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Changing Ownership and Management of State Forest Plantations: New Zealand

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For the

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**International
Institute for
Environment and
Development**

following the International Conference of the same title

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The conference was jointly organised and run by the Department of Water Affairs and Forestry of the South African Government, the UN Food and Agriculture Organisation and the UK Department for International Development. It is anticipated that this case study, together with several other country case studies and an overview, will be published as a book during 2004.

1. New Zealand

The New Zealand study was prepared by Jacki Schirmer and Michael Roche

New Zealand's forests and plantations cover about 30% of its land area, with a total of 6.4 million hectares of indigenous forest and 1.8 million hectares of plantations (MAF 2002). A large forest products industry, based primarily on the plantation estate, contributes significantly to the national economy.

In the 1980s, as part of a wide ranging program of State sector restructuring and economic deregulation, the Government announced it was corporatising New Zealand's State-owned plantations. Subsequently it decided to privatise them. Many of the broader reforms to the New Zealand economy, undertaken at the same time as corporatisation and privatisation were occurring, also impacted on the performance of the plantation industry.

The impacts of privatisation on the competitiveness and efficiency of the plantation sector are generally believed to have been positive. There appears to be a large degree of consensus that the environmental outcomes of privatisation have been mostly neutral or positive. The social impacts of privatisation, however, are disputed. Some commentators believe privatisation has contributed to a decline

in quantity and quality of employment in the plantation industry, and that this has resulted in negative impacts for those affected; others believe this change was inevitable whether privatisation occurred or not. There have also been some concerns over recreation and access to the plantations post-privatisation, particularly in some plantations close to urban or tourist areas.

Add map (of decided to have maps for all countries)

1.1 New Zealand's forests and plantations in 2003: an overview

NEW ZEALAND'S INDIGENOUS FORESTS

New Zealand's 6.4 million hectares of indigenous forest make up just under 25% of the country's land cover. Approximately 77% of indigenous forests are under Crown ownership, managed by the Department of Conservation. Of the privately owned estate, approximately 31% is in Maori ownership (MAF 2002). The present area of indigenous forest represents a significant decline from the area before European arrival in New Zealand, often estimated at about 50-55%. The decline, which saw forest cover reduced to about 23% by the early 1900s, was primarily caused by logging for land clearance for agriculture, and by logging for timber in specific regions such as Northland and Westland (Roche 1987). Large-scale plantations began to be established in the early 1900s largely in response to concerns that the indigenous forests would be logged out by the 1960s (Kirkland and Berg 1997).

Currently very little logging takes place in indigenous forests, with most wood supply coming from plantations. Under *The Forests Act* as amended in 1993, landowners must have a sustainable management plan or permit to harvest or mill indigenous timber, and indigenous timber for export must have been harvested under a sustainable management plan or permit. The only exemptions to this are forests on land reserved under the *South Island Landless Natives Act 1906* (SILNA), timber from land administered by the Department of Conservation, and planted indigenous forest. Land covered by the *West Coast Accord* were also exempt, but have since been withdrawn from logging. The *West Coast Accord*, signed in 1986 by environmental non-governmental organisations (ENGOs), local authorities,

forest industry and the Government, allocated Crown indigenous forest on the West Coast to conservation and production purposes (Ministry of Forestry 1993). In 2002, the Crown forests covered by the *Accord* were withdrawn from timber harvesting (Royal Forest and Bird Protection Society 2001, MAF 2002).

NEW ZEALAND'S PLANTATIONS AND PLANTATION INDUSTRY

The sections below give a picture of the plantation estate and processing industry around 2000-2001, ten years after the first round of sales of State-owned plantations occurred.

The plantation estate

In April 2001, the New Zealand plantation estate was estimated at 1.799 million hectares (NZFOA 2002). Approximately 71% of the total area is on the North Island and 29% on the South Island (MAF 2001). *Pinus radiata* makes up approximately 89.4% of the total plantation area, and Douglas fir 5.7%, with a number of other softwood and hardwood species making up the remaining 4.9% (NZFOA 2002). Increasing proportions of the *Pinus radiata* estate are being pruned, with about 70% of the estate already, or expected to be, pruned to a height of four metres or above (MAF 2001)¹. Approximately 23% of the radiata pine estate is production thinned, with a trend towards less thinning in recent years (MAF 2001).

