

<http://www.ifc.org/IFCExt/spiwebsite1.nsf/0/b4a3f1ec5ca32b8e8525688e00711b7e?OpenDocument>

522 "EBRD and IFC to finance the restart of paper production at Stambolijski", European Bank for Reconstruction and Development press release, 22 March 2002. <http://www.ebrd.com/new/pressrel/2002/02mar22x.htm>

523 "Investment in Plovdiv mill", CEE Packaging, 18 December 2006.

<http://www.ceepackaging.com/2006/12/18/investment-in-plovdiv-mill/>

524 "Croatian mill ups capacity", *Pulp and Paper International*, June 1998.

525 "Ipek Kagit wins IFC loan", *Pulp and Paper International*, Vol. 43, No. 12, December 2001.

- In December 2000, IFC approved a loan for Unicell Paper Mills Caribbean's 20,000 tons per year tissue paper mill in Trinidad and Tobago.⁵²⁶
- In June 2003, IFC approved a loan for the expansion of Intercell's pulp and paper mill at Ostrolenka in north-east Poland and the construction of a sack manufacturing factory near Moscow.⁵²⁷
- In July 2003, IFC agreed a US\$75 million loan as part of a US\$216 million refinancing and debt package to Copamex, Mexico's leading paper producer.⁵²⁸
- In June 2004, IFC agreed to finance the expansion of Carvajal's pulp and paper operations in Colombia.⁵²⁹
- In July 2004, Andhra Pradesh Paper Mills secured a US\$35 million loan from IFC to upgrade its pulp and paper operations in and near Rajahmundry. IFC also bought US\$5 million in shares in the company.⁵³⁰
- In May 2005, IFC signed a US\$1.4 million loan with Altyn Ajydar in Kyrgyzstan for renovations to its corrugated cardboard packaging operations. In 1999, Altyn Ajydar received another IFC loan to upgrade its packaging and printing plant.⁵³¹
- In June 2005, IFC approved US\$10 million in loans and equity and a US\$25 million guarantee to Packages of Pakistan for a new pulp and paper plant at Kasur. Packages has been an IFC client since 1964. Packages is partly owned by Stora Enso and produces pulp from straw. In 1995, IFC gave a US\$37.5 million loan to expand Packages' pulp and paper capacity.⁵³²
- In November 2006, IFC approved a US\$170 million loan to Botnia to build a US\$1.2 billion pulp mill in Uruguay.⁵³³ The pulp mill led to massive protests in Argentina and Uruguay. The company's plantations have dried up water supplies for local people and destroyed their previous livelihoods. (*See* section on Botnia, above.)

As well as supporting individual pulp and paper projects, IFC also promotes the expansion of the industry by financing plans at a national level. In May 2007, for example, IFC held a seminar to announce the results of a "strategic development plan" for Ukraine's pulp and paper industry. The plan was carried out by Pöyry Forest Industry Consulting and financed by IFC, the Association of Ukrainian Enterprises of Pulp and Paper Industry and the Ministry of Foreign Affairs of Finland.

Pöyry's study projects five per cent growth in paper consumption in Ukraine and puts forward an

526 "Unicell Paper Mills Caribbean Ltd. (UPMCL) project number 10168", IFC Environmental Review Summary, 14 July 2000. <http://www.ifc.org/ifcext/spiwebsite1.nsf/0/8854C6741EB613CE8525691C005599E8?opendocument>

527 "Intercell-expan. project number 20601", IFC Environmental Review Summary, 5 May 2003. <http://www.ifc.org/IFCExt/spiwebsite1.nsf/0/11434b54bdbde63285256d1d0073d7b5?OpenDocument>

528 "IFC to invest \$216 million in Copamex as part of a refinancing program", IFC press release, 1 July 2003. <http://ifcfn001.worldbank.org/IFCExt/pressroom/IFCPressRoom.nsf/SearchView/8421CAFE2C54A6CB85256D56005B3AC4/?OpenDocument>

529 "Carvajal bags IFC financing for expansion", Paperloop, 22 July 2004. http://www.paperloop.com/db_area/archive/pponews/2004/wk07_19_2004/60_key.html

530 "Andhra Pradesh gets all-clear for investment scheme", Paperloop, 6 July 2004. http://www.paperloop.com/db_area/archive/pponews/2004/wk07_05_2004/23_key.html

531 "IFC signs loan for expansion of Kyrgyz packaging producer", Paperloop, 25 May 2005. http://www.paperloop.com/inside/stories/wk05_30_2005/08.html

532 "Packages of Pakistan seeks funds for expansion", Paperloop, 4 March 2005. "Packages, project number 23526", IFC Summary of Project Information. <http://www.ifc.org/ifcext/spiwebsite1.nsf/0/0a0440258100418385256fb7005e800d?OpenDocument>

533 "IFC and MIGA Board Approves Orion Pulp Mill in Uruguay: 2,500 Jobs to Be Created, No Environmental Harm", IFC press release 21 November 2006. <http://www.ifc.org/ifcext/LAC.nsf/Content/SelectedPR?OpenDocument&UNID=F76F15A5FE7735918525722D0058F472>

“implementation plan” to meet this projected demand. Ian Luyt, IFC Senior Operations Manager for Europe and Central Asia, is clearly excited about handing over IFC loans to the pulp and paper sector in Ukraine. “This is an exciting period of growth and development for Ukraine’s pulp and paper industry,” Luyt announced in a May 2007 press release. “We believe the industry has the skills and commitment to achieve its full potential, but there are still significant improvements needed in the regulatory environment to aid this development. The strategic development plan is an important basis for planning and implementing the investment to meet future needs.”

Currently, the pulp industry in Ukraine is largely based on recycled paper. Pöyry recommends using Ukraine’s forests to produce pulp.

None of this is inevitable. First the demand has to be created. “We have a long and challenging road ahead to develop a robust and profitable domestic market for pulp and paper in Ukraine,” said Evgeny Lobanov, chairman of UkrPapir, one of the companies in Ukraine hoping to cash in on IFC’s loans. Finland’s industry is also hoping to benefit. Lauri Pullola, First Secretary at the Embassy of Finland in Ukraine, noted that

“The forest industry is a key pillar of Ukraine’s economy. It also represents over 20 percent of Finland’s exports, and our government is happy to promote and support this important study. This will lead to new opportunities for cooperation between the Finnish and Ukrainian governments and the private sector.”⁵³⁴

In China, IFC is playing an important role in financing the expansion of the industrial forestry sector:

- In September 2001, IFC loaned a total of US\$25 million to two subsidiaries of Sino-Forest Corporation for the construction of wood-related manufacturing plants and the purchase of plantations in China.⁵³⁵ Sino-Forest, a Canadian company, has a plantation area of about 240,000 hectares in southern China. The company is currently expanding its plantation area by 200,000 hectares in Guangdong Province.
- In December 2004, IFC announced a financing package to Jiangxi Chenming Paper Company for a 350,000 tons a year paper mill and an associated pulp mill. Jiangxi Chenming is a joint venture between Sappi (South Africa), Shinmoorim (South Korea), Chenming Group (China) and Jiangxi Paper Industry Company Limited (China). IFC will provide US\$72.9 million in equity and loans and will arrange a further US\$205 million project financing.⁵³⁶
- In June 2005, Stora Enso signed a loan agreement with IFC for US\$75 million to finance Stora Enso’s activities in China. A year later, Stora Enso asked for a further US\$225 million. The money is to go towards Stora Enso’s eucalyptus plantations in Guangxi province in southern China and a planned expansion of the company’s Suzhou Mill.⁵³⁷

Companies which receive IFC loans often claim that the loan is some sort of independent approval of the

534 “IFC helps identify opportunities for growth in Ukraine’s pulp and paper industry”, IFC press release, 29 May 2007. <http://www.ifc.org/ifcext/eca.nsf/Content/SelectedPR?OpenDocument&UNID=4DF89FDCFE069FB852572EA00555752>

535 “Sino-Forest signs \$25 million financing agreement to expand in China”, Paperloop, 9 February 2001. http://www.paperloop.com/db_area/archive/pponews/2001/wk02_05_2001/92.shtml

536 “IFC confirms financing package for Shandong Chenming expansion”, Paperloop, 7 December 2004. http://www.paperloop.com/db_area/archive/pponews/2004/wk12_13_2004/08.html

537 “Stora China-II”, IFC Summary of Proposed Investment. <http://www.ifc.org/ifcext/spiwebsite1.nsf/1ca07340e47a35cd85256efb00700cee/912B04166E2036D285257178006439EF>

firm's activities. After his company received an IFC loan, Allen Chan, Sino-Forest's Chairman and CEO, said, "IFC's contribution is an endorsement of Sino-Forest as one of the leaders in sustainable forestry management in China."⁵³⁸

Similarly, when IFC agreed to give a loan to Stora Enso, Markku Pentikäinen, head of Stora Enso Asia Pacific, said, "We are pleased to note that investors such as IFC appreciate our sustainability approach in both forestry operations and paper production. IFC sets a good example for other investors in the region through its emphasis on socially responsible investment."⁵³⁹

Although the IFC has a series of policies which should mean that projects are screened against environmental and social standards, the reality is that the IFC prefers doing business to upholding standards.

The IFC gave its first loan to Kenya's Pan African Paper Mills (Pan Paper). The mill stinks. A visitor from the US-based NGO Global Community Monitor described the waste ponds near the pulp mill that cover the land with "foaming acid smelling wastes".⁵⁴⁰

Michael Ochieng Odhiambo, of the Kenyan NGO RECONCILE lists the health problems that residents of Webuye complain of as a result of the pollution from Pan Paper's operations: "irritation of the eyes and respiratory tracts, dry mouths and scratchy throats, gross accumulation of fluid in air spaces impairing the functioning of the lungs, cancer of the lung and throat, asthma, bronchitis, bronchial pneumonia, conjunctivitis, hepatitis, dermatitis, tuberculosis, impotence, babies born with stunted reproductive organs, retarded intelligence among children, and high levels of respiratory diseases."⁵⁴¹

In 1996, when IFC lent a further US\$15 million to Pan Paper for an expansion of the pulp and paper mill, IFC did not demand a full environmental assessment. Instead IFC relied on information provided by the company and decided that Pan Paper "has made commitment to fully comply with World Bank policies and guidelines".⁵⁴²

IFC promised to "monitor Panafrican Paper's ongoing compliance with World Bank policies and guidelines during the life of the project." Unfortunately, IFC's monitoring of Pan Paper only involves reading reports submitted by the company and "periodic site reviews during project supervision".⁵⁴³ In

538 "Sino-Forest signs \$25 million financing agreement to expand in China", Paperloop, 9 February 2001.

http://www.paperloop.com/db_area/archive/pponews/2001/wk02_05_2001/92.shtml

539 "Stora Enso signs loan agreement with International Financing Corporation", Stora Enso press release, 10 June 2005.

<http://www.storaenso.com/media-centre/press-releases/2005/06/Pages/stora-enso-signs-loan-agreement-with-international.aspx>

540 "Field Report: Pan African Paper – Webuye, Kenya", Global Community Monitoring, 22 September 2007.

<http://www.gcmonitor.org/article.php?id=658>

541 Michael Ochieng Odhiambo (2007) "Industrialization, environmental pollution and public health: Must communities bear the cost while the Nation reaps benefits?", Mazingira Magharibi, Newsletter of the Western Kenya Environmental Law Centre (WK-ELC), Issue 1, 2007. <http://www.reconcile-ea.org/publ/MazingiraNewsletter01.pdf>

542 "Panafrican Paper Mills Ltd. project number 7206", IFC Summary of Project Information, 7 December 1995.

<http://ifcln001.worldbank.org/IFCExt/spiwebsite1.nsf/f9e58192e8a7408b85256a5b006f2d2c/e4c499261afcf2668525688e00759411?OpenDocument>

543 "Panafrican Paper Mills Ltd. project number 7206", IFC Environmental Documents, 6 December 1995.

<http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/f82ec2b88cb393f38525688e00757818?opendocument>

2003, IFC promised more financial assistance for the restructuring of Pan African Paper Mills.

In February 2008, RECONCILE filed a complaint with the IFC's Compliance Advisor Ombudsman (CAO) on behalf of the residents of Webuye town who have suffered negative health, environmental, social and economic impacts. According to the CAO's website, "The CAO Ombudsman has undertaken an assessment of the complaint and has begun working with the parties to discuss options for resolution."⁵⁴⁴

Similar patterns suggesting a failure to carry out adequate due diligence and monitoring are clear from other IFC-financed pulp projects. In November 2004, IFC approved a US\$50 million loan to Brazilian pulp giant Aracruz, to finance the expansion of the company's pulp and plantation operations. IFC gave the loan in spite of ongoing land disputes against the company.

In April 2005, representatives from 64 NGOs wrote to then-World Bank president James Wolfensohn to demand that the IFC cancel its loan to Aracruz.⁵⁴⁵ In his reply, Atul Mehta, Director of IFC's Latin America and Caribbean Department, dismissed the ongoing land claims against the company and stated that "land dispute issues were fully reviewed during IFC's appraisal."⁵⁴⁶

One week after Mehta sent his letter, 500 indigenous Tupinikim and Guarani people cut thousands of eucalyptus trees to demarcate the boundary of 11,008 hectares of their land, land that Aracruz had planted with eucalyptus plantations. "With this act," the Tupinikim and Guarani wrote to Brazil's Minister of Justice,

"we want to express to you and to the entire Brazilian nation that the land belongs to the Tupinikim and Guarani nations, and should be returned so that we may construct our own future, guaranteeing our liberty and autonomy, and the future of our children and grandchildren."

In January 2006, Aracruz and the state police violently removed the Tupinikim and Guarani indigenous peoples from their villages, using helicopters and firing rubber bullets. Several villagers were injured.⁵⁴⁷ Shortly afterwards, Aracruz repaid its loan to IFC in full and IFC managed more or less to avoid a public scandal of financing a company that was involved in shooting at Indigenous Peoples from helicopters.

In early 2005, Peter Neame, IFC's Principle Environmental Specialist, wrote that "IFC is please to support this leading Brazilian forest sector company and to recognize their environmental and social programs and the progress they have made in these areas."⁵⁴⁸ Neame's optimistic view of Aracruz could hardly be further from the realities faced by Indigenous People living in the area of Aracruz's plantations. IFC's loan demonstrates, perhaps better than any other, how ineffective IFC's social and environmental

544 "Kenya – Pan African Paper Mills", Compliance Advisor Ombudsman website, last updated 18 March 2008.

http://www.cao-ombudsman.org/html-english/kenya_pan-african_paper.htm

545 "World Bank and International Finance Corporation (IFC) investment in the company Aracruz Celulose S.A.", Letter to the President of the World Bank: Mr. James Wolfensohn, 4 April 2005. <http://www.wrm.org.uy/bulletin/93/Aracruz.html>

546 Chris Lang (2005) "Open for business: How the International Finance Corporation subsidises the pulp and paper industry", World Rainforest Movement Bulletin 95, June 2005. <http://www.wrm.org.uy/bulletin/95/Global.html#IFC>

547 "Action Alert about violent police action against the Tupinikim and Guarani", Alert Against the Green Desert Network, 23 January 2006. <http://www.wrm.org.uy/alerts/Tupinikim2006.html>

548 Chris Lang (2005) "Brazil : World Bank loan to Aracruz is in breach of Bank forest policy", World Rainforest Movement Bulletin 92, March 2005. <http://www.wrm.org.uy/bulletin/92/Brazil.html>

safeguards are in practice.

European Investment Bank (EIB): Investing in destruction

The European Investment Bank (EIB) was created in 1958. The EIB is the world's biggest public lender, bigger than the World Bank or the IMF.⁵⁴⁹ In 2006, the EIB approved €3 billion of loans.⁵⁵⁰

“It is an EU institution, but is almost totally unknown to EU politicians and the public, and virtually unaccountable to other EU institutions,” notes a recent report by the NGO coalition Counter Balance. “It operates under an anachronistic ideology of ‘balance sheet growth’ and support for massive Western private corporations that is reminiscent of the worst aspects of the World Bank thirty years ago.”⁵⁵¹

The projects that the EIB funds are supposed to help development and cohesion of the European Union. Up to now, much of the Bank's lending has been to infrastructure projects to the poorer regions of the European Union – perhaps explaining why the Bank has received so little attention from politicians, the public and development NGOs. But the Bank's role is changing. In the 1960s, the Bank started to lend to fund projects in Africa. In 1993, the EIB started lending to Asia and Latin America. Today, approximately 10 per cent of EIB lending goes outside the EU. The EIB lends to the oil, gas, mining, hydropower, transport, communication and pulp and paper sectors as well as to financial intermediaries.⁵⁵² Counter Balance points out that “Essentially, the EIB is becoming a major EU development body, without any of the expertise, capacity or operating principles such a body must have.”⁵⁵³

The EIB is a public institution established within the European Union cooperation framework. Its lending to the South is supposed to bring sustainable development and benefits for the people in the countries on the receiving end of the Bank's loans. For example, the European Community Development Policy Statement says that “Community development policy is grounded on the principle of sustainable, equitable and participatory human and social development. . . The main objective of Community development policy must be to reduce and eventually to eradicate poverty.”⁵⁵⁴

The Bank has spectacularly failed to meet this objective. It has been involved in some of the most destructive infrastructure projects on the planet: the Chad-Cameroon Pipeline, the Lesotho Highlands Water Project, the Nam Theun II Dam, the West African Gas Pipeline and Veracel's plantations and pulp mill in Brazil.

