

Transnational Companies and Global Forest Resources

An assessment for WWF UK produced as a submission to the Commission on Sustainable Development

Nigel Dudley

Preface

Transnational companies (TNCs) play a key role in international environmental affairs, by virtue of their size, enormous economic power and unique structure. The annual incomes of the largest TNCs now dwarf the GNP of most countries, and the top few hundred companies control 70 per cent of world trade. Large TNCs are involved in all aspects of production, from extracting the primary resource to high street retailing. A single company can operate in up to a hundred different countries, giving many opportunities for transfer pricing and price fixing and thus undervaluing resources. TNCs have unique access to economic power, political leverage, and control over research and investment.

- Problems fall into two main categories:
 - Problems *unique* and/or particular to TNCs
 - Problems in which TNCs play a major role by virtue of their *size* and their *influence* on markets and politics

In both cases, the role of TNCs is distinct from that of national companies, state enterprises and cooperatives. A few qualifications are needed to put the rest of the text into perspective.

- The report deliberately highlights *problems*, particularly those of relevance to the forthcoming meeting of the Commission on Sustainable Development;
- Not all TNCs are involved in the problems described below, although their nature and structure means that they are *liable* to be so involved;
- Whatever economic and political changes can be expected in the long term, TNCs are likely to be with us for some time to come, making it necessary for conservation NGOs to find ways of working *with* transnational companies in addressing environmental problems;
- TNCs also offer some unique *opportunities* to address environmental problems, and these should be explored.

The report starts by looking at why TNCs should be considered as a special case. It then looks at several reasons, with examples, of why TNCs can create problems for forest resources. A final section suggests some appropriate responses from the Commission on Sustainable Development. I am grateful to Richard Tapper for commissioning the work and commenting on the text, and to Jean-Paul Jeanrenaud, Scott Jones and Francis Sullivan for supplying information. I have drawn on research carried out into the pulp and paper industry by Sue Stolton, who has also commented on the text. Any remaining errors are my own responsibility.

Nigel Dudley

Bristol

March 1995

The following report is the first of three forest papers being published by WWF UK as submissions to the Commission on Sustainable Development in April 1995. The other two are *Timber Trade - Certification and Monitoring* and *UNCED Friendliness in Europe: National action regarding the UNCED Forest Principles - a series of case studies*.

Executive Summary

The following report examines the role that transnational companies (TNCs) have played in the destruction and degradation of forests around the world.

- The report highlights *problems*, particularly those of relevance to the forthcoming meeting of the Commission on Sustainable Development. Not all TNCs are involved in these problems, but their nature and structure means that they are liable to be so involved. TNCs also offer unique opportunities to address environmental problems, and these should also be explored.
- Transnational companies differ from companies based in one country, and from governments, for several reasons, including: size; increasing concentration of power into the hands of a few TNCs; opportunities for vertical integration; international links; influence on global investment patterns and aid budgets; and ability to control areas of global research and development.

Several problems are identified:

- Transfer pricing and price fixing can be used to undervalue resources and thus encourage unsustainable development;
- TNCs adopt varying environmental standards around the world, and resource-intensive industries are increasingly relocated to areas with comparatively weak environmental controls;
- Varying environmental standards can be adopted by the same TNC in different parts of the world;
- TNCs have led opposition to new initiatives aimed at protecting the environment;
- TNCs have frequently been guilty of delaying technical innovation and technology transfer;
- The largest TNCs have a disproportionate political and economic influence, which can outweigh local plans and regulations;
- TNCs have often operated in areas under dispute regarding land rights;
- The dominant role that TNCs take in the market means that they are centrally involved in promoting increased consumption, which itself has environmental effects.

The forthcoming CSD meeting in April 1995 can address these issues further, and WWF has identified ten key points which could help deal with the ten problems outlined in this overview:

- Prevention of transfer pricing;
- Stopping relocation of resource-intensive industries to areas with weak environmental laws;
- Introducing environmentally-sound methods of extracting and processing natural resources;
- Adopting global environmental standards by TNCs;
- Adopting and strengthening the *UN Code of Conduct for Transnational Corporations*;
- Adopting independent timber certification and backing the Forest Stewardship Council;
- Establishing mechanisms to promote technology transfer and capacity building;
- Recognising the importance of regulatory legislation of business and industry activities;
- Recognising the legal standing of indigenous peoples' lands, conservation areas etc;
- Developing business strategies that minimise, rather than increase, resource use;

Introduction

Transnational companies differ from companies based in one country, and from governments and other sectors, for a number of reasons:

- Size;
- The increasing concentration of power into the hands of a few TNCs;
- Opportunities for vertical integration;
- International links;
- Influence on global investment patterns and aid budgets;
- Ability to control areas of global research and development.

Size

The annual incomes of large TNCs exceed the GNP of most countries. The largest Japanese companies now regularly have turnovers exceeding US\$100 billion a year. Royal Dutch Shell, the largest European TNC, had a turnover of £55 billion in 1992, and employed 127,000 people¹.

