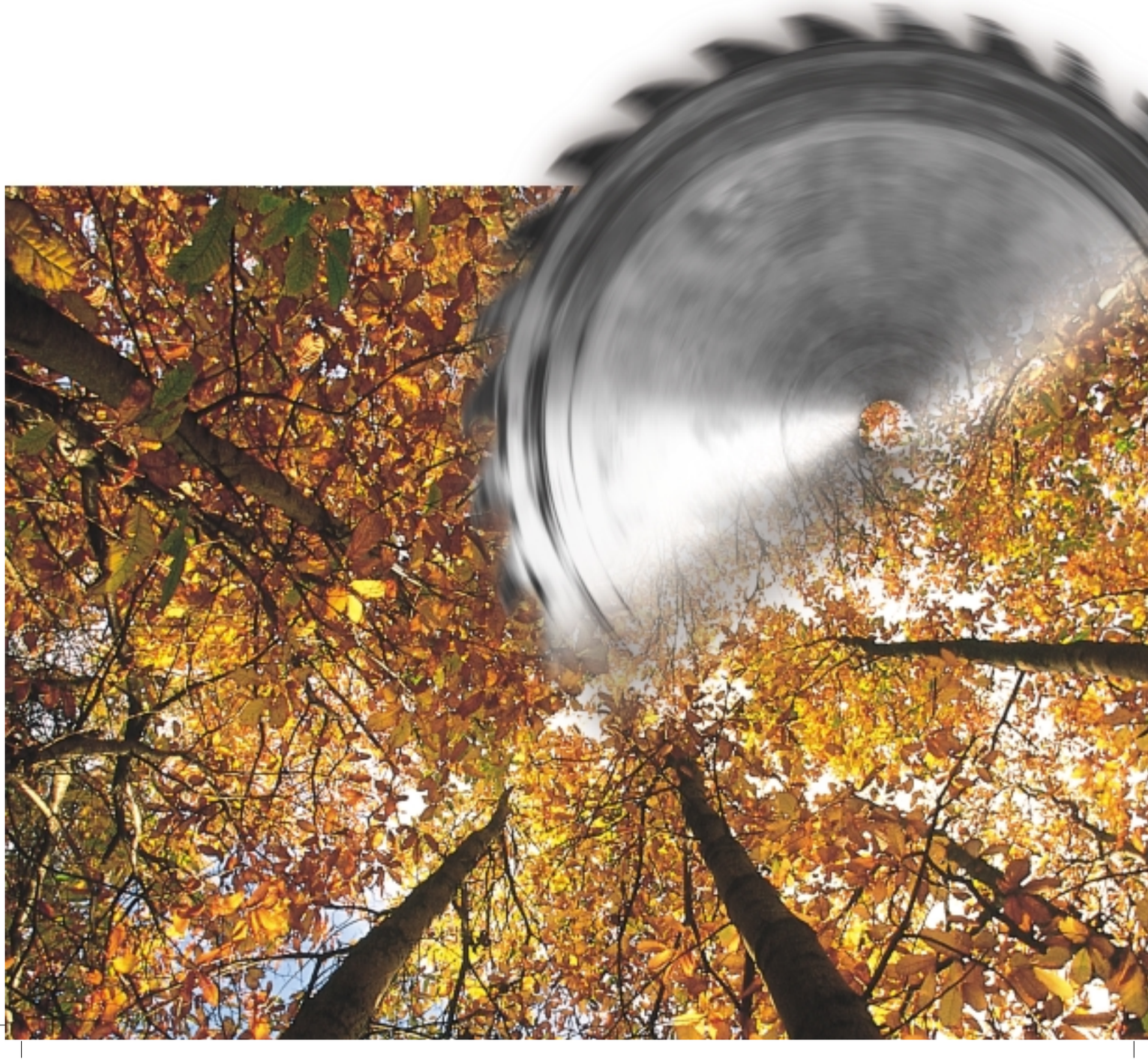
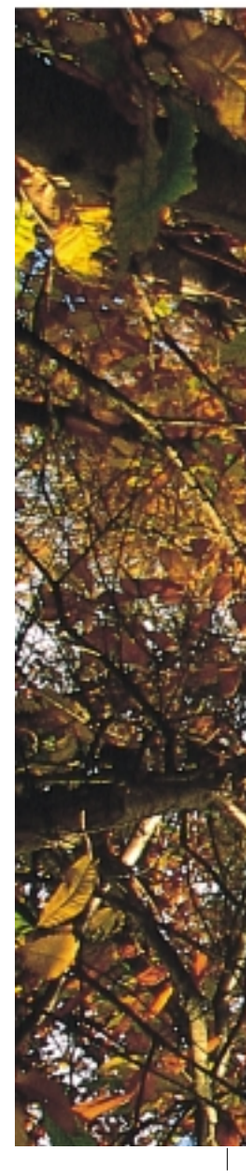
The Forest Industry in the 21st Century



WWF-World Wide Fund For Nature is the world's largest and most experienced independent conservation organization, with 5 million supporters and a global network of 27 National Organizations, 5 Associates, and 21 Programme Offices. WWF is committed to halting and reversing forest loss and degradation worldwide. WWF believes in working in partnership to reach real solutions needed to put an end to the global forest crisis. In 1996, WWF launched the Forests for Life Campaign, which is working to achieve greater forest protection and promoting sustainable forest management world-wide. Through high profile campaigning aimed at world leaders, governments, industries and individuals to take action, act responsibly, and make decisions towards saving the world's forests, Forests for Life is focusing its efforts on changing the mindset and actions of people around the globe.



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WWF Forests: Executive summary

This report examines threats to the world's forests and the industry that depends on them. It argues that it is in the industry's interests to demonstrate responsible management, and that this can be achieved through certification schemes such as the Forest Stewardship Council's.

Using new research commissioned by WWF (as part of an Alliance with The World Bank) we estimate that, despite huge losses from raging forest fires, we can meet likely future needs for wood and wood fibre. With responsible forest management and continued efficiency improvements in conversion we estimate it will be possible to supply the industry's requirements from approximately one fifth of the world's forest area. This confirms that forestry can be a sustainable industry for the future. It emphasises that the problem is not forestry or wood consumption per se but poor practice and over-exploitation in some areas.

Almost 700 companies that produce and use wood have now joined the Global Forest and Trade Network that aims to spread certification of forests and forest products as a means of ensuring responsible management. Through the Forest Stewardship Council (which WWF was instrumental in establishing) more than 20 million hectares of forest in 35 countries are now certified. This means that consumers buying products from those forests can be sure that responsible management is in place. This dramatic progress nevertheless represents only 2-3% of the world's production forest. A sea change in certification is required to build critical mass.

But this is in the industry's interests as well as the interests of protecting the world's forests. Consumers are increasingly demanding responsible business practices, while mainstream investors such as pension funds and insurance companies are also beginning to take account of social and environmental performance. Companies that can demonstrate sound management will gain competitive advantage both in the financial markets and the product marketplace.

WWF research shows that the industry leaders are now in a position to make that sea change. Our analysis reveals that 90% of production comes from 600 million hectares in just 25 countries. Many, although not all, of these countries are in the developed world and possess the necessary legal and institutional framework to support certification.

This report also reveals that almost half the annual wood harvest is processed by the top 50 forest products companies. Similarly, the top 50 users of this wood consume 10% of the total. This level of concentration means that a small number of leading companies are in a position to create the critical mass required for certification to take off.

We argue this would be good for the industry as well as the environment. Not only would it enhance the reputations of the companies involved, and the industry as a whole, but we believe that expanding certification would bring widespread environmental and social benefits as well as driving out illegal logging as markets looked for assurance of sound, legal forestry.

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Introduction

At the beginning of the 21st century the forest industry is facing a major crisis - a crisis which has been building over several decades.

On the one hand wood is recognised as a renewable raw material which the industry converts into numerous products – homes, newsprint, hygienic papers, packaging – which are vital to human well being. On the other hand we are confronted by images of forest fires on an enormous scale and unchecked deforestation which destroys communities and exacerbates climate change. Half of all the world's original forest cover has now been destroyed and much of that destruction has taken place over the last 50 years.