549 Heather Stewart (2008) “The shadowy bank that has loaned £150bn of your cash”, *The Observer*, 2 March 2008. <http://www.guardian.co.uk/business/2008/mar/02/europeanbanks.worldbank>

550 “Citizen's guide to the European Investment Bank”, Counter Balance, 2007. http://www.counterbalance-eib.org/component/option,com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

551 “Citizen's guide to the European Investment Bank”, Counter Balance, 2007, page 5. http://www.counterbalance-eib.org/component/option,com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/
Counter Balance comprises members of CEE Bankwatch Network (Central and Eastern Europe), France: Les Amis de la Terre, Germany: urgewald and WEED (World, Economy, Ecology & Development), Italy: Campagna per la Riforma della Banca Mondiale (CRBM), Netherlands: Both ENDS, United Kingdom: Bretton Woods Project.

552 Jaroslava Colajacomo (2006) “The EIB in the South: In whose interest?”, Friends of the Earth International, Campagna per la Riforma Banca Mondiale, CEE Bankwatch Network, World Economy, Ecology and Development, January 2006.

553 “Citizen's guide to the European Investment Bank”, Counter Balance, 2007, page 5. http://www.counterbalance-eib.org/component/option,com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

554 “Citizen's guide to the European Investment Bank”, Counter Balance, 2007, page 13. http://www.counterbalance-eib.org/component/option,com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

Bank projects are approved by a Board of Directors, which meets only ten times a year. During these meetings the Board is supposed to review over 300 projects. Clearly, projects are not scrutinised in anything like the detail necessary to avoid impacts on local communities and their environment.⁵⁵⁵

Richard Howitt, a Member of the European Parliament (Socialist Group in the European Parliament) points out that

“The EIB doesn’t have the capacity to assess projects internally – and the consequence is that taxpayers’ money is going to private companies, to fund oil pipelines and major infrastructure projects in the developing world, where there can be no assurance that there’s no breach of labour standards, or environmental damage.”⁵⁵⁶

A 2006 report by Friends of the Earth International, Campagna per la Riforma Banca Mondiale, CEE Bankwatch Network, World Economy, Ecology and Development found that the EIB often finances projects “where economic returns are high and guaranteed instead of prioritising lending for poverty alleviation or environmental protection”. The Bank’s mandate for lending in Asia and Latin America is based on “mutual interest”, which the Bank interprets as “development of an external market and support for EU companies”. Since 1993, more than 90 per cent of EIB loans to Latin America have benefited either European Companies or large trans-national corporations.⁵⁵⁷ A December 2004 memorandum with the Inter American Development Bank states that “Lending activity in Latin America has a clear operational focus mainly in support of European Foreign Direct Investment.”⁵⁵⁸

Projects are often funded after inadequate social and environmental assessments. While EIB lending is supposed to comply with EU standards the reality is that there are no mechanisms in place to assess whether EIB projects actually comply with EU policies, either before or after the loan is given. The EIB has no internal safeguard policies. The Bank claims to follow World Bank and other international finance institution policies but the EIB has neither the mechanisms in place, nor the expertise within the Bank, to ensure compliance with these policies. While the World Bank has more than 10,000 staff, the EIB has 1,300. Projects are evaluated by economists or engineers. The Bank’s “sustainable development unit” is utterly incapable of even following all the Bank’s projects, let alone having any influence on the way the projects are designed.⁵⁵⁹ “The reality in practice,” notes Janneke Bruil of Friends of the Earth International, “is that the EIB’s project appraisal is done on economic, financial and technical terms rather than by placing sustainable development at the core.”⁵⁶⁰

555 “Citizen’s guide to the European Investment Bank”, Counter Balance, 2007, page 8. http://www.counterbalance-eib.org/component/option.com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

556 “Citizen’s guide to the European Investment Bank”, Counter Balance, 2007. http://www.counterbalance-eib.org/component/option.com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

557 Jaroslava Colajacomo (2006) “The EIB in the South: In whose interest?”, Friends of the Earth International, Campagna per la Riforma Banca Mondiale, CEE Bankwatch Network, World Economy, Ecology and Development, January 2006, page 4.

558 Janneke Bruil (2005) “The European Investment Bank: Surrounded by secrecy”, World Rainforest Movement Bulletin 95, June 2005. <http://www.wrm.org.uy/bulletin/95/EIB.html>

559 “Citizen’s guide to the European Investment Bank”, Counter Balance, 2007, page 15. http://www.counterbalance-eib.org/component/option.com_datagallery/Itemid,98/file,CounterBalance_en.pdf/func,download/

560 Janneke Bruil (2005) “The European Investment Bank: Surrounded by secrecy”, World Rainforest Movement Bulletin 95, June 2005. <http://www.wrm.org.uy/bulletin/95/EIB.html>

Friends of the Earth International's 2006 report notes that "[T]he EIB remains one of the least transparent and least accountable institutions within the EU."⁵⁶¹ Anders Lustgarden, of the Bretton Woods Project describes the EIB as a "huge black hole in the middle of EU development policy".⁵⁶²

Although the pulp and paper sector does not form a major part of the EIB's lending, the Bank's loans to Veracel clearly illustrate the problems with the Bank's involvement in this sector. While the project led to a series of lucrative contracts for European companies, Veracel's vast areas of plantations have destroyed local livelihoods, leading to increased migration from the area. (See section on Veracel, above.)

In June 2003, EIB agreed to fund the expansion of a controversial pulp and paper operation in the Slovak Republic. The SCP Neusiedler paper mill (owned by Mondi) is notorious in the area for the stink which hangs over the town of Ruzonberok. When the World Bank's IFC announced that it was considering a loan to expand the paper mill's capacity, local people protested, pointing out the pollution from the mill. After IFC dropped the project, EIB stepped in with a loan for €64 million.⁵⁶³ EIB announced the loan after the loan agreement had been signed, allowing local people no chance to protest.⁵⁶⁴

The EIB provided a €245 million loan for the Stendal pulp mill in Germany. The project went ahead despite industry overcapacity in Europe. The main justification for the project was that it created jobs. The project created 580 direct jobs and 1,000 indirect jobs. As CIFOR notes, in its report on financing pulp projects, given the total project cost of €1 billion, "the cost of creating these jobs was high, and there must have been political considerations – such as promoting the integration of Eastern Germany into the EU – that also played a role."⁵⁶⁵

Stendal is in the former Eastern Germany. After German reunification, a nuclear power plant in Stendal was closed down. The pulp mill was intended to replace the jobs lost in the nuclear power plant.

Other EIB loans to the pulp and paper sector include:

- €11 million to Svenska Cellulosa Aktiebolaget (SCA) for research and development (under appraisal, July 2008).⁵⁶⁶
- €43.7 million to Sociedad Anónima Industrias Celulosa Aragonesa (SAICA) for research and development and to convert a paper machine to use waste paper as raw material (2008).⁵⁶⁷

561 Jaroslava Colajacom (2006) "The EIB in the South: In whose interest?", Friends of the Earth International, Campagna per la Riforma Banca Mondiale, CEE Bankwatch Network, World Economy, Ecology and Development, January 2006, page 5.

562 Heather Stewart (2008) "The shadowy bank that has loaned £150bn of your cash", *The Observer*, 2 March 2008. <http://www.guardian.co.uk/business/2008/mar/02/europeanbanks.worldbank>

563 "European Investment Bank lends EUR 64 million for increasing paper production in Slovakia", European Investment Bank press release, 26 June 2003. <http://www.eib.org/projects/press/2003/2003-070-eur-64-mio-for-increasing-paper-production-in-slovakia.htm>

564 "The IFC's 'no' to controversial Slovak paper mill followed by the EIB's 'yes'", Bankwatch Mail 21, 7 June 2004. <http://www.bankwatch.org/publications/mail.shtml?x=221879>

565 Machteld Spek (2006) "Financing pulp mills: an appraisal of risk assessment and safeguard procedures", Center for International Forestry Research (CIFOR), page 25.

566 "SCA Hygiene Product and Packaging RDI", EIB website, 25 July 2008. <http://www.eib.org/projects/pipeline/2008/20080270.htm>

567 "SAICA Venizel", EIB website, 17 December 2007. <http://www.eib.org/projects/pipeline/2007/20070293.htm>

- €80 million to Portucel to upgrade three pulp and paper plants in Portugal (2007);⁵⁶⁸
- €170 million to Finland's Myllykoski Group to build a paper mill in the Czech Republic (2006).⁵⁶⁹
- €200 million to Stora Enso for a new paper machine at the company's Kvarnsveden mill in Sweden (2005).⁵⁷⁰
- €100 million to Sodra Mönsterås to increase pulp capacity and to build a new saw mill in Sweden (2003);
- €25 million to Metsä Botnia to modernise a pulp mill in Finland (2000);
- €160 million to Stora Enso to modernise a pulp and paper mill in Finland (2000);
- €100 million to Metsä Serla to upgrade three pulp and paper mills in Finland (2000);
- €40 million to UPM Kymmene to modernise pulp production at seven mills (1999); and
- €9.7 million to Metsä Botnia in Finland (1998).⁵⁷¹

This list makes clear that pulp and paper companies in Finland have done particularly well out of the EIB. Given the fact that Finland is clearly a “developed” country this raises questions about why Finnish corporations should be so generously supported by European tax payers. In its 2006 report on pulp mill financing, the Center for International Forestry Research (CIFOR) notes that “these transactions could easily have been done in the commercial capital markets”.⁵⁷²

EIB is also funding plantation projects aimed at sequestering carbon. The Bank is planning a China Climate Change Framework Loan, which includes two separate plantation projects. A “carbon sequestration afforestation” project aims to plant 35,000 hectares in Inner Mongolia with trees for wood and fruit production. A “forestation and bio-energy development” project aims to plant 39,000 hectares for oil and bio-diesel production in Jiangxi Province. The projects are currently under appraisal at the Bank.⁵⁷³

In 2007, the EIB approved a €4.65 million loan to New Forests Company, a UK-based company, to establish 6,544 hectares of eucalyptus and pine plantation in Uganda. “The project may generate carbon credits through carbon storage from the trees planted and may become eligible under the Clean Development Mechanism (CDM),” according to the Bank’s website.⁵⁷⁴ In September 2008, New Forests Company secured a €8.5 million equity investment from HSBC Principle Investments.⁵⁷⁵ New Forests Company has built schools, employs over 1,000 people in Uganda and has developed fuel efficient stoves

568 “Portucel Ambiente”, EIB website. <http://www.eib.org/projects/loans/2003/20030599.htm?lang=-en>

569 “Czech Republic: 170 m EUR to Myllykoski Corporation for construction of paper mill”, EIB press release, 28 June 2006. <http://www.eib.org/projects/press/2006/2006-075-czech-republic-eib-lends-eur-170-million-to-myllykoski-corporation-for-construction-.htm?lang=-en>

570 “EUR 200 million for magazine paper machine in Borlänge, Central Sweden”, EIB press release, 29 June 2005. <http://www.eib.org/projects/press/2005/2005-049-eur-200-million-for-magazine-paper-machine-in-borl%C3%A4nge-central-sweden.htm?lang=-en>

571 Machteld Spek (2006) “Financing pulp mills: an appraisal of risk assessment and safeguard procedures”, Center for International Forestry Research (CIFOR), page 26. http://www.cifor.cgiar.org/publications/pdf_files/Books/BSpek0601.pdf

572 Machteld Spek (2006) “Financing pulp mills: an appraisal of risk assessment and safeguard procedures”, Center for International Forestry Research (CIFOR), page 26. http://www.cifor.cgiar.org/publications/pdf_files/Books/BSpek0601.pdf

573 “China Climate Change Framework Loan – Forestation projects”, EIB website, 26 September 2008. <http://www.eib.org/projects/pipeline/2008/20080328.htm>

574 “NFC Forestry Project”, EIB website, 17 April 2008. <http://www.eib.org/projects/pipeline/2006/20060582.htm>

575 “Uganda: UK Blue Chip HSBC Secures Equity Investment in Country”, *The Monitor*, 25 September 2008. http://www.monitor.co.ug/artman/publish/business/UK_blue_chip_HSBC_secures_equity_investment_in_Uganda_72072.shtml

which require half as much wood as typical stoves in Uganda. New Forests Company's website includes photographs of road building, bush clearing and chemical spraying in preparation for the company's plantations.⁵⁷⁶ There is no mention on the website of how much carbon is released to the atmosphere as a result of these operations. New Forests Company plans to invest US\$80 million in plantations in Uganda, to provide biomass for power generation and timber for the construction industry. The company is working with another UK company, Aldwych International, which has a license to build a 50 MW biomass plant in Uganda.⁵⁷⁷

CIFOR notes that EIB is "happy to focus on macro benefits such as balance of payments improvement, job creation and as yet do not work actively to mitigate any potential impacts that their investments might have."⁵⁷⁸ This is an understatement, as the Bank's loans to Veracel and other egregious projects dramatically illustrate. The Bank has neither the capacity nor the interest to even attempt to deal with the negative impacts of its loans.

Friends of the Earth International ends its 2006 report on the EIB with a series of recommendations for the EIB, one of which would exclude "support for projects that are inherently incoherent with poverty alleviation and sustainability". The four NGOs involved in writing the report specifically recommend that the Bank should not fund any large scale industrial tree plantations.⁵⁷⁹

⁵⁷⁶ The New Forests Company website: <http://www.newforestscompany.com/>

⁵⁷⁷ "NFC to invest up to \$80 million in reforestation-for-energy project in Uganda", Biopact, 29 January 2008. <http://biopact.com/2008/01/nfc-to-invest-up-to-80-million-in.html>

⁵⁷⁸ Machteld Spek (2006) "Financing pulp mills: an appraisal of risk assessment and safeguard procedures", Center for International Forestry Research (CIFOR), page 26. http://www.cifor.cgiar.org/publications/pdf_files/Books/BSpek0601.pdf

⁵⁷⁹ Jaroslava Colajacomo (2006) "The EIB in the South: In whose interest?", Friends of the Earth International, Campagna per la Riforma Banca Mondiale, CEE Bankwatch Network, World Economy, Ecology and Development, January 2006, page 41.

I wrote the section about Veracel's pulp mill in the report.

The Food and Agriculture Organisation: Promoting the lie of “Planted Forests”

Created in 1945, the United Nations Food and Agriculture Organisation has worked hard on behalf of the plantation industry to reinforce the myth that a plantation is a forest. In its 2005 Global Forest Assessment, for example, FAO concludes that the “rate of net loss” of forests is decreasing. It sounds good, until you realise that in its definition of forests, the FAO includes monoculture plantations, highly degraded forests and even clearcuts which are expected to regenerate.⁵⁸⁰

FAO has played an important role in promoting the commercialisation of tropical forestry generally⁵⁸¹, and the industry with which FAO’s forestry department has had the “longest and deepest involvement” is the pulp and paper industry.⁵⁸² FAO has produced studies aiming to facilitate investment and production in the pulp and paper industry in a wide range of tropical countries.

The Fifth World Forestry Congress, which took place in Seattle in 1960, discussed “the need for action to use forest tree improvement to strengthen afforestation and reforestation programs and to increase the yield of the world’s forests”. The Congress recommended that the FAO organise a technical conference, “to co-ordinate and promote the development of tree improvement techniques, the mass production of improved planting stock, and the incorporation of these techniques and plants into afforestation and reforestation programs in a scientific and economic manner”. FAO subsequently organised a meeting, “The World Consultation on Forest Genetics and Tree Improvement,” which took place in Sweden, in August 1963.⁵⁸³

“The regional timber trend studies published by FAO demonstrate the greatly increased demand for forest products in tropical countries, as a result of rising standards of living and rapid increases in population,” noted the participants at the conference. They concluded that industrial tree plantations were needed to meet this demand: “These trends, coupled with the generally low productivity of natural tropical forest stands, are focusing increased attention on the need to establish plantations of high-yielding species – either to supplement or replace the natural stands.”⁵⁸⁴

The conference recommended that governments in the South develop “planned programs of forest genetics and tree improvement”.⁵⁸⁵ The conference commended the governments of Australia and Mexico “for their help in collections of eucalypts and Mexican pines, and urges FAO to encourage and support the extension of such action to satisfy critical needs.”⁵⁸⁶ The conference recommended that the FAO’s Forestry and Forest Products Division should set up an advisory and information unit “on the introduction of forest trees with actual or potential use as exotics”.⁵⁸⁷

580 “FAO’s net loss in credibility over global forest resources assessment”, World Rainforest Movement Bulletin 100, November 2005. <http://www.wrm.org.uy/bulletin/100/FAO.html>

581 George Marshall (1991) FAO and Tropical Forestry, *The Ecologist*, Vol. 21 No. 2, March/April 1991, page 66.

582 “FAO: The First Forty Years”, Food and Agriculture Organisation, 1985, page 59.

583 J.D. Matthews (1964) “General Introduction – FAO/IUFRO meeting on forest genetics”, *Unasylva*, Vol. 18 (2-3), No. 73-74.

584 “Proceedings of the World Consultation on Forest Genetics and Tree Improvement, FAO, 1964”, *Unasylva*, Vol. 18 (2-3), No. 73-74.