The full economic and political significance of this remains the subject of debate. However, there is little argument that the size, and accompanying financial and political influence, of large TNCs gives them a disproportionate say in the development of industry as compared with smaller companies or even sometimes of governments. The United Nations Centre on Transnational Corporations (UNCTC) assessed the impact of Du Pont's 25 per cent global share of aerosols as follows:

The fact that one company can implement a global phase-out policy affecting 25 per cent of the world production of such environmentally threatening chemicals underscores the importance of identifying the major industrial sources of environmental degradation and involving transnational corporations in remedial and preventative action².

Transnational companies now control around 70 per cent of world trade³. Around 80-90 per cent of trade in forestry products is now controlled by TNCs⁴. In 1992, the world's top pulp and paper company, International Paper of the USA, had sales of \$13.6 billion⁵. In the same year, for example the GDP for Iceland was \$6.6 billion, less than half that of International paper, while Luxembourg had a GDP of \$10.4 billion⁶.

Concentration of power within the hands of a few TNCs

The economic power of the largest companies has been increasing above the rate of inflation for many years. Qualification for membership of the top 500 United States' companies increased from sales of US\$49.7 million in 1954 to \$418 million in 1983, well in excess of US inflation rates⁷. The UNCTC estimated that, by 1980, the top 350 TNCs controlled 28 per cent of the GDP of the capitalist world⁸. Indications are that this trend has continued. TNCs foreign investments grew three times faster than world trade during most of the 1980s⁹.

The process has been particularly marked in the pulp and paper industry, with a string of acquisitions in the early 1990s which significantly changed the balance of power within the sector. Western companies have begun to explore the markets opened up by the collapse of Soviet bloc¹⁰. At the same time, several

Southern companies have expanded rapidly, such that an Indonesian paper company was ranked sixth largest in the world in 1990¹¹. The result is further power to a few top companies. In Sweden, for example, three companies (Stora, SCA and MoDo) control 75 per cent of the paper market, and in Finland the top four companies control three quarters of the pulp trade¹².

Vertical integration

The largest TNCs are frequently involved in all stages of the production process, from extraction of raw materials to marketing the final products on the high street. This gives TNCs a unique ability to plan international strategies for entire industrial sectors.

In its final submission to UNCED, the UNCTC stated:

...the specific roles and responsibilities of transnational corporations ensue from their unique management aspects, the breadth of their corporate networks, the range of their technological resources and the international consequences of their decision-making¹³.

The twin processes of increasing size, and increasing vertical integration, have affected the forestry sector. For example, over the past decade, the Swedish TNC Stora has undergone a series of acquisitions, including those of Billerud, Papyrus, Swedish Match and the German company Feldmuhle Nobel. Stora's interests run from electricity to explosives, but centre on timber products. It is involved in every stage of the production process from forest management (Stora Forest), through timber sales (Stora Timber and others) to manufacture of a variety of papers (Stora Cell, Stora Papyrus, Stora Feldmuhle etc), packaging (Stora Billerud and Akerlund and Rausing), kitchen and bathroom equipment (Stora Kitchen), doors (Swedoor) and flooring (Trakett). Stora has operations throughout Scandinavia and in Belgium, France, Germany, Ireland, Italy, Switzerland and the UK, and manufacturing units in Canada, Chile, India, the Philippines, Thailand and the USA¹⁴.

International links

The largest TNCs operate in up to a hundred countries through wholly or partially owned subsidiaries, and through joint ventures with local or state industries and/or with other TNCs. Other transnational companies are more localised in their operations, picking countries that offer particular advantages. Timber companies, in particular, have a history of constantly moving to new areas, as resources become depleted. International transport links, and the speed of modern communications, make this process easier than ever. Increasingly, control of several companies in different areas of the world is seen as an important market strategy. The Finnish TNC Kimmene justified buying a minority share in the French sawnwood importer and distributor Becob in 1991 by stating that "we believe that the better we can control our markets and get closer to the end user, the better we can develop our products"¹⁵.

Influence on investment

TNCs play a key role in Third World development through their investment strategies, influence on aid programmes, and via related trusts and research organisations such as the Ford and Rockefeller Foundations. International contractors practice "aid tracking" to maximise their contracts and TNCs often influence the choice and location of aid projects. A consulting engineer told the *African Economic Digest*:

We do a lot of pre-feasibility and feasibility studies which don't go out to tender - as such, we are in the front line of the aid business. We have to establish a relationship with the government and the agency almost as soon as a project becomes a twinkle in their eye, and always before the project is approved¹⁶.

Many aid projects have not been successful in either promoting economic well-being or protecting the

environment. Robert Goodland, Senior Advisor at the Environmental Department at the World Bank, has criticised the role of banks in aid projects:

Banking is not neutral....More attention to the environment in loans to developing countries could have led to fewer bad loans on your books. And less indebtedness imposes less pressure for short term behaviour, less liquidation of environmental assets, and more environmental prudence.... Environmentally irresponsible banks are increasingly subjected to regulatory and social pressures. The privileged confidentiality between banker and client is eroding. Fiscal soundness depends on environmental soundness. And environmental quality affects us all¹⁷.