Most plantations are currently established on rolling to steep hill country, with little establishment on the most productive farmland due to its value for agricultural production (MAF 2002). Historically there has been a similar trend, with a reluctance to establish plantations on good agricultural land for a variety of reasons (Roche 1990a).

Plantation ownership

The ownership of the NZ plantation estate has changed significantly over the past decade, mostly as a result of the ongoing privatisation of State-owned plantation, restructuring and consolidation in the private sector, and an influx of small forest owners in the 1990s (MAF 2001). The changing nature of ownership is discussed further below; this section examines ownership of the plantation estate in 2001, shown in Table 1.1.

Table 1.1. Stocked planted production forest area at 1 April 2001 by ownership

Plantation owner*	Estimated total area (ha)	Percentage of estimated total
Registered public company	780 790	43%
Registered private company	868 284	48%
State-owned enterprise	44 937	3%
Local government	56 753	3%
Central Government	47 993	3%
<i>New Zealand total</i>		100%

* Ownership is based on ownership of the plantation trees, not on ownership of the land

Source: NZFOA 2002

Rights to grow and harvest trees were privately owned on all but 9% of the NZ plantation estate at April 2001. Sixty percent was owned by 14 organisations, each owning over 20,000 hectares. The largest four owners – Carter Holt Harvey, the Central North Island Forest Partnership (in receivership),

¹ This may change in the future, with Carter Holt Harvey (CHH), the largest plantation owner in NZ, announcing a change to pruning only their best plantation areas (less than 10% of their total estate) three years ago.

Fletcher Challenge Forests² and Rayonier New Zealand – each own over 100,000 hectares of plantations, and together own 38% of the total estate (NZFOA 2002). The rest of the estate is owned by smaller companies, partnerships, small landowners, joint ventures and local government. In 1994 it was estimated that there were more than 14,000 plantation blocks of less than 100 hectares in size, many owned by individuals (MAF 2002).

The land on which trees are established is often owned by a different party to that which owns the trees. In New Zealand approximately 15% of plantations are on Maori-owned land. Others are on land owned by the State, much of which is subject to claims under the *Treaty of Waitangi Act 1975*. These claims are gradually being settled by the Crown, as is discussed further below. It is possible that as this process continues, Maori will eventually own up to 41% of the land on which plantations have been established (MAF 2002).

The plantation processing industry

Of a total harvest of approximately 18.5 million cubic metres of wood in 2001, about 12.6 million cubic metres were processed domestically. Only about 0.03% of the total volume of wood produced was sourced from indigenous forests. Approximately 13 million cubic metres was exported in raw and processed form, bringing in \$3.7 billion to the domestic economy (NZFOA 2002). The harvest from plantations in NZ has increased steadily and is forecast to keep increasing, with a predicted annual harvest of 41.9 million cubic metres by 2025, and 52.5 million cubic metres by 2040 (MAF 2002). NZ's domestic processing industry at 2001 included (MAF 2002)³:

- ❑ Four pulp and paper companies, which produced an estimated 1.6 million tonnes of pulp and 869 000 tonnes of paper and paperboard in the year to March 2001;
- ❑ Six panelboard companies, which in the year to March 2001 produced about 1.0 million cubic metres of fibreboard and particle board and, 406 000 cubic metres of veneer and 244 000 cubic metres of plywood;
- ❑ Around 350 sawmillers producing an estimated 3.8 million cubic metres in the year to March 2001; and
- ❑ 80 remanufacturers.

Most sawmills are relatively small; in the year to March 2001 sawmills produced an estimated 3.8 million cubic metres of sawn timber, but all but about 50 of these mills produced under 20 000 cubic metres (MAF 2002).