585 “Proceedings of the World Consultation on Forest Genetics and Tree Improvement, FAO, 1964”, *Unasylva*, Vol. 18 (2-3), No. 73-74.

586 “Proceedings of the World Consultation on Forest Genetics and Tree Improvement, FAO, 1964”, *Unasylva*, Vol. 18 (2-3), No. 73-74.

587 “Proceedings of the World Consultation on Forest Genetics and Tree Improvement, FAO, 1964”, *Unasylva*, Vol. 18

In the mid-1970s, FAO intensified its support of the expansion of the industrial tree plantations and the pulp and paper industry in the global South. The theme of a 1975 issue of FAO's forestry magazine *Unasylva* was "It's time to make paper in the tropics." In the magazine, FAO's Ken King argues that "plantations and mixed tropical hardwoods are the pulp sources of the future, and the future is at hand".⁵⁸⁸ FAO's role in the exploitation of these "pulp sources" is equally explicit:

"It is evident that the governments of most of these [tropical] countries would require financial and technical/managerial assistance if their plans are to be implemented. FAO is prepared to assist in the bringing together of governments and potential investors, in the hope that these plants would be established."⁵⁸⁹

Two years later Ken King, then-head of forestry at the FAO, reported that, a large number of Southern governments had approached the FAO to study the feasibility of establishing "some type of pulp and paper factory, of one kind or another".⁵⁹⁰

By the mid-1980s, about four million hectares of eucalyptus plantations had been planted, in more than 80 countries.⁵⁹¹ During the 1980s, rural communities started to protest against industrial tree plantations in the South, particularly in India and Thailand. In 1986, in response to the protests, FAO produced a study, funded by Sweden's aid agency, SIDA, titled "The ecological effects of eucalyptus". The arguments in favour of industrial tree plantations were the same as in the 1960s (and the same as that from plantation proponents today): "There are high and increasing demands for wood for industrial use and fuel needs, especially in developing countries of the tropics with their growing populations."⁵⁹²

The authors of the report, D. Poore and C. Fries, noted that

"A growing body of opinion claims that eucalypts cause a variety of short-to long-term ills, impoverishing the environment in terms of the soils, water availability and wildlife – even where plantations have been planted on waste lands devoid of tree cover. Some countries have even banned the planting of eucalypts."⁵⁹³

However, rather than visiting and talking to some of the local communities who had seen eucalyptus plantations established on their land, the authors attempted to answer questions such as "Do eucalypts use more water or have a greater effect on the water regime than other species of trees?" and "Are eucalypts more efficient in their use of water (producing more wood per unit of water used) than other species?" They concluded that "Perhaps there is no general answer to either of these questions."⁵⁹⁴

(2-3), No. 73-74.

588 Ken King (1975) "It's time to make paper in the tropics", *Unasylva*, 1975, number 109, page 5.

589 Ken King (1975) "It's time to make paper in the tropics", *Unasylva*, 1975, number 109, page 5.

590 Ken King (1977) "The political economy of pulp and paper", *Unasylva*, 1977, number 117, page 2.

591 "Are eucalypts ecologically harmful?", *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

592 "Are eucalypts ecologically harmful?", *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

593 "Are eucalypts ecologically harmful?", *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

594 "Are eucalypts ecologically harmful?", *Unasylva*, Vol. 38 No. 152, 1986.

Nevertheless, Poore and Fries note that “There is evidence from the humid tropics, however, that young, rapidly growing eucalypt plantations consume more water and regulate flow less well than natural forests.” They also found that “Eucalypts are often planted where there have been no trees before. Under these circumstances, the water yield of catchments is reduced and water-tables are drawn down. The effect is greatest when trees are young and growing rapidly.” But rather than asking local people whether they wanted industrial tree plantations on their land, or asking them how they would prefer to use their land, Poore and Fries conclude that “Other tree genera would probably produce comparable effects.”⁵⁹⁵ According to the FAO, it seems, the need to plant fast growing trees is not negotiable.

Poore and Fries use a similar argument regarding the impact on soils. They note the impact of eucalyptus plantations on soils, but conclude that other species are as bad and in any case fertilizer can be used:

“The cropping of eucalypts on short rotation, especially if the whole biomass is taken, leads to rapid depletion of the reserve of nutrients in the soil. This is a direct consequence of their rapid growth; it would apply in much the same way to any other highly productive crop, and is also closely associated with length of rotation. There is some evidence that the removal of nutrients in comparable crops of pine is greater. In each instance, calculations of nutrient cost should be made and fertilizer treatment decided accordingly.”⁵⁹⁶

Interestingly, the report does differentiate between forests and plantations: “forests produce more diversity than plantations of indigenous species, which in turn produce more diversity than plantations of exotics.”⁵⁹⁷ This differentiation has not been taken up by the FAO, which still insists on describing industrial tree plantations as “planted forests”.

Having documented the impacts of eucalyptus plantations, Poore and Fries conclude that,

“there can be no universal answer, either favourable or unfavourable, to the question of planting eucalypts. Nor should there be any universal answer: each case should be examined on its individual merits. It is difficult to see how further general research, however detailed, can alter this conclusion.”⁵⁹⁸

The authors recommend that before eucalyptus plantations are established, “careful and intelligent assessment of the social and economic consequences” should be carried out. “This can probably best be done,” they explain, “by a sympathetic examination of the ecological circumstances and needs of local people, assisted by an understanding of the results of the fundamental research on water, nutrients, etc. referred to in this article.”⁵⁹⁹

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

595 “Are eucalypts ecologically harmful?”, *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

596 “Are eucalypts ecologically harmful?”, *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

597 “Are eucalypts ecologically harmful?”, *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

598 “Are eucalypts ecologically harmful?”, *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

599 “Are eucalypts ecologically harmful?”, *Unasylva*, Vol. 38 No. 152, 1986.

<http://www.fao.org/docrep/r7750E/r7750e03.htm#are%20eucalypts%20ecologically%20harmful>

While this sounds good, FAO's underlying bias in favour of industrial tree plantations precludes any such "sympathetic examination". FAO's support for plantations has developed and adapted over the years, but the bias in favour of plantations (and against local people) remains. The latest manifestation of FAO's support for plantations is its voluntary guidelines for "Responsible management of planted forests [sic]".⁶⁰⁰

FAO started to work on a code on planted forests in 2004. This resulted in a series of voluntary guidelines, produced in 2006. The bias inherent in the process is revealed from the start. On the front cover of the guidelines is an aerial view of Veracel's plantations in Brazil. The regimented rows of eucalyptus are contrasted by patches of native forest, where the trees are about half as high as the eucalyptus trees. Observers ignorant of the reality of Veracel's plantations might conclude that it all looks green, well managed and productive. There is little hint of the impact on the people living there – or even that any people might have once lived here.

The guidelines acknowledge that industrial tree plantations have created problems:

"In the past, planted forests have not always lived up to their potential. Lack of knowledge, capacity and capability in providing enabling policies, laws, regulations, plans and technical support systems has rendered support for responsible planted forest management difficult. As a result, some planted forest investments have created land-use, social and environmental conflicts, as well as suboptimal performance in the areas of health, vitality, productivity and return on investment."⁶⁰¹

The words "in the past" are disingenuous, implying that companies may have made mistakes in the past, but do not do so today.

FAO maintains that industrial tree plantations are a type of "planted forest", which according to FAO refers to "Forest/other wooded land in which trees have been established through planting or seeding. Includes all stands established through planting or seeding of both native and introduced species." FAO also uses another term, "plantation forest", which is "a subset of planted forest".⁶⁰² The attempt to produce guidelines covering everything from trees planted in forests as part of a management system to industrial pulpwood plantations to plantations established to prevent desertification is inevitably doomed to failure. The motivations and actors driving the tree-planting, as well as the impacts on local people are completely different.

To develop its "code for planted forests", FAO set up a process of "multistakeholder consultations". The aim of the process was ultimately to promote industrial tree plantations: "The intent has been to propose practical voluntary guidelines that, in particular, may promote planted forest investment and management across a wide range of situations – including to owners of small forest areas."⁶⁰³ The problems of FAO's

600 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

601 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page iii. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

602 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 6. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

603 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 4. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

failure to define industrial tree plantations are clearly revealed. FAO can pretend that it is aiming to help “owners of small forest areas”, when in fact it is helping the owners of industrial tree plantations: large multinational corporations.

FAO explains that its guidelines are to be voluntary. FAO set up no system for determining whether a particular project complies with the guidelines and even explains that the guidelines are to be interpreted differently, depending on the level of industrialisation within the country involved:

“The understanding and application of the principles and recommendations will be determined by the prevailing governance, economic, cultural, social, environmental or other contexts. The extent to which country economies are industrialized, in transition or developing will determine the application of each principle.”⁶⁰⁴

This is an extraordinary statement. It implies that different standards would apply in, say, Laos, Brazil and Germany, because of the different level of industrialisation in each country. FAO gives no explanation for this, nor does it explain exactly how the level of industrialisation is supposed to determine how each principle is to be applied.

The guidelines consist of 12 Principles, divided into five sections: Institutional; Economic; Social and Cultural; Environmental; and Landscape approach. A series of guidelines follows each Principle. But the guidelines provide no advice about whether all the Principles and guidelines should be met, or just some of them, some of the time. FAO provides no advice on interpreting the guidelines or who should do the interpreting.

The assumption behind the guidelines is that plantations should go ahead. Principle 1, on “Good governance”, states that governments “should facilitate an environment of stable economic, legal and institutional conditions to encourage long-term investment, sustainable land-use practices and socio-economic stability.” Principle 5, on “Enabling environment for investment”, states that “Governments should create the enabling conditions to encourage corporate, medium- and small-scale investors to make long-term investments in planted forests and to yield a favourable return on investment.”

Some of the guidelines are progressive. Principle 2, on “Integrated decision-making and multistakeholder approaches”, recognises the principle of free prior and informed consent: “respecting international law to ensure that local communities and indigenous peoples retain control over their lands, unless they delegate control with free, prior and informed consent.” Principle 8, on “Maintenance of social and cultural services”, states that governments should prevent “displacement or resettlement of communities without free, prior and informed consent”.

Other guidelines are written in a bureaucratic style that is difficult to understand. For example, Principle 2 states that the guidelines should include “[I]ntegrating policies, planning and management decision-making related to planted forests into intersectoral and multidisciplinary approaches in order to reflect their role in the wider landscape, both spatially and temporally”. It is difficult to know what this means, or what impact of plantations it is attempting to address. Determining whether or not it has been implemented in practice would be pretty much impossible.

⁶⁰⁴ FAO (2006) “Responsible management of planted forests: voluntary guidelines”, Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 9. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

Other parts of the guidelines are meaningless: “selecting indigenous species for the establishment of planted forests if they are equal to or better than introduced species for the purpose intended.” Decades of research into fast-growing eucalyptus species for pulp production ensures that this guideline can easily be met. There is a large global market in eucalyptus pulp. To plant industrial tree plantations with indigenous species for the pulp industry would require decades of research, the development of a new market and millions of dollars of investment. No company is likely to undertake this research.

Other parts of the guidelines clearly reveal FAO’s bias in favour of industrial tree plantations. Principle 4 states that guidelines should include “deriving methods to better reflect the full value of planted forests in justifying investments by governments and private-sector investors (both corporate and small-holder)”. FAO seems to be suggesting developing new ways of justifying plantations. This is not a guideline for implementing plantations, it is an invitation for plantation proponents to produce propaganda in favour of plantations.

In another example, the guidelines recognise “the role that planted forests can play in relieving harvesting pressures on naturally regenerating forests and in providing habitats for indigenous flora and fauna.” Both of these arguments are used frequently by the pulp and paper industry. The reality however is that industrial tree plantations often increase the pressure on forests and on other ecosystems such as grasslands.⁶⁰⁵ Industrial tree plantations have no impact whatsoever on reducing the underlying causes of deforestation such as the expansion of cash crops like soya, sugar or oil palm. Neither do industrial tree plantations have any impact on reducing road construction through native forests or the construction of massive hydropower dams which flood forests and result in the eviction of people from their land and homes.

While indigenous flora may sometimes be found within industrial tree plantations, it is more common (particularly in South Africa) that plantations provide habitat for alien invasive weed species. In any case, plantation managers do not encourage the growth of any species other than the trees which provide raw material to industry. Indigenous fauna can also be found in industrial tree plantations, but fewer species than in native ecosystems.

In yet another example of bias in favour of industry, the guidelines state that:

“Where stakeholders are communities, they may not always be in a position to communicate confidently with government or the corporate private sector due to their limited capacity and capability. In these instances, reputable non-governmental, community-based or other organizations are encouraged to work with them to strengthen their capacity and capability.”⁶⁰⁶

Nowhere do the guidelines mention the limited capacity and capability of governments and corporations to listen to what communities are saying. No mention is made of strengthening corporations’ capacity and capability in this regard. Instead, FAO recommends that NGOs should work with communities to teach them how to communicate.

605 See Ricardo Carrere (1999) “Ten Replies to Ten Lies”, World Rainforest Movement, August 1999.

<http://www.wrm.org.uy/plantations/material/lies.html>

606 FAO (2006) “Responsible management of planted forests: voluntary guidelines”, Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 25. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

FAO's guidelines recommend that governments should subsidise plantations, by "providing direct or indirect incentives to encourage long-term investment in planted forests that may be justified where society as a whole will benefit".⁶⁰⁷ FAO provides no guidance on how to determine the interests of "society as a whole" or who should determine what those interests are. This is important. A group of farmers in rural areas will have a very different view of whether planting thousands of hectares of industrial tree plantations benefits society as a whole to that of a Northern-based consultant keen to win new contracts for their company by ensuring the expansion of the pulp and paper industry.

Having stated that governments should subsidise the establishment of plantations, FAO's guidelines contradict themselves. Principle 6 of the guidelines is titled "Recognition of the role of the market". This Principle states that: "Establishment and management of planted forests should be market- rather than production-driven, unless established for environmental, protective or civic reasons."⁶⁰⁸ Clearly, any commercial company will justify their proposed (or existing) plantations on the basis that they are "market-driven". But if plantations were really "market-driven", why would there be a need for governments to provide subsidies?

Principle 7, "Recognition of social and cultural values", asks governments to recognise "the local community values, customary rights, traditional knowledge, religious values and tenure of indigenous peoples and ethnic minorities in areas targeted for planted forest investments." But FAO provides no advice on how governments are supposed to balance the conflicting demands of "market-driven" expansion of industrial tree plantations and local communities' rights to decide their own future.

FAO's guidelines are in favour of establishing carbon markets to provide another subsidy for the establishment of industrial tree plantations. FAO encourages governments to recognise "the emerging carbon trade markets and the increased understanding of the role of afforestation and reforestation in providing carbon sinks to mitigate climate change, whether planted forests are for productive or protective functions." The guidelines do not discuss the problems associated with all such carbon trade schemes, such as the impossibility of determining what would have happened if the plantation project did not go ahead. Or the complexity of calculating how much carbon is stored in soils and above ground biomass. Or the fact that if carbon is traded it allows the companies buying the carbon credits to continue polluting – thus avoiding addressing climate change. Or the fact that short rotation industrial tree plantations only store the carbon for a short period. If the wood from the plantations is converted to paper, this often has a short life and most of it ends up in landfills where it rots and produces methane (a gas which is more than 20 times as potent a greenhouse gas as carbon dioxide). Or the fact that plantations might be cut down by local communities who want their land back. Or that the plantations may be attacked by disease or fire. In each of these cases, any carbon that is stored in the plantation is released to the atmosphere.⁶⁰⁹

Principle 9, on "Maintenance and conservation of environmental services", confirms that "Planted forest

607 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 13. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

608 FAO (2006) "Responsible management of planted forests: voluntary guidelines", Planted Forests and Trees Working Paper 37/E, UN Food and Agriculture Organisation, page 13. <http://www.fao.org/docrep/009/j9256e/J9256E00.htm>

609 See Larry Lohmann (editor) (2006) "Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power", Dag Hammarskjöld Foundation, Durban Group for Climate Justice and The Corner House, October 2006. <http://www.thecornerhouse.org.uk/summary.shtml?x=544225>

management will impact the provision of ecosystem services.” FAO’s solution is to “minimize negative impacts and promote positive ones”. Governments should “consider voluntary certification programmes an acceptable mechanism for addressing environmental issues”. In the introduction to the guidelines, FAO explains that

“Forest certification schemes may build upon or complement the guidelines by establishing procedures for and monitoring of technical standards and best practices in planted forest management. It is acknowledged that where planted forests are certified by recognized, credible certification schemes, the intent of these guidelines is likely to have been satisfied.”

FAO’s guidelines are intended to “complement the various forest certification schemes in existence without detracting from these schemes.” But FAO makes no attempt to differentiate between the various certification schemes. There is no discussion in the guidelines of the fact that a plantation operation can easily achieve certification under one certification scheme, whereas certification under another may be more difficult. Neither does FAO address the controversy surrounding Forest Stewardship Council (FSC) certification of industrial tree plantations (*see* section on FSC, below), despite that fact that FSC itself acknowledges the problems and is currently carrying out a review of FSC certification of plantations. FAO fails to discuss the fact that no certification scheme explicitly recognises free, prior and informed consent. In order to comply with FAO’s guidelines, a plantation operation simply needs to obtain certification (under any certification scheme) and can then claim to have met the guidelines. This loophole could mean that a company could claim to comply with the FAO’s guidelines even in a situation where local communities and Indigenous People are openly demonstrating against the plantations.