Aid tracking has also affected the forestry sector, and many TNCs have been closely involved in environmentally damaging aid-funded projects, particularly in tropical forests¹⁸.

Influence on global research and development

In many parts of the world, research funding is shifting from government to private sources, including TNCs. Their research priorities may not be compatible with maximising environmental benefits. The UNCTC summed up the importance of this role in a contribution to the preparatory meetings for UNCED:

...transnational corporations have the financial flexibility to raise investment capital and can distribute environmental research and development costs throughout the enterprise. They can allocate more resources for technological adaptation, environmental assessments and safety analysis¹⁹.

These factors provide the framework against which the actions of transnational companies need to be measured and assessed. In the following section, several specific ways in which TNCs impact on forests are outlined.

The impact of transnational companies on global forest resources

TNC's basic characteristics influence every aspect of their operations and strategies. Below, some specific environmental side-effects are outlined, with examples from the forest sector.

■ Transfer pricing and price fixing can be used to undervalue resources and thus encourage unsustainable development.

Although intra-firm trade and transfer pricing can occur within a multi-plant national firm, it is particularly significant in the case of TNCs because they operate in different countries and use a range of currencies. In 1980, a fifth of all US exports and a third of imports involved trade between US TNCs and their majority-owned affiliates²⁰. Since then, the trend has continued to intensify. International trade inside the world's largest 350 TNCs accounted for almost 40 per cent of world merchandise trade in 1990, amounting to US\$3,485 billion²¹. Transfer pricing allows TNCs to:

- Reduce taxes by declaring profits in a country with relatively low taxes;
- Take advantage of favourable exchange rates;
- Reduce profits for subsidiaries in joint ventures;
- Under-report profits where foreign investment is a sensitive political issue.

This means that natural resources, such as forests, can be undervalued by TNCs, thus encouraging unsustainable exploitation and discouraging governments from investing in forests. The financial labyrinths that result allow unscrupulous companies to exercise a range of semi-legal, or illegal,

practices, which also have side effects for forest quality.

- **Transfer pricing in Papua New Guinea:** In May 1987, a **Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea** was established under Justice Thomas Barnett, following persistent criticism of foreign timber companies. The UN Centre on Transnational Corporations, had already hinted at transfer pricing:

Despite a flourishing timber trade, it was not until 1986 that any logging company declared a profit in PNG²². Most of the "Barnett Report" remains unpublished. Extracts from the interim and final reports provide evidence that TNCs have been acting illegally in PNG:

It would be fair to say, of some of the companies, that they are now roaming the countryside with the self-assurance of robber barons; bribing politicians and leaders, creating social disharmony and ignoring laws in order to gain access to, rip out and export the last remnants of the province's valuable timber.

These companies are fooling the landowners and making use of corrupt, gullible, and unthinking politicians. It downgrades Papua New Guinea's sovereign status that such rapacious foreign exploitation has been allowed to continue with such devastating effects to the social and physical environment, and with so few positive benefits.

It is double outrageous that these foreign companies...have then transferred offshore secret and illegal funds....at the expense of the landowners and the PNG government²³.

- The following referred to Gaisho (NG) Pty Ltd, a wholly-owned subsidiary limited of Gaisho Ltd of Osaka, Japan:

Gaisho's other faults were dwarfed by the enormity of its illegal marketing strategies. Gaisho (NG) has a very complex marketing strategy and unravelling it has been like peeling an onion. The peeling process has disclosed true market prices as being 20-22 per cent above the price which the PNG producers received from Gaisho²⁴.

Although the Commission was launched by the PNG government, evidence of corruption reduced support. Justice Barnett was stabbed, nearly fatally, outside his Port Moresby home. Little of the evidence uncovered has been used either to halt individual companies or change practices. One of those accused of serious corruption went on to be Deputy Prime Minister²⁵.

- **Price fixing in temperate forests:** Price fixing has been a persistent problem in the international timber and pulp market, and can also lead to distortions in the market and subsequent undervaluing of some forest products. In December 1984, the European Commission fined 40 of the world's major pulp and paper producers, from the US, Canada, Sweden, Finland, Portugal and Spain over 4 million ECU (£2.4 million) for operating a cartel to restrict price competition²⁶. Ten years later, in 1994, the EU has again charged several European timber and pulp producers, including SCA and Stora, for persistent price fixing²⁷.

Similar problems occur in North America. The Alaskan Pulp Company (APC) has been involved in an increasingly controversial logging operation in the Tongass National Forest for many years. APC

is part-owned by Mitsubishi Corporation and Mitsubishi Bank. The US District Court found the company guilty of trying to monopolise the SE Alaskan timber industry through, according to Judge Barbara Rothstien: a "pattern of collusive communications and joint projects". The US Forest Service found that the company kept two sets of invoices to cover up its transactions. In January 1994, the company closed its pulp mill and in April the US Department of Agriculture voided APC's 50 year agreement for breach of contract. In British Columbia, Mitsubishi's Crestbrook operation is clearcutting to produce pulp for export. The Canadian government filed a suit against the company for systematically avoiding payment of millions of dollars worth of taxes. Crestbrook has been cited by the media as one of the worst polluters in the province. The tax collectors regarded Mitsubishi's agreement with Crestbrook as an illegal form of transfer pricing²⁸.