Rightly or wrongly, the forest industry, which harvests 1.6 billion cubic metres of wood every year, is inextricably linked to the images of forest destruction.

In the words of one industry representative, "people love wood but hate the chainsaw." There is little doubt that President Clinton's decree in January 2001 to put severe restrictions on road building in the remaining "undesignated" roadless areas on USDA Forest Service lands was a consequence of this unease. The forest industry's "licence to operate" is under challenge.

Some wood used by processors is undoubtedly from destroyed forests. When this is exposed it causes serious damage to the industry's image. Companies' claims for sound forest management are attacked by environmental and social non-governmental organisations (NGOs), causing further damage to the industry's reputation. There seems little likelihood that this situation will change in the near future, as a recent UN study concluded:

"Sustainability and the environment have recently emerged as key issues in the forest industry. Global environmental problems and resulting environmental consciousness has resulted in actions in the marketplace by aggressive change agents. The forest industry has globalized, and the resulting international trade and marketing have created a large network of relationships, influence, and communication. Environmental non-governmental organisations working for sustainable forest management are successfully accessing and influencing this network. Stakeholder expectations demanding sound practices from forest owners appear to be permanent. Forest certification may become a primary indicator of those expectations being met." The status of forest certification the ECE region, report for UN-ECE/FAO, 1999.

This report will examine what can be done to protect the world's forests at the same time as improving the industry's reputation. It presents reassuring evidence about the area of forest required to meet likely needs for timber and paper for the foreseeable future, which means there needs to be no threat to the industry as a whole or any need to reduce the volume of wood harvested at a global level.

If there is sufficient forest to meet our needs, and there clearly can be, then the crucial issue is how those forests are managed, and that is the main focus of this report. We argue that sound management is in the industry's interests, because consumers increasingly expect companies in all industries to behave responsibly. Mainstream institutional investors such as pensions and investment funds are also beginning to factor social and environmental responsibility into their calculations.

We argue that the most innovative and promising response to the current situation is independent certification. Independent certification can allow industry to show that the wood it harvests and processes comes from well-managed forests.

The Forest Stewardship Council (FSC), launched in 1993 with significant support from WWF and many other organisations, has successfully established itself as the international benchmark for forest independent certification and product labelling. Independent certification has revolutionised the forest debate and is already bringing substantial benefits to local communities, economies in transition and responsible companies. The FSC has now certified more than 20 million hectares of forest in 35 countries. Beyond that it has played a key role in stimulating the debate on forest management and certification worldwide.

We identify here for the first time the companies that process and buy the largest volumes of wood. Mergers and acquisitions within the forest products industry mean that a relatively small number of companies hold the key to progress. This report makes the case for those companies to play a leadership role in creating a better future for the world's forests. The business case for taking up this challenge is persuasive. Customers, employees, investors and other stakeholders all now expect companies to behave in a socially and environmentally responsible manner. And from an operational point of view, independent certification can help to assure raw material supplies for the future.

The Forest Stewardship Council is an international non-profit organisation set up to support sustainable forestry management. Members span NGOs, the timber trade, the forestry profession, indigenous groups and product certification organisations. The FSC accredits certification bodies which are responsible for certifying forests according to the Council's criteria. Products from such forests can carry the FSC logo, provided the supply chain is verified. The FSC logo provides a guarantee that a product comes from a well-managed forest.

The Threat

We are failing to protect the world's forests, despite increasing efforts to do so over the past decade and despite the importance of forests in combating climate change. Deforestation continues. The latest information from FAO[1] suggests that net forest loss has declined to 9 million hectares per year but this is partly due to new plantations. Indeed the rate of deforestation in some areas grew in the last years of the 20th century. Illegal logging continues on a large scale in many key areas. Massive forest fires have devastated large areas of forest in different continents

Work commissioned by WWF has shown that the recent spate of forest fires around the world has destroyed tens of millions of hectares of forest in the last half of the 1990s. In Indonesia alone 14 million hectares of forest and scrubland were destroyed in 1997/98. The impact spreads beyond the forests themselves. The fires in South East Asia affected the health of some 70 million people as well as incurring direct and indirect economic costs estimated at many billions of dollars.

The problem of forest fires is not limited to developing countries. The 2000 fire season was the most damaging in the US in over 50 years with more than 6.7 million acres burned. It cost between $8 million and $15 million a day to fight the fires. The most dangerous outbreak was at the US Department of Energy nuclear research facility near Los Alamos, New Mexico, where $1 billion worth of damage was caused. As much as 47,000 acres were burned, and the fire raged within 100 feet of buildings containing nuclear materials. Elsewhere in North America about half of Mesa Verde National Park burned, and fires came within a mile and a half of some of the park's most famous ruins.

In the last few years forest fires on a grand scale have occurred in many other countries in all continents from Brazil to Russia. Forest fires are part of the natural cycle in some temperate and boreal forests but rainforests rarely burn. Few of the large-scale fires that have been witnessed

[1] FAO, State of the World's Forests, 2001.

in the recent past are part of any natural dynamic.

Illegal logging can take many forms from logging in strictly “protected” national parks to exceeding permitted harvesting levels, and is causing huge damage to forests. Brazilian government figures show that in the Amazon basin 80% of the log harvest is illegal. Analyses in Indonesia indicate that the illegal share of the total harvest has now reached more than 70%. Cameroon has recently documented illegal logging in the order of 60%. The same problem occurs at a similar scale in other areas from Russia to Cambodia. In a global industry without a credible means of identifying where products come from products, and the companies that produce or buy them, are guilty until proven innocent.

So the threats to forests are very real, without considering the potential impact of legitimate industrial activity. The rest of this report examines the role the forest industry plays, and how the industry can protect its reputation at the same time as reducing its impact. The first task is to quantify the extent to which the practices of the industry contribute to the threat to the world’s forests.

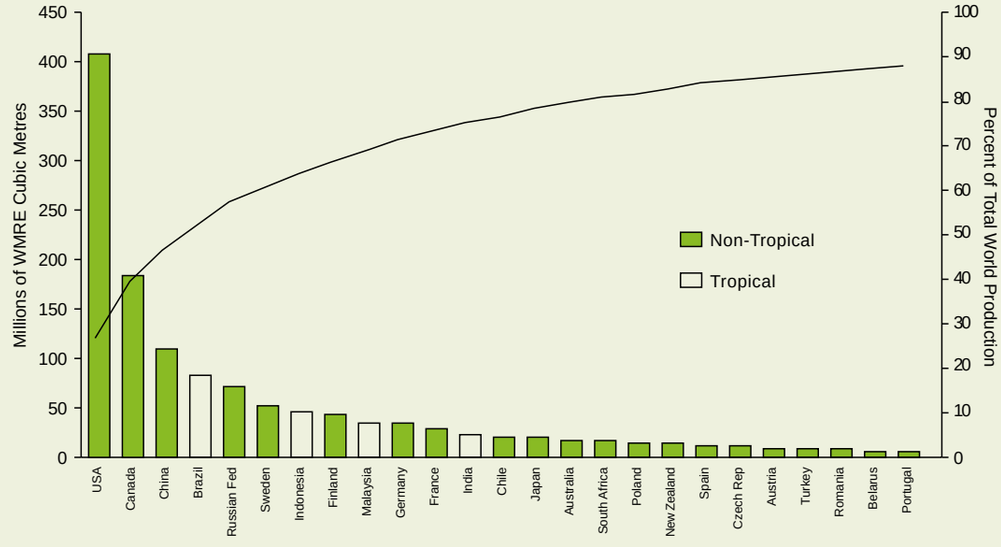
Are We Consuming Too Much Wood?

Every year the world consumes approximately 1.6 billion cubic metres of wood. The US is by far the largest consuming country, using almost a third of the total with an average of 1.7 cubic metres per person per year – 15 times that of the average person in China.

