

Sustainable Development: a business primer

*Prepared by
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For
University of Cambridge Programme for Industry
World Business Council for Sustainable Development*

"Clear cut choices"

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The Situation

You are the Chief Executive Officer for a major wood products company, International Forest Products Inc. (IFP). It is based in the USA and listed on the New York stock exchange, with forestry and paper operations worldwide including a wholly owned subsidiary in Brazil locally known as Madeiras Brasileiras Ltda or MadBras Ltda for short. IFP specialises in a range of wood-based products including paper, paperboard, plywood, hardboard and particleboard. MadBras Ltda's pulp and paper operations are located in Southern Brazil, but from Northern Brazil in the Amazon the company also saws some beautiful tropical hardwoods and exports them to the USA. IFP recognises the growing public concern over forest change linked to deforestation, global warming and biodiversity loss and the changing business environment for wood based industries. You have argued that it makes good business sense to keep a squeaky-clean record, and have insisted that MadBras Ltda join the voluntary Brazilian corporate social responsibility institution ETHOCOM in order to use and report on its indicators of social and environmental responsibility.

Your company is recognised for having made significant investments in the Brazilian forest sector, notably a new pulp and paper production facility in the South of Brazil. But local competition is fierce. Of your two major competitors, Papel Inc. is a major listed company that is brutally efficient, pays peanuts and has a rather dubious social and environmental record. The other, Eucalyptus de São Paulo (ESP) Ltda, is a smaller unlisted family firm that gets its trees through deals with local small independent landowners in return for credit seedlings, fertiliser, extension advice and a guaranteed price for the timber. ESP has a strong environmental record and excellent local trust. A major headache for the general manager of MadBras Ltda has been securing enough Eucalyptus trees to optimise throughput in the new pulp and paper plant. Efforts to gain access to land for tree-growing have led to some heated disputes over tenure and there has been a land invasion by one well-organised landless group called Sem Terra.

In view of the shortage of land and some labour disputes over employment conditions within MadBras Ltda, you have advised the General Manager of MadBras Ltda to outsource your tree growing to local small landowners by introducing an outgrower scheme – along similar lines to that run by ESP Ltda.

Your company's Amazonian sideline in hardwood timber has run into some trouble because of erratic supplies. You intend to make these supplies more reliable by tendering for a forest concession in one of the Brazilian Government's newly established national forests (FLONAs) in the State of Pará. The Federal Ministry of the Environment wants early success stories of sustainable management in these national forests due to pressure from the World Bank which has made a recent loan to the government conditional on demonstrating

sustainable forest management. You have therefore dedicated the company to try to meet the rigorous independent certification criteria of the Forest Stewardship Council (FSC).

You are about to have a busy week. You are scheduled to meet with senior personnel from IFP's largest institutional investor to discuss the company's financial performance. You know of their concerns about the bottom line and the struggling Brazil operation. You also know that a significant minority of your institutional investors – who between them hold 61% of IFP's voting stock - are now developing proactive ethical investment strategies of various kinds. The head of your external relations department is keen for IFP to position itself as an 'industry leader' capable of qualifying for inclusion in the Dow Jones Sustainability Indexes. But a recent Brazilian press release by a local environmental NGO has been brought to his attention, which belittles IFC's careful social and environmental investments. This is precisely the kind of media coverage that IFC needs to avoid to maintain its financial performance.

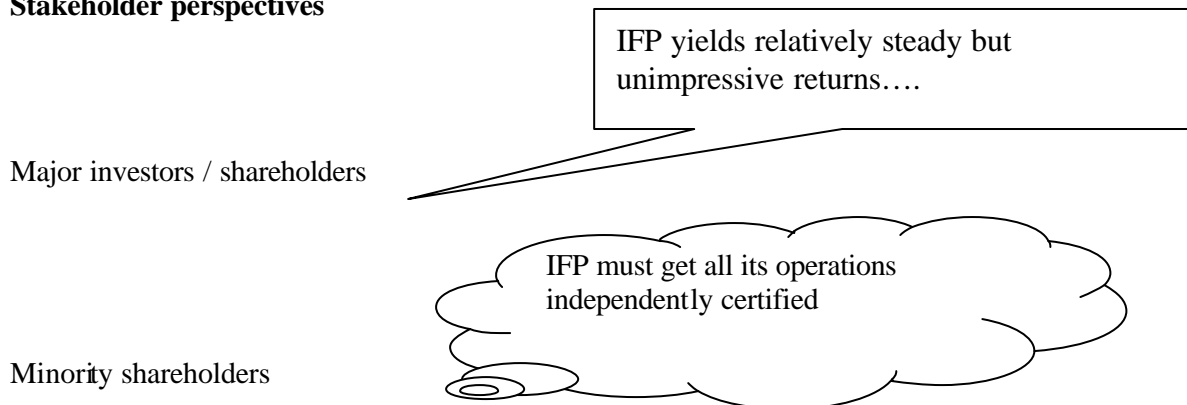
Your dilemma

The large size of your operations in Brazil demands that you give this whole situation serious attention. You are keenly aware of MadBras Ltda's poor economic performance over recent years (and the knock-on effects for IFC) owing to the difficulties in securing access to adequate supplies for full utilisation of your pulp and paper production capacity, not to mention unreliable hardwood supplies. You are also acutely aware of the environmental sensitivities associated with operating in Brazil from the perspective of your major customers and some of your investors. And you are quietly fuming about the recent press coverage. However, you are in no doubt that the scheduled meeting with your largest institutional investor is critical to the immediate future of IFP and that you must therefore be able to demonstrate clearly that your current strategy will (in order of priority):

1. Improve the Brazilian operation's competitiveness, market position and financial performance preferably in the short and definitely in the medium-long term.
2. Increase the reliability of supply of raw materials to up-stream value-added processing within the IFP group (upon which much of your profitability is based).
3. Enhance the environmental and social reputation of IFP as a whole without prejudicing the above.

The night before the meeting you lie awake wondering whether you will be able to justify your long-term social and environmental investments to IFC's largest institutional investor, whether they are indeed the best business strategy or whether you will have to sacrifice your social and environmental conscience for shorter-term financial returns.

