



Brief on the Planned United Fiber System (UFS) Pulp Mill Project for South Kalimantan, Indonesia

Emile Jurgens
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Pulp Mill Project for
South Kalimantan, Indonesia**

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Contents

| | |
|-------------------------------------------------------------------------------------------------------------|----|
| Acknowledgements | iv |
| Executive Summary | v |
| Brief on the Planned United Fiber System (UFS) Pulp Mill Project for South Kalimantan, Indonesia | 1 |
| 1. Overview of the Project | 2 |
| 1.1 Project Background | 2 |
| 1.2 Financial Structure | 3 |
| 1.3 Fiber Supply and Plantation Development | 5 |
| 2. Principal Areas of Concern | 7 |
| 2.1 Underestimation of Plantation Risk | 7 |
| 2.2 Pressures on Natural Forests | 13 |
| 2.3 Exacerbation of Industrial Overcapacity | 14 |
| 2.4 Limited Assessment of Social Issues | 15 |
| 3. Environmental and Social Safeguards | 16 |
| 3.1 Who are the Principal Actors? | 17 |
| 3.2 Who Owns United Fiber System? | 17 |
| 3.3 Who is Tektronix? | 19 |
| 3.4 What is Probosutedjo's Role? | 19 |
| 3.5 CMEC and U.S. Government Sanctions | 20 |
| 3.6 Debt Covenants and the Involvement of Other Financial Institutions | 20 |
| 4. Summary | 21 |
| Endnotes | 24 |
| Appendices | 27 |

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Executive Summary

United Fiber System, Ltd (UFS) – a publicly listed company incorporated in Singapore – is currently seeking to secure financing for a 600,000 tonne greenfield pulp mill project in South Kalimantan, Indonesia. According to UFS, the proposed South Kalimantan pulp project will be somewhat unique in Indonesia in that it will source its fiber entirely from sustainably managed plantations and will generate minimal negative impacts on natural forests and local communities.

This brief has been prepared in the interest of promoting a more informed and transparent dialogue on the proposed project among financial decision-makers, policymakers, and other stakeholders. Based on a review of available documents and analyses, CIFOR has major questions regarding the social and environmental sustainability of the planned pulp mill and associated plantations. We believe that the following issues need particular attention and ought to be urgently addressed before the project proceeds further:

First, the Environmental Impact Analysis and associated project documents made available by UFS provide only limited information on the plantation development program at PT HRB and the mill's overall fiber supply strategy. Moreover, much of the data and projections included in those documents differ — in some cases quite significantly — from the data and projections provided by Jaakko Pöyry in its 2001 valuation study of the PT Menara Hutan Buana (now PT HRB) plantation. Our analysis suggests that UFS may have significantly overestimated the standing volume of pulpwood within PT HRB's plantation concession, as well as growth projections for the second and third rotations at the site. UFS may also have substantially underestimated the areas damaged or lost from existing planted areas at PT HRB, as well as the current risks to its plantations posed by fire.

Second, the proposed project is likely to place direct pressures on the 77,000 ha of natural forest that reportedly remains at the PT Hutan Rindang Banua (PT HRB) plantation concession, and particularly on the 44,000 ha of areas covered by 'mixed tropical hardwood' (MTH) that were designated by Jaakko Pöyry to be appropriate for plantation development. To date, to our knowledge, UFS has provided no detailed or accountable plan for how these areas would be managed or protected. It must be noted that the company has designated these areas as being 'Waste Forest' and carries the conversion value of these areas as an asset on its balance sheet.

Third, the development of a new 600,000 tonne pulp mill in South Kalimantan would compound the very significant problem of industrial overcapacity that currently exists in Indonesia's forestry sector. First, it would mean that fiber from the existing plantations in South Kalimantan would not be available to pulp producers in Sumatra which are currently facing significant fiber shortfalls. Second, UFS has given no indication of where it would source its fiber if it encounters an unforeseen shortfall in supply from its plantations; there is a possibility that it would source a portion of its fiber from natural forest. Third, it is possible that UFS will decide to raise the mill's capacity to 1.2 million tonnes/year, as indicated in project documents. Such a development could, in turn, place significant added pressures on surrounding forests.

Fourth, while the proposed pulp mill and associated plantations could generate significant employment and associated benefits, there is a risk of serious negative impacts on surrounding communities, which have a population of over 60,000 people. In addition, relations between UFS and PT HRB and local communities could have negative effects on the commercial viability of the proposed project (i.e. illegal logging, land claims, violent conflict), as seen with similar projects in other parts of Indonesia. To our knowledge, UFS has not carried out a detailed assessment of the project's likely social impacts or offered a detailed plan for ensuring that the project supports, rather than undermines, local livelihoods. Moreover, there is no indication that UFS and affiliated companies have engaged in the process of consultation with affected peoples.

Finally, the project's current ownership structure lacks transparency, and this could lead to a lack of accountability if UFS or its affiliates fail to meet the commitments it is now making. As such, it is essential that financial decision-makers, policymakers, and other interested parties design structures for ensuring accountability and transparency on the part of project principals.

Brief on the Planned United Fiber System (UFS) Pulp Mill Project for South Kalimantan, Indonesia

Emile Jurgens, Christopher Barr, and Christian Cossalter¹
Center for International Forestry Research (CIFOR)

Since late-2003, United Fiber System, Ltd (UFS) – a publicly listed company incorporated in Singapore – has taken significant steps towards securing financing for a 600,000 tonne greenfield pulp mill project in South Kalimantan, Indonesia. UFS has reportedly already secured some US\$ 693 million in financing, or 80 percent of the project's total cost, from China National Machinery & Equipment Import & Export Corporation (CMEC), a construction company based in Beijing. An additional US\$ 20 million of the project is being financed by Cornell Capital Partners, a US based group of investment funds. UFS claims that construction of the mill will begin in mid-2005 and the mill will begin operations by the end of 2007.

In addition to the pulp mill UFS proposes to build a wood chipping plant with an annual capacity of 700,000 bone dry metric tonnes (BDMT), with which the company apparently plans to begin chipping its mature plantations to generate cash flow. The majority of financing for the plant has reportedly been arranged by Raiffeisen Zentralbank Österreich, a major Austrian bank, and construction is set to begin during the first quarter of 2005, to be completed before the end of the year.

Based on an analysis of available project documents, and interviews with informed sources, the Center for International Forestry Research (CIFOR) has several concerns about the proposed South Kalimantan pulp project's likely impacts on forests, as well as the manner in which the project's financial risk and corporate governance issues have been evaluated. In brief, CIFOR is concerned that the projects:

- Could subject financial stakeholders to higher degrees of risk related to plantation development than those reported in project documents;
- May result in the loss of at least 44,000 ha of natural forest in South Kalimantan;
- Will exacerbate the significant problem of industrial overcapacity that already exists in Indonesia's forestry sector;
- Could have significant negative social impacts, which have not been adequately assessed;
- Lacks transparency in ownership, which may lead to lack of accountability.

CIFOR has prepared this brief in the interest of promoting a more informed and transparent dialogue on the proposed South Kalimantan pulp mill project among financial decision-makers, policymakers, and other stakeholders. It

should be noted that CIFOR met with Mr. Sven Edström, at the time United Fiber System's Chair and CEO, and several members of senior management from UFS and its affiliated forestry company, PT Hutan Rindang Banua, at CIFOR headquarters on December 12, 2003. The purpose of this meeting was to review the company's plans and to discuss many of the concerns presented here. Subsequent to this initial meeting UFS was given the opportunity to comment on a draft version of this report. On February 13th 2004, CIFOR presented the concerns outlined here to members of the World Bank and UFS at the World Bank offices in Jakarta. At that time UFS was hoping to receive political risk insurance from the World Bank's Multilateral Investment Guarantee Agency (MIGA). UFS's application for political risk insurance from MIGA has since been placed on hold. The results of the above discussions have been incorporated into the analysis that follows.

1. Overview of the Project

1.1 Project Background

United Fiber System was formed in 2002 when Anrof Singapore Limited (ASL), a company registered in Mauritius, acquired Poh Lian Holdings, a Singapore based construction company in a reverse takeover. ASL previously owned two Indonesian subsidiary companies: PT Menara Hutan Buana (PT MHB) and PT Marga Buana Bumi Mulia (PT MBBM). PT MHB, which has since changed its name to PT Hutan Rindang Banua (PT HRB), owns the right to a 268,585 hectare (gross) concession in South Kalimantan. PT MBBM owns the right to construct a pulp mill linked to this concession.

Plans to construct the South Kalimantan pulp mill have been in existence since at least 1994. At that time, PT MHB and PT MBBM were owned by former President Suharto's half-brother, Probosutedjo. In the mid-1990s, PT MHB used its political connections to secure Rp 144 billion in government grants and zero-interest loans from the Government's Reforestation Fund (*Dana Reboisasi*, or DR), making it the second largest beneficiary of DR allocations through May 1998.² Financing for the construction of the pulp mill was reportedly being arranged through Indonesia's state banks when the monetary crisis hit in 1997, at which point the project was put on hold.

In 2000 PT MHB and PT MBBM were taken over by management through Anrof Singapore Limited. In December 2000, ASL was sold to a group of holding companies registered in the British Virgin Islands. These companies purchased Poh Lian in April 2002. All assets, including the plantation holdings, were merged and the company was renamed United Fiber System to reflect the nature of its new core business.

Since then, UFS reportedly has been able to secure an agreement with China National Machinery & Equipment Import & Export Corporation (CMEC) for 80% of construction costs with the requirement that the remainder would be provided by UFS. To help generate the additional funding, UFS initiated an application for political risk insurance (PRI) from the World Bank's Multilateral Investment Guarantee Agency (MIGA) in late-2003. Following an NGO campaign aimed at World Bank involvement in the UFS project, as

well as CIFOR's presentation of an earlier version of this report to the World Bank in Jakarta in January 2004, UFS reportedly withdrew its application for MIGA political risk insurance. UFS apparently remains optimistic about the construction of the pulp mill and through early-2005, the company issued a series of statements indicating that it expected financing arrangements to be completed within weeks.