To assess the impact of this level of consumption we need to know how much of the world’s forest is used to produce this wood. Work undertaken recently by the WWF/World Bank Alliance has produced an answer to this question. This study was unique and for the first time we have an estimate of the area of forest used to produce the world’s annual wood harvest

The study took the 25 countries which produce 90% of the world’s timber (see chart below) and for each country it estimated the area of forest used to produce the wood based on average

90% of industrial wood is produced in 25 countries

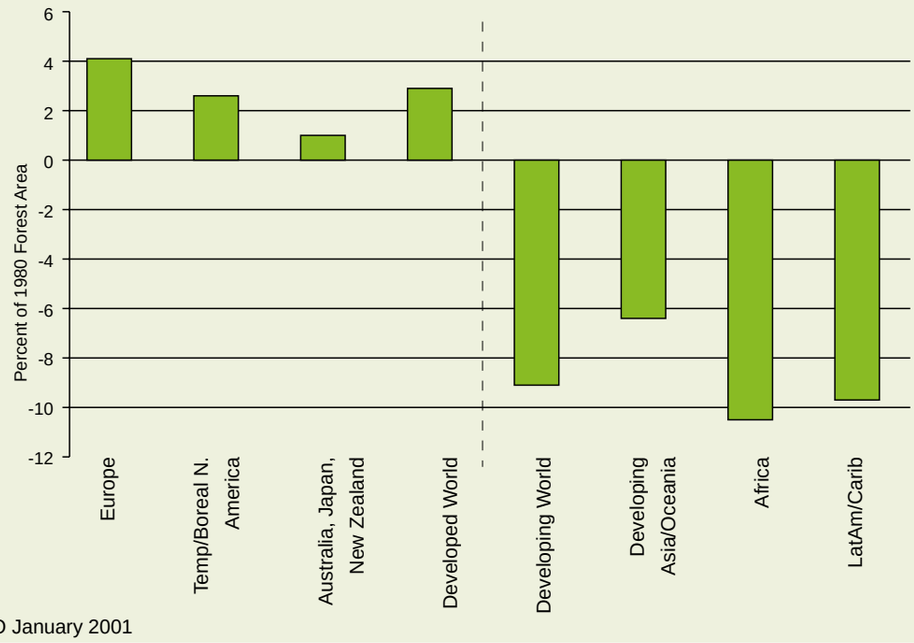


Source: FAO, SOFO 97, LEK analysis

productivity. The total amounts to approximately 600 million hectares of forest for these 25 leading countries. This area of forest amounts to just a fifth of the world's estate. Even if the rest of the harvest is from low yielding forest it is unlikely that the total annual harvest is drawn from more than 800 million hectares. This study assumed that harvest levels can be maintained and that these 600 million hectares could be harvested "in perpetuity". This clearly may not be the case, especially in areas with a high dependency on old-growth forests. A further qualification is that the extent to which illegal logging, over harvesting and poor practice are damaging forests, reducing the future productive capacity is also yet to be quantified.

This is a unique analysis and despite the qualifications, it gives cause for hope. We are meeting current production needs from a minority of the world's forest estate. This means that the majority of forests can be allocated to other uses such as community forests, protected areas and indigenous reserves. A further cause for optimism is evidence that in many of the largest producing countries the forest area is expanding. The chart below shows how, between 1980 and 1995, the forest area in North America, Europe and Australia/Japan/New Zealand grew by an average of 2.7%. This "new forest," frequently lacking many of the original species and does not replace the full ecological role of areas of "old growth" but does indicate that the total area of forest is increasing in these regions. The new forest consists of both plantations and of forest and regeneration on abandoned agricultural land (mostly not used for production).

Forest Area Gains in Developed Regions and Losses in Developing Regions: 1980-1995



Source: FAO January 2001

Meeting Future Needs

But this analysis represents the current picture. How much forest will we need to satisfy world demand throughout the 21st century?

"Eight of every 10 human beings have yet to achieve the level of paper use considered necessary to meet basic needs for literacy and communication. Bridging this paper gap is essential to improving the effectiveness of education programs in developing countries." Forest Futures, Population Action International, 2000.

It is clear that some people have access to far more wood and paper than others and many do not have sufficient for their needs. It would be both impractical and unacceptable to attempt to deny the developing world sufficient resources to meet basic needs. However, if the average per capita consumption throughout the world were the same as in the USA then the world's annual total would exceed 10 billion cubic metres! But it is safe to say that consumption will not level up like that. Consumption has only increased at about 1% per year since 1960 with an economy growing at 4%[2]. Current estimates of future demand for wood in 2050, by organisations such as FAO, range between 2 and 3 billion cubic metres.

Reduction, reuse and recycling will help to stem the rise in consumption of logs. But increased efficiency and effectiveness in the industry will have a much greater impact. The combination of the two should help to keep peak demand during this century towards the bottom end of this projection - nearer 2 billion cubic metres.

"Conventional wisdom predicts that the total amount of wood harvested will reach 2.5 billion cubic metres in 2050. But the figure could be much lower if millers improve efficiency, manufacturers deliver higher value through the better engineering of wood products, and consumers recycle and replace more. Together, these steps could shrink demand to about 2 billion cubic metres per year …". Restoring the Forests, Victor and Ausubel.

But that would still be 25% more than current consumption, so increased efficiency and effectiveness will be very important in limiting the additional impact on the world's forests.

There is potential for improvements in efficiency in both "wood producing" and wood saving" of the industry.

Improving Efficiency - Wood Producing

More efficient production of wood, ie producing more wood from less area can take two principal forms: fast growing plantations or improved silviculture (forestry practices).

Plantations

Fast growing plantations are supplying an increasing proportion of the world's industrial wood harvest (see chart overleaf: Projected Plantation Supply 1997 - 2030). Currently about 50 million hectares of fast growing plantations produce 20% of the wood harvest. This is an area somewhat twice the size of the UK, but a mere 0.33% of the world's land area. This analysis includes only fast growing plantations with a rotation length (the time between planting and harvesting) of 50 years or less. These are mainly located in the US South and in southern hemisphere countries – Brazil, Chile, South Africa, New Zealand and Australia. These plantations are producing wood at around 5 to 10 times the global average yield of forest. The area of fast growing plantations is projected to grow to 80 million hectares by 2030 supplying about half of the world's wood demand.

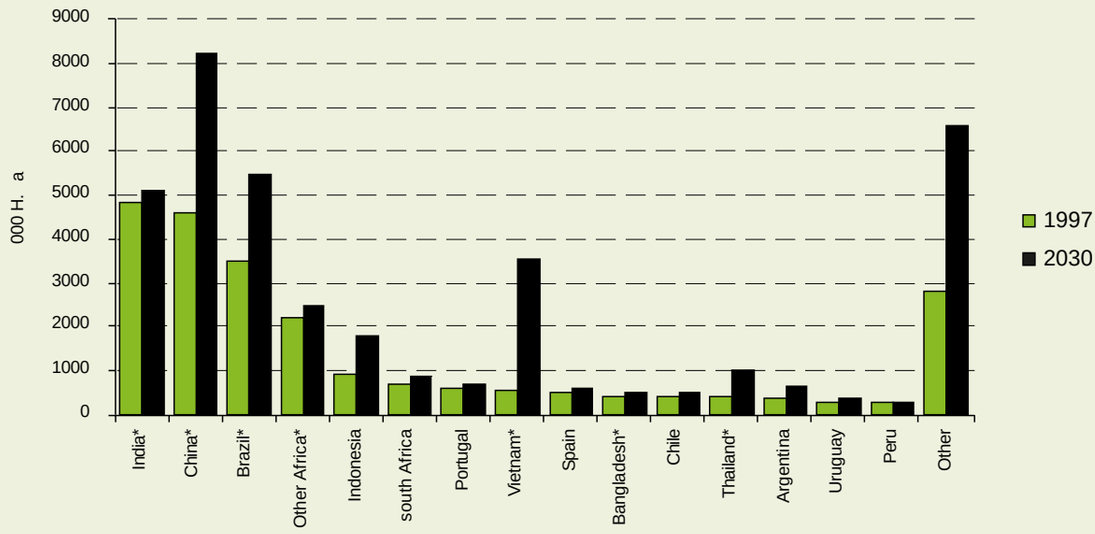
The UN's Food and Agriculture Organisation (FAO) suggests[3] that even below current rates of plantation establishment (4 million hectares per year in total), plantations could be producing 1500 million cubic metres by 2050. This amounts to 50-75% of projected total consumption. This is a high growth scenario but it provides a realistic upper estimate for the contribution of plantations.