Stakeholder perspectives



General Manager of MadBras Ltda

It is going to be hard enough just to meet last year's financial performance targets, never mind introducing fancy new systems

Paper packaging company

Our customers are increasingly demanding sustainably produced products so we want IFC to certify its plantations

Federal government

We need to attract responsible companies to make our new concession system work

State level government

The elections are almost on us and the last thing we need is the sort of social unrest caused by some of these major land disputes in the forest sector

Local communities in forest areas

Powerful international companies always trample us on

Small landowners in the South

We are benefiting well from our deals with ESP but we mistrust the intentions of IFC

Employees

The pay and conditions are only just above the minimum wage - we want improvements and better social services

Papel Inc

MadBras Ltda does not have the experience to meet our efficiency levels and is ripe for a buy out

ESP Ltda

We will have to be careful or MadBras Ltda will try to steal our suppliers to meet their shortfall in plantations

U.S. Environmental NGOs

IFP is a multi-national whose only aim is profit and we will expose their poor record if at all possible

Current hardwood suppliers in The Amazon

MadBras Ltda will buy anything so it does not matter where we get it from

Your options

You have already brainstormed with the Brazilian General Manager and your Chief Financial Officer to prepare three negotiating positions towards IFP's major investor. You are aware that each option will have significant consequences for the company. But which should you chose?

Option 1 - Stand firm: short term pain for long term gain?

Building a strong social and environmental reputation is the only strategy which will resolve the resource supply problems. Current difficulties are merely part of the short-term investment phase in Brazil. . A quick 'spruce-up' of the company image is required, but the long-term strategy is sound. You introduce a new company Code of Conduct, which captures your sound intentions, and engage in a media offensive about IFP's high social and environmental standards and its desire to manage a concession, and get it certified, precisely to avoid bad social and environmental impacts. You introduce the outgrower scheme in the South and plan a land transfer agreement with Sem Terra as a gesture of good will.. Your strategy is to match the market profile of ESP Ltda and differentiate yourself from Papel Inc.

Risks	Opportunities
High initial transaction costs of outgrower schemes and certification	Outgrower schemes shift the risks of land, labour and tree-growing to small landowners
Powerful conflicting political forces linked to land and forest management in the Amazon	Certification may give a market edge over competitors
Shareholders may block further investment	Enhanced corporate reputation brings new investors

Option 2 - Creative compromise - several ways to crack Brazil nuts?

It is all a case of give and take - while your social and environmental stance is admirable, it cannot be achieved over night. Much more important is to resolve bottom line issues now. Your required expansion in plantation area and the need to improve your social and environmental profile can be resolved at once through the immediate acquisition of ESP Ltda, which has an established infrastructure of socially and environmentally sound small-scale producers. You can avoid the high early transaction costs of establishing your own outgrower scheme and optimise your throughput to close the gap in price with Papel Inc., but with the significant advantage of a strong market reputation. Use your membership of ETHOCOM to shape the group and press for the exclusion of companies such as Papel Inc. The Sem Terra incursion can be written off as an unfortunate once-only occurrence. The improved company standards can be used to meet new investment criteria such as the Dow Jones Sustainability Indexes. There is no need for wholesale change or unscrupulous activity.

Risks	Opportunities
Good social and environmental reputations are hard to gain and easy to lose	Access more wood and improved local reputation by buying a company that has both
Land disputes masked not solved	Use acquired reputation to secure concession deals
Independent suppliers tempted away by better deals elsewhere	Lobby for regulations which exclude competitor companies not meeting standards

Option 3 - Toe the line -especially the bottom line?

Your legal obligation is to maximise the returns to your investors. Your only social and environmental concerns should be to comply with existing legislation - it is the government's responsibility (not your's) to set the standards which reflect society's needs. If you are pressed to improve financial performance you could take simple management steps, such as contracting out harvesting operations. You must be able to cultivate local and national allies who can solve your land access problems and help with your image problem. Perhaps a significant contribution could be made to the State Governor's election campaign in exchange for some timely words about the importance of Madbras Ltda. to local employment, a commitment to further plantation areas and an agreement to make the land invasion by the Sem Terra movement 'disappear'. You need to erode the market differentiation of your more socially and environmentally friendly competitor, ESP Ltda, perhaps by paying a journalist to research an article on their shortcomings. There is no need to achieve full (and costly) FSC certification. It is sufficient to be part of ETHOCOM (whose voluntary standards need only be applied where economically efficient).

Risks	Opportunities
Hostility bred from unimproved working conditions and land problems	With more contractors than there is work, competition is fierce - and costs low
Media criticism from environmental NGOs reaching shareholders	Out-compete Papel Inc on price and destroy the local reputation of ESP Ltda
Competitors gain advantage in socially and environmentally discriminating markets	Gain market advantage over competitors in indiscriminating markets

The consequences one year on

Option 1 - Stand firm: short term pain for long term gain?

Your major investor was unimpressed by your lack of attention to the short-term bottom line but eventually gave you a year trial period to improve performance. The outgrower scheme proved difficult to set up and, although you are convinced that fibre from this scheme will eventually prove to be cheap, costs at this stage are greater than you expected. However, your improving social profile has won you praise from the local press and State government. As plantations mature you anticipate an increasing throughput to your pulp and paper processing

facility. MadBras Ltda was awarded its hardwood concession in the Amazon and is in the final phase of certification by FSC. Your membership of ETHOCOM was rewarded with a prize for corporate responsibility that led to favourable press coverage. Internationally, your pioneering work in response to the new listings rules has won praise, and several new investors have been attracted to IFP as a result. But transaction costs at all levels are still high and your major investor has called for an urgent meeting. You expect to have to fight hard to secure their ongoing support.

Stakeholder opinions

- **Minority shareholders:** IFC is becoming a leader in corporate social responsibility and is a must in our investment portfolios.
- **Federal government:** Thank heavens one of our concessions is being managed well, we'll have to highlight it in our next meeting with the World Bank and bring AFLORs along
- **Small landowners in the South:** Our destiny is in our own hands as never before, and living standards have improved with the new MadBras outgrower scheme
- **Papel Inc:** Why is the State government on our backs all the time? MadBras will never make their complicated system work - they do not understand that only the strong win in Brazil.

Option 2 - Creative compromise - several ways to crack Brazil nuts?

IFP's major investor was impressed by this bold strategic move. The acquisition of ESP Ltda and its outgrowers was successful and financial returns soared as pulp and paper processing was optimised. Your reputation has been maintained with State and Federal government contacts. The tougher financial terms offered by MadBras Ltda. to outgrowers created considerable friction, however, and many suppliers have switched to dealing with Papel Inc. The improved social and environmental profile of the company did lead to the success of the bid for the major hardwood concession in the Amazon, but it has still proved necessary to source from other suppliers to meet required hardwood volumes. This in turn has eroded the social and environmental reputation of MadBras Ltda such that the market share is much as it was one year ago. Your major investor has called for an urgent meeting to discuss the poor financial returns on their investment.

Stakeholder opinions

- **Major investors / shareholders:** The Chief Executive can take some bold decisions, but Brazil is obviously not viable - we'll insist on them pulling out.
- **General Manager of MadBras Ltda:** Nothing but headaches this year - endless work to take over ESP and then half of the suppliers desert and it's all back to square one.
- **Employees:** Conditions are as bad as ever - now would be a good time to strike since our bargaining position is strong since MadBras cannot afford any more major problems this year.
- **ESP Ltda:** Years to build a family business and contribute to society and it's all come to nothing - we will complain to the State Governor.
- **US Environmental NGOs:** As we thought, IFP is just another multi-national whose only aim is profit and we will expose their poor record with new hard evidence.