■ **TNCs adopt varying environmental standards around the world, and resource-intensive industries are increasingly relocated to areas with weak environmental controls.**

TNCs have consistently resisted attempts to compel or encourage them to operate to the same environmental standards throughout the world. Large companies frequently adopt completely different standards, for example, when operating in the North and South. TNCs often operate at or near the minimum required by law, so that standards vary widely with location. This has a number of damaging side effects:

- (1) It means that in many countries TNCs are operating to standards that have already been identified as harmful in those regions where environmental awareness has been more fully developed
- (2) The ability to do this encourages TNCs to relocate the areas with fewer environmental or social controls
- (3) It delays the spread of environmental legislation.

This is clearly seen as a key business advantage by transnational companies. Representatives claim that keeping to the same standards throughout the world is not "appropriate". As a growing number of countries introduce legislation for environmental protection, TNCs are shifting their investment away from industrialised countries²⁹, and are increasingly relocating to areas where environmental laws remain weak or poorly enforced³⁰.

Timber and pulp companies are moving to areas where controls over logging practice, plantation establishment and timber and pulp processing remain lax. This is part of a long-term process of moving to new areas of forest as remaining sites are overcut and depleted. It causes problems in two ways:

- (1) It creates environmental problems in the new areas of operation
- (2) It can also cause economic hardship in the original location, thus creating increased pressure for deregulation; ie for the reversal of existing environmental protection policies

The ability to move to areas where regulations are weaker is central to the philosophy of many timber companies; in practice this often goes hand in hand with efforts to seek out new supplies and areas for development. Although there is now a gradual shift towards use of plantation timber, logging in natural, semi-natural and old-growth forests remains a key sector of the industry.

- **North American companies go south:** Following the introduction of tighter regulations on logging in the US Pacific Northwest, North American logging companies from the region are moving to

South America, where environmental restrictions are not so strong. Portland-based Louisiana Pacific is currently building the first of four planned pulp mills in Venezuela. Diamond Wood Products is operating in Chile, with an option on 85,000 acres of native forests. On Tierra del Fuego, the Washington-based Trillium Corporation is planning the island's largest-ever logging operation, cutting on 625,000 acres of old growth forests. The plans are opposed by Chilean conservation groups, and Jean Gorton, an executive with Trillium, admits that "It's a way to make enemies". In Argentina, one US investor commented favourably on the lack of environmental controls: "It's like it was (in Oregon) back in the 1940s. And that's where the opportunities are for a business to go in"³¹. Similarly, Stone Container Corporation of the US, which is currently trying to develop a major wood chip mill in Costa Rica, has admitted that it engages in projects in Central and South America to avoid more stringent US environmental policy³².

- **Finnish forest companies operating in Russia:** Despite increasingly stringent regulations in Finland, Finnish companies operating in Russia have been accused of causing environmental damage. The Finnish company Enso-Gutzeit Oy has gained rights to log in 380,000 ha of Ladoga, of which 50,000 ha is a nature reserve in a form of a 2km strip at the coast. Despite thinning rather than clear-felling, the company was accused of causing damage to young trees, and fined over 2 million roubles, in 1991. Another Finnish company, Tehdaspuu Oy, is involved in a joint venture - Tepules - to fell timber on the islands and shores of Karelian lakes, in violation of watershed protection regulations. In November 1991, the Public Prosecutor of Karelia instituted criminal proceedings against the company for illegal logging, felling of young trees etc, in part due to prior permission having been given, without proper authority, by another Karelian official³³.

■ TNCs have led opposition to new initiatives aimed at protecting the environment.

TNCs have a history of using their financial and political influence to oppose environmental regulations, including those aimed at the conservation of forest resources, if they perceive these to be threatening their own operations. This can involve direct lobbying of governments, funding public relations companies and front organisations, and threatening to withdraw investment. Examples include lobbying against pesticide controls, a carbon tax³⁴ and controls on car usage.

Although traditionally a phenomenon involving pressure from companies based in the North towards governments in the South, this is also starting to work in reverse.

TNCs are often only partially accountable to the governments of the countries in which they operate, and are insulated from direct influence by the local population. In the case of the largest TNCs, subsidiaries are also, at least to some extent, independent of control by the central company, particularly in the case of joint ventures or subsidiaries operated by nationals. This leads, in effect, to the creation of autonomous units, with the power and influence of a major TNC, but operating with few restrictions either inside or outside the country of operation.

- **Opposition to pollution legislation in North America:** In the USA, proposals to combine regulations controlling toxic substances in both air and water, the so-called "Cluster Rules", could have a considerable impact on the pulp and paper industry, but would result in an overall reduction in pollution. They have met concerted opposition by large corporations within the US. The American Forest and Paper Association, which represents all US pulp companies including many TNCs, has campaigned against the regulations. It sponsored a consultancy study, which suggested that the legislation would cost the industry an additional \$11 billion in capital expenditures and eliminate 107,500 industry and industry-related jobs. The pulp and paper industry has constantly questioned the accuracy of the underlying premises behind the proposed legislation, in an attempt to

get the stricter standards rejected³⁵.