There is considerable controversy about the role of new plantations in forestry. Like all things, there are good and bad plantations. Many have been very poorly established, have replaced natural forest and damaged local communities in the process. But others are managed to the highest

[2] Restoring the Forests, D G Victor and J H Ausubel, Foreign Affairs, Nov/Dec 2000

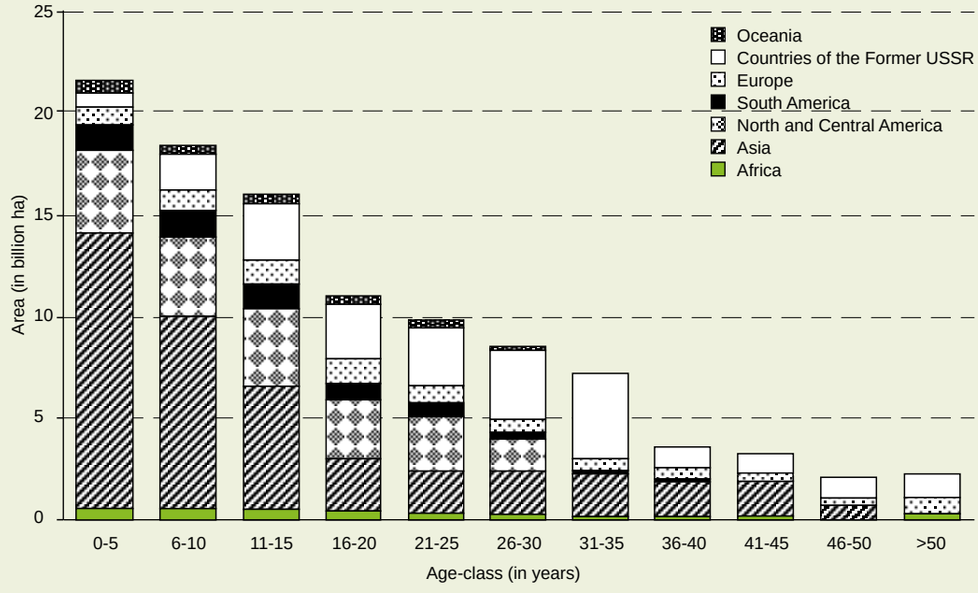
[3] Global outlook for the future wood supply from forest plantations, FAO 2000

Projected Plantation supply 1997 - 2030



Source Wood Resources Intentional, 1999

Age Classes of Plantations - 54% of Industrial Plantations are under 15 years old



Source Wood Resources Intentional, 1999

standards. If such standards can be applied to new plantations they could contribute significantly to meeting demands for fibre and timber and minimising the industry's environmental impact.

In addition to industrial plantations there are other ways of increasing production. Many argue that an alternative model is to increase incentives and land security to the rural poor to increase productivity and achieve a more equitable distribution of wealth. In Asia, the World Bank

estimates that more than half of the pulp and fuelwood supply comes from wood harvests outside of forests. Many pulp companies, notably in Brazil, are encouraging tree planting by landowners in their supply areas. The industry and NGOs could collaborate to promote schemes that produced fibre at competitive prices and helped the rural populations in most need.

Silviculture

Waste is a fact of life in many logging operations, particularly in parts of the tropics. However work has gone on in many parts of the tropics on improved silviculture and so-called 'low impact logging'. This includes better mapping and planning of harvesting, and post-harvest treatments. The work has demonstrated the advantages of low impact logging not only for the forest but also the forest operators' profits.

Typically, damage to the residual stand is reduced by half, natural regeneration is improved, and the recovery time before the next harvest is also halved. In Suriname, post-harvest treatments have increased growth in commercial timber by a factor of at least four, from about 0.5 to 2 cubic metres per hectare per year. With better harvesting (reduced impact harvesting) and processing techniques, the Tropical Forest Foundation estimates that productivity can be increased 20% with a 50% reduction in residual damage to the remaining stand.

There were added costs in planning and improved management. But these were compensated by savings from more efficient use of machinery and better yield related to field and sawmill processing improvements.

Natural forest management is a complex business. At its best it delivers excellent environmental, social and economic benefits which are difficult to match under any other form of land use. The exchange of information on best practice could produce better results for the environment and better yields.

Improving Efficiency – Wood Saving

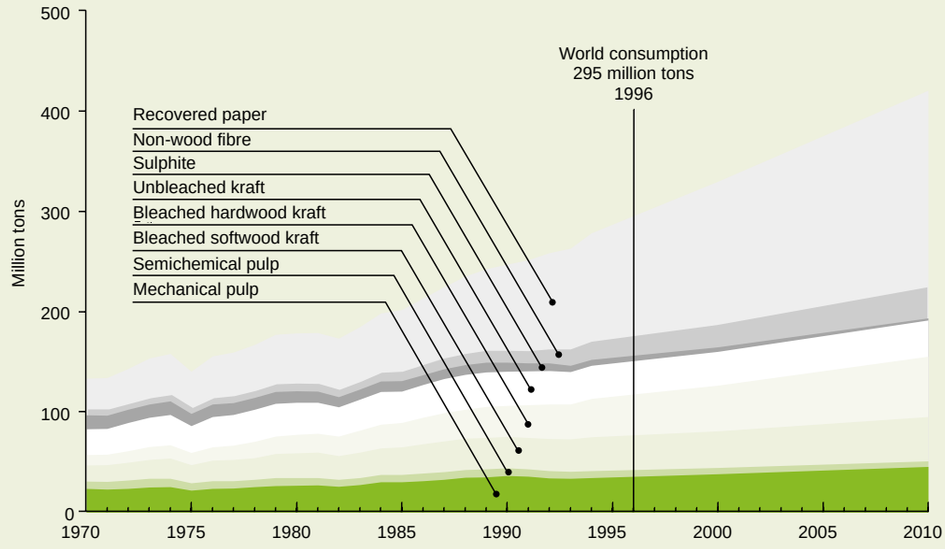
In addition to improved efficiency of production large gains can be made in using the wood that is produced more effectively. More efficient conversion of the wood, producing more product from less raw material is one way, and producing better designed products is another.

Conversion

There is huge potential to improve the efficiency of conversion in sawmills around the world. The best sawmills in the US and Europe produce up to 70% of saleable wood from each log they process. Residual chips and sawdust are used for particleboard, paper or energy production. In many developing countries the figure is nearer 30% with little use of chips and sawdust. If a sawmill doubles its efficiency only half the number of logs need to be extracted from the forest.

Efficiency in the paper industry is also being improved. Changes in pulping processes are increasing the conversion efficiency (less wood per ton of paper produced). Indeed some plantation hardwoods such as *Eucalyptus globulus* require only 3.0 cubic metres of logs to produce a ton of pulp, 50% less than many natural forest hardwoods (Bazett, pers. comm.) Recycling within mills is also having a major impact on yields. The level of recycling worldwide has doubled since 1970 and is likely to continue to grow (see chart overleaf: Consumption of total papermaking fibre in the world 1970 - 2010).

Consumption of total papermaking fibre in the world 1970 - 2010



This study shows rapid growth in papermaking. However the bulk of the additional fibre comes from recovered paper

Source: Jaakko Pöyry, courtesy Stora enso

Product development

Again the trends are for the production of more finished product from fewer trees. There has been a steady growth in the use of panel products including new types such as Oriented Strand Board. Products such as medium density fibreboard, which maximise the utilisation of wood, are also being applied to a greater range of end uses e.g. moulded products. These products make more efficient use of a tree and can use lower grade fibre. These engineered wood products can drastically reduce the need for inputting quantities of raw virgin materials of high quality (i.e. big trees of preferred species from “old growth” forest).