Option 3 - Toe the line -especially the bottom line?

The hardnosed 'can-do' approach worked well with your investor. Your friends in the State government were re-elected and initially supported the further acquisition of land. Your tough

stance with the unions and new contracting out system has cut costs such that you now undercut Papel Inc. The poor working conditions have led to continued grumbling among the contracted out workforce but this is no longer a concern of yours. Your bid for the concession was successful but you have received bad press coverage of your dealings with adjacent communities. They have barricaded the extraction road, thus forcing you to source from some notably unreliable suppliers. The Ministry of the Environment was embarrassed by the coverage and pressure has been placed on State level decision makers reducing the likelihood of further expansion. You have also been excluded from membership in ETHOCOM at the insistence of Papel Inc which is following ESP Ltda in building up a strong market reputation over your products. Your major investor has called for an urgent meeting to discuss the deteriorating financial returns on their investment.

Stakeholder opinions

- **Minority investors:** We will continue to bring forward minority shareholder actions until IFC improves its social and environmental record.
- **Paper packaging company:** We will have to switch suppliers unless IFC changes its performance in Brazil - our customers will demand it.
- **Federal government:** This MadBras problem will make our negotiations with the World Bank even more difficult. Perhaps we should favour Brazilian competitors in the future.
- **Local communities in forest areas:** We will not stand for this any longer - big business and government are always in bed together - wait until the next elections!
- **Papel Inc:** So MadBras want to play tough - they underestimate our connections with the State government - whose house is this anyway?

"Clear cut choices"

FACTS BEHIND THE STORY AND FURTHER INFORMATION

[First draft: 2 October 2002, IIED]

Box 1. Your position

You are the Chief Executive Officer of International Forest Products Inc. (IFP) and are particularly concerned to build a company of which you can be proud. You are a keen nature lover and have always had quite strong views on environmental sustainability. You took your family for a holiday in the Amazon last year and stayed in a floating house in the flooded Mimirua Forest. You delighted in showing your children the wealth of animals and plants (not to mention the biggest diversity of fish, some of which found their way onto your plates). You also enjoyed a night-time river canoe trip to see caymen.

At work, you struggled to convince board members of the importance of a good environmental profile and have spent long hours at night rehearsing the business case for investments in the social and environmental performance of the company (see box 4).

Box 2. Your company

Your company, International Forest Products Inc. (IFP), is based in the USA and listed on the New York stock exchange, but has operations in 30 countries worldwide. It has annual sales exceeding US\$ 6 billion and employs more than 25,000 people in its various operations. In its forestry operations it manages a total area of approximately 1.5 million hectares, of which 1.1 million hectares is plantation for pulp and paper production and the remaining 400,000 hectares is managed natural forest.

IFP has a published set of company values which include:

- Customer commitment
- Profitability and value creation through business excellence
- Respect for the individual and personal accountability
- A commitment to the environmental, social and economic sustainable development
- Teamwork

All employees are assessed on how well they are "living the values" and this is linked to their incentive remuneration.

Box 3. The extent and composition of forests are changing

Natural forests are declining worldwide with the consequent loss of biodiversity and global climate changes are likely to bring further drastic changes to forests. Under-priced, high-value resources, such as natural forests with good timber supplies have also been the target for corporate timber mining where weak government control allows this. Most of the 5.9 million hectares of tropical forest logged annually during the late 1980s were harvested by the private sector. Stock markets, which value listed companies on a daily basis, still place a higher premium on companies that can secure such assets at the lowest cost (which means those with lowest social and environmental provisions).

Whilst blocks of natural forest are decreasing, forest goods and services are today derived from a wide spectrum of land use types including among others: simple plantations, natural or planted mixtures set aside for multiple amenity purposes and farm landscapes with trees. More emphasis is being placed on the environmental service functions of forests, such as carbon sequestration and watershed protection. Meanwhile, goods like fibre are now being increasingly produced in intensive plantation or mixed forest-farm landscapes.

Plantations are relatively low-cost, low-risk, and high-yield and with a uniform and predictable product, which can be used for a wide range of finished goods, thanks to recent technological developments. Plantations currently provide 20 % of wood, and will provide 50-75 % by 2050 according to FAO predictions (FAO, 2001). An IIED review of 23 countries, North and South, showed that every country was privatising forest ownership, management and/or services provision (Landell-Mills and Ford, 1999). Plantations of one or a few species (and without other major priority uses) comprise the highest-yielding forests in the world. They have therefore been the target for acquisition or lease by corporations, which have access to the genetic resources, technology and other inputs needed to manage and improve them (Bass, 2001). They will increasingly, be the only economically- and socially-acceptable source of wood.

But natural forests will remain important for specialist woods, such as fine-grained hardwoods for which there is no real substitute, as well as for certain non-timber forest products such as wild medicines.

Box 4 . The business environment for forestry companies is changing

With demand rising (3-5 % per year for paper products), production for export is increasing. So also is domestic consumption in many developing countries – for good reasons, such as paper for health care, education and communications. Forest products already form the third largest category in international trade. While concentration in the forest sector is low, the ten largest companies produce 40 % of global turnover of all forest products and perhaps 50 companies control over 140 million ha of the world's forests, through ownership and leases. Mergers and buyouts are on the increase. North American and Scandinavian companies dominate (exploiting market power and comparative advantages), but South East Asian companies are also being forced to merge and spread operations internationally. Over 90 % of industrial wood production comes from 600 million ha (a fifth of global forest area) in just 25 countries, the biggest five being USA, Canada, China, Brazil and Russia. Processing is more concentrated, with half the annual wood harvest being processed by 50 companies, the top three all being North American.

As they get bigger, large companies are increasingly vulnerable to changes in demand. For example, the European forest industry is highly susceptible to downturns in the construction industry. The global pulp industry similarly suffers boom-bust cycles resulting in part from the huge size of every new pulp mill, which substantially increases the quantities of pulp available with consequent price reductions. Under these conditions, integrated firms are under pressure to develop new wood-based products and materials, both to provide outlets for surpluses and to make greater efficiencies in times of relative raw material shortage (Bass, 2001).

A globalising forest industry can present opportunities for the South. Many developing countries have land that is better suited to forestry than to farming, producing some of the world's highest tree growth rates. Much of this land may not be fully utilised at present; and there may be potentials for farming/plantation mixes. Foreign companies may have considerable strength to raise capital and, if they would employ the best technology and management skills, could exploit considerable comparative advantage to make long-term investments in forestry. They may also be best placed to access markets – and notably markets which demand environmental and social benefits through forestry production – and to weather periods of low commodity prices (Mayers and Vermeulen, 2002).