The guidelines allow the use of genetically modified organisms, by recommending “adopting science-based and regulatory policies, risk-management protocols, practices and monitoring in the use of biotechnology (including genetically modified organisms) in reproductive materials”. Genetic engineering “is not intrinsically good or bad” according to the FAO’s guidelines. “Each application of this technology to planted forests should be assessed on a case by case basis, under stringent national regulatory conditions, in order to recognize the various risks, depending on the biology of the trees, the type of genetic modification and how it is deployed in the field.” This is precisely the approach favoured by proponents of GM trees. Far from providing guidelines to address the risks of GM trees, FAO’s guidelines allow companies to decide whether their GM trees present a risk or not.

FAO states that “The potential of planted forests to contribute to rural development, including poverty alleviation, is well recognized and is particularly important during times of economic depression.” FAO fails to provide any information about how plantations contribute to poverty alleviation.

I wrote to Linda Rosengren at FAO’s Forestry Department to provide a source for this statement. I pointed out that in fact plantations provide few jobs and the majority of the jobs provided are poorly paid, based on contract labour and are extremely dangerous. I quoted from a 2004 study carried out by the International Institute for Environment and Development (IIED) in South Africa, which concluded that “jobs provided by forestry contracting are not able to lift the vast majority of forestry workers, mainly women, out of chronic poverty, or prevent them from falling further into poverty”.⁶¹⁰

610 Jeanette Clarke and Moenieba Isaacs (2004) “What role for forestry in reducing poverty in South Africa? Case studies of contractors in the forestry sector”, International Institute for Environment and Development, May 2004. Available here: http://www.wrm.org.uy/countries/SouthAfrica/Final_Report.pdf

Rosengren did not reply to my email.⁶¹¹

Other questions that Rosengren and her colleagues at the FAO, Peter Holmgren (Chief of FAO's Forest Resources Development Service) and Jim Carle (FAO Senior Forestry Officer), declined to answer include the following:

- Why does FAO insist on referring to “plantation forests” or “planted forests” rather than clearly differentiating between forests and industrial tree plantations?
- In a presentation to The Forest Dialogue in April 2008, Rosengren stated that the guidelines are intended to “enhance sustainable livelihoods and land use”. How does FAO anticipate that the voluntary guidelines might achieve this, particularly as in several important aspects the guidelines are even weaker than the principles and criteria of the Forest Stewardship Council?
- Which institutions took part in the “multi-stakeholder process” to prepare FAO's guidelines? How was agreement reached during this process and are comments on the draft guidelines available to the public?
- Since the guidelines have been produced, FAO has started a process to implement the guidelines in China, Thailand, Laos and Vietnam. What does FAO intend to do when it finds that a company's plantations do not comply with the guidelines in these countries (or anywhere else)? What process does FAO anticipate will take place to determine whether plantations comply with the guidelines? Will FAO (or a third party) carry out assessments of the plantation operations? What mechanisms does FAO envisage setting up to encourage companies to comply with the guidelines, and what does FAO intend to do when a company decides to completely ignore the guidelines?
- Has FAO produced any information on how plantation companies are allowed to use the guidelines when selling products from their plantations? Could they, for example, advertise paper as coming from “plantations in compliance with the FAO's voluntary guidelines on planted forests”? Is there anything to prevent companies who are negotiating a plantation contract from claiming that they will comply with the guidelines (even though at that stage no trees have been planted, and it is impossible to verify whether or not the company will comply)?
- Given that the guidelines were formulated during the time that the FSC was undertaking a review of the certification of plantations, and that the FAO's guidelines are even weaker than those of FSC, how does FAO respond to the accusation that the guidelines in effect undermine FSC's standards?

By declining to answer these questions, FAO shows itself to be more interested in helping to greenwash the plantations industry than in encouraging a meaningful discussion about the impacts of industrial tree plantations and how the corporations responsible for these impacts might be regulated.

The guidelines make no attempt to help governments regulate the impacts of industrial tree plantations on rural communities and their environments. The guidelines state that “No attempt is made to describe detailed technical guidelines or implementation standards for planning, management and utilization.” This, apparently, was a decision taken by the FAO's “stakeholders”. “[I]t was decided by the stakeholders that the core should be the principles and guidelines, with less emphasis on the technical guidelines for implementation practices.”

FAO's work on promoting industrial tree plantations continues. FAO has produced a Working Paper

⁶¹¹ I wrote to Linda Rosengren (with copies to FAO's Peter Holmgren and Jim Carle) on 9 June 2008 and again on 3 September 2008. I asked for a response by the end of September 2008.

which describes “a methodology for capacity building to translate the Voluntary Guidelines for Responsible Management of Planted Forests into action proposals.”⁶¹² The Working Paper provides no guidance on how FAO will determine whether a company is in breach of its voluntary guidelines. Instead it describes a series of “multi-stakeholder processes”, five-day regional workshops and action plans. A meeting took place in Chiang Mai, Thailand in January 2008, with representatives from China, Laos, Thailand and Vietnam. While there were several representatives from plantation companies, governments and the FAO, there was only one NGO representative: Boris Saraber, from WWF’s Greater Mekong programme.

The code is “voluntary and non-binding”. In other words, should a company choose to ignore the code, there is nothing that can be done. What is perhaps worse, is that there is apparently no mechanism in place to prevent a company claiming to be operating in accordance with the code, no matter how severe the impacts of its operations on local people and their environment.

FAO urgently needs to review its support to industrial tree plantations and to the pulp and paper industry. It could start by defining industrial tree plantations as something completely different to forests and recognising that voluntary guidelines are simply a way that plantation company’s can claim to be environmentally and socially benign regardless of the realities on the ground. The guidelines are nothing more than a mechanism for companies to avoid meaningful regulation.

⁶¹² L.M. Rosengren and A.P. Vuorinen (2007) “Responsible management of planted forests: Voluntary Guidelines Preparation for action - the methodology” FAO, Working Paper FP/39/E, July 2007.

Forest Stewardship Council: Misleading consumers about paper products

Established in 1993 by NGOs and the timber industry, the Forest Stewardship Council is supposed to guarantee that products carrying its logo come from forestry operations that are “well managed”. FSC does not carry out the assessments itself, but has accredited a series of certifying bodies to carry out assessments to determine whether the forestry operations comply to FSC’s Principles and Criteria.

While it sounds like a good idea, FSC is riddled with problems. The certifying bodies interpret FSC’s standards loosely, leading to the certification of operations that are blatantly in breach of FSC’s Principles and Criteria. FSC certification is not only based on the Principles and Criteria, but on a bewildering array of policies, standards, advice notes, procedures and guidelines. These cover subjects such as accreditation, chain of custody, controlled wood, use of the FSC trademark, genetically modified organisms and high conservation value forests.⁶¹³ Currently FSC is carrying out several policy reviews, on plantations, principles and criteria, standard development, pesticides, governance and chain of custody.⁶¹⁴ The most common response to criticisms of FSC is that a review is currently under way, with a promise that the critique will be taken into account. Whether these promises are actually met is open to debate. In some cases, the review makes the situation worse, rather than better.⁶¹⁵

FSC is supposed to reassure consumers that products carrying the FSC logo come from well managed sources. But FSC’s labels include one called “mixed sources”. A product carrying the “mixed sources” label can contain as little as 10 per cent FSC certified material, the rest coming from “controlled sources”. But the “control” of the controlled sources is carried out by the companies themselves, thus introducing a large element of self-regulation by the industry that FSC is supposed to be regulating.

“To ensure its independence it does not accept funding from industry,” stated FSC’s website in October 2003.⁶¹⁶ FSC has since cast off any such reservations⁶¹⁷ and is getting increasingly cosy with the timber industry, in particular the pulp and paper industry. Each year, FSC holds a “Global Paper Forum” which brings industry representatives, NGOs and FSC staff together to find “Market opportunities for FSC-labelled paper”. This year the Forum was sponsored by Mondi and Suzano.⁶¹⁸ Sponsors of FSC’s 2008 General Assembly include pulp and paper companies Mondi, Tembec and Sveaskog.⁶¹⁹

One of the most serious problems with the Forest Stewardship Council is the fact that it promotes consumption. Paper produced from eucalyptus monocultures is marketed with the FSC’s logo. Consumers are tricked into believing that this is “environmentally friendly” paper. As Simon Counsell, the UK

613 FSC’s documents are available on the FSC website:

[http://www.fsc.org/36.html?&no_cache=1&tx_damdownloads_pi1\[cat\]=35](http://www.fsc.org/36.html?&no_cache=1&tx_damdownloads_pi1[cat]=35)

614 FSC lists its on-going policy review and development processes on its website: <http://www.fsc.org/current-consultations.html>

615 In November 2006, Simon Counsell, Hermann Edelmann and I set up FSC-Watch, a website aimed at documenting some of the controversies raised by FSC certification. See <http://www.fsc-watch.org>

616 “Who are we?” FSC website accessed 27 October 2003 . http://www.fscoax.org/html/who_are_we.html

617 Actually a motion passed eleven months previously, at the 2002 General Assembly allows FSC to accept money from private and public companies “as long as no restrictions are attached which would affect the independence or integrity of FSC”.

“Final Motions and Results from the FSC General Assembly 2002”, FSC, 2002. http://www.fsc.org/fileadmin/web-data/public/document_center/general_assembly_documents/FSC_General_Assembly_2002_Final_Motions.pdf

618 See <http://www.writingthefuture.org>

619 “Support the FSC General Assembly 2008”, Forest Stewardship Council. <http://www.fsc.org/gasupport.html>

Director of the Rainforest Foundation, pointed out in an interview with *Ethical Consumer* magazine,

“The vast majority of what we import into this country [UK] is from North America and Scandinavia and it’s not timber it’s pulp and paper. This shows that most importantly we need to reduce consumption. We need much, much more recycling and reuse. One problem is that the increasing amount of FSC certified paper and toilet tissue is undermining efforts to sell more recycled paper, because people see it and think it’s a green product so it’s OK. Actually it’s not, and it may be from oldgrowth logging in Ontario or Northern Russia, and it’s damaging recycling markets.”⁶²⁰

This criticism is not new. In September 1993, before FSC’s founding assembly, German NGO Rettet den Regenwald produced a report criticising the proposal to establish FSC. “At best the FSC initiative is naive,” wrote Rettet den Regenwald, “at worst it provides a framework for the timber industry to achieve a much desired ‘green veneer’ and defuse pressure to attack the real issues of illegal trade, indigenous people’s rights and over-consumption.”⁶²¹

FSC’s certifying bodies exercise a large degree of control over the way the organisation functions. One of FSC’s certifying bodies, SGS, is also sponsoring the General Assembly. SGS will be sponsoring the General Assembly while under a self-imposed “moratorium” on new FSC assessments. On 29 May 2008, after a series of controversial certificates, SGS imposed the “moratorium”, which FSC misleadingly announced on its website as a moratorium on issuing new certificates. In fact, SGS continued to issue certificates, issuing 15 in the three months after announcing the “moratorium”.⁶²² FSC declined to answer my questions about the “moratorium”.⁶²³

Equally disturbing is the relationship between the certifying bodies and the companies being assessed. Companies hire the certifying bodies directly. As such, the certifying bodies compete against each other for business. Clearly, any commercial timber company is far less likely to hire a certifying body that interprets FSC’s Principles and Criteria strictly and gets a reputation for being “difficult” than a certifying

620 “Forest Stewardship Council – Seeing the Wood for the Trees”, *Ethical Consumer*, Issue 100, January/February 2008. http://www.fsc-watch.org/archives/2008/02/01/FSC_acknowledges_sys

621 “The Forest Stewardship Council Aims Principles and Criteria: A Critical Examination Predicting its Failure”, Rettet den Regenwald, 30 September 1993, cited in Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 22. http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

Of course, parts of the timber industry were also opposed to the establishment of FSC. In 1992, Terence Mallinson, director of the UK timber industry Forests Forever campaign, wrote twice to the Oxford Forestry Institute stating that FSC “could rebound on us all” and “We do not approve of the FSC and its charter, since it is clearly in breach of sovereignty and defies any current or proposed forest management programmes”. Cited in Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 37. http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

622 According to a search for SGS-issued certificates on <http://www.fsc-info.org>. When I asked about this, SGS’s Gerrit Marais told me that “The moratorium came into place on 29th May 2008, however at this point, SGS obviously had already signed contracts for certification services which have to be concluded and it stands to reason that certificates would still be issued post this date.” (Email from Gerrit Marais to Chris Lang “FW: Information Request – FSC-Watch”, 3 September 2008.)

623 I wrote to Patricia Dudeck in FSC’s Communications Department on 3 September 2008. FSC’s announcement of the moratorium stated “For further information, please contact the FSC Communications Program at p.dudeck@fsc.org.” The contact address has since been changed to communications@fsc.org. “SGS moratorium on new FSC forest management certificates”, FSC website, 4 July 2008. [http://www.fsc.org/news.html?&tx_ttnews\[backPid\]=86&tx_ttnews\[cat\]=1&tx_ttnews\[tt_news\]=31&cHash=467d8d9723](http://www.fsc.org/news.html?&tx_ttnews[backPid]=86&tx_ttnews[cat]=1&tx_ttnews[tt_news]=31&cHash=467d8d9723)

body that rubber stamps operations as well managed after a cursory inspection.

“One of the things I’ve been saying for five years,” Simon Counsell explains, “is that you’ve got to remove the major conflict of interest at the core of the organisation, which is that the certifying companies contract directly with the companies that they’re supposed to be independently monitoring.” Counsell recommends a system where companies would contact the FSC and certifiers would then apply for the contract. “They would have to demonstrate that they’ve got the expertise, that they’d spend enough time in the field to carry out proper assessments and would comply rigorously with the FSC’s requirements. It would become in their interests to keep the FSC happy rather than to keep the logging companies happy.”⁶²⁴

Rather than addressing the structural problem, FSC created a body called Accreditation Services International (ASI) to monitor its certifying bodies. ASI carries out audits of the certifying bodies and publishes the reports on its website.⁶²⁵ These reports often reveal serious problems, but ASI is slow to take meaningful action against its certifying bodies. In Uganda, for example, ASI found that SGS had issued a certificate to the Ugandan Wildlife Authority (UWA) for Mount Elgon National Park based on hoped for future improvements, rather than what was actually happening in the national park. In February 2008, UWA evicted more than 4,000 people, including Indigenous Peoples, from the national park. Other ASI audits of SGS found similar problems, in Russia, Poland, Guyana and Spain.⁶²⁶

Timothy Synnott, FSC’s executive director from 1994 to 2002 notes that

“The work of the FSC has been described as an example of ‘Consumer Democracy’ by Monbiot (2003, p. 59), ‘enabling the consumer to make an informed choice’. When the ‘informed choice’ to buy certified forest products is made by large number of governments, organizations and companies, the impact can be very great.”⁶²⁷

This is, unfortunately, typical of the cherry picking that FSC proponents use to promote FSC certification. In his 2003 book “The Age of Consent”, George Monbiot discusses the limits of what he calls “consumer democracy”. He notes that “mindful consumption is a weak and diffuse means of changing the world, and it has been greatly overemphasized by those . . . who wish to avoid the necessary political conflicts.”⁶²⁸

FSC and plantations

In his notes about the first years of FSC, Timothy Synnott explains that one of the reasons he became

624 “Forest Stewardship Council – Seeing the Wood for the Trees”, *Ethical Consumer*, Issue 100, January/February 2008. http://www.fsc-watch.org/archives/2008/02/01/FSC_acknowledges_sys

625 Accreditation Services International <http://www.accreditation-services.com/>

626 “Accreditation Services International: A watchdog with neither bark nor bite”, FSC-Watch. http://www.fsc-watch.org/archives/2008/02/12/Accreditation_Service

Chris Lang (2008) “Uganda: Thousands of Indigenous People evicted from FSC-certified Mount Elgon National Park”, World Rainforest Movement Bulletin 131, June 2008. <http://chrislang.org/2008/06/27/uganda-thousands-of-indigenous-people-evicted-from-fsc-certified-mount-elgon-national-park/>

627 Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 50. http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

628 George Monbiot (2003) “The Age of Consent: A manifesto for a new world order”, Flamingo, page 56.

involved with FSC was that he “had grown disillusioned . . . about plantations, where the trend towards monocultures and chemical-dependence continued unabated”.⁶²⁹ Synnott writes that “FSC and certification seemed to be what was needed for a major shake-up.”

Synnott notes the “rapid spread of industrial tree plantations, often at the expense of natural forests and other natural habitats.”⁶³⁰ He notes that people living near plantations “objected to the march of alien-looking plantations, but they were easily brushed aside as being against the march of progress and the national interest.”⁶³¹

Today, FSC has certified a large area of monoculture, chemical-dependent industrial tree plantations. The exact area is impossible to determine, however, because FSC does not provide information about the area of industrial tree plantations that it has certified. It classifies its certified areas as “Natural” (55.25%), “Semi-Natural and Mixed Plantation and Natural Forest” (36.41%) and Plantations (8.33%).⁶³²

At FSC’s Founding Assembly, in October 1993, FSC had two sets of Principles and Criteria. One set applied to forests and one to plantations.⁶³³ Both sets had nine principles. The plantations set was dropped, and reintroduced as Principle 10 in 1996.