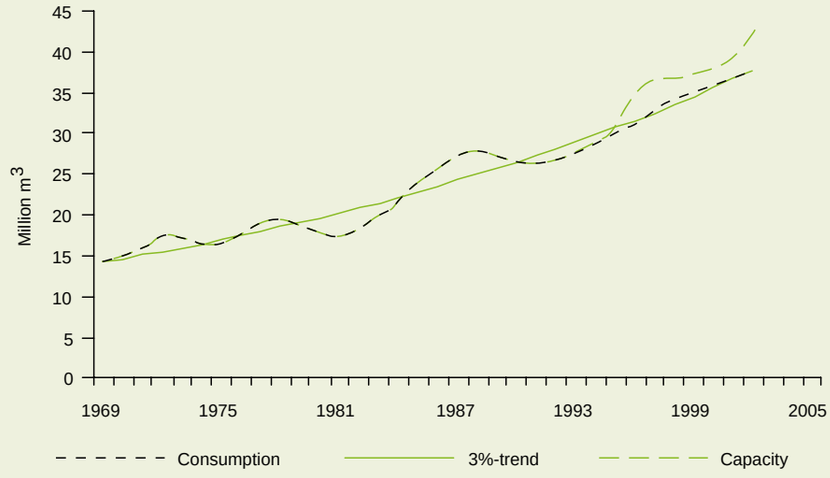
The production of Particleboard worldwide grew by 50% between 1983 and 1997. The production of structural wood panels in North America doubled between 1980 and 1994. There is also a new family of laminated products, most notably “LVL” which promises to make great inroads overtime and is a very efficient “user of wood.” The impact is less fibre “or tree” per unit of product.

In both the wood “producing” and “saving” areas, the industry is steadily improving efficiency and hence limiting the growth of demand for raw material. With the widespread application of the most effective methods, it is possible that the world’s demand for wood could continue to depend on no more than the 20 - 25 % of the world’s forests, which we have shown is the current position. If “best practice efficiency” can also continue to be improved it is possible that this impact could even decrease over the next 50 years.

Nevertheless, the industry extracts 1.6 billion cubic metres of wood every year and this will grow. This process must be extremely well managed to minimise the impact on communities and the environment.

North American structural panel demand and capacity, 1969 - 2000

Engineered wood product production is increasing rapidly as this chart showing panel production increasing at 3% per year in North America shows



Source: UN-ECE/FAO Forest Products Annual Market Review, 1999-2000

How Well Managed Are The World's Forests

The remarkable fact is, that at the beginning of the 21st century, we simply do not know how well the world's forests are managed. Until we have applied a global framework for defining good management and how we recognise it in the field, this question is impossible to answer with any precision. Some forests are extremely well-managed delivering multiple environmental, social and economic benefits while at the other end of the spectrum forests are destroyed with profound consequences for people and the environment.

However we do know:

- that illegal logging is wide-spread in many countries,
- some forest conversion to other land use practices contributes significantly to wood supply in some regions yet can hardly be described as forest management at all
- deforestation and forest degradation continue to occur over tens of millions of hectares

Against this background how can we begin to estimate the scope, or potential, for sound management?

More than half of the top 25 leading producer countries are members of the OECD, the industrialised nations' club. They are pledged to 'share the principles of market economy, pluralistic democracy and respect for human rights'. In total the OECD members account for almost two-thirds of global wood production. Together they produce approximately half of the world's wood. In these countries the rule of law generally applies. In addition many other nations, including some developing countries, have made progress in promoting improved forest management. Existing statutes of these nations stipulate minimum levels of forest practice. Although that minimum may not be enough to constitute sound environmental management, and it may not always be properly enforced, the basic framework exists. The fundamentals are in place to permit sound management.

This suggests that a significant proportion of the world's wood harvest is coming from sources that can be regarded as "managed". Unfortunately the quality of management is highly variable.

A significant part of the harvest from these areas is poorly managed, while an unknown volume of wood even in some of these "manageable" countries is from illegal sources.

We can go as far as to suggest that:

- a significant proportion of production comes from forests which are within reach of the standard for responsible forestry. In these areas it is necessary to start a dialogue to agree good forestry standards, make the improvements necessary to achieve sound management.
- some production is from areas where management is poor. Here standards must be agreed, but significant work needs to be put in and investment is required to bring the forests up to a good standard.
- some production is from sources where management is non-existent and/or production is illegal. Initiatives must be taken to tackle this problem directly.

But if we begin to implement the first two above steps then we will set forestry as a whole on an improvement pathway. Bad forestry can be squeezed out of the system as markets and consumers demand increased environmetal performance. The best thing that responsible companies can do to eliminate illegal logging and bad practice is to demonstrate the sound management of their own forests – in sorting out their own back yard they will simultaneously make life harder for the illegal operators.

The Role Of Independent Certification

"We see certification systems, such as the FSC, as one of the most important methods for encouraging and rewarding production practices that rise to the highest global standards. The FSC is the most important new tool we have seen in a decade for protecting forests worldwide." Michael Conroy, Senior Programme Officer, Ford Foundation.

WWF believes independent certification is the answer. Through independent certification we can learn to define and recognise good forest management and that is the purpose of the Forest Stewardship Council (FSC).

The FSC provides a framework for standard setting and auditing which can be applied worldwide. Conflicts can be resolved and agreement reached on what constitutes good practice. Through independent certification, industry can demonstrate that the forests it uses are managed to the highest standards and therefore deliver environmental, social and economic benefits.
Companies have gained, too. Most forest operators have had to modify some practices to achieve independent certification, but these changes have been practicable and have frequently brought benefits.

The studies reported in this document demonstrates the potential and that the scale of the challenge is manageable. We have shown that 90% of the world's production comes from approximately 600 million hectares. Already more than 20 million hectares are certified by the FSC. Given leadership from the industry and the green movement it must be possible to certify, in an agreed framework, the majority of the producing forest in the world. This would transform the environmental impact of the industry as well as its reputation.

Independent certification can demonstrate that the forest estate is looked after to the highest standards and we already have systems working on the ground. WWF would like to play a leading role in extending independent certification to the entire production forest estate.

In order to achieve this WWF is working on:

- all aspects of independent certification, from standard setting to model projects, to increase the area of forest which is demonstrably well managed.
- dialogue with producers who are within reach of independent certification in order to increase the certified area rapidly
- investment in improved forest management where standards are unacceptable and where considerable resources are required before independent certification would be possible. WWF is working on the concept of Producer Groups (Forest and Trade Networks with a focus on production) in Russia, Latin America, Africa and Asia. These initiatives will help member companies to improve the level of forest management, to embrace independent certification and to expand trade.

However, WWF, the FSC and our current partners will not be able to extend certification to the entire forest estate without far greater involvement of many organisations, especially the forest industry itself.

"FSC is the only group that doesn't audit itself. The problem we have with some of the certification schemes is that they audit themselves...The source of supply is key here, and we need to be confident and comfortable that the products the industry can stamp as FSC come from woodlands that are well managed." Annette Verschuren, President, The Home Depot Canada.

Other Schemes

The debate has moved on from is "certification a good thing" to "what kind of certification will do". In reality certification must be independent, involve all interest groups, environmental, social and economic, be transparent and operate to similar standards around the world. Chain-of-custody and a product label are also required to verify that the end product is in reality from a responsibly managed forest. Of the many schemes that have developed, many are now collaborating with the FSC and the words mutual recognition are much discussed though rarely defined. It is fair to say that mutual recognition, or recognition will not happen unless schemes are operating to equally challenging standards that have been developed in open participatory ways, inspected with the same independence and stringency. The industry will not benefit from a proliferation of labels of varying credibility. There is no quick fix to a certified world but if we all pull in the same direction we will get there faster.

The FSC was initially established to provide a global umbrella for forest certification schemes run by different organisations and there are now 9 certification bodies accredited (ie. officially recognised) by the FSC. In WWF's view the FSC provides the benchmark for assessing all other schemes and these should be encouraged to collaborate with FSC.