Box 5. The business case for forest Corporate Social Responsibility (CSR)

Environmental niche markets for forest products are growing – in Europe and North America in particular, although social niche markets remain small. These markets are increasingly shaped by ‘soft law’, such as certification, which is scrutinised by civil society groupings (see Box 15). Product chain-of-custody information is also becoming increasingly important as buyers, manufacturers and producers attempt to send signals through the supply chain about market demands and sustainability.

Until recently the social responsibility of a major forestry company ended with its formal obligation to pay royalties and taxes and perhaps cash compensation to communities for lost assets, a few jobs and perhaps the construction of schools and health clinics. Yet a few big companies are paying more attention to a wider group of stakeholders. It is widely claimed that companies practising corporate social responsibility have a number of financial benefits which ultimately affect the returns and risks for investors. Typical arguments include:

- *Clean technologies are usually more efficient*. Similarly, good working conditions can lead to higher productivity and fewer union disputes and make it easier to attract and retain employees;
- *Changes in legislation* (e.g. tightening regulations) or changes in rules on liability for damage can imply significant costs and companies that can prepare for regulatory change will have a competitive advantage;
- *Less risk* - Companies with good environmental and social performance will be perceived as less risky by financial markets, reducing capital costs and insurance premiums.
- *Secure markets* - compliance with environmental and social standards can secure markets and occasionally secure higher prices;
- *Public reputation* - this can affect the company’s social licence to operate, reducing the time required to secure government approval of, and community support for, new developments or expansion.

In many developing countries, the first two factors are less relevant as enforcement of legislation is weak and consumers are interested primarily in price and quality alone. So the argument hinges on the financial implications of company reputation at local, national and international level.

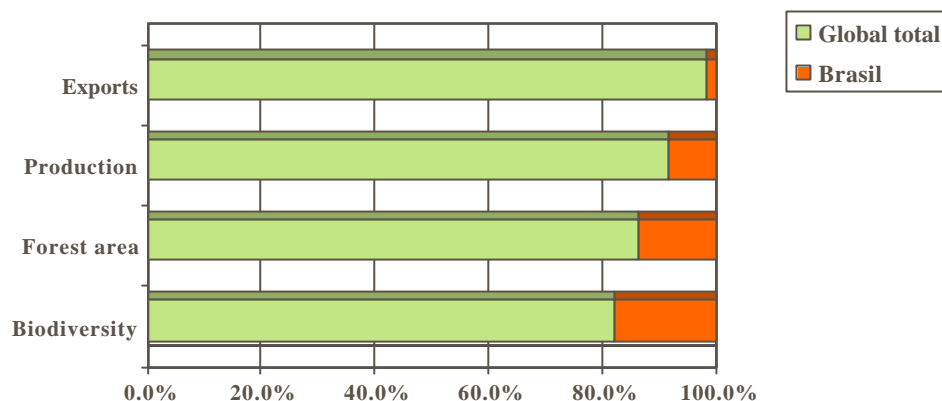
Box 6 - Corporate and Social Responsibility (CSR) in Brazil

In the last few years, Instituto Ethos has established a voluntary membership of more than 500 companies interested in CSR. Criteria and indicators of CSR are published and training given to allow companies to self-monitor their performance against a benchmark set by leading industries. Instituto Ethos also trains journalists in how to assess company performance against these criteria and indicators and feeds particular success stories to them as a way to motivate further company membership.

Box 7. An overview of Brazil's forests and forest loss

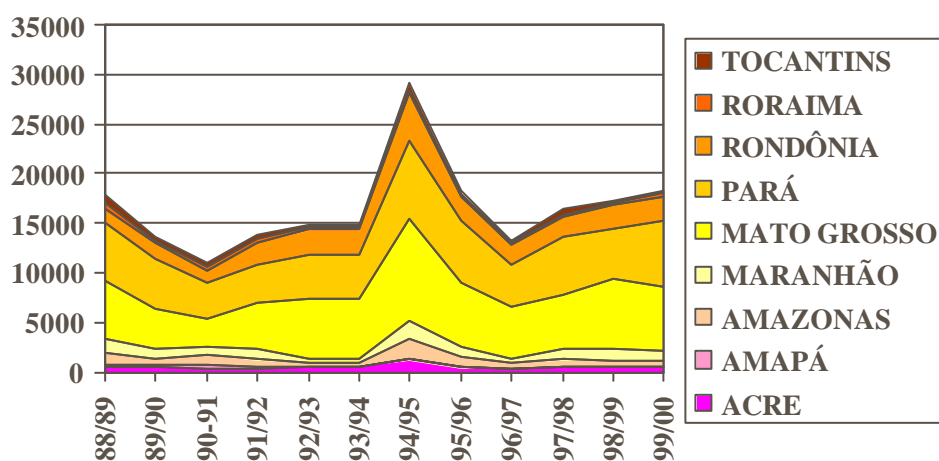
The forests of Brazil constitute 26.6% of the global total. Forests of different types cover 551 million hectares (65% of the country) and are highly biodiverse. In relation to its forest area, Brazil's production capacity and exports are less than might be expected (Figure 1) but the situation is changing as forest resources are depleted particularly in South East Asia.

Figure 1. Brazil's forest sector in perspective (IUCN and FAO data)



Media attention has focused on deforestation in the Amazon because of its high biodiversity and significance for the global climate. Precise satellite measures of deforestation are made by the Brazilian Government's National Institute of Space Research (INPE) - Figure 2.

Figure 2. Deforestation by State in the Amazon (km²/yr) INPE, 2001

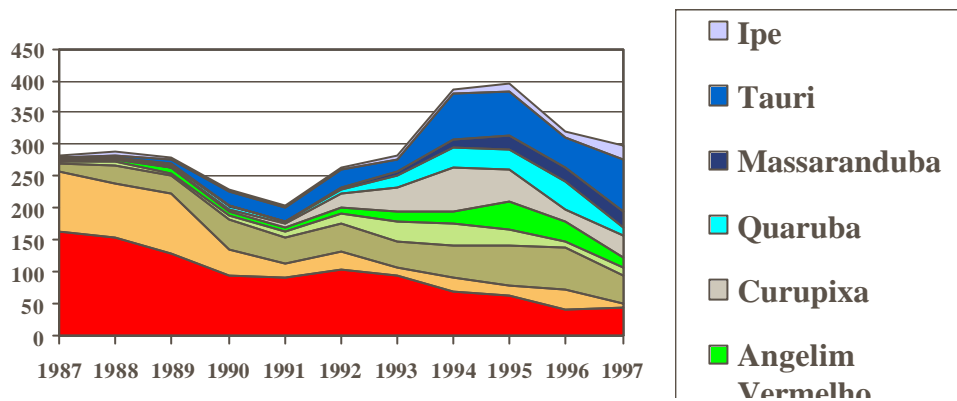


Deforestation has occurred in an arc around the southern and eastern edge of the Brazilian Amazon (the natural distribution of Mahogany), principally in the states of Rondônia, Mato Grosso and Pará. The peak in 1995 was linked to the Plano Real which introduced economic stability and allowed business to flourish. The recent fall in Mato Grosso is due in part to a new satellite based enforcement scheme reducing costs of targeting illegal operations.