FSC’s Principle 10 states that “Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria.” In other words, the plantation itself must be managed to comply to all of FSC’s Principles and Criteria. There is nothing in the Principles and Criteria which would allow certifying bodies to issue certificates to companies that attempt to “offset” an area of monoculture plantations with an area of protected forest.⁶³⁴

Several of FSC’s Principles and Criteria should rule out the certification of industrial tree plantations.⁶³⁵

629 Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 3.

http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

630 Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 4.

http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

631 Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 5.

http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

632 FSC (2008) “Global FSC certificates: type and distribution”, FSC Presentation, 17 April 2008.

http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/08-04-01_Global_FSC_certificates_-_type_and_distribution_-_FINAL.pdf

633 Timothy Synnott (2005) “Some notes on the early years of FSC”, 19 November 2005, page 19.

http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

634 This point was raised with FSC in 2002, by IMO, one of FSC’s certifying bodies. Six years later it remains true, although this may be about to change, as a result of FSC’s Plantations Review, which started in 2004.

Wolfram Kotzurek, Karl Büchel and Thomas Papp-Váry (2002) “Requirements for certified plantations. Interpretation of FSC – P&C”, Institut für Marktölogy forestry division.

635 This critique is based in part on the following:

“Comments on the FSC’s Principle on Plantations”, World Rainforest Movement Bulletin, Special Issue on FSC certification of plantations, February 2001. <http://www.wrm.org.uy/bulletin/FSC.html#10>

“Certifying the Uncertifiable: FSC Certification of Tree Plantations in Thailand and Brazil”, World Rainforest Movement, August 2003. <http://www.wrm.org.uy/actors/FSC/uncertifiable.html>

Criterion 1.6, for example, states that “Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.” In practice, companies can get away with a public statement stating that they adhere to FSC’s Principles and Criteria, regardless of the reality. Pulp and paper companies that produce raw material in large scale monocultures cannot demonstrate commitment to all of FSC Principles and Criteria.

Principle 2 relates to “Tenure and use rights and responsibilities” and states that “Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.” One of the problems with the certification of industrial tree plantations is that disputes over tenure and use rights take place when the plantations are established. By the time the plantation is assessed for certification, the people who lost their land and livelihoods have often long since moved away from the plantation area. To uncover their stories would involve in-depth research in the slum areas of nearby towns – research which is beyond the capacity of certifying bodies.

Criterion 5.4 states that “Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.” Monoculture tree plantations which produce only raw material for the pulp and paper industry clearly do not strengthen or diversify the local economy. In fact, they do the reverse. They make the local economy heavily dependent on a single company which is in turn dependent on one single product: wood as raw material for pulp production.⁶³⁶

It is difficult to imagine how any industrial tree plantation could comply with Principle 6. It states: “Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.” Industrial tree plantations destroy biodiversity, impact water resources and soils, and are monocultures which replace native ecosystems. Plantation management is an artificial system which has little or nothing to do with the ecological functions and integrity of the forest.

Criterion 6.3 alone should exclude the certification of all monoculture tree plantations: “Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession; b) Genetic, species, and ecosystem diversity; c) Natural cycles that affect the productivity of the forest ecosystem.” Industrial tree plantations replace ecological functions with a monoculture, which is harvested in clearcuts and replanted. No forest regeneration or succession takes place in an industrial tree plantation. Diversity is deliberately limited. Natural cycles have little or nothing to do with the productivity of industrial tree plantations.⁶³⁷

Criterion 6.6 deals with the use of chemicals: “Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides.” Industrial tree plantations are at severe risk from pest and disease. While management may “strive to avoid” (whatever that means in the context of tens of thousands of hectares of monoculture) using chemical pesticides, the reality is that plantation managers are dependent on

636 This point was raised with FSC in 2002, by IMO, one of FSC’s certifying bodies. Six years later it remains true. Wolfram Kotzurek, Karl Büchel and Thomas Papp-Váry (2002) “Requirements for certified plantations. Interpretation of FSC – P&C”, Institut für Marktölogy forestry division.

637 This point was raised with FSC in 2002, by IMO, one of FSC’s certifying bodies. Six years later it remains true. Wolfram Kotzurek, Karl Büchel and Thomas Papp-Váry (2002) “Requirements for certified plantations. Interpretation of FSC – P&C”, Institut für Marktölogy forestry division.

pesticides, fungicides and herbicides to prevent and control outbreaks of pests and diseases. Plantation managers often also rely on chemical fertilizer to achieve faster growth rates.

FSC's position on genetically modified trees is confusing. Criterion 6.8 is clear: "Use of genetically modified organisms shall be prohibited." But as with many of FSC's standards, the problem is in the implementation of the Criterion. Can an FSC certified company carry out laboratory research into GE trees? Can it carry out field trials in areas that are not certified? Can it finance research into GE trees by universities or other research institutions? In October 2007, the US-based Stop GE Trees campaign wrote to Heiko Liedeker, FSC's then-director, with copies to all Board members, requesting clarification on these questions. FSC declined to reply.⁶³⁸

Criterion 6.9 is almost completely meaningless in the context of large-scale industrial tree plantations planted with exotic species: "The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts." In order to certify industrial tree plantations, FSC is saying that a plantation company that plants millions of exotic trees (which may become weedy and spread into natural ecosystems, as is the case with eucalyptus, pine and acacia plantations in South Africa, for example) is actually "carefully controlling" the use of exotic species. Clearly, this is nonsense. Any company "actively monitoring" its plantations would immediately realise that its monocultures have created adverse ecological impacts.

Principle 10 is a strange mixture of statements. On the one hand, parts of Principle 10 sound similar to the propaganda produced by plantation proponents. On the other hand, Principle 10 includes several criteria which are apparently aimed at excluding industrial tree plantations from FSC certification (although the wording used is so weak that it is wide open to interpretation by the certifying bodies).

Principle 10 includes the following statement:

"While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests."

This is not a principle against which plantation management can be judged, it is the sort of wishful thinking produced by the pulp and paper industry. The language does not lend itself to precise interpretation. Instead of saying that plantations *shall* provide social and economic benefits and reduce pressure on forests, it says that they *can* and *should* do so respectively. An industrial tree plantation established to provide raw material for a pulp mill, explicitly does not provide social and environmental benefits. Proving that a particular plantation reduces pressure on forests would be difficult, if not impossible. It would involve taking into account the activities of all the people who have moved away from the area of the plantations because of the impact on their livelihoods. In many cases, they have little choice other than to clear areas of forest elsewhere to grow food. Neither do plantations "promote the restoration and conservation of natural forests", on the contrary, plantations often replace natural forest. In its 2003 report on "Fastwood" plantations, CIFOR notes that "there is little evidence to suggest that

638 "Stop GE Trees Campaign seeks clarification of FSC's position on GM trees", FSC-Watch, 12 October 2008. http://www.fsc-watch.org/archives/2007/10/12/Stop_GE_Trees_Campaign_seeks_clarification_of_FSC_s_position_on_GM_trees

fast wood plantations have taken pressure off natural forests”.⁶³⁹

FSC displays a bias in favour of companies and against local people in Principle 10, with the mention of “the world’s needs for forest products”. As the pulp industry relocates to the global South, local people are increasingly being forced off their land to make way for industrial tree plantations that provide raw material to meet “the world’s needs”. But the pulp is often exported from the country in which it is produced. Paper consumption in the North is way higher than in the South. FSC’s Principle 10 assumes that consumers in the North need paper more than local people in the South need land.

Criterion 10.1 appears to commit plantation managers to restoration of native forest: “The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.” As WRM pointed out in its critique of Principle 10, written in 2001, “management objectives of industrial plantations are always explicitly stated: the production of large quantities of timber in the shortest time possible”.⁶⁴⁰ This has nothing to do with restoring forest.

Criterion 10.3 states that “Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.” This should exclude the certification of monoculture tree plantations. But what do the words “is preferred” mean in this context? Could this criterion be met, as WRM suggests in its critique of Principle 10, simply by planting two species of eucalyptus over a huge area and planting two areas a couple of years apart? Apparently so, judging from some of the certificates of industrial tree plantations that FSC’s certifying bodies have issued.

Criterion 10.4 contradicts itself. It starts by stating that “The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives.” A pulp company, in, say, Brazil, will have no problem complying with this. There is a large market for eucalyptus pulp. Scientists have carried out decades of research into fast-growing eucalyptus species and matching these species to soil types and climate types. Planting eucalyptus is entirely appropriate to the company’s management objectives: to produce pulp. No problem there, then.

But the next sentence puts the pulp company in difficulty, at least if it wants to comply with FSC’s standards: “In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems.” It seems that in order to qualify for FSC certification, the pulp company will have to relocate to Australia, at least if it wants to plant eucalyptus. Fortunately, for Australia, there’s a loophole large enough to accommodate a US\$1.5 billion pulp project anywhere in the world. Once again, Principle 10 uses the word “preferred”. The Criterion states only that “native species *are preferred* over exotic species”, not that exotic species shall not be used. So the pulp company can remain in Brazil, establish vast areas of exotic eucalyptus monocultures, and get FSC certification after all.

639 Christian Cossalter and Charlie Pye-Smith (2003) “Fast-Wood Forestry. Myths and Realities”, Center for International Forestry Research (CIFOR), Bogor, Indonesia, page 44. <http://assets.panda.org/downloads/fastwood.pdf>

640 “Comments on the FSC’s Principle on Plantations”, World Rainforest Movement Bulletin, Special Issue on FSC certification of plantations, February 2001. <http://www.wrm.org.uy/bulletin/FSC.html#10>

The final sentence of Criterion 10.4 confirms that the pulp company need not worry about its eucalyptus monocultures: “Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.” Pulp companies plant exotic eucalyptus trees precisely because their performance is better for pulp production (or at least better researched) than native species. Eucalyptus pulp commands a higher price on the world market than pulp manufactured from native forests. Little is known about the growth rates of many of, say, Brazil’s tree species, and even less is known about their qualities for producing pulp. Monitoring for “unusual mortality, disease, or insect outbreaks” is business-as-usual for any company that has invested millions of dollars in an exotic monoculture plantation.

Monitoring for “adverse ecological impacts” is another matter. Replacing a natural ecosystem with a monoculture of thousands of hectares of exotic species is in itself an “adverse ecological impact”. The problem is that the impacts, such as reduced water supply as the monocultures suck streams and ponds dry, is felt by local communities and not by the scientists that the company employs to monitor its plantations. When FSC’s certifying bodies visit the plantations they listen to the company’s scientists rather than the local communities.

Criterion 10.5 is hopelessly vague: “A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.” Once again this leads to a string of questions. What percentage of the management area shall be restored to forest? Is one per cent sufficient? Or 10 per cent? Or 50 per cent? What if the area never had forest cover, in countries such as Uruguay, Argentina or South Africa, where large areas of plantations have been FSC-certified?

Criterion 10.6, if applied consistently, would exclude all large scale, fast growth, exotic tree plantations from FSC certification. It states that

“Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long-term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.”

Yet FSC has certified large scale plantations with serious impacts on soil structure, fertility, biological activity and water. FSC-certified plantations in South Africa, Brazil, Chile and Uruguay are harvested in large clearcuts, leaving the soil exposed.

Criterion 10.7 states that “Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions.” FSC does not specify the measures that companies are supposed to take. Year after year, thousands of hectares of FSC-certified plantations in South Africa burn. FSC-certified companies kill baboons, which have become a pest in plantations.⁶⁴¹ Obviously this slaughter has an impact on local biodiversity. Meanwhile the plantation companies’ exotic trees have turned into invasive species in native ecosystems. None of the plantation companies have lost their FSC certificates as a result.

641 “Wildlife slaughter and fires take corporate gloss off FSC General Assembly”, FSC-Watch, 4 September 2008. http://www.fsc-watch.org/archives/2008/09/04/Wildlife_slaughter_a

Principle 10.8 should prevent the certification of industrial tree plantations:

“Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.”

But what does monitoring “appropriate to the scale and diversity of the operation” actually involve in practice? This is wide open to interpretation. Any plantation company is likely to carry out trials before investing in large scale plantations. But the trials are invariably small scale and, as WRM pointed out in 2001, “the only effective test of the social and environmental effects of large-scale plantations are large-scale plantations themselves”. WRM proposed that “The criterion should therefore be revised to specify that no plantations will be certified in areas where there is enough evidence of substantial negative impacts (social, environmental or both) caused by existing large-scale plantations.”⁶⁴²

The final sentence of Criterion 10.8 is also problematic. What does “special attention” to social issues of land acquisition actually mean? If any local right has been violated, does this mean that an FSC certificate will never be issued? Clearly not, given the certificates that have been issued. So what, exactly, does this sentence mean in practice?

Criterion 10.9 states that

“Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.”

Once again, this raises several questions. What does the word “normally” mean in the first sentence? How does FSC define “sufficient evidence”? What happens if a company buys a plantation operation after 1994, from a company that cleared forest to make way for the plantations? Can the company that bought the plantation be certified? How much investigation do certifying bodies have to carry out into allegations that companies hired local people to clear forests?

Clearly there are several serious problems with the FSC-certification of industrial tree plantations. By certifying large areas of monocultures, FSC is undermining its own legitimacy.

Plantations review

FSC is well aware of the problems with the certification of plantations. In 2001, FSC’s secretariat included the organisation’s position on plantations in a list of issues needing clarification. Subsequently,

642 “Comments on the FSC’s Principle on Plantations”, World Rainforest Movement Bulletin, Special Issue on FSC certification of plantations, February 2001. <http://www.wrm.org.uy/bulletin/FSC.html#10>

Tim Synnott, then-FSC's Policy Director, wrote a draft FSC Plantation Policy. Synnott's draft paper acknowledged that "Disputes have arisen around plantation certification, with reports of infraction of FSC guidelines. Some of the disagreements and disputes have been caused by different interpretations of the FSC Principles and Criteria and other policies."⁶⁴³

At FSC's General Assembly in 2002, a motion was passed for FSC to carry out a "Plantations Review". The motion stated that "The current version of the FSC Plantation Policy Draft (30 May 2002) is not clear enough and needs improvement." The motion continued to state that FSC should produce a revised plantation policy "after a broad consultation with the membership" to give "concrete guidance on the interpretation of P10 [Principle 10]". This was supposed to take place within 18 months of the motion (i.e. by May 2004).⁶⁴⁴ But six years after passing this motion, FSC has still not produced a revised plantation policy.

At the 2002 FSC General Assembly, members passed another motion for a review of FSC's chain of custody. This also had an 18 month deadline. The review involved creating a new label for "mixed sources", effectively making it very much easier for paper companies to put FSC's logo on their products. FSC used "mainly core funding" to carry out this review, according to Sofia Ryder, who worked in FSC's policy and standards unit at the time.^{645 646}

When it came to the Plantations Review, no funding was available.

In November 2003, a year after the motion was passed, FSC had made little or no progress towards carrying out a Plantations Review. Nevertheless, FSC produced a two page information leaflet titled "Forest Plantations". The leaflet explains that FSC defines forest as "a tract of land dominated by trees". According to FSC, plantations are "forest areas lacking most of the principal characteristics and key elements of native ecosystems, which result from the human activities of planting, sowing or intensive silvicultural treatments." As such, "Plantations are included in the FSC definition of forests". Clearly, FSC was not going to consider too radical an approach to its Plantations Review, the outcome of which might include, for example, a definition of plantations making clear that they are not forests.

643 Timothy Synnott (2002) "Review of FSC Plantation Policies: An FSC discussion paper. Clarification of FSC's position on plantations", Forest Stewardship Council, Draft, revised 18 July 2002.

[http://www.old.fsc.org/plantations/docs/Resources%20-%20FSC%20docs%20and%20reports/FSC-DIS-30-001%20FSC%20Plantation%20Policies_draft%20\(2002\).pdf](http://www.old.fsc.org/plantations/docs/Resources%20-%20FSC%20docs%20and%20reports/FSC-DIS-30-001%20FSC%20Plantation%20Policies_draft%20(2002).pdf)

644 "Final Motions and Results from the FSC General Assembly 2002", FSC, 2002. http://www.fsc.org/fileadmin/web-data/public/document_center/general_assembly_documents/FSC_General_Assembly_2002_Final_Motions.pdf

645 "Presentation by Sofia Ryder, FSC at Forest Movement Europe meeting", 24 April 2004, Helsinki.

646 It is worth noting where the use of "percentage based claims" (which later became the "mixed sources" label) within the FSC system comes from. In September 1995, FSC's executive director, Tim Synnott, visited the Caperboard factory in Scotland. Here's his account of the visit:

"The manager explained that his raw materials came from hundreds of municipal and industrial recycling schemes, from thinning operations in thousands of different properties, and waste from countless sawmills, all derived from a long list of forests that varied every year. He recognized the public concerns about forest management quality, and also the right of industries to seek evidence of good management, but he knew that several years would pass before most of these forest properties would be certified. He was willing to start down this road, but only if he could get some recognition for the progress made towards fully certified raw materials, while continuing to use some raw materials from uncertified forests. After this visit, a policy for Percentage-Based Claims was a priority, that came into operation two years later." Timothy Synnott (2005) "Some notes on the early years of FSC", 19 November 2005, page 39. http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Notes_on_the_early_years_of_FSC_by_Tim_Synnott.pdf

By April 2004, FSC had, at last, started fundraising to carry out the Plantations Review. Two meetings were held, one in Brazil and one in South Africa. “We’re just trying to understand what are the issues, and that will help us to put together the scope of what the review has to be,” explained Sofia Ryder in April 2004.⁶⁴⁷ Two of the environmental organisations that took part in the meeting in Brazil had very close links to FSC-certified companies. Others, who are highly critical of FSC certification of plantations, were not at the meeting.