- **Southern pressure on the North:** As international markets change, Northern governments are facing TNC pressure as well. A Taiwanese corporation, interested in establishing itself in Canada in the early 1990s, was reported to be pressurising the provincial government to guarantee that timber supplies would not be impaired by future conservation legislation³⁶.
- **Opposition to the creation of protected areas:** TNCs have been amongst the most powerful lobbyists against protected areas, where these are perceived as interfering with business interests. Oil and timber companies have lobbied hard against the creation of new protected areas in Alaska, USA³⁷, which would ensure the protection of large areas of fragile boreal forest. Timber companies in Tasmania have campaigned for "resource protection" legislation, which is aimed at *preventing* additional land being set aside for conservation³⁸.
- **Opposition to independent certification:** When the Forest Stewardship Council was launched to oversee independent certification of timber products from well-managed forests, several large timber corporations, and their organisations, attempted to undermine the process. The Canadian Pulp and Paper Association announced news of its own certification scheme on the day before the FSC's launch in Toronto, in what appeared to be a move to confuse the media. In 1994, the Forest Industries Council of Great Britain launched a *Woodmark* label, at the same time as the Soil Association was launching an independent certification scheme of exactly the same name³⁹. The FICGB's scheme included no independent certification, and was little more than an additional label on timber products, but again appeared likely to confuse the trade, and consumers, about the independent label. More recently, the Malaysian timber industries have decided to boycott certification until the year 2000.

■ **TNCs have frequently been guilty of delaying technical innovation and technology transfer.**

It can be to a TNC's advantage to hinder or block particular technical developments, and to slow down the transfer of technology between countries, if it enables the corporation to maintain a market lead. TNCs inhibit development in several ways:

- By funding an increasing proportion of research, and thus controlling its direction;
- By buying up new, potentially competitive, technical innovations and concealing these;
- By splitting their operations between different countries of the world, thus restricting any one nation from developing up a vertically- integrated industry.

The dominance and financial resources of TNCs allow them to tacitly or actively encourage practices that have a proportionately greater environmental cost, if these offer short-term economic advantages. If the more damaging methods are cheaper to use in the short term, the fact that TNCs promote them can virtually force all competitors to follow suit, or lose their place in the market. TNCs also sometimes actively lobby for continuation of unsustainable practices. In respect to forest issues, the techniques of clearcutting in the temperate regions, and extraction of all trees above a minimum diameter in the tropical regions both give cause for concern from an environmental perspective. However, they are heavily promoted by TNCs, because they maximise short-term gains from the forest and are suitable for large-scale operations.

- **Clearcutting in British Columbia:** The size and location of clearcuts in Canada's British Columbia have resulted in international protests and large-scale opposition within the province. Several major

timber companies hired the international public relations firm Burston Marsella to head off environmental opposition. Burston Marsella devised and established the *BC Forest Alliance*, a supposedly independent group of industrialists, environmentalists and concerned citizens. Patrick Moore, a formerly a prominent Greenpeace member, was hired as a consultant. The Forest Alliance has led the media assault against many environmental groups, including WWF. A particular target has been Greenpeace's campaign to ban clearcuts, and the BC Alliance has attacked this in a variety of ways, including a highly selective reference to quotations from WWF in a sponsored TV advertisement, leading to protests from WWF International and WWF Canada⁴⁰. Although promoted as a spontaneous citizen action group, the BC Forest Alliance is a creation of major timber companies in the region.

- **Scandinavian involvement in Indonesia:** According to a report published by WWF Sweden: "The recent attempts to integrate environmental matters into forestry planning in Sweden is not reflected in the policies of Scandinavian forestry consultants in Indonesia. The outdated Swedish concept of clearfelling and planting, without taking into account major environmental factors, is exported." The majority of Scandinavian involvement in Indonesia is through the Finnish Jaakko Pöyry group, the world's largest forestry and forest industry consultant company, which has an office in Jakarta. A statement by Indonesian environmental groups argued that: "...these parties are neither altruistic, as they themselves or their nationals profit significantly from advising, supplying, and funding pulp and paper development, nor (interested in) actually preserving the natural environment, since they facilitate the growth of an industry which profoundly transforms it, particularly through timber estates"⁴¹. The Indonesian government intends to convert 10 per cent of the land area to plantations, and is building or intends to build 56 pulp and paper mills⁴².

■ **The largest TNCs have a disproportionate political and economic influence, which can outweigh local plans and regulations.**

It is difficult for governments, particularly of poorer countries, to withstand the political influence wielded by a powerful transnational company. This can lead to the company receiving particular concessions, including being tacitly or explicitly allowed to operate in areas where controls on industry are supposed to be in place.