Box 8. The sustainability of natural forest management in Brazil

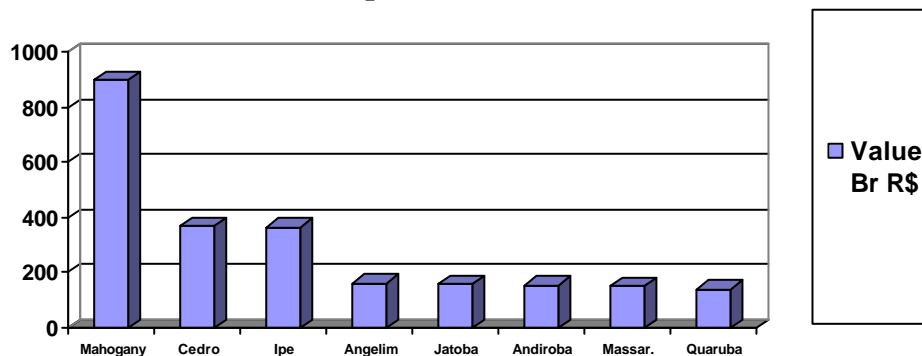
Even when selective logging leaves an area of forest in tact, the appearance of sustainability may mask rapid declines in the principal commercial timber species. Industrial attention switches from one species to the next as each is logged to commercial extinction in turn. This is much more difficult to monitor but may be seen in the export figures from Brazilian States such as Pará (Figure 3)

Figure 3. Exports of key commercial timber species from the State of Pará (000m³/yr) AIMEX, 1997



Part of the problem is the high price differential between species which favours logging of only the more lucrative species. Mahogany (currently the subject of a log export ban) is worth two and half time that of medium value species such as Cedro and Ipe, which are themselves twice as valuable as many excellent but lesser known species (Smeraldi *et al.* 1999 - see Figure 4).

Figure 4. Price of sawn timber per m³ (1997 based on IMAZON data)

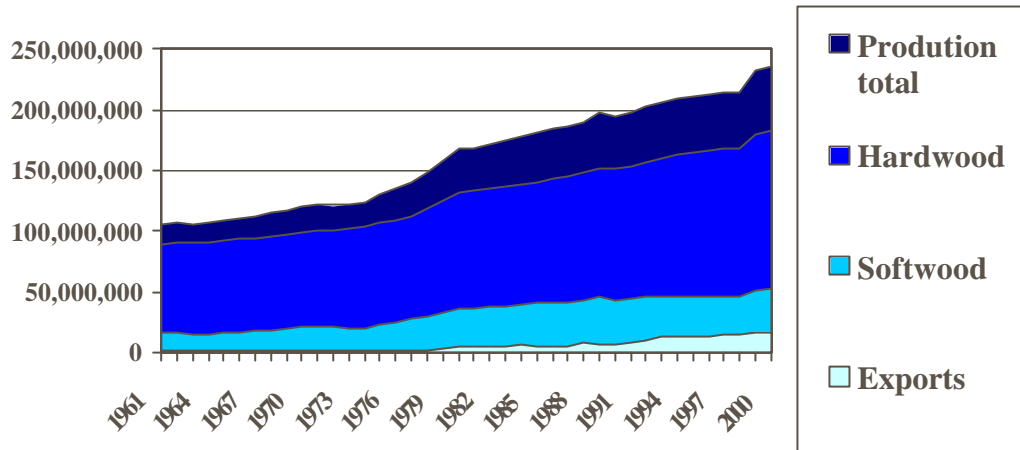


These high price differentials encourage mining of the forests for only the most valuable species. It should also be noted that, although current attention is focused on the Amazon, historic deforestation rates in Brazil have been higher in other forest types in the South, South East and North East of the country such as the Atlantic rainforests

Box 9. The Brazilian wood products industry and plantations

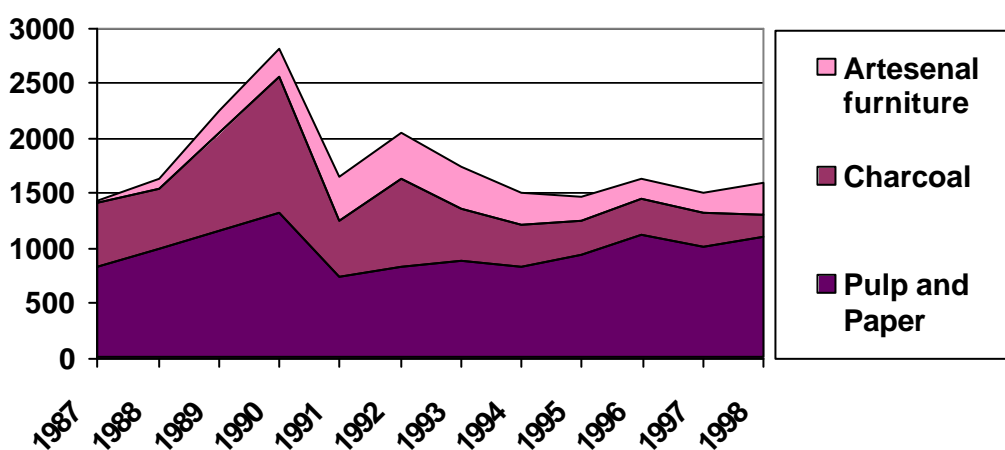
Production of wood products has risen steadily in Brazil (Figure 5) but most of this is consumed within Brazil. For example, 86% of Brazil's Amazonian production is consumed internally, particularly in the South and South East in States such as São Paulo (20.1%), Minas Gerais (9.4%) and Paraná (9%). Only 14% of this production is exported.

Figure 6. Production and export of wood products from Brazil (m³/yr)



The export percentage has been rising since the 1970s when exports of pulp and paper began to grow rapidly as the first plantations matured. Companies in the South and South East of Brazil have largely reversed the deforestation trend in this region through the establishment of more than 5 million hectares as plantation (Figure 6.)