When a motion is passed at the General Assembly, there is no mechanism within FSC to ensure that the Secretariat carries out that motion. At the time, the Policy and Standards Unit in the FSC Secretariat consisted of two people. A motion to carry out a chain of custody review, which relaxed FSC’s standards and created a new label for the benefit of the pulp and paper industry was carried out using FSC core funding. A motion to carry out a Plantations Review, which, in theory at least, might lead to a strengthening of FSC’s standards did not even start for almost two years because FSC had no funding to carry out the review. The biases towards the industry within the FSC system are clear.

When the plantations review motion was passed in 2002, an area of 3.3 million hectares of plantations had been FSC-certified. That figure is now 8.6 million hectares.⁶⁴⁸

The Plantations Review finally started in September 2004. The first phase of the Review was a two year “Policy Working Group”, carried out by 12 people representing each of FSC’s chambers (economic, environment and social). The team consisted of 11 men and one woman. The second phase consists of four “Technical Expert Teams”, appointed by the FSC Board. These technical experts are working to “further develop the recommendations of the Policy Working Group”. Out of a total of 18 experts, only two are women.⁶⁴⁹

Needless to say, the pulp and paper industry is very interested in ensuring that no meaningful reforms come from the plantations review. A Plantation Working Group meeting in South Africa was sponsored by Mondi. The visit included a two day field trip to visit Mondi’s plantations. South African NGO coalition Timberwatch requested as much time as industry to present their point of view, but this was rejected. Nevertheless, Timberwatch ensured that the Plantations Working Group saw (and heard about) some of the impacts of FSC certified plantations in South Africa.⁶⁵⁰

At its fourth meeting in April 2006, the Policy Working Group produced a vision of what it would like FSC to achieve in the next ten years. The vision is titled “Raising the Bar”, implying that as a result of the Plantations Review, FSC’s standards will be improved. But there is little to suggest that things will genuinely improve.

647 “Presentation by Sofia Ryder, FSC at Forest Movement Europe meeting”, 24 April 2004, Helsinki.

648 “Global FSC certificates: type and distribution”, FSC, 17 April 2008, page 7. http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/08-04-01_Global_FSC_certificates_-_type_and_distribution_-_FINAL.pdf

N.B. These figures ignore plantations included under FSC’s category of “Semi-Natural and Mixed Plantation and Natural Forest”.

649 “Expert Teams for the Technical Phase of the Plantations Review”, Forest Stewardship Council, 13 December 2007. http://www.old.fsc.org/plantations/docs/Home/2007-12-13_Expert_Teams.pdf

650 “Did the FSC Plantations Policy Working Group get it right?”, Timberwatch, 2006 <http://www.wrm.org.uy/countries/SouthAfrica/filedtrip.pdf>

Instead of producing concrete recommendations for tightening up Principle 10 to exclude industrial tree plantations from FSC certification, the Plantations Review Policy Working Group suggests that what is required is a “new mindset and approach”. Parts of the Group’s final report sound more like a manifesto for a new age society, than an attempt to regulate corporations that are producing billions of dollars of profit and creating massive environmental and social impacts. To give just one example from the final report:

“[W]e used the term highest common denominator to describe how we need to operate in the future, using conflict as a multiplier or lever for better outcomes, rather than a wedge to come between us. How else can we deliver a system that is economically viable, environmentally sustainable and socially just? Aiming for anything less than the highest common denominator will simply put us in conflict with ourselves, and we will likely all lose out.”⁶⁵¹

Back in July 2002, Tim Synnott, then FSC’s Policy Director, wrote: “FSC P&C [Principles and Criteria] and guidelines are not always clear or precise, leading to different and contradictory interpretations by assessors, managers and FSC members”. Four years later the Policy Working Group had failed to clarify the situation. In its report of its fourth meeting, the Group states that, “the lack of confidence in FSC certification of plantations, is not because of the structure, nor the content of the P&Cs.” The Working Group suggests leaving any changes to the Principles and Criteria to a separate review process. This review process is currently under way and in April 2008, FSC’s Board of Directors issued a draft revised version of FSC’s Principles and Criteria.

The Board of Directors’ April 2008 draft is the result of a series of motions from the 2005 General Assembly⁶⁵² and the recommendations from the Plantations Review (although the Technical Expert Teams have not yet finished their work).

One of the changes is to insert the words “and plantations” throughout the principles and criteria, after the word “forest”. The draft amended version of Criterion 1.1 therefore reads as follows: “Forest *and plantation* management shall respect all national and local laws and administrative requirements,” (emphasis added). This is intended “to clarify that the Principles and Criteria are applicable to all types of forest and plantations management,” according to the board of directors’ notes in the revised draft.

In the draft revised version, the word “should” has been replaced with the word “shall” throughout the Principles and Criteria. This is intended to clarify that the Principles and Criteria are requirements, not recommendations.⁶⁵³ This is good news for those who think that FSC should not certify industrial tree

651 “The FSC Plantations Review Policy Working Group Final Report”, Forest Stewardship Council, 20 October 2006. [http://www.old.fsc.org/plantations/docs/Resources%20-%20FSC%20docs%20and%20reports/Final%20Plantations%20Policy%20Review%20Report%202006-10-20%20\(EN\).pdf](http://www.old.fsc.org/plantations/docs/Resources%20-%20FSC%20docs%20and%20reports/Final%20Plantations%20Policy%20Review%20Report%202006-10-20%20(EN).pdf)

652 At the 2005 General Assembly, a series of motions were raised relating to the Principles and Criteria. Instead of voting on each one separately, FSC members passed a statutory motion to set up a working group to analyse these motions a make recommendations. FSC’s members were to subsequently vote on whether the working group’s recommendations should be implemented or not. Instead of setting up a working group, “Given the high level of legitimacy required in this process, the Board of Directors decided as the working group for the P&C group.” (“FSC-STD-01-001 Version 5-0 Draft 1-0 EN FSC Principles and Criteria”, FSC International Center, 30 April 2008. http://www.fsc.org/fileadmin/web-data/public/document_center/international_FSC_policies/standards/FSC_STD_01_001_V4_0_EN_FSC_Principles_and_Criteria.pdf) FSC is currently requesting applications from members to join a working group to revise the Principles and Criteria.

653 “FSC-STD-01-001 Version 5-0 Draft 1-0 EN FSC Principles and Criteria”, FSC International Center, 30 April 2008.

plantations, because it creates the impossible-to-meet and impossible-to-prove principle that plantations “*shall* complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests,” (emphasis added).

A major change suggested in the draft is to Principle 4, which is retitled “Workers’ rights, social responsibility and local development”. The idea is to separate the criteria relating to each of these three issues. The revised criteria include participatory assessments, mitigation and compensation measures, adherence to ILO standards and communities are to be “identified” and consulted as well as given “opportunities for employment, training, and other services”. In addition, new criteria are proposed to give the same rights for sub-contracted workers as directly employed workers, better wages, rules on accommodation and healthcare, and mechanisms for resolving grievances.

So far so good. These changes reflect the Plantations Review Policy Working Group’s intention to “[i]ntegrate, more systematically than before, social issues into FSC structures and processes”.

Other proposals are far more problematic though. The revised draft proposes deleting the words “avoiding dependence on a single forest product” from criterion 5.4. As it stands, this Criterion should (at least in theory) exclude the certification of many industrial tree plantations, which exist to produce one product, such as raw material for pulp production.

A revision to criterion 6.1 suggests that the impacts of the operation shall have been determined before activities are started. This is to include the “ecological process of nutrient, water, carbon and biological cycles”. While this may create a bonanza for forestry consultants, it is unlikely to have any beneficial impact on plantation management. I look forward to reading the assessments of how establishing a plantation on large areas of grassland in Uruguay might impact the carbon cycle, particularly when the product produced is pulp, to be shipped to China, where it will be processed into paper which will end up rotting in a landfill and emitting methane. I look forward to the companies’ guesses of what might happen to the people whose livelihoods are destroyed by the plantations, including those who migrate to cities and take up a lifestyle resulting in far more carbon dioxide emissions (or less, depending on what they previously did – the point being that it is impossible to predict and even more difficult to monitor).

In at least one case, the Plantations Review Policy Working Group recommended a major weakening of FSC’s standards. As noted above, FSC’s Criterion 6.3 should exclude all industrial tree plantations from FSC certification. It states that: “Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.”

Rather than recommending a strict interpretation of this Criterion, the Plantations Review Policy Working Group proposed that it should be interpreted as follows: “An FSC certified plantation will take an active approach to optimising its conservation strategy.” There are two serious problems with this interpretation. First, it amounts to a complete re-writing of the Criterion, to the point where the words used in the Criterion no longer have any meaning. It is a dramatic weakening of the Criterion. Second, and perhaps more importantly, it suggests that an “offset” system of certification is appropriate – one where the

plantation itself need not comply with all of FSC's Principles and Criteria, but by conserving forest outside the plantation the plantation manager can "offset" this non-compliance.

The Board of Directors' proposed revisions to the Principles and Criteria propose deleting criterion 6.3. Sure enough, the proposed amendments explicitly allow offsetting of the impacts of operations: "Each impact shall be linked with a description of how and where in the management unit the impact is prevented, mitigated or remedied." So, a plantation company could wipe out the biodiversity in its plantations, but "mitigate" this by establishing a strictly protected forest area in another part of its forest management unit. This amounts to a double whammy for local people: excluded from the land where the plantations are established *and* excluded from the forest which is protected to "offset" the impacts of the plantation.

The Plantations Review Policy Working Group appeared determined to make it as easy as possible for industrial tree plantations to remain certified. The Policy Working Group suggests, for example, that FSC should introduce a "Social Management System" which forest and plantation managers could use "to address social issues in forest and plantation management, which certification bodies would then be able to audit". This proposal overlooks the fact that local communities are sometimes in direct opposition to plantation managers. In some cases, it can be extremely dangerous for them to speak out against plantation companies. To suggest that the plantation managers simply need to refer to a Social Management System is ludicrous.

According to the Policy Working Group, plantation managers are to be responsible for "consultation". FSC's Certifying Bodies are supposed to be able "to determine if consent has been 'manufactured'" and whether "the manager's research into the local community has identified all affected parties". But plantation managers have little interest in uncovering problems with their plantation operations. Meanwhile, determining whether all affected parties have been identified and whether consent has been manufactured could require months and years of study – certainly longer than the few days that FSC's Certifying Bodies spend assessing plantation operations.

The Board of Directors' revisions to the Principles and Criteria suggest introducing a requirement for a Social Management Plan, to include "tenure and use rights, indigenous peoples rights, community relations and worker rights, local development, dispute resolution and stakeholder consultation." The document is to be produced by the company. The certifying body is to monitor the Social Management Plan. The danger is that this could easily further exclude local people from the certification process. Instead of listening to local people, certifying bodies will refer to the Social Management Plan, regardless of the realities faced by local people.

The Board of Directors proposes a new criterion 7.6: "Forest and plantation management shall proactively implement and document appropriate public consultation and communication processes with affected and interested parties." Once again, the risk is that certifying bodies will check what the company says it does, rather than speaking to local people to find out what it is actually doing. In a situation where communities are living in fear of a plantation company which has taken over their land, local people are unlikely to risk speaking in public to a certifying body hired by the company, any more than they would risk speaking to the company itself.

In its final report, the Plantations Review Policy Working Group recommended that "FSC develops one

integrated set of common Principles and Criteria for all types of management units rather than the current structure with a common set of nine principles and an additional Principle 10 for Plantations.” The Board of Directors decided to ignore this recommendation, to allow FSC members and “stakeholders” to “be given the opportunity to comment on this proposal before embarking on such a restructuring of the P&C”. The result of this is that six years after the motion passed at the General Assembly, no concrete proposals have been made for any amendments to the most problematic of FSC’s Principles (apart from changing the word “should” to “shall”).

Bizarrely, given that the Policy Working Group recommended abolishing Principle 10, one of the Plantations Review Technical Expert Teams is looking at the 1994 cut-off date for conversion of forests to plantations. This is covered in Criterion 10.9, which states that if a plantation manager has cleared forest in order to establish plantations since November 1994, then that operation cannot “normally” be certified under FSC. There are problems with this, since it does not exclude certification of plantations established since 1994 on grasslands, for example. An improvement would be, for example, prohibiting the conversion of grasslands and other ecosystems to plantations.

The Policy Working Group proposed another review to look at conversion, which will consider other ecosystems. However, the Policy Working Group also suggested that the review should reconsider the 1994 cut-off date, partly on the grounds that the current system “may exclude responsible managers who had never heard of FSC in 1994 and converted from natural forest to plantation in good faith, but who are now locked out of the certification process.” Asia Pulp and Paper is among the companies that has been lobbying for this change.⁶⁵⁴

In its vision for FSC, the Plantations Review Policy Working Group hopes to see a “significant demand for certified forest [sic] products” within ten years. In the context of a Plantations Review this is an extraordinary statement. Many industrial tree plantations provide raw material for the pulp and paper industry. The Policy Working Group is therefore hoping for a “significant demand” for paper products. This undermines both local struggles against industrial tree plantations and NGO campaigns in the North aimed at reducing the consumption of paper.

The Policy Working Group did not raise the bar, it lowered FSC’s standards. This is an inevitable result of its wish for a “significant demand for certified forest [sic] products”. FSC is far too keen to pander to the industry that it is supposed to be regulating (albeit on an entirely voluntary basis).

During an NGO meeting in 2004, FSC’s Sofia Ryder explained how FSC was trying to make things easier for the industry:

“We’re trying to unblock the supply chain. We’re trying to make certification more accessible. We’re trying to strengthen the standards and tighten them. We’re trying to improve incentives and rewards for people to become involved in certification, and we’re trying to bring more FSC products into the market.”⁶⁵⁵

654 At the 2004 meeting to launch FSC’s Plantations Review, one of the people who questioned the 1994 cut-off date was Arian Ardie, then-director for sustainability at Asia Pulp and Paper. Obviously APP had an interest in changing this cut-off date, given the vast area of forests that the company has cleared since 1994.

655 “Presentation by Sofia Ryder, FSC at Forest Movement Europe meeting”, 24 April 2004, Helsinki.

Many of the NGOs present at the meeting questioned whether FSC was actually trying to strengthen its standards. Bringing more FSC products into the market and strengthening standards are not easily compatible goals. Rather than worrying about sales of FSC-certified products, FSC needs to concentrate on the standards that it is supposed to uphold. It should be the industry's responsibility to change to meet these standards and to sell its products, rather than FSC's responsibility to adapt its standards and labels to meet the demands of the industry.

The Plantations Review Technical Expert Teams currently working on the recommendations suggested by the Policy Working Group include several representatives of the industry that FSC is supposed to be regulating. Stora Enso, Potlatch and Timbercorp have a seat at the table.⁶⁵⁶

So far, then, FSC's Plantations Review has been a colossal waste of time, at least for anyone who thought that it might change the way that FSC certified industrial tree plantations. The Plantations Review process has made no difference whatsoever to the way FSC certificates are issued. In October 2005, WRM wrote to FSC demanding a "moratorium on the certification and re-certification of industrial timber plantations", until the Plantations Review was completed. FSC's board responded that "The main reason for deciding not to seek a moratorium on the certification of large-scale (or 'industrial') tree plantations was that we were not convinced this would be supported by the broad majority of the FSC membership." They were right. A motion put forward by Robin Wood at the 2005 FSC General Assembly requesting a similar moratorium was rejected by FSC's members.

FSC currently anticipates that its Review of the Principles and Criteria will be completed by the end of 2009.⁶⁵⁷ Meanwhile, as the Plantations Review and the Review of the Principles and Criteria continue, so do the problems with FSC certification of industrial tree plantations. For many, the certification of Veracel in March 2008 was the final straw. WRM called it the death certificate for FSC.⁶⁵⁸ The following section looks at some of the controversies raised by FSC certification of industrial tree plantations.

Veracel, Brazil

Veracel is perhaps the most egregious of FSC's current plantation certificates, although it is certainly not the only one that should be withdrawn. It was certified by SGS in March 2008. SGS issued the certificate just before a team from Accreditation Services International visited Veracel's operations to carry out an audit of SGS's assessment.

Since Veracel established its monoculture eucalyptus plantations in the south of Bahia state, rivers, streams and springs have dried up. As the company expands its area of eucalyptus, the area of land planted to food crops is decreasing. Rural people have lost work and moved to cities to look for work, where many end up living in the favelas surrounding Brazil's cities.⁶⁵⁹ In July 2008, Veracel was fined

656 "Expert Teams for the Technical Phase of the Plantations Review", Forest Stewardship Council, 13 December 2007. http://www.old.fsc.org/plantations/docs/Home/2007-12-13_Expert_Teams.pdf

657 "Announcement : Expanded Review and Revision of FSC Principles and Criteria (FSC-STD-01-001 Version 4-0)", Forest Stewardship Council, 3 September 2008.