In 2004 UFS announced the creation of another Indonesian subsidiary, PT Mangium Anugerah Lestari (PT MAL). The purpose of PT MAL is the construction and operation of a wood chip plant with a planned annual capacity of 700,000 BDMT on Pulau Laut, an island off the coast of South Kalimantan. UFS entered into a financing agreement with CMEC for approximately 47%, or US\$ 18 million, of the construction cost of the wood chip plant. In December 2004, UFS signed an agreement with Raiffeisen Zentralbank Österreich for the remaining 53% of the construction cost. The plant will reportedly begin operating in the end of 2005, and will likely be used to chip *Acacia* logs harvested from the mature growth at plantation sites affiliated with UFS on the mainland, plantation sites managed by state-owned Inhutani II on Pulau Laut, and sites managed by small-holders and other companies in the area. At least until the UFS pulp mill is built, the company is expected to sell these chips to other pulp producers, located either within Indonesia or in export markets such as China through an off-take agreement with CMEC.

A chronology of key events since this project was initiated is presented in Appendix A.

1.2 Financial Structure

UFS proposes to build a greenfield single-line mill with an annual capacity to produce 600,000 air-dried tonnes (ADt) of bleached hardwood kraft pulp (BHKP). The project involves the construction of the mill, as well as a township, an electricity plant, a water treatment facility and a chemical plant to supply the mill, in addition to further development of associated plantations. The cost of the mill alone is estimated to be US\$ 863 million. In addition to the pulp mill, the cost of the wood chip plant that UFS is currently constructing on Pulau Laut is estimated to be US\$ 38 million.

At least 80 percent of the financing for the pulp project will come from Chinese sources. On 18 December 2002, UFS entered into a turnkey contract with China National Machinery & Equipment Import & Export Corporation (CMEC) for the construction of the pulp mill. Under the turnkey contract, CMEC is responsible for financing US\$ 690 million of the development costs while UFS is responsible for financing the remaining 20%, or approximately US\$ 173 million. The loan from CMEC carries favorable terms with no payments until after the commissioning of the mill.³ According to Sven Edström, financing for the CMEC loan will come from China Development Bank.

Implementation of the initial contract was dependent upon adequate insurance arrangements as well as equity participation for the remaining 20% of the construction costs. In 2003 UFS submitted a proposal to MIGA to

insure the project against political risk. This proposal, which has since been put on hold, reportedly would have had MIGA act as the lead provider of political risk insurance (covering US\$ 200 million) in a syndicate that would have included the China Export and Credit Insurance Corporation (Sinosure) and other export credit agencies. In December 2004, UFS announced that Sinosure in conjunction with international insurers has agreed to provide the coverage of related insurances for the project.

UFS' 2003 Annual Report states that UFS expects to procure the remaining 20% of the total construction costs from a combination of debt and equity and as a last resort, shareholders' loans from UFS' majority shareholder, Tektronix Industries Limited ("Tektronix"). According to the Annual Report, UFS had, on 21 April 2001, entered into a Deed of Undertaking with Tektronix pursuant to which Tektronix undertook to contribute an amount of up to US\$182 million in financing.

In December 2004 UFS secured an equity line facility of S\$ 40 million from Cornell Capital Partners Offshore, LP (Cornell). Cornell is a group of funds managed by US based Yorkville Advisers LLC. Cornell committed to purchase new common stock of UFS for up to S\$40 million over a five year period at market prices. Furthermore, UFS is negotiating a Loan Note Agreement with Cornell for an additional S\$7.5 million. The proceeds from the financing arrangements will be used to finance pre-operating expenses of the pulp and wood chip projects.

Funding for the wood chip plant was finalized in December 2004. At this time Raiffeisen Zentralbank Österreich extended a US\$ 21 million loan to the project. The remaining US\$ 18 million for the plant will be provided through a turnkey agreement with CMEC. Construction of the plant is expected to begin in the first quarter of 2005 with operations commencing toward the end of the year.

Edström believes that there are several reasons for the interest of Chinese banks in financing the UFS mill. First, China's demand for wood pulp is growing sharply and the government is acting to ensure a future supply of raw material for its paper mills. Second, China is interested in developing the technical capacity for constructing world-class pulp and paper mills domestically. The South Kalimantan project would give CMEC – which has never built a pulp mill — the experience it needs to start developing mills within China. Lastly, under the agreement, parts of the machinery for the UFS mill will be constructed in China, contributing to regional employment.⁴

Recognizing that CMEC has no direct experience in the pulp and paper industry, UFS and CMEC plan to engage leading European equipment and machinery companies as suppliers, in addition to contracting construction and engineering companies with past experience in building pulp mills. According to Edström, UFS together with CMEC will select the vendors and contractors, but CMEC will engage them directly and will manage their contracts.⁵ In June 2004 UFS announced that CMEC had executed a purchase contract with Andritz, an Austrian machinery supplier, for the bulk of the process machinery.⁶

UFS is still negotiating with independent companies for the construction, operation and ownership of the supporting facilities, which include a wastewater treatment facility and a chemical plant. According to Edström, UFS was in discussion with Vivendi Water for the construction of the water supply and treatment plant. The chemical plant was initially supposed to have been built by Eka Chemical, a subsidiary of the Dutch Akzo Nobel. However, Eka Chemical ended its involvement with the project in December 2002 shortly after protests by Milieudefensie Netherlands, an environmental NGO, outside Akzo Nobel's head office in Arnhem. According to a regional manager of Eka Chemical, the company will only proceed with an investment in the UFS project if the project receives World Bank approval.⁷

1.3 Fiber Supply and Plantation Development

UFS claims that it has designed the planned mill so that it will utilize plantation-grown *Acacia* fiber, and that unlike most existing Indonesian pulp producers, the mill will not consume any 'mixed tropical hardwoods' (MTH) harvested from natural forests. To run at full capacity of 600,000 tonnes per year, the mill will require approximately 3 million cubic meters (m³) of standing pulpwood on an annual basis. UFS reports that it plans to source this wood largely from its affiliated plantation company, PT Hutan Rindang Banua (PT HRB), which holds a 268,585 ha (gross) plantation concession (*Hutan Tanaman Industri*, or HTI) along the province's southern coast (see map, Appendix B).

According to a valuation of the PT Menara Hutan Buana (now PT HRB) plantation conducted by Jaakko Pöyry (JP) in January 2001, the vegetation on the concession consists of a "mixture of remaining logged over natural mixed tropical hardwood forest (MTH), planted plantation forest and scrub and grassland."⁸ JP estimates that the concession's net plantable area — which excludes steep areas, reserve areas, disputed ownership areas, areas of agricultural encroachment and estimated areas lost to infrastructure development — is 61% of the total concession area, or 164,490 ha, including 44,000 ha of natural forest that is deemed suitable for conversion.

According to UFS, approximately 86,000 ha of mostly *Acacia mangium* plantations were established at the PT HRB concession between 1994 and 1999 (see Tables 1 and 2). As far as we know, no new planting has occurred since 1999. While the total area planted as well as the quality of these plantations is under debate (see discussion below), the existing trees are ready for harvest based on an eight-year rotation. UFS plans to utilize these trees during the pulp mill's first years of operation.

According to UFS's Environmental Impact Analysis, the company plans to plant additional areas with *A. mangium* totaling 20,000 ha per year up to a total plantation size of 160,000 ha (net).⁹ This will supposedly be achieved through the conversion of scrub and grasslands within the PT HRB concession, and possibly through the acquisition of additional areas surrounding the concession. UFS also claims that it is seeking to gain access to additional *A. mangium* fiber from nearby concessions held by state-owned

forestry companies. These include the HTI concessions of PT Inhutani II Semaras, PT Inhutani II Semakin, and PT Inhutani III Sabuhur, and PT Inhutani III Riam Kiwa (see Table 3).¹⁰ In addition UFS has stated that it will source at least 20% of its wood from local forest owners.¹¹

Table 1: Areas of PT HRB Concession According to PT MBBM, January 2001 (in hectares)

| Areas | Total Plantation Area | Merchantable MTH Reserves Available for Plantation Forestry | MTH Reserves Not Available for Plantation Forestry | Non Forested Areas Not Available for Plantation Forestry | Non Forested Areas Available for Plantation Forestry | Total Area Available for Plantation Forestry Development | Total Gross Area |
|-----------------|-----------------------|-------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|------------------|
| Kintap | 19,148 | 930 | 1,930 | 15,100 | 5,492 | 25,570 | 42,600 |
| Sebambam | 34,223 | 7,539 | 965 | 18,450 | 21,723 | 63,485 | 82,900 |
| Riam Kiwa | 4,171 | 10,000 | 15,000 | 15,000 | 6,329 | 20,500 | 50,500 |
| Teluk Kepyayang | 18,209 | 5,751 | 965 | 11,100 | 10,975 | 34,935 | 47,000 |
| Pamukan | - | 20,000 | 10,000 | 6,000 | - | 20,000 | 36,000 |
| Total | 75,751 | 44,220 | 28,860 | 65,650 | 44,519 | 164,490 | 259,000 |

Source: JP Management Consulting "Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia", January 2001.

Table 2: Plantation Area at PT HRB Concession by Age Class and Sector (in hectares)

| Sector | Planting Year | | | | | Total Plantation Area |
|-----------------|---------------|--------------|---------------|---------------|--------------|-----------------------|
| | 94/95 | 95/96 | 96/97 | 97/98 | 98/99 | |
| Kintap | 1,116 | 1,600 | 3,739 | 9,497 | 3,196 | 19,148 |
| Sebambam | 4,999 | 5,375 | 7,038 | 13,329 | 3,482 | 34,223 |
| Riam Kiwa | - | - | 2,783 | 750 | 638 | 4,171 |
| Teluk Kepyayang | - | 592 | 2,429 | 14,865 | 323 | 18,209 |
| Pamukan | - | - | - | - | - | - |
| Total | 6,115 | 7,567 | 15,989 | 38,441 | 7,639 | 75,751 |

Source: JP Management Consulting "Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia", January 2001.