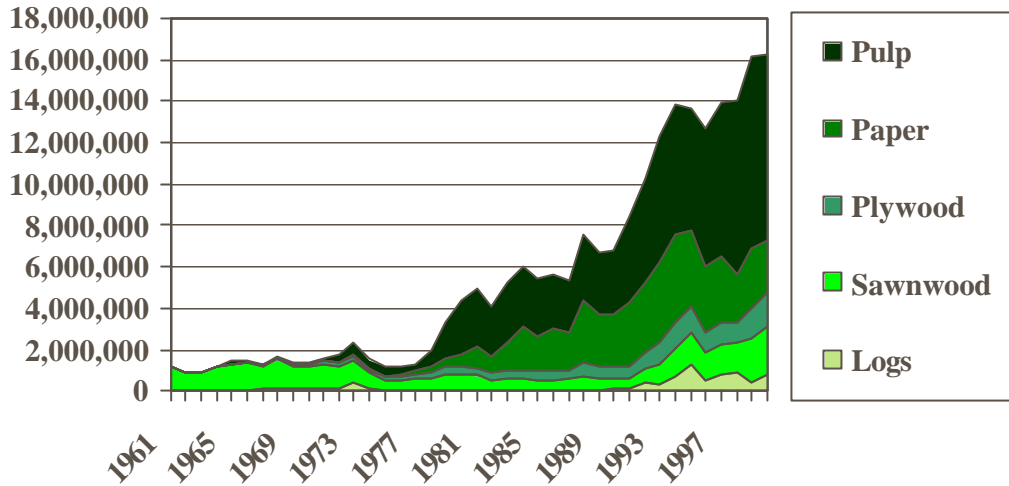
Figure 5. The rate of establishment of plantations in Brazil by end-use purpose (km²/yr) Viana *et al.* 2002



Box 10. Brazilian exports of forest products

The pulp and paper boom of the 1970s was followed by semi-processed wood in the 1990s due to import tariffs reduction on foreign processing equipment (Figure 7).

Figure 7. Exports of wood product categories from Brazil (m³/yr)



Most of Brazil's pulp and paper is destined for Europe or North America (Figure 8), as is most of Brazil's semi processed softwoods and hardwoods (Figure 9).

Figure 8. Destination (as % of total value) (Data from FAO)

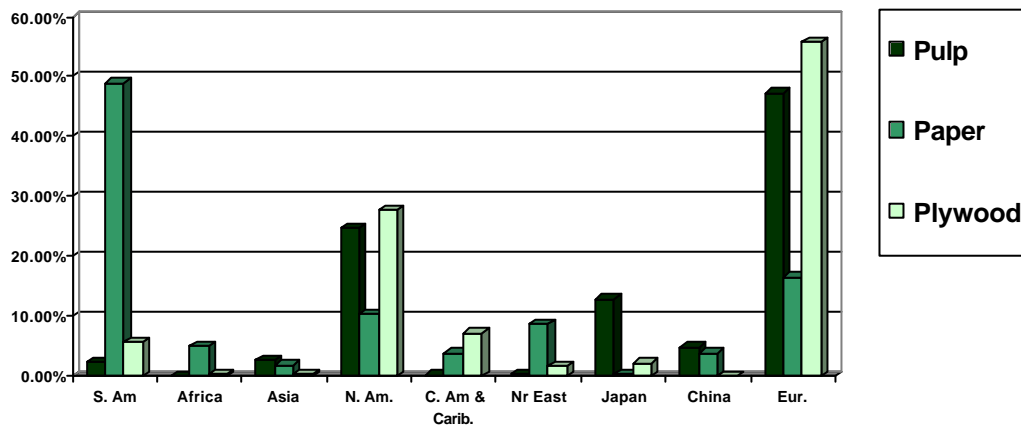
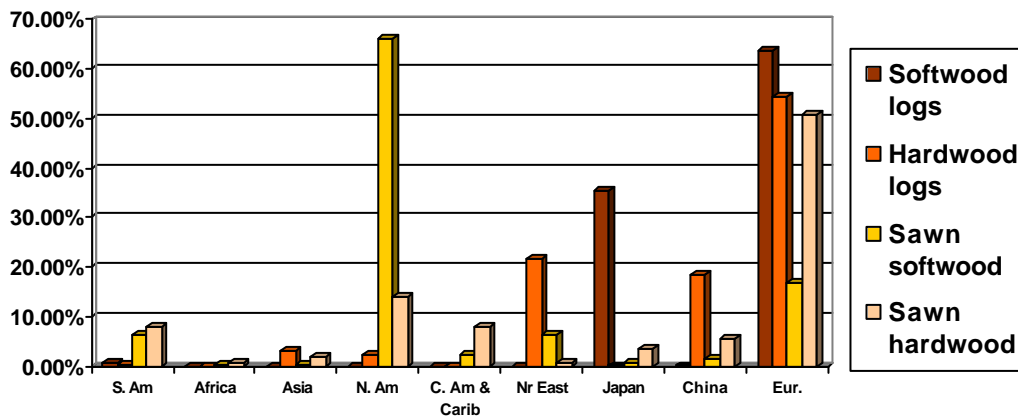


Figure 9. Destination (as % of total value) (Data from FAO)



Box 11. Overview of forest sector employment worldwide

In the late 1990s there were estimated to be almost 47 million people working in the forest industry worldwide (ILO, 2001). Just under 30 million of these were in informal or subsistence employment, while only 17 million were in the formal sector. Of formal employees, 4.7 million work in forestry operations, 4.6 million in the wood industries, 3.5 million in furniture manufacture and 4.6 million in pulp and paper manufacture. The globalization of the forest industry has begun later and is at a slower pace than in other industries. Nevertheless there is growing international integration between firms and trade is often captive within firms that are linked through FDI or subcontracting arrangements both in the North and South. Integrated units are better placed to take advantage of international markets. There has also been a trend towards falling or stagnating employment (despite rising production figures) in all except resource rich developing countries.

In short, employment is being substituted by capital in the forest sector, especially in the bigger firms. There have also been sudden falls in employment following harvesting restrictions due to environmental concerns. Wages differ widely and are linked to national trends. In general the forest industry has had to raise wages for technical operations to maintain competitiveness with other sectors. On the other hand contracting out less skilled activities has become widespread, almost universally resulting in lower quality jobs in terms of income, job stability, working hours, health and safety and social security coverage. Concurrently, friction with employees and adjacent communities is on the increase. There are very strong links between indices of decent work and deforestation. Small and medium sized enterprises are particularly important for social development because of their high employment intensity but are at a disadvantage in the current context of globalization and structural adjustment.

Box 12. Employment in the forest industry in Brazil

Brazil is the sixth largest employer in the forest sector with more than 500,000 people estimated to be employed throughout the country, although as few as 150,000 are in the formal sector. Forestry operations account for most of the employment, but much of this falls in the informal sector (ILO, 2001).