According to some estimates the domestic forestry industry has enough plantation resources to absorb \$3 billion more in investment in wood processing capacity, based on the assumption that 25-30% of logs are exported. Between 1995 and 2002 approximately \$1 billion in planned wood processing investments were announced, leaving a large gap between future available wood resources and domestic processing capacity (MAF 2002).

Contribution of plantations to the economy

The contribution of the forest industries – which are predominantly made up of the plantation industry – to the national economy in 2001-02 was estimated at four percent of national GDP (NZFOA 2002). It was estimated that the forestry and first stage processing industries directly employed 24,315 people in February 2001 (NZFOA 2002). Employment opportunities are forecast to increase, and there have been recent shortages in labour supply for forest growing and harvesting (MAF 2002).

² Fletcher Challenge Forests have, however, recently announced the intention to sell their plantations to concentrate their business activity on the processing of wood (ref ***).

³ The make-up of the processing sector changes rapidly in New Zealand and so these figures are likely to date rapidly.

1.2 Regulation, legislation and policy

A wide range of regulation, legislation and agreements affect the management of New Zealand's plantations, including:

- International agreements;
- Domestic legislation, particularly the *Resource Management Act 1991*;
- Voluntary agreements and self-regulation; and
- Certification.

INTERNATIONAL AGREEMENTS

NZ is a signatory to and participant in various international conventions and processes affecting plantation management, including the United Nations Forum on Forests, the Montreal Process, the International Tropical Timber Agreement, the Convention on Biological Diversity, and the Kyoto Protocol (MAF 2002).

DOMESTIC LEGISLATION AND POLICY

A range of legislation affects plantation management in New Zealand, including the *Forests Act 1949*, *Forests Amendment Act 1993*, *Historic Places Act 1980*, *Forest and Rural Fires Act 1977*, and various acts affecting pest control (Walker *et al.* 2000). The primary legislation regulating plantation management, however, is the *Resource Management Act 1991*, described below. The Forestry Rights Registration Act, taxation provisions and regulation of international trade are also important.

Resource Management Act

The *Resource Management Act* (RMA) applies to all resource management in NZ, and uses an effects-based, rather than prescription-based, approach to resource management.

The RMA is administered by Regional and District Councils. Regional Councils prepare Regional Plans which prescribe the rules applying to activities which have effects on soil, air and water. District Councils - the agencies responsible for land use management - prepare District Plans that identify key resource management issues and set out objectives and targets for their districts. District Councils have powers to control the use of land for particular purposes. Land uses may be classed as "permitted", "controlled", "discretionary", "non-complying" or "prohibited" in particular zones. Where forestry is classed a discretionary or non-complying activity, plantation managers have to apply for a resource consent before being allowed to undertake plantation activities. Where it is zoned a controlled activity, the District Council may impose conditions on the activity but cannot refuse it. In many cases, public notification is required before a resource consent can be granted. The Act also includes a duty of consultation with Maori people. Appeals against decisions on resource consents may be taken to the Environment Court, an independent judicial body established under the RMA (Storey and Clayton 2002).

The forestry industry has expressed various concerns about the application of the RMA, including (Ministry of Forestry 1993, Hawes and Memon 1998, Walker *et al.* 2000, MAF 2002, Inwood News Services 2003a):

- the time taken to obtain a resource consent causes significant delays in undertaking forestry activities;
- companies have to deal with widely varying requirements in different regions, raising costs of compliance;
- regional and district councils are regulating – some believe over-regulating - activities instead of the outcomes of activities; and
- problems with the RMA are discouraging international investors from investing in the industry, particularly in processing facilities.

Forestry Right

To enable effective joint ventures to take place between investors/capital providers and landholders, the *Forestry Rights Registration Act 1983* provides for the creation of a *profit a prendre* Forestry Right. This is a right granted by the landowner to another person or entity to establish, maintain and/or harvest a crop of trees, along with ancillary rights of access and works needed to undertake the plantation activities (Forestry Joint Venture Working Group 1991).