The Business Imperative

A "sustainable" forest products industry should be a business objective as well as an environmental target. The business case for independent certification and responsible forestry is compelling. It begins with the need to sustain raw material supplies. But it goes beyond that to the need to satisfy shareholders and sustain corporate reputation.

"We have long argued against stifling governmental regulations. But certification may provide the internal desire for industry to voluntarily achieve results that regulations... rarely accomplish." Bill Howe, Collins Pine.

Sustaining the Yield

Forestry companies depend on a sustained, predictable yield of logs. Given that operational requirement, sustainable forest management should be a given, but this is not always the case.

Where companies lack secure tenure they frequently over-harvest. There is an incentive to extract as much timber as possible in the available time if access is only guaranteed to an area of forest for a few years. This kind of behaviour has seen the tropical timber trade move from species to species as overexploitation has led to the commercial decline of one after another.

Independent certification provides an independent guarantee that operations are economically viable and that yields are at levels that can be maintained in the long term. This should be as valuable and necessary for a forestry company as a financial audit. For processors, manufacturers, traders, end users or investors, independent certification guarantees that future supplies are assured.

Reputations and global brands

All companies, but especially those in the extractive industries, are increasingly under scrutiny over their impacts on the physical and social environments in which they work. Expectations of the business world have become more prominent in an unprecedented expansion of global trade.

The last few decades have seen a shift from big government to big business. The largest 500 companies in the world carry out half of all trade. As the power of business and industry has increased, and as governments have withdrawn from involvement in certain areas, so societal expectations have transferred from the public to the private sector.

The growing power of business, combined with growing expectations, have combined to produce widespread scepticism about the role of business in society. The impact of trade has been a particularly emotive issue, as demonstrations in Seattle and elsewhere have shown.

NGOs see global capitalism as a villain, leading to world income differences, poverty and the exploitation of poorer nations by unethical MNEs [multinational enterprises]…….. MNEs are now viewed by NGOs as "big, bad and ugly." (Alan M Rugman, The Illusion of the global company, Financial Times, 8 Jan, 2001)

The level of trust in big business has slipped to an all-time low, as a recent study carried out on behalf of the UK's Cooperative Bank illustrates powerfully (see chart on page 13).

Global brands may be powerful but they are also

Figure 1. The Millennium Poll on Corporate Social Responsibility, commissioned by Price WaterHouse Coopers, (Environics International Ltd., 2000)

Interviews with over 25,000 average citizens across 23 countries on 6 continents reveal that:

In forming impressions of companies, people around the world focus on corporate citizen-ship ahead of either brand reputation or financial factors.

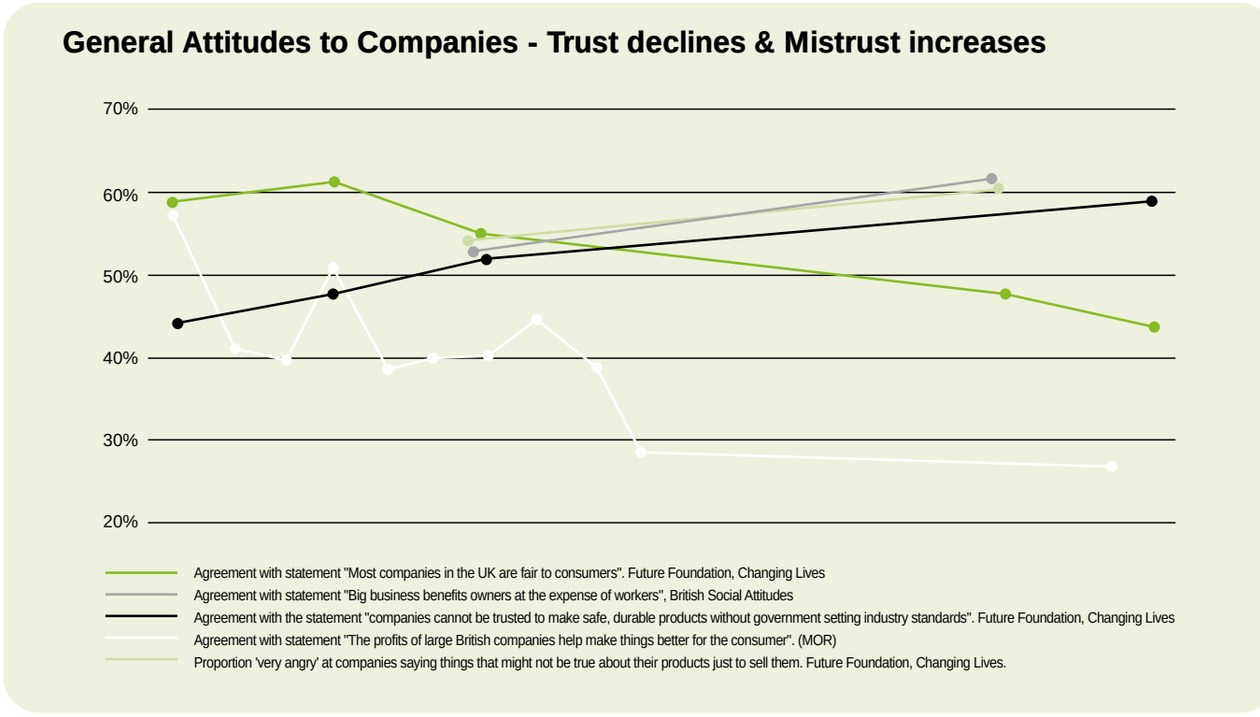
Two in three citizens want companies to go beyond their historical role of making a profit, paying taxes, employing people and obeying all laws; they want companies to contribute to broader societal goals as well.

Actively contributing to charities and community projects doesn't nearly satisfy people's expectations of corporate social responsibility

Fully half the population in countries surveyed are paying attention to the social behavior of companies.

Over one in five consumers report either rewarding or punishing companies in the past year based on their perceived social performance,and almost as many again have considered doing so.

Opinion leader analysis indicates that public pressure on companies to play broader roles in society will likely increase significantly over the next few years.



vulnerable. Perhaps unfairly, companies tend to be judged by their worst performance – one slip can be extremely damaging. The impact on Shell of campaigns against its activities in Nigeria and on Nike over the conditions of its workers in Indonesia, are powerful indications of that vulnerability.

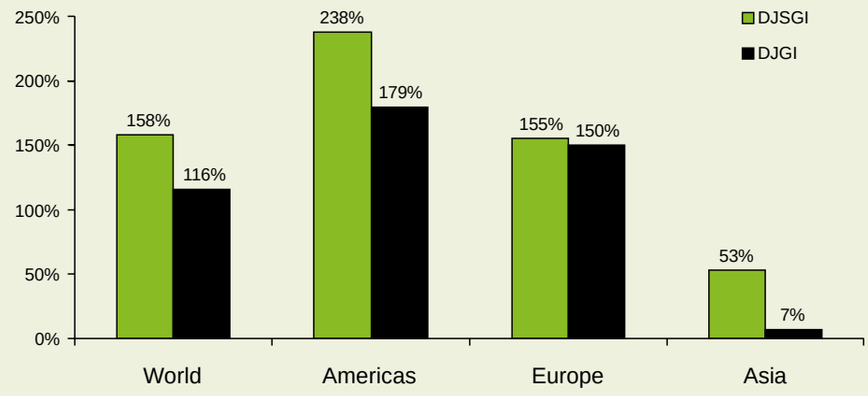
Kamran Kashani professor of marketing at IMD, Lausanne (The essence of building an effective brand, Financial Times; Dec 18, 2000) has argued that: “effective brands evoke a trusting relationship…..Trust in brands, as in any relationship, comes from consistency and continuity. On consistency, every customer experience with the product or service must reaffirm and reinforce the values it communicates. Anything short of this is cause for distrust and termination of the relationship.” Poor social or environmental performance can damage trust and undermine the core values of a brand.

The challenge is clear. Trust is at an all time low, global brands are vulnerable and society’s expectations of standards of corporate behaviour are increasing. Corporate social responsibility is increasingly synonymous with reputation management and good brand management.