Table 3: Proposed Sources of Acacia Mangium Fiber Supply (excluding 20% sourced from local farmers)

| Company | Location (Kabupaten) | Area of SK HPHTI (ha) | Area of plantation up to 2002 (ha) |
|------------------------------------|------------------------------------------|-----------------------|------------------------------------|
| PT HRB | Banjar, Tanah Laut, Kotabaru/Tanah Bumbu | 268,585 | 75,758 |
| PT Kirana Khatulistiwa | Kotabaru/Tanah Bumbu | 14,400 | 4,100 |
| PT Inhutani II Semaras and Semakin | Kotabaru/Tanah Bumbu | 50,000 | 37,450 |
| PT Inhutani III Sabuhur | Tanah Laut | 20,000 | 11,700 |
| PT Inhutani III Riam Kiwa | Banjar | 28,908 | 8,500 |
| Total | | 388,639 | 137,518 |

Source: PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.

2. Principal Areas of Concern

UFS has indicated that it is taking measures to ensure that the South Kalimantan mill project does not produce the negative social and environmental impacts that have been associated with many of Indonesia's pulp mills in recent years, as detailed by CIFOR and others.¹² In an addendum to the company's Environmental Impact Analysis, Sven Edström reports that "UFS is very much aware that the prevailing conditions for establishing a world size chemical pulp mill in Indonesia differ considerably from the conditions during the 1990s. Today the wood raw material has to come from forest plantations and all considerations (including the social and environmental impact of the mill) have to be taken into [account], both during the construction and the operation periods."

CIFOR appreciates the company's acknowledgement that issues of social and environmental sustainability need to be addressed at each stage of the project. However, based on our review of available information, we believe that the project's likely impacts on natural forests and on surrounding communities have been inadequately assessed. Moreover, we are concerned that the project will compound existing problems of industrial overcapacity in Indonesia's forestry sector; will expose investors and other stakeholders to higher levels of financial risk associated with the company's plantation program than has been reported; and will proceed with little transparency or accountability on the part of the principal owners and financial stakeholders.

2.1 Underestimation of Plantation Risk

The Environmental Impact Analysis and associated project documents made available by UFS provide little information on the plantation development program at PT HRB and the mill's overall fiber supply strategy. Moreover, much of the data and projections included in those documents differ, in some cases quite significantly, from the data and projections provided by Jaakko Pöyry in its valuation studies of the PT Menara Hutan Buana (now PT HRB) plantation.

Based on an analysis of these documents and on our knowledge of similar plantations in Sumatra and Kalimantan, we believe that UFS has significantly underestimated the risks associated with its plantation development program and overstated the volumes of fiber that it will likely be able to obtain both from existing planted areas and from subsequent rotations at PT HRB. It should be emphasized that CIFOR has not been granted access to the plantations at PT HRB. As such the discussion in the sections that follow are principally intended to highlight issues that need further assessment, preferably by independent forestry experts.

2.1.1 *Standing volume on existing plantations*

UFS calculates the current volume of *Acacia mangium* at the PT HRB plantation concession to be approximately 8.5 million m³. This is based on the following assumptions:

| | |
|-----------------------------|------------------------------------------------------------------------|
| Total Area Planted | = 75,751 ha |
| Loss from Area | = 20 % |
| Mean Annual Increment (MAI) | = 20 m ³ /ha/yr |
| Age | = 7 years |
| Standing Pulpwood Volume | = MAI * Age * Area * (1.0 - % Area Loss) = 8,484,112 m ³ |

In its 2001 valuation study of the PT Menara Hutan Buana (now PT HRB) plantation, Jaakko Pöyry, concluded that UFS has significantly overestimated the volume of *A. mangium* at the concession. The study reports low production yields “due to a combination of poor seed source, large scale fire damage and budget restraints limiting the plantation tending and maintenance programs.”¹³ Specifically, Jaakko Pöyry estimates that the Mean Annual Increment (MAI) at “currently established non-damaged plantations” is 15.9 m³/ha/yr. JP bases this estimate on analysis of Permanent Sample Plot (PSP) data provided by PT MHB and field observations and measurements taken by JP Management Consulting. In addition, JP estimates that approximately 20% of the total areas planted by PT MHB have been lost, particularly due to fire damage, and are not available for harvest.

Using the same methodology as above, and applying Jaakko Pöyry’s findings, the standing pulpwood volume of *Acacia mangium* at the PT HRB concession is approximately 6.8 million m³. This calculation is based on the following assumptions:

| | |
|--------------------------|------------------------------------------------------------------------|
| Total Area Planted | = 75,751 ha |
| Loss from Area | = 20% |
| MAI | = 16 m ³ /ha/yr |
| Age | = 7 |
| Standing Pulpwood Volume | = MAI * Age * Area * (1.0 - % Area Loss) = 6,787,290 m ³ |

These figures imply a divergence of over 25% between the JP estimate and the UFS calculation of standing pulpwood volume at PT HRB, calculated as follows:

$$\% \text{ Difference} = \frac{10,605,140 - 6,787,290 \text{ m}^3}{6,787,290 \text{ m}^3} = 25\%$$

It should be noted that UFS disputes Jaakko Pöyry’s estimate of PT HRB’s current production yield. In a note to CIFOR, Sven Edström states:

Referring to the JP report, we do not agree to the reduction of their calculated volume 101 m³/ha to 78.4 m³/ha, as the reason for the reduction is partly the same as the reason for their reduction of the plantation area from 75,751 ha to 60,601 ha.¹⁴

As noted above, CIFOR has not visited the PT HRB plantation site and, as such, is not in a position to independently verify either the UFS or the JP estimates. However, we believe that this magnitude of difference between the two estimates warrants further analysis of the plantation's growth rates, standing stock, area losses, and production yields. It is advisable that such an analysis be conducted through a field-based assessment by an independent forestry expert.

Based on CIFOR's analysis of similar plantations in Sumatra and Kalimantan, we believe that the low MAI's and survival figures mentioned in the JP report could be an indicator that the plantation has suffered from inadequate maintenance and fire protection. In Indonesia plantations were generally neglected during the monetary crisis when even large, professionally-managed pulp companies did not have the financial resources to make necessary investments in their plantations. Inadequate site preparation and insufficient tending have led to poor growth and production losses in many areas.

In addition to the quality of the PT HRB plantation, the amount of area originally planted on the concession is under debate. In 2001, a government appointed research team conducted an aerial photography study of the site and concluded that PT MHB had only planted around 40,000 ha instead of the 70,000 ha claimed by PT MHB's director, Probosutedjo. In 2003 the court sentenced Probosutedjo to 4 years in prison for embezzling funds from the government's reforestation fund by inflating the size of the area planted, and the case is currently on appeal. As far as we know, there has been no comprehensive assessment of the area planted by PT MHB since the court appointed study.

2.1.2 Fiber requirement during start-up phase

The proposed pulp mill will be designed to produce 600,000 ADt of bleached hardwood kraft pulp (BHKP) per year. In projecting the mill's fiber requirement, UFS uses the following assumptions:

- 4.65 m³ sob (solid wood over bark) is consumed by the mill to produce 1 ADt of pulp.
- 10% fiber loss between the standing volume and the volume that arrives at the mill.

Using these assumptions UFS arrives at the following fiber requirement:

600,000 ADt * 4.65 m³ = 2,790,000 m³ at the mill.

2,790,000 m³/0.9 = 3,100,000 m³ standing volume consumed per year.

UFS expects that the mill will operate at 70 % capacity during its first year, and will not reach full capacity until the fourth year of operation. During this time, UFS projects that the mill's annual fiber consumption will grow from 2.1 million m³ to 3.1 million m³ (see Table 4).

Table 4: Estimated Fiber Requirement During Years 1-4 of Mill Operation, According to UFS

| Year | Operational Capacity | ADt pulp | Standing pulp fiber requirement (m ³ /yr) |
|------|----------------------|----------|------------------------------------------------------|
| 1 | 70% | 420,000 | 2,170,000 |
| 2 | 85% | 510,000 | 2,635,000 |
| 3 | 95% | 570,000 | 2,945,000 |
| 4 | 100% | 600,000 | 3,100,000 |

Source: Sven Edström, letter to CIFOR, 17 December 2003.

The anticipated schedule for logging and pulpwood production to supply the UFS pulp mill is detailed in the Environmental Impact Analysis (EIA) prepared for PT MBBM. According to the EIA, the volume of pulpwood harvested from the existing plantations at PT HRB will match the mill's projected fiber demand schedule in the first five years of operation. The EIA predicts a surplus of 900,000 m³ (standing pulpwood) in 2011 from a harvested area of 20,000 ha, which it plans to plant in 2004 (see Table 5).¹⁵

Using Jaakko Pöyry's estimate of an MAI of 16 m³/ha/yr and a 20% loss of planted area due to damage, the supply from existing plantations, assuming that the initial planted area corresponds to UFS' claims, is only enough to cover the first three years of operation (see Table 6). If it is assumed that the next plantation will not be ready for harvest until age 7 and the mill starts operating at the end of 2006, then the mill will run out of fiber from PT HRB's existing plantations in the 4th and 5th years of operation. It should be noted that if, as had been suggested by the Indonesian courts, the total initial planted area is less than what is claimed by UFS, the fiber deficit from the UFS concession could be significantly larger.