- **Mineral exploration in tropical forests:** Most of the world's remaining tropical rainforests have been leased for exploration or extraction of fossil fuels. Large areas of temperate forest are also under exploration or active extraction. The majority of the enterprises involve transnational oil companies, often working in joint ventures with state enterprises, local companies or with other TNCs. Other forests are leased for mining of minerals such as bauxite, uranium, copper and gold. Mining has a range of impacts on human communities and the environment:
 - Direct clearance of forest areas for agriculture, logging or the establishment of other large-scale schemes
 - Building roads, railways, seismic lines and other routes into virgin forest areas
 - Introduction of migrant workers into fragile environments
 - Development of settlements and other infrastructure
 - Destruction of wildlife as a side effect of industrial development or other TNC business
 - Creation of pollution of water, air and soil
 - Impacts on indigenous and tribal peoples
 - An increased requirement for energy and other resources, necessitating further impacts on the forest
 - Displacement of workers and other social effects⁴³
- A number of oil TNCs operate in areas of tropical forest that are supposed to be protected in reserves. Oil drilling damages wildlife and ecology and can result in major deforestation and

ecosystem loss, as in Rondonia in Brazil⁴⁴. In Gabon, oil drilling is taking place in the range of rare sun-tailed guenon monkey (*Cercopithecus solatus*)⁴⁵ and is threatening the mandrill (*Papio sphinx*)⁴⁶. Drilling in Ecuador's Oriente is destroying one of the world's most biologically diverse areas, containing 10-20,000 plant species, plus hundreds of animals including several endemic species. In recognition, the Yasuni National Park has been declared a World Biosphere Reserve, but is continually being degraded by oil drilling operations⁴⁷.

■ **TNCs have frequently operated in areas under dispute regarding land rights.**

One way in which TNC's influence can damage forest ecosystems is through their ability to operate in areas that are officially either already under the control of other groups or currently under dispute. This is particularly true when land is nominally controlled by the weaker sectors of society, including indigenous people and migrant farmers, or has been set aside for conservation interests.

- **The Russian Far East:** The United States' timber giant Weyerhaeuser has been negotiating for two years to set up a joint venture along the coast of the Khabarovsk Krai in the Russian Far East, which would open up a million hectares of forest land for exploitation. This includes extensive old growth forest in the Botcha region, which is important ecologically and as the home of the Orochi, an indigenous group of about 300 people who live by fishing the offshore waters. Weyerhaeuser has launched a large public relations exercise in the area, bringing local officials to the United States to see model tree farms and putting money into local scientific institutes, some of which had spoken out against the development. Despite this, opposition to the scheme remains strong in the area⁴⁸.
- **Japanese companies in tribal lands:** In Malaysia, Mitsubishi Corporation controls Dayia Malaysia SDN, which is logging a 240,000 acre concession, despite blockades by tribal groups including the Iban and Kayan. Mitsubishi is also one of the largest importers of wood chips from Australia's old-growth forests, despite legal claims by aboriginal people⁴⁹. In Canada, the Alberta government has leased some 40,000 km² of boreal aspen forest, currently under claim by the Lubicon Cree people, to the Japanese company Daishowa, which has also been given a \$65 million grant for infrastructure development and is working in cooperation with another Japanese TNC, Marubeni. Daishowa agreed to stop logging until a land claim was settled with the Lubicon people in 1990, but then sublet its lease to two other companies which have started logging, and Daishowa now denies any agreement with the Lubicon people. Land rights issues are complex, and different groups sometimes have claims on the same area. Native groups are sometimes involved in logging, or there are splits within the community between pro and anti-logging factions⁵⁰.
- **Tribal lands under threat in the Amazon:** TNCs have invaded tribal lands in several Amazonian countries, extracting fossil fuels, other minerals and timber. In May 1992 the human rights group Survival International reported that the Bannach Timber Company, which sells mahogany to the UK, had cut a road through the Arara Reserve, attracting up to 5,000 settlers⁵¹.

■ **The dominant role that TNCs assume in the market means that they are centrally involved in promoting increased consumption.**

TNCs control the majority of world trade. Their dominant position gives them unique opportunities to fashion both consumer demand and product lines. Over the past twenty years, as some traditional demands for timber have decreased, any shortfall has been more than compensated for by vigorous promotion of replacement products, including particularly certain papers, including soft tissues.

- **Promotion of paper use:** Since 1950, world paper consumption has increased five-fold, to a 1988 total of 216.3 million tonnes⁵². World newsprint demand alone rose 3.5 per cent in 1990, with above

average growth rates in West Europe, Scandinavia and Asia⁵³. Canada annually cuts 42,000 acres of forest to provide American dailies with newsprint for advertisements⁵⁴ and Americans receive two million tons of junk mail a year⁵⁵, and spend more on food packaging than farmers earn⁵⁶. In 1986, over 40 per cent of West German paper products were used in packaging, with roughly the same amount used for printing⁵⁷. South Korean imports and production of paper both increased by around 12-13 per cent towards the end of the 1980s⁵⁸. These changes have not come about by accident, but are in part the result of a sustained sales drive by the largest companies. The tobacco industry, for example, spends more per day promoting tobacco than the world spends on public health, much of this involving paper in advertising⁵⁹.