Taxation

The taxation of forestry enterprises has historically been a contentious issue in NZ. The current forestry taxation regime has been in place since 1991. Under it, some forestry costs can be deducted the year they are incurred – including some types of land preparation, road maintenance expenditure, and tree planting and tree maintenance costs. Other costs must be held over to be deducted from the income received when the trees are harvested (Campbell *et al.* 2001). If immature plantations are sold, the purchaser can deduct the cost of the plantation against income received from sale of that timber when sale occurs in the future, but cannot deduct it against income at the time of purchase (Wilton 2002).

Regulation of foreign ownership

Overseas investors planning to invest in land for plantation establishment, or in existing plantations - whether they purchase the trees, the land, or both - are usually required to apply for permission from the Overseas Investment Commission (OIC) before they invest. OIC approval is not needed to acquire a forestry right, or to acquire the right to harvest a plantation under a contract or other arrangement (Storey and Taylor 2001).

Regulation of international trade

Prior to the structural adjustment program implemented by the Labour, and subsequently National, governments from 1984, a considerable number of export incentives and import controls were in place in New Zealand, aimed at supporting domestic industry (Roche 1990b, Birchfield and Grant 1993). Since 1984, a process of deregulation has removed most of these controls and incentives. Various trade liberalisation processes, including GATT, NAFTA, the WTO and APEC negotiations aim to reduce international barriers to trade (Walker *et al.* 2000, Turner *et al.* 2001). The impact has been to open NZ wood processors and log sellers to international markets.

VOLUNTARY AGREEMENTS AND SELF-REGULATION

Non-governmental organisations have had significant influence on the NZ forest sector. They have negotiated a series of accords and agreements with the forest industry, some of which affect plantation management (Salmon 1993). In addition, forestry industry groups have developed voluntary codes of practice.

The NZ Forest Accord was signed in 1991 between representative industry groups and ENGOs. The Accord specifically views plantations as a way of producing wood products while protecting native forest, and identifies land where it is inappropriate to establish plantations, ensuring in particular that plantations do not replace regenerating or mature indigenous forest. (Walker *et al.* 2000).

In December 1995, the plantation industry and ENGOs signed the Principles for Commercial Plantation Forest Management in NZ. The agreement is complementary to the Accord and aims to 'promote understanding between the signatory parties with a view to New Zealand achieving environmental excellence in plantation forest management ...'(Principles for Commercial Plantation Forest Management in New Zealand 1995).

The Logging Industry Research Organisations (LIRO) NZ Forest Code of Practice, developed in 1990 and revised in 1993 to include improvements and address the introduction of the RMA, provides a means 'of ensuring safe and efficient forest operations that meet the requirements of sound and practical environmental management (LIRO 1993 cited in Walker *et al.* 2000, Visser 1996).

CERTIFICATION

In recent years, various forms of certification have been obtained by different plantation companies and businesses in NZ. Common types of certification have included the ISO14000 Environmental Management System, the Forest Stewardship Council and the Verification of Environmental Performance scheme (Walker *et al.* 2000, MAF 2002).

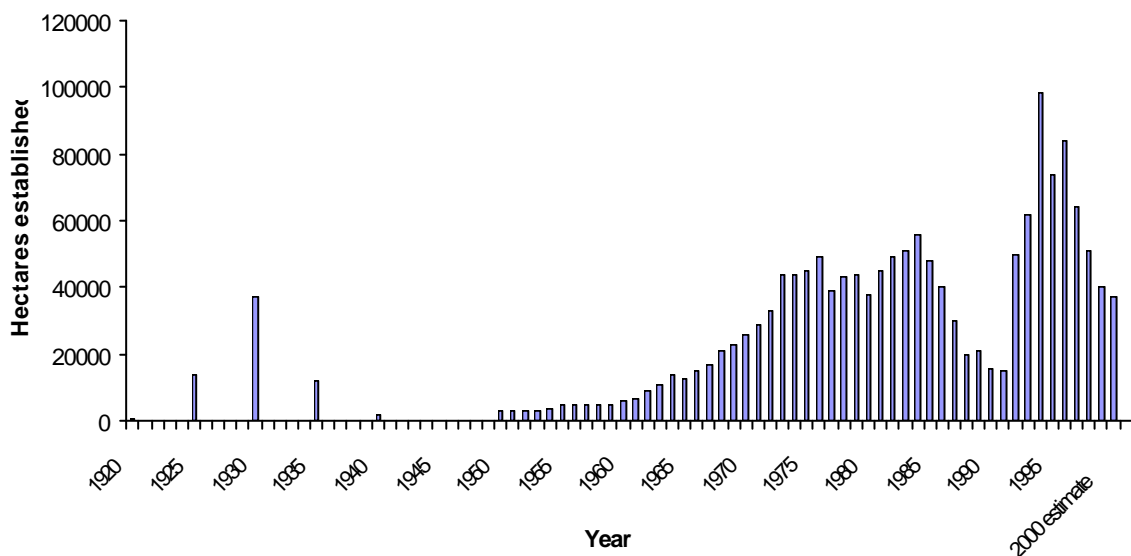
In 2002, a draft New Zealand Forestry Standard (NZFS) for plantations was released for comment and scrutiny. The standard was developed using the FSC standards process, and was still under scrutiny at the time of writing (Inwood News Services 2002a). Development has also begun on an indigenous forest standard.