It is significant that UFS plans to secure a positive cash flow in 2005 by converting at least a portion of its mature plantations into wood chips.¹⁶ As noted earlier, it is currently building a US\$ 38 million wood chip plant on Pulau Laut, which will have a capacity of 700,000 bone dry tonnes per year. The wood chip plant, which is scheduled to begin production toward the end of the year, will require approximately 1.02 million m³ of standing timber per year to operate at full capacity.¹⁷ It would seem likely that UFS has located the wood chip plant on Pulau Laut as part of a strategy to gain access to plantations managed by the state-owned forestry corporation PT Inhutani II, as well as small-holders and other companies in the area. UFS also reportedly plans to chip mature trees from PT HRB plantation sites and to sell the wood chips to other producers; the bulk of these sales will reportedly be managed through an off-take agreement with CMEC.¹⁸

The sale of wood chips from the PT HRB concession could significantly increase the gap between fiber supply from the company's standing stock of *Acacia* and fiber demand during the start-up phase of the pulp mill at whatever point it is built. This will particularly be the case to the extent that PT HRB is harvesting trees without an equivalent amount of replanting.

Table 5: Projected Pulpwood Production by Age Class from Existing Plantations within the PT HRB concession, According to PT MBBM's EIA (MAI = 20 m³/ha/yr and 0% Loss of Planted Area)

| Year of Harvest | Planting Year | Area (ha) | Production (m ³) | Demand (m ³) | Surplus/Deficit(m ³) |
|-----------------|---------------|-----------|------------------------------|--------------------------|----------------------------------|
| 2005/2006 | 1994/1995 | 6,116 | 1,131,460 | 2,170,000 | |
| | 1995/1996 | 5,884 | 1,088,540 | | 50,000 |
| 2006/2007 | 1995/1996 | 1,684 | 311,540 | 2,635,000 | |
| | 1996/1997 | 12,316 | 2,278,460 | | -45,000 |
| 2007/2008 | 1996/1997 | 3,676 | 680,060 | 2,945,000 | |
| | 1997/1998 | 12,324 | 2,279,940 | | 15,000 |
| 2008/2009 | 1997/1998 | 17,000 | 3,145,000 | 3,100,000 | 45,000 |
| 2009/2010 | 1997/1998 | 9,118 | 1,686,830 | 3,100,000 | |
| | 1998/1999 | 7,641 | 1,413,585 | | 415 |
| 2010/2011 | 2003/2004 | 20,000 | 4,000,000 | 3,100,000 | 900,000 |

Source: PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.

Table 6: Projected Pulpwood Production by Age Class from Existing Plantations, Based on Jaakko Pöyry's Assumptions (MAI = 16 m³/hr/yr and 20% Loss of Planted Area)

| Year of Harvest | Planting Year | Area (ha) | Production (m ³) | Demand (m ³) | Surplus/Deficit(m ³) |
|-----------------|---------------|-----------|------------------------------|--------------------------|----------------------------------|
| 2005/2006 | 1994/1995 | 6,115 | 676,270 | 2,170,000 | |
| | 1995/1996 | 7,567 | 836,850 | | |
| | 1996/1997 | 6,545 | 656,880 | | - |
| 2006/2007 | 1996/1997 | 9,444 | 1,044,430 | 2,635,000 | |
| | 1997/1998 | 15,850 | 1,590,570 | | - |
| 2007/2008 | 1998/1999 | 22,591 | 2,498,477 | 2,945,000 | |
| | 1998/1999 | 4,449 | 446,532 | | - |
| 2008/2009 | | 3,190 | 353,811 | 3,100,000 | -2,476,189 |
| 2009/2010 | 1998/1999 | | | 3,100,000 | -3,100,000 |
| 2010/2011 | 2003/2004 | 20,000 | 2,800,000 | 3,100,000 | -300,000 |

Source: Growth projections based on JP Management Consulting "Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia", January 2001.

2.1.3 Long term fiber supply

The company's capacity to meet the mill's fiber requirements from the PT HRB plantation in the 6th year of operation and beyond will depend, to a large extent, on whether PT HRB succeeds in planting the 20,000 ha that it has projected for 2003/2004 and subsequent years. Thus far, the company has given no indication as to whether the projected planting for 2003/2004 was initiated. However, according to Sven Edström, planting will only commence once the pulp mill project proceeds.¹⁹

In its valuation study, Jaakko Pöyry expects that the average MAI at the PT HRB plantation concession could be raised from the current 16 m³/ha/yr to 25m³/ha/yr for the second rotation and up to 30m³/ha/yr for subsequent rotations. This projection is based on the assumption that “improved management and funding” for plantation development are forthcoming.²⁰ These figures imply an increase in average growth of 56% between the first and second rotations, followed by another increase of 20% between the second and third rotations – equivalent to an aggregate increase of 87% over 14 years. The base numbers used by the EIA substantially exceed JP’s growth predictions. The EIA reports an expected increase to an MAI of 29 m³/ha/yr for the next two rotations and 33 m³/ha/yr for the fourth rotation onwards.²¹

We believe that the projected increases in MAI presented in both the JP valuation study and the EIA for PT MBBM are extremely optimistic. While there is general agreement that such increases in incremental growth can be achieved on trial plots over relatively small areas, there is little evidence to suggest that such dramatic increases in MAIs can be achieved on an industrial scale across all sites during such a relatively short period of time. To our knowledge, an MAI of 33 m³/ha/yr has never been achieved at an operational scale in Indonesian pulpwood plantations. Plantation companies managed by the Sinar Mas Group (the parent conglomerate for Asia Pulp & Paper), for instance, have pioneered the development of fast growing *A. mangium* plantations in Sumatra since the mid-1980s in order to supply fiber to the Indah Kiat and Lontar Papyrus pulp mills. These companies have only recently achieved MAIs of 20-23 m³/ha/yr at an operational scale. This has been achieved through substantial investments in research and development, and tree breeding, as well as nearly two decades of operational experience.

The Jaakko Pöyry valuation study states that large tracts of the existing planted areas at the PT HRB plantation concession were either damaged or lost to fires in the past. Some portions of the plantation reportedly suffered up to 50% losses of planted area due to large-scale fires. Given this history, fires clearly pose a very significant risk to the plantation, and it will be essential for PT HRB to implement a comprehensive fire management strategy if the company is to meet even the most conservative of its production targets over the medium term.²²

Our analysis shows that the proposed pulp mill will not be able to rely solely on fiber sourced from the PT HRB concession during the first few years of operation, and possibly for much longer. In both the short and the long term, the mill is likely to require significant additional supplies of fiber.

Sven Edström has indicated that UFS plans to purchase 20 % of the mill’s fiber needs from forest plantation owners other than PT HRB.²³ Edström stated that the company already has confirmation that this volume is available. However, it is not clear whether UFS has made contractual agreements for land area or fiber supply with other forest plantation owners. Moreover, while wood purchases on this scale would certainly offset some of the projected fiber deficits, they are unlikely to fill the gap that is anticipated by the Jaakko Pöyry valuation study (which does not take into account the additional loss of fiber from chipping operations). Also, as discussed below, UFS’s proposal to source 20% of its fiber supply from local farmers may be difficult to implement.

2.2 Pressures on Natural Forests

UFS claims that the proposed mill has been designed so that it will have little, if any, direct adverse effects on natural forests. In particular, the company reports that the mill will rely fully on plantation-grown *Acacia*, and will not utilize any MTH – in contrast to the Asia Pulp & Paper (APP) and APRIL mills in Sumatra, which continue to rely on MTH for roughly 70 % of their fiber inputs. Moreover, UFS claims that plantation development at PT HRB and associated sites will not involve any conversion of natural forests.

In spite of these claims, UFS has not produced a detailed and accountable forest management plan that ensures protection of the natural forest areas that currently remain within the PT HRB plantation concession site, and within any other concession areas that UFS plans to develop. The Jaakko Pöyry valuation study estimates that just over 73,000 ha of logged-over natural forests remain at the PT HRB concession site. Of this area, JP has identified some 44,000 ha of natural forest area with merchantable MTH, which it believes are suitable for plantation development. The JP valuation study projects that the mill would obtain over 8.0 million m³ from the MTH cleared from these areas during the mill's first five years of operation.²⁴

UFS's communication materials in 2003 referred to the MTH areas within their concession as "Waste Forest."²⁵ Moreover, according to Sven Edström, UFS was working with Bappeda, South Kalimantan's regional planning agency, to secure swap agreements with neighboring landowners, whereby unplantable areas will be traded for additional scrub and grassland areas or agricultural lands. Included in the areas that UFS is hoping to swap are portions of the remaining MTH areas within the PT HRB concession site.²⁶ If the company succeeds in making these swaps, UFS would appear not to be converting natural forests, while not forfeiting plantable land area at PT HRB's concession. The fate of the 44,000 ha of MTH areas designated by JP to be suitable for plantation development would (presumably) be out of the hands of UFS.

It should be noted that the release of these MTH areas by PT HRB would create potentially lucrative business opportunities for timber companies that are able to secure the rights to harvest the remaining MTH. If the project does proceed, it would be important to monitor who is logging these areas (i.e. are they being logged by affiliates of PT HRB?) and what types of compensation PT HRB or UFS receives in exchange for access to the standing timber.

UFS claims the pulp line will be designed exclusively for *Acacia* furnish and will not be able to process MTH. CIFOR is not in a position to verify or to refute this claim, but clearly the limitation would not extend to the wood chip plant. As far as we know there is nothing preventing UFS from logging MTH areas for chips, and selling these to other pulp producers, either as market chips or through an off-taker, such as CMEC.

The value of the commercially viable natural forest areas remaining on the PT HRB concession, represents US\$ 204 million, or 30% of the total book value of UFS's assets as stated on its 2003 Balance Sheet. The fact that UFS carries the entire value of the MTH areas on its balance sheet implies that UFS has the intent and ability to realize this value. As Edström pointed out

in a letter to CIFOR, the management of UFS is legally bound by its fiduciary duty to maximize the financial return on its assets. In the words of Edström: “UFS as a public company and as the rightful owner of this MTH forest, has to consider this as an asset with value. In the case [that] the pulp mill is not built, due to one reason or another, the management of UFS will have to decide what to do with this asset.”²⁷

2.3 Exacerbation of Industrial Overcapacity

The development of a new 600,000 tonne pulp mill in South Kalimantan would compound the very significant problem of industrial overcapacity that currently exists in Indonesia’s forestry sector. By most estimates, Indonesia’s domestic wood processing industries consume 55-70 million cubic meters of logs each year (approximately 28 million cubic meters is utilized by the pulp industry).²⁸ However, the volume of wood that can be harvested sustainably from the nation’s natural forests is widely believed to be less than 20 million cubic meters. A considerable portion of this gap is filled by logs that are in conversion forests and logs that are harvested illegally.