Conclusions: Responses for the CSD

TNCs can and do present serious problems for global forest resources. Their unique size, global range and financial structures pose some intrinsic problems. However, at the same time the very global nature of TNCs offers some opportunities for cooperation and for positive change. These changes can take place, and WWF has been heartened by positive changes in attitude by many TNCs over the past few years. The role of both large and small retailers within the WWF UK 1995 group, comprising companies committed to phasing out non-certified timber products by the end of 1995, is a good example of positive change. The forthcoming CSD meeting in April 1995 can address these issues further, and WWF has identified several key points which could help deal with the ten problems outlined in this overview:

- Prevention of transfer pricing, which currently encourages a net flow of resources from South to North, and in forestry terms encourages unsustainable use of forest resources;
- Ending the practice of relocating resource-intensive industries to countries with weaker resource protection laws;
- Introduction of sustainable and environmentally sound methods of extracting and processing natural resources;
- Adoption of global environmental standards by TNCs and elimination of environmentally unacceptable practices in every country in which a TNC operates;
- Adoption and strengthening of the *UN Code of Conduct for Transnational Corporations*;
- Recognition of the importance of independent timber certification and of the Forest Stewardship Council, and adoption of independent certification of timber and pulp products;
- Establishment of mechanisms to promote technology transfer and capacity building in order to improve the competitive ability of low-income countries;
- Recognition of the importance of adequate national and international legislation to regulate business and industry practices and activities;
- Recognition of the legal standing of indigenous peoples' lands, conservation areas etc and avoidance of these in industrial operations, including forestry;
- Development of business strategies that minimise resource use, rather than seek to increase use.

References

1. Cowe, Roger [editor] (1993); *The Guardian Guide to the UK's Top Companies*
2. United Nations Centre for Transnational Corporations (1991); *Transnational Corporations and Issues Relating to the Environment Including the Contribution of the Commission and the United Nations Centre on Transnational Corporations to the World of the Preparatory Committee for the United Nations Conference on Environment and Development*, E/C.10/1991/3 25th March 1991, Economic and Social Council, United Nations, New York
3. Leonard, Richard (1992); Key role of big business emerges, *Development Forum*, May-June 1992
4. United Nations Centre on Transnational Corporations (1985); *Environmental Aspects of the Activities of Transnational Corporations: A Survey*, UN, New York
5. Pulp and Paper International (1994); *International Fact and Price Book*
6. Dresner, Denise (1994); *Info 95: Today's Yearbook and Almanac*, Helicon Publishing, Oxford
7. Kidron, Michael and Ronald Segal (1987); *The Book of Business, Money and Power*, A Pluto Project, with Pan Books, London
8. United Nations Centre for Transnational Corporations (1988); *Transnational Corporations in World Development: Trends and Prospects*, United Nations, New York
9. Dullforce, William (1991); Companies fuel world growth says UN study, *Financial Times* 22nd July 1991
10. Parkes, Christopher (1988); An era of structural change beckons pulp and paper makers, *Financial Times*, 7th June 1988, London
11. Payne, Mark (1991); *World Pulp and Paper: Profiles of 150 leading manufacturers*, Economist Intelligence Unit Special Report **2132**, EIU, London
12. O'Hara, Helen (1991); *Forests in Crisis: The Myth of Sustainable Forestry*, The Women's Environmental Network
13. United Nations Centre on Transnational Corporations (1990); *Transnational Corporations and Issues Relating to the Environment*, Report to the Commission on Transnational Corporations, Economic and Social Council, E/C.10/1990/10, 28th March 1990
14. Statistics for Stora from *Stora Facts and Figures 1991*, Stora, Falun, Sweden
15. *Timber Trade Journal* (1992); 8th February 1992
16. Katsouris, C (1986); Aid tracking gives companies an edge, *African Economic Digest*, 11th October 1986
17. Goodland, Robert (1991); Environmental Priorities for Commercial Banks, presented at the seminar "Banking and the Environment", Zurich, Switzerland
18. Dudley, Nigel (1987); *UK Aid and Tropical Forests*, report to Friends of the Earth International, London
19. United Nations Centre for Transnational Corporations (1991); *Transnational Corporations and Sustainable Development: Recommendations of the Executive Director*, United Nations, New York
20. Jenkins, Rhys (1987); *Transnational Corporations and Uneven Development*, Methuen
21. Dodwell, David (1992); Multinational's cross-border trade surges, *Financial Times*, 2nd May 1992, London
22. Jackson, J K (1986); *A Study in Timber Transfer Pricing in PNG*, UN Centre on Transnational Corporations, New York,