1.3 Plantation development in New Zealand: a brief history

RATES OF PLANTATION ESTABLISHMENT

Figure 1.1 shows plantation establishment rates over time in New Zealand. The overall trend has been for increasing rates of plantation establishment, with peaks in planting at three times. The first planting boom occurred in the 1920s to 1930s, as the early bond afforestation and the New Zealand Forest Service established thousands of hectares. Planting almost stopped during World War II and it took until the 1970s for the next peak of planting to be achieved as the State and large utilisation companies expanded their estates. The late 1980s and early 1990s saw a drop in planting rates, followed in the mid to late 1990s by higher planting rates than had ever been achieved before. This third major planting boom was driven by small landowners and syndicate investors.

Figure 1.1. Establishment of new plantations in New Zealand 1920-2000



Source: MAF 2001

Note: Only five year average annual estimates are available before 1950; the 2000 planting rate is an estimate

Large scale plantation development was started at the same time by both the public and private sector in NZ, in the 1920s and 1930s. Plantation development and evolution is described in three periods: State-owned and private development to the mid 1980s; corporatisation and privatisation of the State-owned plantations from the late 1980s to mid 1990s, and the subsequent development of the private plantation sector.

STATE-OWNED PLANTATIONS : DEVELOPMENT AND EVOLUTION 1800S TO 1984

Early State involvement in plantation development

Prior to 1897, the majority of tree planting in NZ was undertaken by private landholders, although county councils in Canterbury were given grants to plant trees, principally for shelter (Poole 1969). Increasing concern about the potential for a future timber famine, driven by observation of the rapidly decreasing indigenous forest resources in NZ, led to the recommendation at a timber conference in 1896 that State involvement in tree planting be undertaken (Simpson 1973). In 1897, a forestry branch of the Lands Department was formed to undertake this role, and over the next 22 years planted 34,017 acres of plantations, much of it established using prison labour (Roche 1987).

The first planting boom of the 1920s-1930s

Various attempts were made to pass a Forests Act that would give adequate State control over indigenous forest management and development of State plantations. While various Acts were passed, none resulted in large-scale State involvement in afforestation until 1919, when a review of forestry by the National Efficiency Board, a war time organisation, recommended that the Lands Department should not be responsible for afforestation as it represented a conflict of interest with the Department's primary role of making land available for agriculture (Roche 1987). This recommendation led to the establishment in 1919 of the State Forest Service, later to become the New Zealand Forest Service (NZFS)⁴, which was to be responsible for all the Crown's plantation and indigenous forest management until April 1987 (Clarke 1999). The NZFS was part of the Lands Department in 1919, gained administrative independence in 1920, and gained full administrative and legal independence with the passing of the *State Forests Act* 1921-22 (Poole 1969, Roche 1987).