Through the Consultative Group on Indonesia (CGI), the World Bank and other members of the international donor community have been working closely with the Ministry of Forestry since 2000 to downsize and restructure the country’s wood processing sector, in order to balance domestic log demand with sustainable supply levels. Construction of the proposed mill would run directly counter to, and potentially undermine, these efforts in three ways:

First, the development of the UFS pulp mill would mean that fiber from the existing plantations in South Kalimantan would not be available to pulp producers in Sumatra which are currently facing significant fiber shortfalls. The Ministry of Forestry has recently announced that it will allow those producers to clear new areas of natural forests to secure a plantation-based fiber supply if they are not able to obtain plantation pulpwood from external sources. The plantations managed by PT HRB, as well as the Inhutani II and Inhutani III plantation sites that UFS is now trying to secure, represent sources of plantation fiber that could potentially be used to offset the fiber deficits faced by the Sumatra mills if they are not utilized by the proposed mill in South Kalimantan.

Second, although UFS has announced its intention to process only plantation-grown *Acacia*, the company appears to be overly optimistic in its projections regarding plantation development at PT HRB. As outlined in the previous sections, the company is unlikely to achieve its projected growth rates and yield targets within the first two rotations, in addition to facing significant (though poorly-assessed) risks associated with illegal logging, land conflicts, and fire. In spite of these risks, UFS has given no indication of where it would source its fiber if it encounters an unforeseen shortfall in supply. Would the pressure to feed the mill lead, either directly or indirectly, to the logging of MTH areas?

Third, it is often the case that pulp producers seek to expand capacity, through the installation of a new production line, very shortly after a mill is

constructed. While UFS has not formally announced its intention to do so, company documents indicate that UFS is indeed considering the possibility of installing a second pulp line, at some point, to raise the mill's capacity to 1.2 million tonnes/year.²⁹ What would be the implications of such an expansion on surrounding forests?

2.4 Limited Assessment of Social Issues

The planned UFS pulp mill would almost certainly have a significant impact on surrounding communities. UFS estimates that the pulp mill will employ 6,000 people in its plantation, transport and mill operations.³⁰ According to the EIA, UFS has committed to support and develop approximately 200 small and medium enterprises to boost the local economy. However, as far as we know, UFS has made no binding commitments in this regard. While the mill could potentially provide important benefits, the history of such projects in Indonesia suggests that UFS needs to take steps to ensure that serious negative social impacts are minimized. Having reviewed documentation made available by UFS, we feel that important issues related to social impacts have not been adequately addressed and more work needs to be done in this area. The Environmental Impact Analysis that was submitted to MIGA is exclusively focused on the immediate area surrounding the proposed pulp mill (see map, Appendix B), and ignores the potential social impacts of the large-scale land use changes envisioned by UFS.

According to the EIA, there are five villages in the vicinity of the planned pulp mill. Satui Barat, Satui Timur, Sungai Danau and Sungai Cuka are located in the *kecamatan* (sub-district) of Satui. Sebambam Baru is located in the *kecamatan* of Kintap. The total population of these villages is reported to be around 60,000 people. The agricultural sector, which includes food and agriculture, plantations, fishery, animal husbandry, and other agricultural operations, accounts for more than 50% of employment.³¹ According to the EIA, most of the people in the villages are farmers and 'wood seekers', and others are employees of the regional coal mining and plantation industries. The EIA also mentions, but does not discuss further, several transmigration villages in the area: Bukit Mulia, Sumberjaya, Mekarsari, and Kebun Raya.

The Jaakko Pöyry valuation study of the concession makes a brief reference to "disputed ownership areas" and "areas of agricultural encroachment" existing within the concession. The EIA mentions that forest resources have been "squeezed by HTI companies in the area"³² and that people are unhappy about the low productivity of the remaining lands. The EIA also mentions that the people of Sungai Cuka practice a form of shifting cultivation that utilizes shrub and forest land. This begs the question of how these people will be affected by the conversion of shrublands to pulpwood plantations. According to Lesley Potter, who conducted a study of farmer's perspectives on the conversion of *Imperata* grasslands close to one of the PT HRB concession areas, "farmers in the district feel strongly that their needs were not addressed carefully enough when the reforestation company was drawing up the boundaries of its concession area"³³.

The JP valuation notes that some 7,000 ha of areas planted with *Acacia* exist outside the boundaries of PT HRB's plantation concession.³⁴ It is unclear

who planted these areas or what claims are being made on these areas at this point. According to Sven Edström, UFS is now seeking approval from the provincial and district governments to secure control over the trees planted on these lands. Given the degree of competition over land, and particularly areas on which trees have been planted, that exists in much of Indonesia, it will be critical that outstanding claims to these areas be fully assessed and resolved before they are assumed to be available to UFS.

In his presentation to CIFOR, Sven Edström mentioned that UFS hopes to implement an outgrower scheme whereby local farmers will be contracted to plant pulpwood trees that are later sold to the mill. Any such initiative needs to be carefully thought out and planned. Similar schemes have in some cases proven difficult to implement, or have not resulted in the intended benefits for local people. UFS has not given any indication of how it aims to implement successful outgrower schemes. According to Potter:

In the early days of the HTI's in the Riam Kiwa, the *taungya* or *tumpangsari* system was tried, with villagers contracting to plant food crops between the rows of Acacia, but the growth rates of the trees were too rapid for this to last more than a year. People also said that the crops did not grow particularly well, so the system did not interest them....The poorer villagers, with no alternative but to continue their swiddening [i.e. shifting agriculture], feel most of the intrusion into their district and are pushed into more distant areas. Even they maintain their independence and have no interest in working as part of the HTI system.³⁵

An issue brought up by the EIA is that since approximately 80% of the villagers do not have an education beyond primary schools, many skilled laborers will have to be brought to the region from outside. The study suggests that locals will be able to find employment in the service industries surrounding the pulp project.

3. Environmental and Social Safeguards

According to UFS, the proposed South Kalimantan pulp project will be somewhat unique in Indonesia in that it will source its fiber entirely from sustainably managed plantations, and will generate minimal negative impacts on natural forests and local communities. While such an approach is certainly laudable in principle, the projections that UFS is now making about social and environmental sustainability are, in many respects, strikingly similar to those that have been made over the last several years by Indonesia's existing pulp producers – namely, APP, APRIL, and Kiani Kertas. Although these producers' mills have relied heavily on MTH, each company has announced a series of 'sustainability targets' at which point its mill would utilize only plantation-grown fiber. In each case, however, the company has failed to meet these 'sustainability targets' – due to overly optimistic plantation projections or due to the expansion of production capacity at the pulp mill, or in some cases, to both.

Sven Edström has repeatedly pointed to the fact that as a publicly listed company, UFS is legally bound to rigorous requirements set forth by the

Singapore Stock Exchange. While this is undoubtedly true, it should be noted that as the cases of APP and APRIL suggest, being publicly listed has not been a guarantee for environmental, social, or fiscal responsibility in the past.

The recent history of Indonesia's pulp and plantations sector raises important questions about what types of safeguards will be in place to ensure that UFS and its affiliates meet the commitments to environmental and social sustainability that they are currently making. According to Sven Edström, MIGA was going to play a key role in ensuring that UFS adheres to these commitments, as the agency's willingness to provide political risk insurance to the project would have required the company to meet the standards specified in MIGA's own social and environmental policies. The application for political risk insurance from MIGA was reportedly withdrawn by the project sponsor in March 2004. It is not clear whether UFS has plans to resubmit the application at some future date.

Given the poor track record of other Indonesian pulp and plantation companies in meeting social and environmental commitments (in addition to financial commitments), it is important to consider what kind of safeguards are now in place that will ensure that UFS acts responsibly. In effect, what are the implications if UFS and/or its affiliates fail to meet the promises it is now making? In assessing such a scenario, it is essential to know who the principal actors in the project are; to understand what their track records have been over the last several years; and to have a clear sense of what channels of recourse would be available if they do not fulfill their commitments.

3.1 Who are the Principal Actors?

Due to the environmental and social risks inherent in the proposed South Kalimantan pulp project, it is critical that the principal owners and financial stakeholders be held to a high standard of accountability and transparency. Past projects in Indonesia's pulp and plantations sector have shown that government regulation and law enforcement alone cannot prevent undesirable environmental and social impacts from occurring, and that other safeguards need to be in place.

This section examines who the principal owners and financial stakeholders in the proposed South Kalimantan pulp project are. Given the highly opaque ownership structure of UFS, we believe that this information is essential for financial decision-makers, policymakers, and other interested parties who may be involved in designing structures for ensuring accountability and transparency on the part of project principals.

3.2 Who Owns United Fiber System?

United Fiber System (UFS) came into being through the reverse takeover of Anrof Singapore Limited (ASL) by the Singaporean construction company Poh Lian Holdings Limited in April 2002. The purchase of ASL was completed through the issuance and transfer of Poh Lian equity to the owners of ASL, resulting in these owners becoming the majority shareholders of the newly formed UFS.

ASL is a holding company incorporated in Mauritius. ASL's ownership comprised another holding company named Shinning Spring Resources Ltd (SSR), incorporated in the British Virgin Islands. Through direct and indirect ownership (through SSR) ASL owned 100% of PT Menara Hutan Buana (MHB) and PT Marga Buana Bumi Mulia (MBBM). PT MHB was the Indonesian company, which was awarded the 268,585 hectare HTI concession in South Kalimantan in 1998 and later became PT HRB. PT MBBM is the Indonesian company whose purpose is the development of the pulp mill adjacent to the PT MHB concession.