Employment in the pulp and paper industry accounts for more than 30% of the employment in the formal sector. (Viana *et al.* 2002). Brazil is fast developing an industrial cluster for forestry where local industries can supply local machine manufacturers, researchers and specialised services. Average wages in the pulp and paper sector are just over US\$ 15,000 per year (or about half of the average wage in the USA). Brazil has seen a trend towards contracting out in Brazil in order to avoid collective bargaining and drive down wages (in one case to US\$ 900 per year) and other responsibilities. Nevertheless, some contractors such as Plantar in Brazil are enormous (with an average workforce of 3000) and have the power to negotiate with major forest companies.

In the rest of the forest industries average wages are about half of those in the pulp and paper sector (US\$ 7500) and less still in forestry operations where allegations of debt bondage have been made at recent international seminars - up to 20,000 are alleged to be trapped in debt in remote rural locations.

Conditions of employment are particularly bleak due to their geographical isolation (often with long commuting times), harsh working environments, heavy physical strain, dangerous working conditions and reliance on or hostage to company services.

Box 13. Why outgrower schemes and other forms of partnership between companies and communities or farmers may make sense

In the climate of change described above, various factors may push or pull businesses to seek deals with community groups or individual farmers to produce forest products. *Companies* may aim for partnerships with communities when there are:

- *Public pressures to behave well*
- *Discriminating markets* e.g. certification, fair trade or standards-based stock exchanges (e.g. the Green Dow-Jones and the FTSE For Good – see Box 6)
- *Imposed national or international requirements*
- *Land and resource access and security advantages*
- *Cost advantages that the community can provide* – through motivated knowledgeable labour and efficient land and resource management.
- *Local risks that the community can help minimise or take on themselves* – such as tenurial and land-use conflict etc.
- *Collective goods that only the community as a whole can provide* – such as communal forest resources and the support of community institutions

But these trigger factors are only likely to result in companies pursuing partnerships if the many potential restraining factors are also outweighed. These may include: poor infrastructure and high transport costs relative to gains, excessive red tape, weak regulatory regimes, and lack of socially astute staff. Companies may also see only weakly organized communities and high transaction cost in dealing with them.

Communities on the other hand may be attracted to deals with companies when there are:

- *More secure land tenure and tree rights*
- *Potential for higher returns (and or reduced risk from land and labour than available alternatives)*
- *Decreasing opportunities from the public sector*
- *Desirable technologies or services that only companies can provide*
- *Institutions capable of representing the interests of the community to the company*
- *Markets to which the company has better access*
- *Scientific knowledge that the company can provide*

For more detail see Mayers and Vermeulen, 2002.

Box 14. The creation of Brazil's National Forests

Brazil's government is implementing a policy based on sustainable forest production within an expanded system of National Forests (Flonas) (Verissimo *et al.* 2002). Flonas have existed as a conservation tool since the 1970's, but over relatively small areas (only 160,000km² in 2000). The National Forest Program established in 2000 aims to augment existing Flonas by 500,000km² by 2010. Currently, more than a quarter of the Brazilian Amazon lies under protected areas (1.37 million km²). The majority of these areas (76%) are Indigenous Reservations. Of the protected regions, only Flonas and Production Reserves (160,000 km²) allow logging. Flonas can only be sited in forested regions with low levels of human occupation and then, by law, only after consultation with resident populations. Flonas can, however, incorporate small and scattered human residences. The physical siting of new Flonas has required considerable analysis, eliminating inhabited, protected, unsuitable or highly biodiverse areas, or areas too remote for economically feasible harvesting. There are still approximately 700,000 km² for Flonas, more than sufficient to meet expected hardwood demands using sustainable management techniques (Verissimo *et al.* 2002).

Box 15. Overview of certification worldwide

Certification was developed to independently verify the quality of forest management, to communicate this to market players, and so to improve market benefits for the products of good management. It is conceived as a voluntary procedure based on market incentives. A third party inspector (the certifier) gives a written assurance to consumers that the quality of forest management practised by a defined producer conforms to specific standards. Certification therefore attempts to link market demands for production to high social and environmental standards with producers who can meet such demands. Forest certification has evolved since 1989 and the current three main approaches include:

- *The Forest Stewardship Council (FSC) approach*: the only international system of forest management certification based around high performance standards. FSC offers a global set of Principles and Criteria (P&C) for good forest stewardship; an international accreditation programme for certifiers; and a trademark labelling system. ‘Chain of custody’ also certifies the route of products from the forest through the processing chain.
- *The International Organisation for Standardisation (ISO)*: offers a framework for certification of environmental management systems (EMSs) through its ISO 14000 series. It does not specify forest management performance standards, and does not confer a label on products, limiting how products can be promoted in the market. Some companies are having their EMS certified in preparation for forest performance certification under FSC or a national scheme.
- *National certification programmes*: some are developed under the aegis and following the procedures of the FSC. But others are independent e.g. in Indonesia, Malaysia, Finland, Norway, Canada and an emerging approach in Ghana. Many of these combine elements of the FSC performance-based approach and the ISO process-based approach.

Certification is increasingly common in all continents and has been supported by ‘Buyers Groups’ (e.g. in Brazil), which have applied pressure on their suppliers. Recent changes in FSC’s policy on percentage-based claims may facilitate the certification of products based on a mix of raw materials. Some forest producers have certified without supply chain or market pressure – to protect reputations, to improve trade relations in general, to improve credit ratings, or to satisfy other concerns of staff, shareholders or the public. Overall, the pressure for certification has led to:

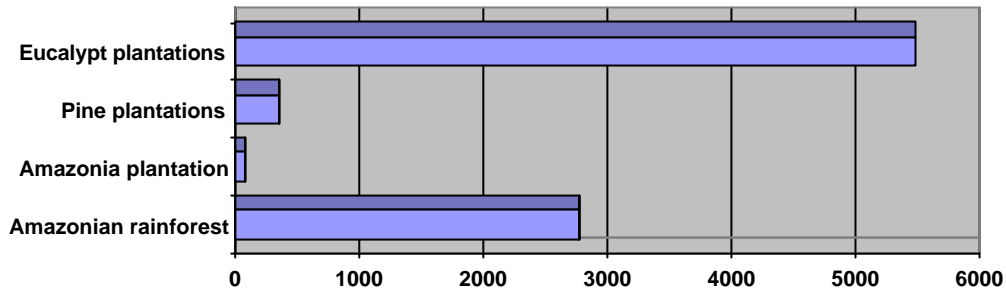
- Improvements in transparency
- Some switching of suppliers
- Maintaining and accessing markets
- Occasional higher prices
- Retailers gaining much of the benefit

Further analysis from an international review of the impacts of certification can be found in a book by Bass *et al* (2001).