658 "Veracel: FSC's 'Death Certificate'", World Rainforest Movement, March 2008. http://www.wrm.org.uy/actors/FSC/Veracel_Death_Certificate.html

659 See, for example:

Chris Lang (2006) "Veracel pulp mill, Brazil: The impact of industrial tree plantations on land rights and livelihoods", in

for clearing areas of Atlantic rainforest and ordered to cut down its plantations and replace them with native trees.⁶⁶⁰ Veracel's FSC certificate remains in place. The certification process produced no benefits whatsoever for local communities. On the contrary, it undermines their struggle against Veracel.

Valourec & Mannesmann, Brazil

In February 2007, armed guards employed by Valourec & Mannesmann shot and killed Antonio Joaquim dos Santos in front of his 16 year-old daughter. He was collecting firewood. A year before the shooting, a local community submitted an international complaint, pointing out that the destruction of the native cerrado (savannah) vegetation has left the community without access to firewood and fruits and has led to the drying up of the Cana Brava River. V&M's response was to increase the pressure on the community.

The problems with V&M's operations are well documented. In 2002, WRM published a report documenting the problems for local communities living near to V&M's plantations.⁶⁶¹ The report found the following problems with SGS's assessment:

- “They did not make an in-depth study of the context surrounding the companies planting eucalyptus and neglected a series of important social, economic and environmental aspects;
- “They listened to only a few ‘stakeholders’ and then only to the least critical ones. They did not listen to the most important ‘stakeholders’ and therefore, did not obtain essential information on a series of serious problems involving the companies;
- “It was not clear whether the conditions and recommendations in fact reverted the evident lack of compliance with certain FSC principles and/or criteria and whether an adequate follow-up regarding compliance with these conditions and recommendations is being carried out;
- “They did not disseminate the public certification summary for the knowledge of local and regional civil society and the public bodies. SGS did not even place a version of the public summary in Portuguese, the official language of Brazil, on the internet.”⁶⁶²

“The European Investment Bank in the South. In whose interest?” CRBM, CEE Bankwatch Network, Friends of the Earth International and WEED, February 2006. <http://chrislang.org/2006/02/21/veracel-pulp-mill-brazil-the-impact-of-industrial-tree-plantations-on-land-rights-and-livelihoods/>

“FSC Certification of Veracel: A turning point or business as usual?”, “Brazil: The impossible certification of Veracel”, and “The reasons why Veracel cannot be certified, seen from the standpoint of society”, World Rainforest Movement Bulletin 121, August 2007. <http://www.wrm.org.uy/bulletin/121/viewpoint.html>

Ivonete Gonçalves (2007) “Brazil: Response to Veracel's attempt to obtain the FSC label for its plantations”, WRM Bulletin 119, June 2007. <http://www.wrm.org.uy/bulletin/119/Brazil2.html>

“Brazil: Veracel's deceitful practices”, WRM Bulletin 115, February 2006. http://www.wrm.org.uy/bulletin/115/Brazil_2.html

660 “Millions of FSC certified trees to be uprooted as Brazilian court condemns Veracel”, FSC-Watch, 14 July 2008. http://www.fsc-watch.org/archives/2008/07/14/Millions_of_FSC_cert

“Controversy deepens over Veracel certification”, FSC-Watch, 26 August 2008. http://www.fsc-watch.org/archives/2008/08/26/Controversy_deepens

661 Marco Antônio Soares dos Santos André, Rosa Roldán, Fábio Martins Villas, Maria Diana de Oliveira, José Augusto de Castro Tosato, Winfried Overbeek, and Marcelo Calazans Soares (2003) “Evaluation report of V&M Florestal Ltda. and Plantar S.A. Reflorestamentos, both certified by the Forest Stewardship Council”, in “Certifying the Uncertifiable: FSC Certification of Tree Plantations in Thailand and Brazil”, World Rainforest Movement, August 2003. <http://www.wrm.org.uy/actors/FSC/uncertifiable.html>

662 Ricardo Carrere (2006) “Certification of tree plantations by SGS and SmartWood: A history of controversial certifications”, World Rainforest Movement, March 2006. http://www.wrm.org.uy/countries/Uruguay/SGS_Smartwood.html

WRM's researchers did not name the people interviewed in their report, and emphasised their "concern over the fear these interviewees feel". The researchers pointed out that "Certification firms should not be fostering such an atmosphere on repression and fear."⁶⁶³

In 2006, a villager told activist and journalist Heidi Bachram that "The threat to workers and people here is great. Shots have been fired on people by the armed guards. They feel prisoners within their own lands."⁶⁶⁴

In September 2006, WRM demanded the withdrawal of the V&M certificate, together with those of Suzano and Plantar. "The social and environmental impacts of these three companies are so well documented that it is obvious that the FSC must immediately withdraw its certificate[s]," said Marcelo Calazans of the Brazilian Alert Against the Green Desert Movement.⁶⁶⁵

A few weeks after the murder of Antonio Joaquim dos Santos, V&M announced its "voluntary decision to leave FSC after 8 years of very close relationship". FSC took no action against the certifying body, SGS.

Smurfit Cartón de Colombia

The impacts of this company in Colombia are well documented.⁶⁶⁶ The company has deforested large areas and had serious impacts on local communities. WRM visited the company's plantations in November 2003 and interviewed local people. "The plantations have finished off the water," a villager said. Another noted that "spraying has finished with everything there was in the soil." Other villagers told WRM that "there is hardly any fauna left," that there used to be "clouds of birds" and that now "only in the summer does some bird appear, but not in winter time," and that "there are no fish left either."⁶⁶⁷

Villagers also complained about working conditions and the fact that it is outsourced. "All the work is seasonal," one villager said. "The contract implies working for two and earning for one." There is no trade union and "he who grumbles is out," a villager said.

Astonishingly, given the record of the company, Smurfit's Victor Giraldo represented the company on FSC's board of directors. None of FSC's members complained about this. Smurfit's operations in

663 Marco Antônio Soares dos Santos André, Rosa Roldán, Fábio Martins Villas, Maria Diana de Oliveira, José Augusto de Castro Tosato, Winfried Overbeek, and Marcelo Calazans Soares (2003) "Evaluation report of V&M Florestal Ltda. and Plantar S.A. Reflorestamentos, both certified by the Forest Stewardship Council", in "Certifying the Uncertifiable: FSC Certification of Tree Plantations in Thailand and Brazil", World Rainforest Movement, August 2003, page 116. <http://www.wrm.org.uy/actors/FSC/uncertifiable.html>

664 Heidi Bachram (2006) "Carbon credits and the green desert", *Red Pepper*, September 2006. <http://www.redpepper.org.uk/Carbon-credits-and-the-green>

665 "Organizations from eight countries demand the FSC to withdraw its 'green label' to several plantation companies", World Rainforest Movement press release 1 September 2006. http://www.wrm.org.uy/actors/FSC/Campaign_De_Certification/De_Certification_Campaign.html

666 Joe Broderic (1998) "El imperio de cartón: impacto de una multinacional papelera en Colombia", cited in "Colombia: The uncertifiable plantations of a member of the FSC Board of Directors", World Rainforest Movement Bulletin 77, December 2003. <http://www.wrm.org.uy/bulletin/77/Colombia.html>

667 "Colombia: The uncertifiable plantations of a member of the FSC Board of Directors", World Rainforest Movement Bulletin 77, December 2003. <http://www.wrm.org.uy/bulletin/77/Colombia.html>

Colombia were certified by SGS. SGS is due to re-assess the company in December 2008.

ENCE, Spain and Uruguay

In June 2008, ENCE lost its certificate issued to its Spanish subsidiary NORFOR. Three years previously, the Association for the Defence of the Galicia Estuary (Asociación pola defensa da Ria de Galicia) sent a letter to FSC's representatives in Spain demanding the urgent cancellation of NORFOR's certificate. The letter was accompanied by a detailed 85-page report, which documented how the company was in breach of FSC's standards.⁶⁶⁸ A coalition of NGOs in Spain campaigned for the certificate to be withdrawn, pointing out NORFOR's "indiscriminate use of herbicides such as glyphosate, practices of excessive damage to subsoil and consequent increase in erosion, clear-cuttings of more than 20 hectares, and the complete lack of promotion of the use of native species in their plantations". Several NGOs left the FSC in protest about the certification of Norfor.⁶⁶⁹

ENCE's Uruguayan subsidiary Eufores is also FSC certified. In August 2008 Eufores was caught destroying 80 hectares of forest, which is strictly protected under Uruguayan law.⁶⁷⁰

A 2007 report by the Latin American Network of Action on Pesticides and their Alternatives (RAP-AL) Uruguay found that working conditions in ENCE's nurseries were poor and that two chemicals were used which are banned under FSC's pesticides policy.⁶⁷¹

FSC has taken no action, either against Eufores, or against SGS, the certifier. Indeed, when WRM sent a copy of its 2006 report, which documents the impact of the plantations on rural communities in Uruguay, including those of Eufores, FSC responded by issuing a statement claiming that "FSC guarantees peace of mind," for consumers in the North.⁶⁷²

Coillte, Ireland

Coillte has about 450,000 hectares of pesticide-laden monoculture plantations in Ireland.⁶⁷³ After seven years of complaints about the certification of Coillte, Accreditation Services International (ASI), which is supposed to ensure that certifying bodies are upholding FSC's standards, carried out an audit of Soil Association's Woodmark assessment of Coillte.⁶⁷⁴

668 Ricardo Carrere (2006) "Certification of tree plantations by SGS and SmartWood: A history of controversial certifications", World Rainforest Movement, March 2006.

http://www.wrm.org.uy/countries/Uruguay/SGS_Smartwood.html

669 "ENCE loses one certificate in Spain. Soon to lose another in Uruguay?", FSC-Watch, 22 August 2008.

http://www.fsc-watch.org/archives/2008/08/22/ENCE_loses_one_certi

"Another NGO quits FSC in protest against NORFOR plantations", FSC-Watch, 29 May 2008. http://www.fsc-watch.org/archives/2008/05/28/Another_NGO_quits_FS

670 "ENCE loses one certificate in Spain. Soon to lose another in Uruguay?", FSC-Watch, 22 August 2008.

http://www.fsc-watch.org/archives/2008/08/22/ENCE_loses_one_certi

671 "Banned chemicals used in FSC-certified nurseries in Uruguay", FSC-Watch, 4 October 2007. http://www.fsc-watch.org/archives/2007/10/04/Banned_chemicals_used_in_FSC-certified_nurseries_in_Uruguay

672 "Certified plantations in Uruguay: Can the FSC really guarantee peace of mind to consumers?", WRM Bulletin 108, July 2006. http://www.wrm.org.uy/bulletin/108/Uruguay_Peace.html

673 John Vidal and David Adam (2008) "Timber hitch", Eco-soundings, The Guardian, 30 April 2008.

<http://www.guardian.co.uk/environment/2008/apr/30/1>

674 "How Accreditation Services International (FSC-ASI) allows certifiers to break FSC's rules and issue certificates to

ASI found a series of breaches of FSC standards. Woodmark had “closed out” its Corrective Action Requests against Coillte without documenting why it had done so. ASI also found that Woodmark had “kept open” other Corrective Action Requests for long periods, in breach of FSC’s rules. As a result, notes ASI, “non-compliance with relevant FSC Criterion is likely to be ongoing for a few years”. Nevertheless, Coillte remains certified. FSC has taken no action against the certifying body, Woodmark.

Sappi and Mondi, South Africa and Swaziland

An area of just over 1.6 million hectares of industrial tree plantations has been certified in South Africa.⁶⁷⁵ The plantations have dried up streams, destroyed grasslands, taken over people’s land and introduced exotic tree species which are invading ecosystems outside the plantation areas. Every year thousands of hectares of the monocultures burn, with devastating consequences for local communities, especially when their villages are completely surrounded by plantations. Last year, dozens of people were killed in the fires.

As Philip Owen of the South African NGO Geosphere points out, “Plantation management operations destroy grassland’s multiple products and services – thereby undermining economic viability and a wide range of environmental and social benefits.” Owen points out that SAPPI’s plantations above the Sudwala caves in Mpumalanga are “contributing to the un-natural and excessive drying out of the [cave] system”. Geosphere has made a formal complaint to Woodmark about the certification and is demanding that SAPPI removes the trees above the caves and allows the grassland to recover.⁶⁷⁶

In Swaziland, Woodmark ignored the impacts of SAPPI’s plantations on water supply to neighbouring farms, despite the fact that one of the farmers is suing SAPPI because of these impacts. Fires in Swaziland in 2007 were declared a national emergency and this year a contractor died in the fires.⁶⁷⁷

Asia Pulp and Paper, Indonesia

In December 2007, FSC announced its “dissociation” from pulp and paper giant Asia Pulp and Paper. FSC issued a statement saying that it has “a duty to protect the good will and integrity associated with its name and logo for consumers and for our trusted partners and members.”

FSC noted that “Reports from WWF, Greenpeace, Eyes on the Forest and many other independent sources suggest that APP is actively conducting forestry practices contrary to FSC Principles and Criteria.”⁶⁷⁸

non-compliant companies”, FSC-Watch, 16 March 2008. http://www.fsc-watch.org/archives/2008/03/16/How_Accreditation_Se

675 According to a search for Forest Management certificates in South Africa on “FSC registered Certificates”. <http://www.fsc-info.org>

676 “The ‘many wrongs’ of FSC in South Africa”, FSC-Watch, 20 July 2008. http://www.fsc-watch.org/archives/2008/07/20/The_many_wrongs_of

677 “Fires kill Sappi Usutu contractor”, RISI. <http://www.risiinfo.com/pulp-paper/news/Fires-kill-Sappi-Usutu-contractor.html>

678 “FSC dumps Asia Pulp and Paper - but who was to blame?” FSC-Watch, 10 January 2008. http://www.fsc-watch.org/archives/2008/01/10/FSC_dumps_Asia_Pulp

The dissociation became necessary after “APP gained certification for products produced at an Indonesian mill from FSC certified pulp purchased on international markets. The company has used this partial certification to associate itself more generally with FSC,” according to a statement by FSC Australia.⁶⁷⁹

Another FSC statement about APP, available on FSC Canada’s website, states that

“[E]ven with our policy structure in place it remained possible for companies to participate in the FSC system while simultaneously engaging in unacceptable forestry practices. As a result, in March 2007, the FSC Board of Directors mandated the FSC International Center to follow a new and broader approach, which entailed the development of criteria for the association of any third party with FSC’s good name and trademarks.”⁶⁸⁰

FSC produced a draft “Policy for the Association with FSC”, which it circulated to members in October 2007. Since then, the draft Policy seems to have disappeared without trace, and the dissociation from APP remains a one-off for FSC.

Stora Enso’s operations in Brazil, Argentina and Uruguay

Stora Enso has some of its operations certified by FSC, including its share of Veracel. FSC’s rules are supposed to prevent companies from greenwashing their operations by certifying one part but carrying out socially and environmentally destructive activities elsewhere.

Earlier this year, about 900 women from the International Peasant Movement, Via Campesina, were violently evicted by the Military Police from an area of 2,100 hectares of Stora Enso’s plantations in Rio Grande do Sul, Brazil. According to a statement from Via Campesina about 60 women were badly injured and 800 were arrested. The women were protesting against Stora Enso’s monoculture eucalyptus plantations, which the company is currently establishing in Rio Grande do Sul.⁶⁸¹

In August 2008, the Movement of Landless Peasants (MST) and Via Campesina in Brazil launched an international campaign against Stora Enso, in protest against the company’s expansion of its plantations in Brazil, Uruguay and Argentina. Predictably, Stora Enso’s response was to question the information that Via Campesina and MST provided. FSC has taken no action against Stora Enso, or against the certifying bodies that have certified Stora Enso’s operations.⁶⁸²

FSC’s goal, according to the introduction to the Principles and Criteria, is “to promote environmentally

679 “FSC steps up action to block greenwash”, FSC Australia, 9 November 2007.

<http://www.fscaustralia.org/files/100/fsc%20news%20release%207%202007%20-%20app%20%20partial%20certification.pdf>

680 “Asia Pulp & Paper (APP) – FSC Trademark Notice”, FSC Canada. <http://www.fscCanada.org/APP.htm>

681 “Police repress peasant women to protect Swedish-Finnish company Stora Enso’s illegal plantations”, World Rainforest Movement press release, 7 March 2008. <http://pulpinc.wordpress.com/2008/03/07/police-repress-peasant-women/>

“Women of the Via Campesina occupy area of Stora Enso in the Rio Grande do Sul state”, Via Campesina press release, 4 March 2008. <http://pulpinc.wordpress.com/2008/03/04/via-campesina-occupy-area-of-stora-enso/>

682 “International Campaign against Stora Enso”, Pulp Inc. 19 August 2008.

<http://pulpinc.wordpress.com/2008/08/19/international-campaign-against-stora-enso/>

responsible, socially beneficial and economically viable management of the world's forests.”⁶⁸³ FSC should not certify industrial tree plantations, for the simple reason that they are not forests. Industrial tree plantations are neither environmentally responsible nor socially beneficial. They are often not even economically viable, at least not without generous government subsidies. FSC should therefore not certify them.

683 From the Introduction to “FSC Principles and Criteria for Forest Stewardship”, FSC-STD-01-001 (version 4-0) EN, Forest Stewardship Council. http://www.fsc.org/fileadmin/web-data/public/document_center/international_FSC_policies/standards/FSC_STD_01_001_V4_0_EN_FSC_Principles_and_Criteria.pdf

4. Future planned pulp mills

As the information in the table below indicates, the pulp industry is planning a massive expansion in the global South. However, given the current crisis facing the world's financial system, it is impossible to predict which of these projects will go ahead. A world recession would reduce the demand for paper and would mean that many of these projects will not get built – at least not in the time frame proposed by the companies.