1986

23. Commission of Inquiry Interim Report number 4, volume 1 page 85 "New Ireland".
24. Commission of Inquiry Interim Report Number 4, "Timber Exploitation in New Ireland Province" vol 3 appendix 6
25. Marshall, George (1990); *The Barnett Report: A Summary of the Report of the Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea*, Asia Pacific Action Group, Hobart, Tasmania
26. Peel, Quentin (1984); EEC Commission to fine 40 pulp producers, *Financial Times* 20th December 1984
27. *Financial Times*, August 1994
28. Marx, Michael (1994); Mitsubishi: The money and power behind Alpac, *Western Canada Wilderness Committee: Boreal Forest Campaign Educational Report 13* (7), Edmonton, Alberta, summer 1994
29. *Financial Times* (1992); Multinational switch focus of investment, 16th June 1992, London
30. Hines, Colin and Tim Lang (1993); *Green Protectionism*, Earthscan, London
31. Sleeth, Peter (1994); Logging to the end of the Earth, *The Sunday Oregonian*, Portland, Oregon
32. Reuters wire service, October 16 1992, quoted in *World Rainforest Report 9* (2), World Rainforest Movement, Rainforest Action Network, San Francisco
33. Anderson, Patrick *et al* (1993); *Quick Cash for Old-Growth: The Looting of Russia's Forests*, Greenpeace International, Amsterdam
34. Spinks, Peter (1992); Multinationals get hot under the collar over Europe's carbon tax, *The Guardian* March 20th 1992, London
35. Galin, Rob (1994); Industry says cluster rules, based on inaccurate data, go too far, *Pulp and Paper*, USA, April 1994
36. Dudley, Nigel (1992); *Forests in Trouble: A Review of the Status of Temperate Forests Worldwide*, WWF International, Gland, Switzerland
37. Wilderness Society (1986); *America's Vanishing Rain Forest: A Report on Federal Timber Management in Southeast Alaska*, Washington DC; and Wilderness Society (1991); *Tongass National Forest: America's Vanishing Rainforest*, Fact Sheet, Washington DC
38. Hayward, Elizabeth (1991); *The Tasmanian Forest Industries*, Tasmanian Timber Promotion Board and Forest Industries Association of Tasmania, Hobart; Miller, Jonathan (1984); *Tasmania's Forests: Their Economic Use and Conservation Status*, Forest Action Network, Tasmanian Conservation Trust and Australian Conservation Foundation, Hobart; Moore, Michael (1992); APPM pull-out threat on mill, *The Mercury*, 1st April 1992, Hobart; Private Forestry Council (1989); *Review of the Private Forest Resource*, A report prepared by the Technical Steering Committee of the Private Forestry Council of Tasmania, Kings Meadows, Tasmania
39. Jackson, Dorothy (1994); *personal communication* from the Soil Association
40. Letters from Jean-Paul Jeanrenaud and Nigel Dudley at WWF International and Monte Hummel at WWF Canada, 1994
41. Rasmusson, Ulf (1994); *Swedish/Scandinavian involvement in Indonesian forestry - the industrial forest plantation and pulp mill sector*, WWF Sweden, Solna, April 1994
42. Wahana Lingkungan Hidup Indonesia and Yayasan Lembaga Bantuan Hukum Indonesia (1992); *Mistaking Plantations for the Forest: Indonesia's Pulp and Paper Industry, Communities, and Environment*, Jakarta

43. Dudley, Nigel (1992); *Transnational Companies in Tropical Forests*, a report to WWF UK
44. Mallineau, J P, R D'Achuna and C Justine (1992); Future operational monitoring of tropical forests: An Alert strategy, *Proceedings of the World Forest Conference*, San Jose dos Campos, Brazil, Joint Research Centre CEC, Ispra, Italy, 27-19 May
45. Harrison, Michael (1988); New guenon from Gabon, *Oryx* **22** (4), 190-191, Fauna and Flora Preservation Society, London
46. Harrison, M (1988); The mandrill in Gabon's rainforest: ecology, distribution and status, *Oryx* **22** (4), 218-228, Fauna and Flora Preservation Society, London
47. Kimmerling, Judith (1992); *Amazon Crude*, National Resources Defense Council, Washington DC
48. Gordon, David (1992); Joint logging ventures in the Russian far east, *Taiga News* **2**, International Working Group on Boreal Forests, Jokkmokk, Sweden
49. Marx, Michael (1994); Mitsubishi: The money and power behind Alpac, *Western Canada Wilderness Committee: Boreal Forest Campaign Educational Report* **13** (7), Edmonton, Alberta, summer 1994
50. Olsson, Roger [editor] (1993); *The Taiga: A treasure - or timber and trash?*, Taiga Rescue Network, Jokkmokk, Sweden
51. Survival International (1992); *Urgent Action Bulletin*, May 1992
52. Uutela, E (1989); "Strong growth predicted to year 2000", *Pulp and Paper International*, January 1989, London
53. Canadian Pulp and Paper Industry (1991); *Statistics of World Demand and Supply*, Montreal
54. Durning, Alan Thein (1993); Can't live without it; *World Watch*; May/June 1993
55. Anderson, B N [editor] (1990); *Ecologue*, Prentice Hall Press, New York
56. Pollock, Cynthia (1987); *Mining Urban Wastes: The Potential for Recycling*, Worldwatch Paper **76**, Worldwatch Institute, Washington DC
57. VDP (1986), the West German Industry Association, quoted in Kroesa, Renate (1990); *The Greenpeace Guide to Paper*, Greenpeace International, Vancouver
58. *Business Korea* (1990); Publications mushroom, stimulating paper industry, **7** (8), February 1990
59. According to *Newsweek* (January 23, 1989), quoted in Pradervand, E and Pradervand, P (1992); Advertising ourselves to death; *Ecodecision*; December 1992