Prior to the reverse takeover, ASL was wholly owned by a group of holding companies registered in the British Virgin Islands and by a private engineering company based in Singapore. The holding companies had no other business activities beside the ownership of ASL (and thereby PT MHB and PT MBBM).

At the time of the reverse takeover in April 2002, the shareholders of Anrof Singapore Limited were:

| | |
|------------------------------------------------------------|--------------|
| <i>Tektronix Industries Ltd. (British Virgin Islands)</i> | 76.4% |
| <i>M.E.I. Project Engineers Private Ltd. (Singapore)</i> | 1.52% |
| <i>E-Infohigh Ltd. (British Virgin Islands)</i> | 5.33% |
| <i>Automatrix Technology Ltd. (British Virgin Islands)</i> | 5.33% |
| <i>Drayson Technology Ltd. (British Virgin Islands)</i> | 5.33% |
| <i>Adriatic Assets Ltd. (British Virgin Islands)</i> | 6.10% |
| Total | 100% |

Source: Poh Lian Holdings Ltd., Circular to Shareholders, 28 March 2002.

Through the reverse takeover, the previous owners of ASL became the majority shareholders of United Fiber System, with Tektronix owning 51% of UFS equity as at April 10 2003.

According to a Circular sent to Poh Lian shareholders prior to the takeover, E-Infohigh, Automatrix, and Drayson were all wholly owned by Mr. Wisanggeni Lauw. Adriatic was wholly owned by the wives of Wisanggeni Lauw and Karl Anders Lindman³⁶, one of the shareholders of Tektronix. All four companies are registered in the British Virgin Islands, as is Tektronix. MEI is a privately held project engineering company based and registered in Singapore.

As at April 10 2003, Tektronix was the largest shareholder with 51% of the total shares of UFS. Mr. Wisanggeni Lauw is the largest known individual shareholder in UFS, with approximately 10% of the company's total shares. These shares are registered to LOBKay Hian Pte Ltd and the holding companies Drayson, E-Infohigh, Automatrix and Adriatic (through his spouse).³⁷ In compliance with Singapore Stock Exchange listing requirements, the public holds approximately 35% of the Company's shares.³⁸

A diagram describing the ownership structure of UFS and its forestry subsidiaries is presented in Appendix C.

3.3 Who is Tektronix?

According to the Circular to Shareholders that was circulated prior to the reverse takeover of the planned pulp project, the majority shareholders of Tektronix as at March 2002 also owned more than 25% of the shareholding interests in CellMark Holdings AB.³⁹ Sweden based CellMark is the world's largest marketing company for the pulp and paper industry. Since April 2001, CellMark has had a 10-year offtake agreement with PT MBBM. According to Edström, this is a "take or pay" agreement, whereby CellMark agrees to purchase 90% of the output from the pulp mill and has an option to market the remaining 10%. Most of the pulp would go to the Asian market and the remainder to Europe.

The owners of Tektronix in March 2002 according to the Circular were:

- Håkan Arne Björnhage CEO CellMark Holdings
- Bengt Thomas Leifsson Hallberg CEO CellMark Pulp, Singapore
- Bror Thomas Hedberg Director of CellMark
- Per Waldemar Hultengren CEO CellMark Paper
- Hans Östen Kling CEO CellMark Pulp
- Karl Anders Lindman Previously at CellMark
- Jan Lennart Meuller Manager of Packaging, CellMark
- Bo Peter Mikael Norrman
- Bengt Ragnar Stenbeck CEO CellMark Pulp North America

According to Hans Kling⁴⁰, CellMark cannot officially own a substantial part of UFS due to potential conflicts of interest. It is questionable whether CellMark's indirect ownership makes CellMark accountable for UFS' environmental performance.

3.4 What is Probosutedjo's Role?

Probosutedjo, the half-brother of former President Suharto, was Chief Director of the South Kalimantan concession, PT Menara Hutan Buana, from January 1995 until his resignation in January 2002. In August 1997 Probosutedjo was under investigation for possibly diverting a capital loan from the state's Reforestation Fund (*Dana Reboisasi*) to build a pulp factory rather than planting trees⁴¹. On 5 September 2002 Indonesian prosecutors charged Probosutedjo with 'marking up' the size of the plantation area of the PT MHB concession, thereby receiving and pocketing excess reforestation loans totaling Rp 49 billion, or approximately US\$ 6 million.⁴²

On 22 April 2003 Probosutedjo was sentenced to four years in prison for corruption and his lawyers are currently appealing the sentence. According to Sven Edström, Probosutedjo has no interest in UFS or any of its subsidiaries; however, due to the complex ownership structure of UFS, this is difficult to verify. It is clear, however, that Wisanggeni Lauw, the largest known individual shareholder, has a long-standing relationship with Probosutedjo. In 1994 Wisanggeni Lauw began working with Probosutedjo as the director of PT MHB.

3.5 CMEC and U.S. Government Sanctions

Given the significant role played by CMEC in this project, CIFOR asked UFS what it knows about the company's environmental policies and performance in prior projects. Sven Edström reported that he does not know anything about CMEC's environmental record.⁴³

In searching for information on CMEC's environmental track record, however, CIFOR has been surprised to learn that the company is a Chinese state-owned enterprise which was placed under sanction by the US Government on July 9, 2002 under the Iran-Iraq Arms Non-Proliferation Act of 1992 ("Iran-Iraq Act") and the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 ("Chemical Biological Weapons Sanctions Law").⁴⁴ It is not clear what the US sanctions would mean in this case.

CIFOR has not found information on CMEC's environmental track record. However, its record of questionable international dealings is a cause for concern, and CMEC's involvement as the largest creditor raises questions about the 'reputational capital' invested in this project. It should also be noted that unlike many global financial institutions, CMEC and the Chinese banks that will be funding it are believed to have only limited degrees of environmental accountability in their home country, and therefore they may be less likely to maintain high standards of environmental management in the construction of the proposed South Kalimantan pulp mill.

While a growing number of investment banks and export credit agencies have adopted detailed environmental policies and operate under the scrutiny of environmental groups, CMEC and its funding institutions are likely to be less encumbered by such oversight and may remain largely unaccountable for their environmental impacts.

3.6 Debt Covenants and the Involvement of Other Financial Institutions

Financial institutions that have adopted environmental policies, or are concerned about their public image, may use debt covenants to ameliorate the environmental and social consequences of their investments. In the case of MIGA, which is bound by the World Bank's guidelines on investments in forestry projects, these covenants could stipulate among other things that project sponsors⁴⁵:

- Consult local interest groups involved in forest management and conservation in the subject forest area.
- Adopt policies and programs to ensure conservation and sustainable management of existing forests and promote active participation of local people in the long-term sustainable management of forests.
- Adopt a comprehensive and environmentally sound forestry conservation and development plan that clearly defines the roles and rights of the government (where applicable), the project sponsor, and directly affected local people.
- Set aside adequate compensatory forests.

- Establish an internal capacity to implement and enforce these commitments.

In addition, when MIGA-supported projects involve the commercial exploitation of forests on lands owned by, or customarily used by indigenous peoples, MIGA requires that they should:

- Be informed about the potential impacts to their livelihoods, environment, and use of natural resources;
- Be consulted at an early stage on the development of such projects, and be involved in decisions that affect them; and
- Be provided with opportunities to derive culturally appropriate benefits from the project.

We do not know whether Raiffeisen Zentralbank Österreich or Cornell Capital has included environmental or social covenants in their financing contracts with UFS. However, such covenants would be difficult to enforce once the UFS project is underway. UFS is a new company in the forestry field without a significant public image to protect, and as discussed above, the company generally lacks transparency in ownership. This background, coupled with the considerable financial incentive to log the remaining commercially valuable MTH areas within the UFS concession, implies that, as the project now stands, at least some environmental covenants would be extremely difficult to enforce.

Notably, Raiffeisen Zentralbank Österreich is a signatory of the UNEP Financial Initiative. As such it has officially endorsed the following principles (among others)⁴⁶:

- We regard the financial services sector as an important contributor towards sustainable development, in association with other economic sectors.
- We support the precautionary approach to environmental management, which strives to anticipate and prevent potential environmental degradation.
- We recognize that identifying and quantifying environmental risks should be part of the normal process of risk assessment and management, both in domestic and international operations. With regard to our customers, we regard compliance with applicable environmental regulations and the use of sound environmental practices as important factors in demonstrating effective corporate management.

4. Summary

Over the last several years, Indonesia's pulp and plantations sector has experienced very rapid growth with the development of some of the largest BHKP production facilities in the world. In each case, Indonesian pulp producers have indicated that their operations would have relatively minimal negative environmental and social impacts. In particular, each of the industry's major producers has assured financial stakeholders and government regulatory agencies that within a few years of initiating

operations, their company's pulp mill would fully source its wood fiber from sustainably managed plantations. In addition, the industry's leading plantation companies have given assurances that their operations would provide significant livelihood opportunities for local communities.

The reality is that most of Indonesia's pulp and plantation companies have failed to meet the environmental and social commitments that they have made in recent years. This failure has resulted from a combination of overly optimistic technical projections; limited accountability to government regulators or local stakeholders; and strong economic incentives to maximize profits in spite of the impacts their projects may have. At present, Indonesian pulp producers obtain over 70 % of their raw materials through the clearing of MTH from natural forests. In consuming some 25-28 million m³ of wood per year, the industry contributes substantially to the current industrial overcapacity that exists in Indonesia's forestry sector. Moreover, Indonesia's heavily subsidized industrial plantation program has involved significant misuse of public monies through the Government's poorly managed Reforestation Fund. In many cases, plantation development has led to the displacement of local peoples and, at times, to violent resource conflicts.