Box 16. Certification in Brazil

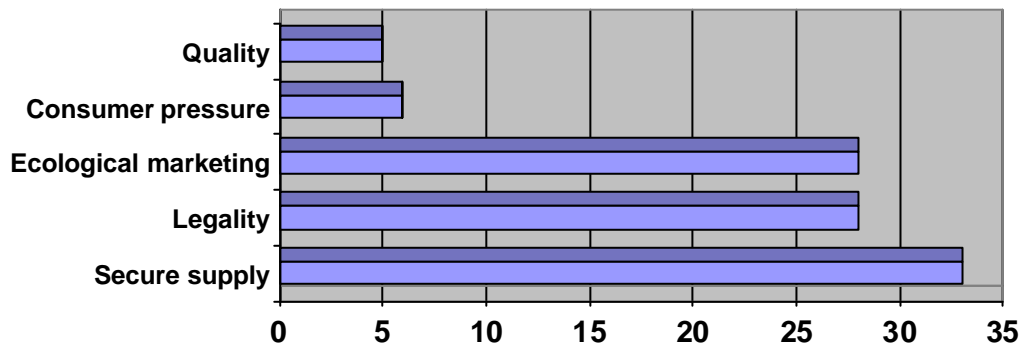
Brazil has the largest number of enterprises certified by FSC of any Latin American country which number 23 if one include chain of custody certification. Most of the certification has occurred to date in Southern or South-Eastern plantations of Pine and Eucalypt, but there are increasing numbers of certified operators in the natural forests of the Amazon region (Figure 10).

Figure 10. FSC certification in Brazil by forest area and type (km²)



In a recent survey of national buyers of timber products (who account for 86% of Brazilian production) 58% of companies interviewed in Sao Paulo expressed interest in purchasing certified products. The reasons why national consumers are interested in certified products is given in Figure 11 (based on Sobral *et al.* 2002).

Figure 11. Reasons why 58% of Brazilian buyers are interested in certified timber (% of interviewees)



Box 17: Sustainability indices

The Dow Jones Sustainability Indexes (DJSI) track the performance of the leading sustainability-driven companies in the Dow Jones Global and STOXX Index series. The aim is to provide investors and industry with a neutral, rigorous and transparent measurement of sustainability performance. As of August 2002, the two index families, the Dow Jones Sustainability Index World and the Dow Jones STOXX Sustainability Index which focuses on Europe, included over 300 and 148 companies respectively. The DJSI World selects the top 10% of the leading sustainability companies in the Dow Jones Global Index, and the DJSTOXX Sustainability Index includes the top 20% of the Dow Jones STOXX600 index in terms of sustainability. As of September 2002, three forest products companies, Stora-Enso, Domtar and UPM Kymmene were included in the DJSI World Index.

Companies are assessed according to a methodology devised by DJSI which evaluates economic, environmental and social risks and opportunities. The criteria used include general as well as industry-specific issues. Social criteria addressed include: strategies for stakeholder involvement, formulation of a social policy, corporate codes of conduct and standards for suppliers. The basis for the assessment is information supplied by the company through a questionnaire and company policies and reports as well as publicly available information. The index composition is reviewed annually to assess changes in the relative sustainability performance of companies.

By August 2002 40 licenses had been issued to financial institutions in 14 countries for creation of financial products based on the DJSI. The asset value of the funds managed in these portfolios amounted to 2bn EUR (see: www.sustainability-index.com).

A similar approach has now been adopted by the other main market player in stock market indices - the FTSE4Good index series was launched in 2001 (see: www.ftse4good.com). The series has benchmark and tradable indices covering four markets, UK, Europe, US and global. Companies must apply for consideration and are assessed according to environmental sustainability, social issues and stakeholder relations, as well as human rights. As of June 2001, the top three sectors in the FTSE4GoodUS100 were information technology hardware, software and computer services and telecommunications. There was one forest products company (International Paper) included in the top US 100.

If you are in a hurry...

Forest links - for diverse links to sites with information about tropical forestry see the website of the Tropical Forest Forum (TFF) at:

<http://www.forestforum.org.uk/>

or for a structured overview of forest issues, ongoing international processes and forest news see the 'Eldis Forest Guide' at:

<http://nt1.ids.ac.uk/eldis/forests/forests.htm>

Forests - for information on the state of the world's forests and trade see the website of the Food and Agriculture Organisation of the United Nations (FAO) at

<http://www.fao.org/>

or see the website of Global Forest Watch

<http://www.globalforestwatch.org/english/index.htm>

Forest industries - for information on the perspectives of wood based industries worldwide see the website of the International Tropical Timber Organisation at:

<http://www.itto.or.jp/>

or for specific information see the International Wood Products Association at:

<http://www.iwpa.org/>

Brazilian Forestry -For information about Brazilian forestry issues, Brazilian policies and news see the Amazon News website at:

www.amazonia.org.br

Employment standards - for an overview of employment standards and specific information on the forest sector see the website of the International Labour Organisation at:

<http://www.ilo.org/>

CSR - For information and links to sites on Corporate Social Responsibility in general see the website at:

<http://www.mallenbaker.net/csr/>

or that of the 'Eldis Corporate Social Responsibility Guide' at

<http://www.eldis.org/csr/>

or that of the World Commission on Forests and Sustainable Development (WCFSD)

<http://iisd1.iisd.ca/wcfsd/>

Brazilian CSR - For information about Corporate Social Responsibility initiatives in Brazil see the website of Instituto Ethos at:

<http://www.ethos.org.br/>

Investment indexes - For information about investment sustainability indexes see the Sustainability Index website at:

www.sustainability-index.com

Certification - for information on the requirements for and status of certification worldwide see the website of the Forest Stewardship Council at:

<http://www.fscoax.org/>

or that of Forest Forever at:

<http://www.forestsforever.org.uk/>

Other sources:

Forest research - For details of the latest developments in the Sustainable Management of tropical forests see the website of the Centre for International Forestry Research at:

<http://www.cifor.cgiar.org/>

Brazilian Forestry - For more details from non-governmental sources about the current dilemmas affecting the Amazon see the websites of IPAM at:

<http://www.ipam.org.br/>

or that of IMAZON at:

<http://www.bio.psu.edu/People/Faculty/Uhl/IMAZON/index2.htm>

Forests and the Environment - for more details about the environmental impacts of forestry see the website of the United Nations Environment Programme (UNEP) at:

<http://www.unep.ch/>

or that of the World Conservation Union (IUCN) at:

<http://www.iucn.org/>

or that of the World Conservation Monitoring Centre (WCMC) at:

<http://www.wcmc.org/uk>

Illegal or unsustainable forestry - to examine some of the campaigns against poor forestry activities see the website of the Environmental Investigation Agency (EIA) at:

<http://www.eia-international.org/>

or that of Forests Monitor at:

<http://www.forestsmonitor.org/>

or that of Global Witness

<http://www.globalwitness.org/indexhome.html>