The industry is concerned about overcapacity in China. Some mills are already not running at full capacity because of the financial crisis. Annie Zhu, Features Editor at *Pulp and Paper International* magazine reports that “it has become more and more difficult to secure bank loans or seek funding in the stock market to purchase machines amid the uncertain economy in China and the rest of the world.”⁶⁸⁴ Meanwhile, Jennifer Ellson, News Editor at *Pulp and Paper International* Asia News, describes the Asian pulp and paper industry as “another casualty of the credit crunch, the equities collapse and the global economic slowdown.” Nine Dragons Paper (Holdings) and Lee & Man Paper Manufacturing have postponed previously announced expansion plans in China and Vietnam.⁶⁸⁵

Projects elsewhere have been put on hold. Aracruz's proposed 1.5 million tons a year pulp mill at Guaiba in Rio Grande do Sul is on hold, while Aracruz tries to save money. The company is likely to lose about US\$1 billion as a result of its investment in derivatives.⁶⁸⁶

At the same time, the industry continues to shrink in North America and Europe. Recent announcements of pulp mill closures include the following:

- Smurfit-Stone is to close its 253,000 tons a year Pontiac pulp mill in Quebec, resulting in 218 jobs lost.⁶⁸⁷
- Evergreen Pulp Inc. is closing its pulp plant in Samoa, California, “until the pulp market rebounds”. Currently 215 people are employed at the plant.⁶⁸⁸
- The Port & Talbot pulp mill in Mackenzie, British Columbia decided in October 2008 to remain closed “at least until spring or until economic conditions improve”.⁶⁸⁹
- Borregaard is to close its 110,000 tons a year pulp mill in Switzerland, resulting in the loss of 450 jobs.⁶⁹⁰ The pulp mill is owned by the Norwegian group Orkla.⁶⁹¹

684 Annie Zhu (2008) “Opportunities and challenges in China”, RISI website, 23 September 2008.

<http://www.risiinfo.com/blogs/Blog-Opportunities-and-Challenges-in-China.html>

685 Jennifer Ellson (2008) “Rock, Paper, Scissors”, RISI website, 22 October 2008. <http://www.risiinfo.com/blogs/Blog-Rock-Paper-Scissors.html>

686 “Aracruz suspends construction of new pulp mill in Guaiba”, Pulp Inc, 21 October 2008.

<http://pulpinc.wordpress.com/2008/10/21/aracruz-suspends-construction-of-new-pulp-mill-in-guaiba/>

687 “Smurfit-Stone to Permanently Close its Pontiac Pulp Mill Due to Weakening Pulp Market”, PR Newswire-FirstCall, 17 October 2008. http://news.paperindex.com/NewProjects_MillClosures/Smurfit-Stone_to_Permanently_Close_Its_Pontiac_Pulp_Mill_Due_to_Weakening_Pulp_Market/

688 “Humboldt pulp mill to close amid falling demand”, *San Francisco Chronicle*, 9 October 2008.

<http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2008/10/09/financial/f101025D68.DTL&feed=rss.business>

689 Gordon Hamilton (2008) “Global crisis ends plans for B.C. pulp mill”, *Vancouver Sun*, 8 October 2008.

<http://www.canada.com/vancouver/news/business/story.html?id=612d022b-d1d4-4a86-bded-bc741c113458>

690 “Borregaard intends to close pulp mill in Switzerland”, Ad Hoc News, 24 October 2008. <http://www.ad-hoc-news.de/Borregaard-intends-to-close-pulp-mill-in-Switzerland--/de/Unternehmensnachrichten/19699546>

- Stora Enso will close part of its 655,000 tons a year Enocell pulp mill in eastern Finland, cutting back production by one-third and cutting 50 jobs.⁶⁹²
- In October 2007, Stora Enso announced that it would cut 1,100 jobs in Finland. In 2008, Stora Enso plans to close pulp and paper mills in Anjalankoski, Hamina, Norrsundet and Kemijärvi in Finland.⁶⁹³
- M-real, a subsidiary of the Metsäliitto Group, is to close its pulp mill in Lielähti, near Tampere and two magazine paper machines at its Kangas mill in Jyväskylä in Finland. About 200 workers will lose their jobs.⁶⁹⁴
- In May 2006, UPM launched Finland's largest ever lay-off programme, affecting 2,500 jobs over three years. UPM pulp mills in Kajaani and Tervassari in Finland are to be closed.⁶⁹⁵

UPM's president and chief executive, Jussi Pesonen recently summed up the situation for the pulp and paper industry in Europe: "With today's market outlook and the recent cost development, UPM's paper and pulp production in Finland cannot continue in its current form and extent."⁶⁹⁶

There is little doubt that the industry is moving from North to South. The most rapid expansion is planned for Brazil. The Brazil Pulp and Paper Association anticipates that Brazil will become the world leader of pulp production by 2012, with an annual production of 18 million tons. This year, Brazil will overtake Sweden (12 million tons) and in 2009 production in Brazil will probably be higher than that in Finland (13 million tons).⁶⁹⁷

Other countries in Latin America, particularly Uruguay, are also facing a huge expansion in pulp capacity. A major expansion of the pulp industry in Russia is planned in the next few years. The impacts on forests in Russia could be devastating. In Asia, new pulp mills are proposed in Indonesia, Laos, China, India, Malaysia and Vietnam. The industry is also looking at expanding in Africa. Apart from South Africa, which already has a large pulp and paper industry, plantations are being established in Mozambique with the aim of providing raw material to the pulp industry and there are plans to build a pulp mill in Angola.

691 "Orkla to close down pulp mill in Switzerland", Reuters, 29 September 2008.

<http://www.reuters.com/article/rbssConsumerGoodsAndRetailNews/idUSLT49288220080929>

692 "Stora to close pulp line at Enocell mill -report", Reuters, 8 September 2008.

<http://www.reuters.com/article/rbssIndustryMaterialsUtilitiesNews/idUSL86676620080908>

693 "Jobs arise from ashes of Finland forestry", Reuters, 17 January 2008.

<http://www.reuters.com/article/rbssIndustryMaterialsUtilitiesNews/idUSL1057830920080117?pageNumber=2&virtualBrandChannel=0&sp=true>

694 Pertti Jokivuori (2007) "Massive job cuts due to restructuring in paper sector", European Industrial Relations Observatory On-line (eiroline), 21 December 2007. <http://www.eurofound.europa.eu/eiro/2007/11/articles/fi0711029i.htm>

695 "Kainuu reeling as paper companies announce closures", Helsinki Times, 18 September 2008.

http://www.helsinkitimes.fi/htimes/index.php?option=com_content&view=article&id=3182:kainuu-reeling-as-paper-companies-announce-closures-&catid=17:business&Itemid=162

"Jobs arise from ashes of Finland forestry", Reuters, 17 January 2008.

<http://www.reuters.com/article/rbssIndustryMaterialsUtilitiesNews/idUSL1057830920080117?pageNumber=2&virtualBrandChannel=0&sp=true>

Pertti Jokivuori (2007) "Massive job cuts due to restructuring in paper sector", European Industrial Relations Observatory On-line (eiroline), 21 December 2007. <http://www.eurofound.europa.eu/eiro/2007/11/articles/fi0711029i.htm>

696 "Strikes hit UPM mills in Finland", *Packaging News*, 16 September 2008.

<http://packagingnews.co.uk/business/news/846201/Strikes-hit-UPM-mills-Finland/>

697 "Brazil expected to overtake China in pulp production by 2012", Macau Hub, 10 September 2008.

<http://www.macauhub.com.mo/en/news.php?ID=6056>

Planned pulp projects:⁶⁹⁸

Company	Location	Country	Capacity (t/yr)	Cost (US\$)	Planned completion
Companhia de Celulose e Papel de Angola	Ganda	Angola	-	-	-
Protavia	Penola	Australia	735,000	1 billion	-
Gunns	Tasmania	Australia	800,000 – 1.1 million	1.3 billion	-
Aracruz	Rio Grande do Sul	Brazil	1.5 million	2.1 billion	2010 - currently postponed
Aracruz	Minas Gerais	Brazil	1.4 million	2.4 billion	2015
Klabin	-	Brazil	-	-	2014
Suzano	Bahia	Brazil	2.9 million	6.6 billion	2015
VCP	Tres Lagoas, Mato Grosso do Sul	Brazil	1.3 million	1.5 billion	2009
VCP	Rio Grande do Sul	Brazil	1.3 million	-	2013
Veracel	Bahia	Brazil	900,000	2 billion	-
Stora Enso	Rio Grande do Sul	Brazil	1 million	1 billion	2012-2015
APP China	Zhejiang	China	250,000	142 million	-
APRIL	Shandong	China	1 million	-	-
Oji Paper	Jiangsu	China	800,000	1.95 billion	2014
Zhanjiang Chenming	Guangdong	China	700,000	1.2 billion	2010
Stora Enso	Guangxi	China	1 million	-	-
Lee & Man	Chongqing	China	125,000	-	2008
Abhishek	-	India	125,000	192 million	-

698 In April 2006, I carried out a review of publicly available statements about new pulp mills (largely based on a search on RISI's website). This was updated and published in the report "Banks, Pulp and People" (<http://www.pulpmillwatch.org/countries/>). This table is an updated version of the information that appeared in Banks, Pulp and People. Some of these projects are expansions of existing pulp mills and others are new pulp mills. The information is intended to be indicative rather than exhaustive. Plans change and many projects are announced which never leave the drawing board. Not all of the projects in the table have received planning permission. No guarantee can be given that the information in this table is complete or (obviously) that all (or any) of these projects actually will go ahead. See http://www.delicious.com/chrislang/new_projects for sources.

Industries					
Century Pulp and Paper	Uttaranchal	India	150,000	-	2009
West Coast Paper Mills	Karnataka	India	230,000	260 million	2009
APRIL	Sumatra	Indonesia	600,000	-	2008
APP	Sumatra	Indonesia	800,000	-	2008
International Paper	Central Kalimantan, West Papua	Indonesia West Papua	1.5 million	4 billion	-
Kaltim Prima Pulp & Paper	East Kalimantan	Indonesia	1.2 million	1.5 billion	-
Korindo	Central Kalimantan	Indonesia	200,000	450,000	2009
UFS	South Kalimantan	Indonesia	600,000	1 billion	2010
PT Garuda Kaltim Lestari	West Kalimantan	Indonesia	1.2 million	-	-
Medco Group	Papua	Indonesia	-	-	-
Aditya Birla	Savannakhet	Laos	200,000	350 million	-
Shandong Sun Paper	-	Laos	300,000	-	-
Sabah Forest Industries	Sabah	Malaysia	125,000	-	-
Portucel	-	Mozambique	1 million	-	-
Angara Paper Wood Chemical Plant	Yenisey	Russia	220,000	1.3 billion	2011
Aspek Group	Manturovo	Russia	800,000	3.1 billion	2010
Boguchanskiy P&P Mill	Boguchansk	Russia	730,000	3 billion	2011
Ilim Group/International Paper	Arkangelsk	Russia	-	423 million	-
Larvik Cell	Pskov	Russia	600,000	563 million	2009
Mondi	Syktvkar	Russia	190,000	525 million	2010
Stora Enso	Nizhny Novgorod	Russia	-	1 billion	-

UPM and Sveza Group	Vologda	Russia	800,000	1 billion	2012
Sappi Saiccor	KwaZulu-Natal	South Africa	300,000	460 million	2008
Sappi	Ngodwana	South Africa	225,000	-	-
NCT Forestry Cooperative	Richards Bay	South Africa	140,000	-	-
Celulosa Argentina	-	Uruguay	1 million	1 billion	2009
Ence	Colonia	Uruguay	1 million	930 million	2010
Nippon Paper	-	Uruguay	-	-	-
Portucel	-	Uruguay	1.3 million	4 billion	-
Stora Enso	-	Uruguay	1 million	1 billion	2012-2015
-	-	Venezuela	-	800 million	-
Lee & Man	200 km south of HCM City	Vietnam	150,000	-	2008-2009
Tan Mai Company	Quang Ngai	Vietnam	130,000	199 million	2011
Tan Mai Company	Lam Dong	Vietnam	200,000	36 million	2010
Tan Mai Company	Central Highlands	Vietnam	130,000	-	-
Incomex Saigon	Quang Nam	Vietnam	115,000	150 million	-
Ballapur Industries, Martin Group	Tuyen Quang	Vietnam	130,000	200 million	2009
Vietnam Paper Corporation (Vinapimex)	Bai Bang	Vietnam	250,000	300 million	2010

Conclusion and recommendations

It is usual in a report such as this to provide recommendations. After all, we want the pulp and paper industry to improve. However, as this report has hopefully shown, voluntary certification schemes or voluntary guidelines have completely failed to produce the structural changes needed in the industry. They have even failed to improve the industry by preventing the most disastrous projects from going ahead.

Networks of NGOs in North America, Europe and Indonesia have produced “Visions” of how they would like to see the pulp and paper industry develop. These “Visions” contain much that is good, such as a more than 50 per cent reduction of paper production in the case of the European Environmental Paper Vision. But they don’t go far enough in proposing a radical restructuring of the industry in such a way that would make redundant the massive industrial tree plantations that the industry is increasingly relying on.

Here is another vision of the pulp and paper industry.

“[I]magine a future scenario: All your separated household waste is collected from outside your house and transported to the local combined and very small power/pulp/paper mill. What used to go to landfill goes straight to the fluidized bed boiler along with everything that can be burnt (not paper!) for the supply of local energy. Your paper for recycling then goes into the pulp mill, along with any local farmers’ raw material waste that can be used for pulp. Then tissue and toilet rolls, cut size A4 and any other paper products that can be made in a miniature, fully automated mill, are produced and then delivered to the local supermarkets ready for the repeat of the next short, lifecycle.”⁶⁹⁹

Before you dismiss this as hopelessly radical or out of touch with the real world, I should point out that this “Vision” comes from *Pulp and Paper International*, a magazine produced for the industry and which usually promotes business as usual for the industry. While we could (and should) argue about whether we really want all our waste to be incinerated (given the pollution involved) and need to discuss with local communities where these minimills are to be built, the proposal to restructure the industry using small scale regional mills would avoid many of the problems created by today’s pulp and paper industry. It would also help address the problem of overproduction by producing paper that is needed locally. It would also create jobs.

A UK-based company, BioRegional, has developed such “minimills”. The mills were originally designed to be used in China, where thousands of small scale mills which used agricultural residues as raw material have been closed down – partly because they are polluting, but also partly to allow the restructuring of the industry with massive pulp and paper mills, to a large extent reliant on imported pulp. BioRegional’s minimills would allow China’s small-scale mills to be replaced with far less polluting versions, rather than closed down.⁷⁰⁰ But the minimills could be used anywhere.

In her 1997 book, “The U.S. Paper Industry and Sustainable Production: An Argument for Restructuring”, Maureen Smith looks at the possibilities of restructuring the North American pulp and

699 Mark Rushton (2008) “Global spotlight, local microscope”, *Pulp and Paper International*, August 2008, page 3.

700 A description of the BioRegional MiniMills project is available here:

http://www.bioregional.com/programme_projects/pap_fibres_prog/minimill/minimill_furtherinf.htm

paper industry along ecological lines. She concludes that a complete restructuring is the only way that the industry can begin to address the environmental problems that it has created.⁷⁰¹

With this sort of alternative structure of the pulp and paper industry in mind, the following list is a suggestion for how paper should be produced. It is not intended to be a set of guidelines for investing in a “sustainable” pulp and paper industry. Instead it is intended to be a way of alerting both the industry and its financiers to the problems currently created by the industry.

Paper should be produced:

- without destroying native forests;
- without establishing large scale monoculture tree plantations;
- without impacting on local peoples’ rights and access to land and livelihoods;
- without resulting in extensive environmental impacts: depletion of water resources, biodiversity loss, introduction of invasive species;
- without polluting air, water and soils; and
- without benefiting from government direct or indirect subsidies (including ECAs, multilateral banks, or bilateral aid).

Any pulp mill project that cannot meet these guidelines should not be funded and should not be built.

This may seem impossible to achieve, or hopelessly idealistic. But there is no such thing as “responsible investment” in the pulp and paper industry, as it currently exists. Why should the industry be allowed to continue establishing vast areas of monoculture tree plantations in the South? Why should the industry be allowed to “restructure” by sacking thousands of workers in the North while it employs cheaper labour in dangerous and often temporary jobs in the global South? Why should the industry continue to expand, continue to promote wasteful consumption and continue to produce huge amounts of greenhouse gases? Why should the pulp and paper industry be allowed to continue destroying local communities’ and Indigenous Peoples’ livelihoods and environments?

Currently, development “aid” is one of the factors that helps to support the industry to continue business as usual, rather than looking for innovative solutions to the problems that it is creating. For this reason, this report demands an end to “aid” to industrial tree plantations. It also demands an end to “aid” to the pulp and paper industry, for the simple reason that aid is supposed to promote development which is beneficial to communities in the South. Industrial tree plantations and the pulp and paper industry are not beneficial to communities in the South.

701 Maureen Smith (1997) “The U.S. Paper Industry and Sustainable Production: An Argument for Restructuring”, MIT Press.