Within this context, and based on analysis of available information, CIFOR has major questions regarding the social and environmental sustainability of the planned South Kalimantan pulp mill and associated plantations. We believe that the following issues need particular attention and ought to be urgently addressed before the project proceeds further:

First, the Environmental Impact Analysis and associated project documents made available by UFS provide only limited information on the plantation development program at PT HRB and the mill's overall fiber supply strategy. Moreover, much of the data and projections included in those documents differ — in some cases quite significantly — from the data and projections provided by Jaakko Pöyry in its 2001 valuation study of the PT Menara Hutan Buana (now PT HRB) plantation. Our analysis suggests that UFS may have significantly overestimated the standing volume of pulpwood within PT HRB's plantation concession, as well as growth projections for the second and third rotations at the site. UFS may also have substantially underestimated the areas damaged or lost from existing planted areas at PT HRB, as well as the current risks to its plantations posed by fire.

Second, the proposed project is likely to place direct pressures on the 77,000 ha of natural forest that remains at the PT HRB plantation concession, and particularly on the 44,000 ha of MTH areas that were designated by Jaakko Pöyry to be appropriate for plantation development. To date, to our knowledge, UFS has provided no detailed or accountable plan for how these areas would be managed or protected. It must be noted that the company has designated these areas as being 'Waste Forest' and is currently seeking to swap them for non-forested lands, which would likely lead to their conversion to agricultural uses.

Third, the development of a new 600,000 tonne pulp mill in South Kalimantan would compound the very significant problem of industrial overcapacity that currently exists in Indonesia's forestry sector. First, it would mean that fiber from the existing plantations in South Kalimantan would not be available

to pulp producers in Sumatra which are currently facing significant fiber shortfalls. Second, UFS has given no indication of where it would source its fiber if it encounters an unforeseen shortfall in supply from its plantations; there is a possibility that it would source a portion of its fiber from natural forest. Third, it is possible that UFS will decide to raise the mill's capacity to 1.2 million tonnes/year, as indicated in project documents. Such a development could, in turn, place significant added pressures on surrounding forests.

Fourth, while the proposed pulp mill and associated plantations could generate significant employment and associated benefits, there is a risk of serious negative impacts on surrounding communities, which are estimated to have a population of approximately 60,000 people. In addition, relations between UFS and PT HRB and local communities could have negative effects on the commercial viability of the proposed project (i.e. illegal logging, land claims, violent conflict), as seen with similar projects in other parts of Indonesia. To our knowledge, neither UFS nor MIGA has carried out a detailed assessment of the project's likely social impacts or offered a detailed plan for ensuring that the project supports, rather than undermines, local livelihoods. Moreover, there is no indication that UFS and affiliated companies have engaged in the process of consultation with affected peoples that is required under MIGA's guidelines.

Finally, the project's current ownership structure lacks transparency, and this could lead to a lack of accountability if UFS or its affiliates fail to meet the commitments it is now making. As such, it is essential that financial decision-makers, policymakers, and other interested parties design structures for ensuring accountability and transparency on the part of project principals.

Endnotes

- ¹ Emile Jurgens (emile@aya.yale.edu) is a financial analyst working as a consultant for CIFOR. Christopher Barr (C.Barr@cgiar.org) is a senior policy scientist with CIFOR's Program on Forests and Governance. Christian Cossalter (C.Cossalter@cgiar.org) is a senior scientist with CIFOR's Program on Environmental Services and Sustainable Forest Management.
- ² Ernst & Young. 1999. "Special Audit of the Reforestation Fund, Final Report" Jakarta. December 27.
- ³ United Fiber System Limited Annual Report 2002.
- ⁴ Sven Edström, presentation at CIFOR, December 12, 2003.
- ⁵ Sven Edström, presentation at CIFOR, December 12, 2003.
- ⁶ G. Rodden. 2004. "UFS feels secure investing \$1 billion to build a hardwood kraft pulp mill in Indonesia," *Pulp and Paper International*, July.
- ⁷ Steve Hunt, personal communication April 13, 2004.
- ⁸ JP Management Consulting "Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia", January 2001.
- ⁹ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.
- ¹⁰ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.
- ¹¹ Rodden, 2004.
- ¹² Many of these impacts are detailed in C. Barr. 2001. "Profits on Paper: The Political Economy of Fiber and Finance in Indonesia's Pulp and Paper Industry." In C. Barr. *Banking on Sustainability: Structural Adjustment and Forestry Reform in Post-Suharto Indonesia*, Center for International Forestry Research (CIFOR) and WWF Macroeconomic Program Office, Washington, DC.
- ¹³ JP Management Consulting, "Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan Indonesia" January 2001.
- ¹⁴ Sven Edström, letter to CIFOR, 17 December 2003.
- ¹⁵ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003. UFS has since stated that new planting will not occur before construction of the pulp mill commences.
- ¹⁶ www.ufs.com.sgated
- ¹⁷ According to Japanese Finance Ministry conversion factors, 1BDMT = 1.46 m³ for Indonesian hardwood (cited in DANA-WRI, *International Pulpwood Resource and Trade Review* – 2005 edition).
- ¹⁸ Paperloop.com (April 27, 2004)
- ¹⁹ Sven Edström, Letter to CIFOR January 28, 2004.

- ²⁰ JP Management Consulting “Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia”, January 2001.
- ²¹ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.
- ²² According to the Annual Report UFS has ensured that firebreaks and other fire fighting measures are in place.
- ²³ Sven Edström, letter to CIFOR, 17 December 2003.
- ²⁴ JP Management Consulting “Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia”, January 2001.
- ²⁵ Sven Edström, presentation at CIFOR, December 12, 2003. It should be noted that this is not a classification assigned to these areas by the Ministry of Forestry or a term used by Jaakko Pöyry in its valuation study. Rather the choice of term apparently belongs to UFS.
- ²⁶ Sven Edström, presentation at CIFOR, December 12, 2003.
- ²⁷ Sven Edström, Letter to CIFOR January 28, 2004.
- ²⁸ Cf World Bank. 2001. *Indonesia: Environment and Natural Resource Management in a Time of Transition*. Washington, DC: World Bank.
- ²⁹ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.
- ³⁰ Article published in Pulp and Paper International, available at www.ufs.com.sg
- ³¹ PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003.
- ³² PT Marga Buana Bumi Mulia, Environmental Impact Analysis, August 2003. Page V-57
- ³³ Potter, L.M. The Dynamics of Imperata: historical overview and current farmer perspectives, with special reference to South Kalimantan, Indonesia. *Agroforestry Systems*: 36 31-35 1997.
- ³⁴ JP Management Consulting, Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan Indonesia. January 2001.
- ³⁵ Potter, L.M. *ibid.* p. 47
- ³⁶ Karl Anders Lindman was the initial President of UFS. He passed away and was replaced by Sven Edström in 2002.
- ³⁷ United Fiber System Ltd. Annual Report 2002.
- ³⁸ Sven Edström, presentation at CIFOR, December 12, 2003.
- ³⁹ Poh Lian Holdings Ltd., Circular to Shareholders, 28 March 2002.
- ⁴⁰ Hans Kling, telephone interview, 15 December 2003.
- ⁴¹ Gerry van Klinken, *Inside Indonesia*, 8 December 1997.
- ⁴² The Straits Times, September 6, 2002
- ⁴³ Sven Edström, presentation at CIFOR, December 12, 2003.
- ⁴⁴ The US Government imposed sanctions on CMEC for “knowingly and materially contributing, through the transfer of goods or technology, to the efforts of Iran or Iraq to acquire chemical weapons or destabilizing numbers and types of advanced conventional weapons.” A press release from the US State Department detailing the imposition of sanctions against CMEC is available on the web at: www.state.gov/r/pa/prs/ps/2002/12139.htm.
- ⁴⁵ Interim Issue Specific Safeguard Policies, www.miga.org
- ⁴⁶ www.uepfi.org, accessed February 2005.
- ⁴⁷ Straits Talk, 25th July 2003
- ⁴⁸ JP Management Consulting “Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia”, January 2001.
- ⁴⁹ *ibid.*

- ⁵⁰ Poh Lian Holdings Ltd., “Circular to Shareholders”, 28 March 2002
- ⁵¹ Company website: www.UFS.com.sg
- ⁵² The Straits Times, September 6, 2002
- ⁵³ United Fiber System Limited Annual Report 2002.
- ⁵⁴ Kristina Bjurling and Mats Valenitn, “Svenska affärsintressen i indonesisk pappers- och massaindustri,” 18 March 2003
- ⁵⁵ Subsequent Events, United Fiber System Limited Annual Report 2002.
- ⁵⁶ Paperloop.com, 20 October, 2003.