The Rise of Ethical Investment

Ethical investment has been a niche market, attracting only a tiny proportion of investors’ funds. But it is now breaking out of the niche to influence mainstream investment. The Businesses for Social Responsibility (BSR) based in California, estimates that $1 out of every $8 invested now goes through some type of social or environmental screen. Several large UK institutions are now applying a social responsibility policy across their entire investment funds. They include organizations with an ethical investment background, such as Friends Provident and Henderson. But powerful mainstream investors such as CGNU and Hermes are also introducing social responsibility criteria. The Dow Jones Sustainability Index, focusing on global sustainability leaders, demonstrates that this is an international trend (see chart overleaf).

Dow Jones Sustainability index 5 year performance
December 1995- December 2000; Euro, Price Performance



Source: Dow Jones Sustainability Group Index GmbH Switzerland January 2001

"Socially responsible investment is booming! …. When it comes to companies involved in using or trading wood-based products, FIS encourages them to make commitments to sourcing those products from sources that are independently certified as being sustainably - managed and to joining organizations such as the 95+ Group [the UK Forest and Trade Network] ……" Rachel Crossley, Senior Analyst, Friends Ivory and Sime.

As ethical investment expands and ethical criteria become part of the mainstream investment market the forest products industry will find itself coming under increasing scrutiny by its shareholders. Companies which are judged to perform best environmentally will be favored over those with worse records, and will see the benefit in their share prices.

The Role of the Consumer

Trust in business is low but does this really impact individual companies? The Millenium Poll On Corporate Social Responsibility and a Cooperative Bank study have produced compelling results to show that consumer values are being translated into buying behaviour. Consumers are increasingly seeking to use their purchasing power to reward or punish companies for their behaviour. This is not confined to the affluent west. The PWC survey shows that this is a growing trend globally. This is both a threat and an opportunity for businesses everywhere – a threat to companies which do not embrace social and environmental responsibility, but an opportunity for those who do to win consumer approval.

The Cooperative Bank study concluded that there will be continued growth of ethical markets. And that the total potential ethical market in the UK could rise "from around 30% to at least half the population".

"In total, ethical concerns could be backed, at a conservative estimate, by over £8 billion of consumers' money [UK]." (Who are the ethical consumers? Cooperative Bank, 2000)

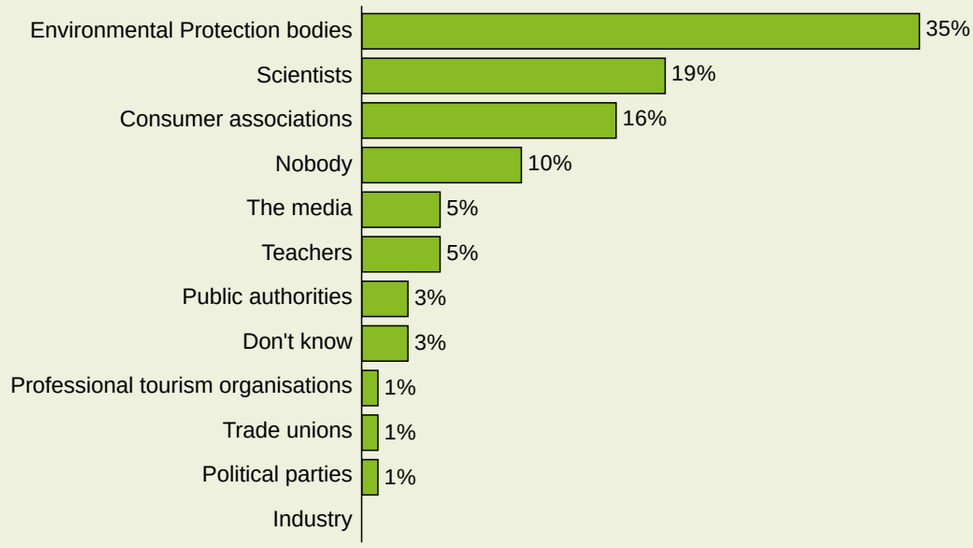
The Global Forest and Trade Network is committed to producing and purchasing products from well-managed forests. The Network spans the industry from forest owner to architect, manufacturer to retailer. The network is open to any organization that supports the objective of improved forest management and credible independent certification. National networks operate in Austria, Australia, Belgium, Brazil, France, Germany, Ireland, the Nordic Countries, the Netherlands, North America, Russia, Spain, Switzerland, and the UK. There are more than 700 member companies, from small producers to world leading companies such as Home Depot and IKEA.

Consumer behaviour is significantly influenced by NGOs. Various studies have shown that environmental organisations rank highest in public confidence for information on the environment. A recent study of "thought leaders" in the USA, France, Germany, UK and Australia by Edelman PR (Dec, 2000) concluded that "non-government organizations are more trusted than the media, the most respected corporations or governments."

"Non-Governmental Organizations (NGOs) such as Greenpeace and Amnesty International have become the new "super brands" in global governance. They have earned a far greater level of trust than some of the most well-respected global multinational companies such as Ford, Microsoft, G-7 governments and global media according to new research conducted by Strategy One, a unit of Edelman Public Relations Worldwide."

"Because of the greater reliance on NGOs, government and multinational corporations can work toward mutually beneficial outcomes such as the Home Depot alliance with Forest Stewardship Council or the Chiquita partnership with the Rainforest Alliance," Jonathan Wootliff, Managing Director of Edelman's global NGO practice. "In both cases, our clients have adapted their business practices to work with organizations that may once have been their critics".

Who Do People Trust On The Environment?

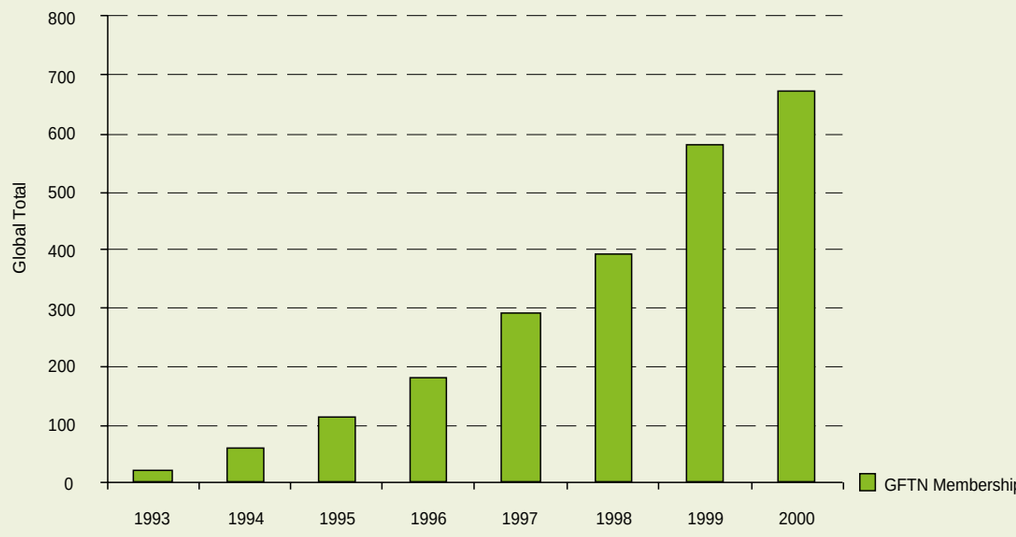


Source: Eurobarometer 2000

The Global Forest and Trade Network (see box on page 15), a partnership between organisations and companies committed to supporting independent certification has been the engine that has driven the development of forest certification and the FSC.

The growth of the Global Forest and Trade Network shows that many forest products businesses are already persuaded of the business imperative.

The growth of GFTN 1993-2000



Source WWF January 2001

The Global Forest and Trade Network

Source January 2001

Leaders in Finding a Solution?

A global change in forestry cannot be achieved only through the efforts of NGOs such as WWF. There are now almost 700 companies in the Global Forest and Trade Network committed to producing, trading or purchasing forest products certified as sustainably produced. These companies have driven the development of certification and together they account for approximately 7% of world industrial wood use. Although this is significant it falls short of a critical mass.

This proportion could be increased dramatically if a small number of leading companies pursued the same objectives as those that have already joined the Global Forest and Trade Network.