Appendices

Appendix A. Chronology of Events

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|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22 December 1994 | PT MHB incorporated in Indonesia. Probosutedjo is president director of PT MHB from January 1995 to January 2002. |
| 1995 | Poh Lian Holdings Pte. Ltd. incorporated in Singapore. The company's primary business is the manufacture, sale, rental and supply of access equipment, construction activities in the public and private sectors, vessel staging, property investment and development, and other construction-related activities ⁴⁷ . |
| 19 September 1996 | PT MBBM incorporated in Indonesia. The specific purpose of PT MBBM is the development of an integrated BHKP Mill project in S. Kalimantan. |
| 15 May 1997 | Poh Lian group is listed on the mainboard of the Singapore Exchange. |
| 27 February 1998 | 268,585 hectare HTI concession close to the south coast of South Kalimantan granted to PT MHB by the Republic of Indonesia, Ministry of Forestry. PT MHB is operated as a joint (60/40) venture between PT Wono Gung Jinawi and the state owned forestry company Inhutani II ⁴⁸ . |
| 15 April 1998 | A letter of understanding between PT MBBM and Eka Chemical outlining plans for joint venture on chemical plant. The letter is extended on 31 December 2001. |
| 30 July 1999 | MoU with Singapore Power Int'l Ltd pertaining to the joint development and operation of a co-generation power plant at the BHKP Mill. |
| 5 January 2000 | Letter from CellMark confirming intent to enter into a 10-year off-take agreement for 90% to 100% of MBBM's output. |
| 12 April 2000 | Shinning Spring Resources Ltd. incorporated in the British Virgin Islands. SSR is a wholly owned subsidiary of Anrof Singapore Ltd. (ASL). Save for PT MHB and PT MBBM ASL does not have any subsidiary nor associated companies. ⁴⁹ |

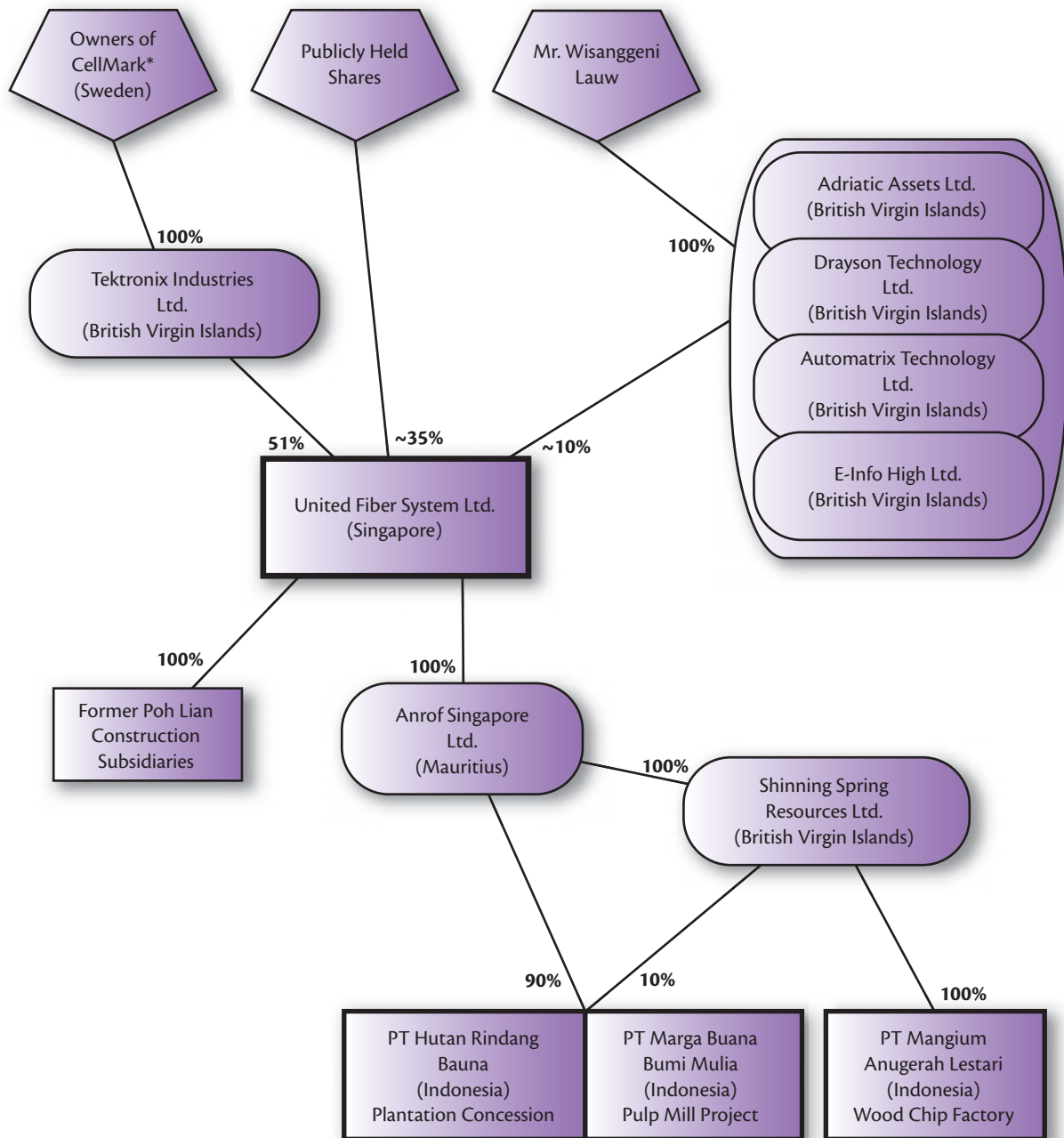
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| 8 December 2000 | Anrof Singaprooe Ltd. (ASL) incorporated in Mauritius. Grand Cyber Investments, which is owned by Wisanggeni Lauw, is the 100% shareowner of ASL. |
| 12 December 2000 | Wisanggeni Lauw signs sale and purchase agreement on behalf of PT MHB with PT Kirana Chatulistiwa for additional concession rights to 14,400 hectares. |
| 20 December 2000 | Conditional sale and purchase agreement between Wisanggeni Lauw and Tektronix, MEI, E-Infohigh, Automatix, Drayson and Adriatic relating to entire issued and paid-up share capital of ASL by Wisanggeni Lauw. ⁵⁰ |
| January 2001 | JP Management Consulting completes “Valuation of PT Menara Hutan Buana Future Operations in South Kalimantan, Indonesia” for Poh Lian Holdings Ltd. |
| 26 February 2001 | Letter of understanding between PT MBBM and Vivendi related to the construction of a waste-water treatment plant. |
| 19 March 2001 | PT MHB obtains in-principle approval to change its status into a foreign investment company. |
| 26 April 2001 | Offtake Agreement between PT MBBM and CellMark. |
| 14 December 2001 | Letter of Understanding between PT MBBM and Eka extended by an Amendment to the letter. |
| 8 January 2002 | Probosutedjo resigns as director of PT MHB. |
| April 2002 | The shareholders of Poh Lian Ltd. approve a plan to enter into the forestry and pulp businesses. Through a reverse takeover, the entire share capital of Anrof Singapore Ltd group of companies is acquired including PT MHB and PT MBBM. The company name is changed to United Fiber System Limited ⁵¹ . |
| 5 September 2002 | Indonesian prosecutors indict Probosutedjo for embezzling state reforestation funds. ⁵² |
| 24 October 2002 | The Ministry of Forestry issues a decree canceling the rights of PT HRB to develop industrial forest plantations. PT HRB files a lawsuit on 21 November 2002. On 28 November 2002, the Jakarta Court for Government Administration issues a provisional decision letter postponing the execution of the Ministry of Forestry decree. |
| 2 December 2002 | Friends of the Earth Netherlands (Milieudefensie) stages a protest in front of Akzo Nobel’s head office in Arnhem. The same day FoE publishes a paper detailing Akzo Nobel’s plans in Indonesia. |
| 18 December 2002 | PT MBBM enters into a turnkey contract with China National Machinery & Equipment Import & Export Corporation (CMEC) for the construction |

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| | of the major part of the pulp mill for a consideration of up to US\$863 million. Under the turnkey contract, CMEC is responsible for financing 80% of the development costs while PT MBBM is responsible for the remaining 20%. The repayment of the CMEC financing, together with interest, shall only commence upon the commissioning of the BHKP mill. ⁵³ |
| 31 December 2002 | Akzo Nobel/Eka Chemicals announces that it withdraws its letter of understanding to develop a chemical plant adjoining the MBBM pulp mill. ⁵⁴ |
| 31 March 2003 | PT MBBM and China National Machinery & Equipment Import & Export Corporation (“CMEC”), the holding company of CMECHK, enters into an offtake agreement in which CMEC has confirmed to PT MBBM its interests to be the off-taker of a minimum of 500,000 bone dry tones per year of MBBM’s annual wood chip production for a period of ten years from the date of the commencement of the commercial production. ⁵⁵ |
| 22 April 2003 | Probosutedjo sentenced to four years in prison for corruption. Appeals. |
| 22 April 2003 | UFS announces that PT MBBM has entered into a turnkey contract with China Machinery & Equipment (HK) Co. Ltd (“CMECHK”) for the construction of a wood chip mill in S. Kalimantan with an annual production capacity of 600,000 bone dry tones. |
| 22 April 2003 | UFS announces that CMEC has awarded the pre-construction work contract to UFS’ subsidiary, Poh Lian Construction Pte Ltd at a contract price of up to US\$15 million. |
| October 2003 | UFS announces the creation of Mangium Anugerah Lestari whose purpose is the manufacture and trade of wood chips. The company is a subsidiary of Shinning Spring Resources Ltd. ⁵⁶ |
| March 2004 | UFS places its application for political risk insurance from MIGA on hold. Project documents are removed from the MIGA website. |
| April 2004 | The Jakarta Court for Government Administration rules in favor of UFS and the company is reawarded the right to the PT HRB concession. This decision is then appealed by the Ministry of Forestry. |
| December 2004 | UFS announces that the majority of the financing for the Pulau Laut wood chip plant will be provided by Raiffeisen Zentralbank Österreich. In addition, UFS announces that Cornell Capital Partners has agreed to purchase S\$ 20 million in new equity. |

Appendix B. Map of the UFS Concession Area



Appendix C. Ownership Diagram of United Fiber System and its Forestry Subsidiaries (as of December 2003)



Sources: UFS Annual Report 2002; Poh Lian Group “Circular to Shareholders”, 2001; Sven Edström presentation at CIFOR, 12 December 2003; and Paperloop.com, 20 October 2003.

* CellMark does not officially own Tektronix, but reportedly all registered owners of Tektronix are directors or managers of CellMark.

The Center for International Forestry Research (CIFOR) was established in 1993 as part of the Consultative Group on International Agricultural Research (CGIAR) in response to global concerns about the social, environmental and economic consequences of forest loss and degradation. CIFOR research produces knowledge and methods needed to improve the well-being of forest-dependent people and to help tropical countries manage their forests wisely for sustained benefits. This research is done in more than two dozen countries, in partnership with numerous partners. Since it was founded, CIFOR has also played a central role in influencing global and national forestry policies.

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