WWF has undertaken research to discover the companies that influence the future of forestry. Through this work we have identified the top 50 processors and buyers of forest products.

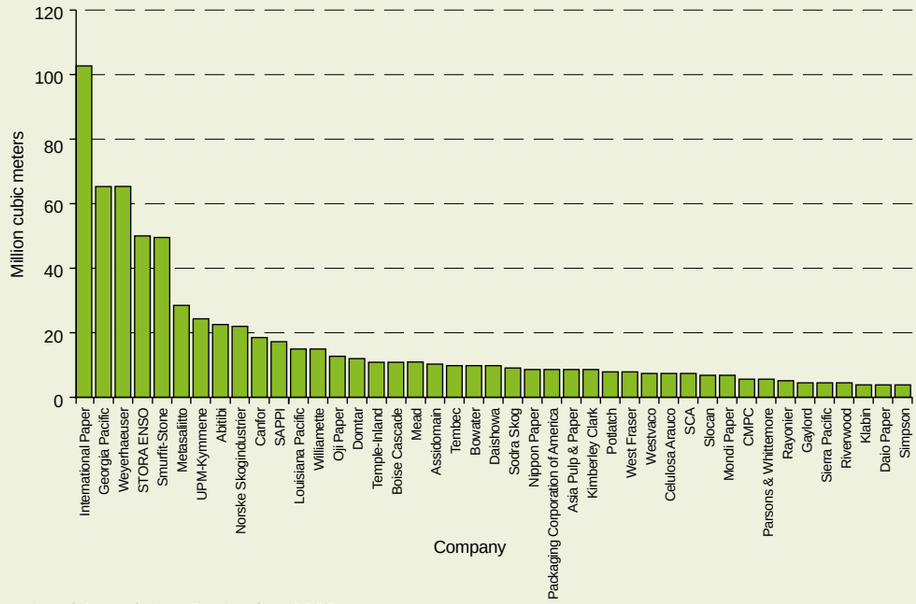
Using published data on the volumes of pulp, paper, sawn wood and panels produced by each company, and standard conversion factors, we have estimated that 50 companies process 43% of the world annual harvest of industrial wood.

The following bar chart shows (below and overleaf) the volumes of wood processed by the leading companies. The largest, International Paper, processes over 100 million cubic metres of wood each year – more than the entire annual production of Sweden, Finland or British Columbia and nearly double the annual consumption of the UK.

The other big actors in the top 5 are Georgia Pacific, Weyerhaeuser, Stora-Enso and Smurfit Stone Container. Together, the top 5 companies process one fifth of the world's industrial wood. While the rest of the industry remains very fragmented the chart clearly shows that a limited number of companies are beginning to dominate.

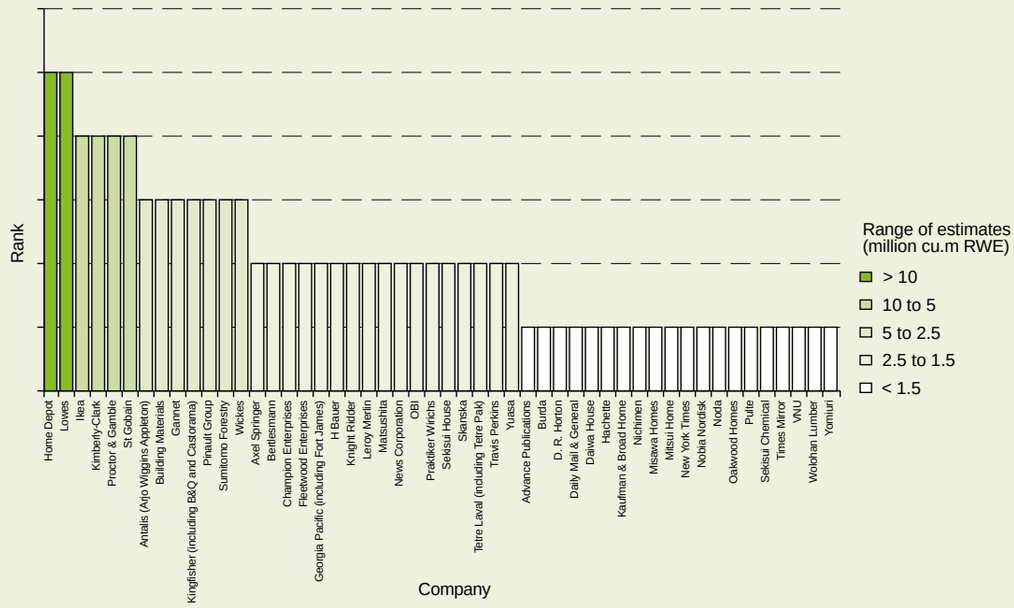
A similar study was undertaken to find out who are the main buyers of forest products. Estimating the volume of wood and other products purchased by a retailer or a manufacturer is very complex. However there are many sources of data and various techniques can be used. Several companies

Annual wood consumption of largest global processing companies



Source: Bazzet and Associates, September 2000

Fifty of the worlds largest companies



Source: WWF/James Hewitt 12 2000

record consumption and publish data. We estimate that the top 50 consuming companies purchase 10% of the annual wood harvest. The chart above ranks the top 50 companies.

This concentration of both producers and to a lesser extent the users means that a relatively small number of companies can make a dramatic difference to the industry. If these leading companies work with WWF and the certification movement we can jointly create an optimistic vision for the world's forests. Responsible forest management will not become widespread without the participation of these industry leaders.

"I think that if a company our size and posture can pull this off, and I know that we can, then we will be a catalyst for change among a lot of companies" - Arthur Blank, CEO [now co-chair] The Home Depot.

Conclusion

This report has demonstrated the important role independent certification can play in promoting improved forest management and protecting the reputation of the forest products industry and individual companies within it. If poor practice and illegal logging continue to be widespread and forests around the world continue to be destroyed it will be difficult for any global company to remain untarnished.

There is little doubt that the industry will continue to face increasing numbers of questions about its environmental performance from NGOs, consumers and shareholders. We have shown that there need be no threat to the long-term viability of the industry. There is sufficient forest remaining around the world to meet likely demand for wood, especially if the industry continues to improve the efficiency with which trees are produced and the products are made. The problem is not forestry or wood consumption per se but poor practice and over-exploitation in some areas.

But if a better future for the world's forests is to be achieved and the industry's reputation is to be protected it is essential to spread sound management and to demonstrate that through independent certification.

At the heart of the industry's problem is the fact that we have no universally accepted definition of good forest management, making it difficult to identify responsible companies. Until recently there was no way of detecting which wood products come from well-managed sources and which come from badly managed and/or illegal logging.

Independent certification will allow the stamp of sound management to travel down the supply chain to the end customer. Companies which embrace independent certification will no longer be part of the problem, they will be part of the solution.

It is also our belief that, as more and more forest is certified as well managed, pressure will build on the 'bad apple' companies and illegal logging will be 'squeezed' out of the system.

The debate has moved on from is "certification a good thing" to "what kind of certification will do". The industry will not benefit from a proliferation of labels of varying credibility. The challenge will be to ensure that there is a globally accepted framework. WWF believes FSC to be the benchmark.

WWF research has shown that a relatively small number of companies now dominate the industry. These companies have the opportunity, through adopting independent certification, of not only protecting their own reputations but also of transforming both the standards of forestry worldwide and image of the industry.

Research by WWF described in this report has shown that it is realistic to aim for at least half or more of the annual wood harvest to be independently certified in the medium term. It would be tragic if, at the beginning of the 21st century, we could not aim for all forests to be well-managed in the foreseeable future.

Only through independent certification can consumers be confident that the wood and wood products they buy come from soundly managed forests. And only by action from the industry leaders can that reassurance be provided.

"So long as wood retains its importance in human life, logging will remain an essential human activity. Just as with farming, the issue is not eliminating the practice but making it more environmentally sustainable." Forest Futures, Population Action International, 2000.

“We wish to thank the Wallace Global Fund for their generous contribution which made possible the underlying research for this report.”