The newly formed NZFS carried out an inventory of indigenous forests and estimated they would be cut out by 1965-70. The solution to the foreseen shortage of wood was deemed to be establishment of plantations of exotic tree species (Cox *et al.* 1993). A report in June 1923 by Hansson calculated how much land would need to be planted with *Pinus insignis* (as *Pinus radiata* was then called) to meet future needs, as well as calculating the needs if other species such as Douglas Fir or Ponderosa pine were used (Roche 1990a).

In 1924, the government announced a new afforestation strategy which 'revolved around the proposal to lift the area of State plantations from 13,000 acres to 300,000 acres by 1935' (Kirkland and Berg 1997: 49). Planting proceeded rapidly, with various improvements in establishment and other aspects of silviculture. The planting goal of 300,000 acres was mostly achieved by the time of the Depression, and was eventually exceeded. Planting effectively stopped in the late 1930s after the goal of 300,000 acres was achieved (Kirkland and Berg 1997).

A considerable proportion of planting in this first planting boom, both public and private, took place in the central North Island. However, plantations were also established over other parts of both North and South Island, as part of the NZFS policy of ensuring each province could eventually have an adequate timber supply to meet its needs. Much of the land afforested in the volcanic plateau of the central North Island was afflicted with 'bush sickness' (later discovered to be cobalt deficiency), which prevented its use for agriculture. The cure for 'bush sickness' was found in 1937. By this stage both public and private afforestation had almost halted; it is probable that the newfound ability to use the land for agriculture would have prevented establishment of much more afforestation in the region had it not already effectively stopped (Poole 1969).

Development of a State plantation processing industry 1940s to 1960s

Between the first planting boom of the 1920-30s and the second planting boom of the 1960-70s, new afforestation occurred at a much slower rate than previously. Afforestation took place in several new regions, and planting to control erosion and stabilise sand dunes became more prominent, particularly on the east coast of the North Island (Poole 1969).

⁴ Note: Throughout this paper, the name New Zealand Forest Service (NZFS) is used to avoid confusion.

The NZFS began to undertake its own milling operations in the central North Island in 1940, establishing the Waipa State Mill in the central North region because of the large area of plantations there (Poole 1969). In other regions, local privately-owned sawmills were expected to be able to process the timber produced from new plantations (Kirkland and Berg 1997). This began a long history of the State acting both as a competitor to other private sector processors, and also supplying State-grown logs to private processors.

The NZFS wanted to be involved in development of an integrated sawmill and pulp and paper plant, and in 1951 called for interested private sector organisations to work with it to develop such a project. The only genuine response came from Tasman Pulp and Paper Group, principally formed by Fletcher (later Fletcher Challenge Forests). The project was developed as a joint State-private enterprise. The State had a significant shareholding in Tasman when it was registered in 1952, and provided seven and a half million pounds of advances to Tasman between 1952 and 1956 to help cover costs (Simpson 1973). The NZFS also provided logs from State plantations at very low prices to feed the operation, aiming to boost Tasman's profitability. The State sold its direct interests in Tasman in 1979, but its long-term supply contracts remained in place, effectively subsidising Tasman's processing costs (Kirkland and Berg 1997).

Plantation expansion, central planning and multiple objectives: the 1960s to 1980s

The second planting boom took place from the 1960s to 1980s, and during much of this time was heavily influenced by the central planning policies of the Government, which aimed to direct the activities of both the public and private sector. Planting targets were set for the public and private sector at Forestry Development Conferences and subsequently approved by Government (Poole 1969, Le Heron and Roche 1985, Birchfield and Grant 1993, Kirkland and Berg 1997).

In 1960 the Director General of Forests called for 14,000 acres (5,665) ha to be planted annually by both state and private agencies (Le Heron and Roche 1985). This goal was soon replaced by a call to establish 16 000 hectares per year in 1964-65, and by even higher targets soon thereafter. The targets set were met by both public and private sector (Kirkland and Berg 1997). This process continued until 1981, when the 1981 Forestry Development Conference presented targets of 43,800 hectares per year to be established over 1981-85, with 16,050 hectares to come from State establishment, 17,200 hectares from large private growers and 10,550 hectares from small private growers.

The new planting was driven both by a perceived need to plant enough plantations to meet future domestic demand, and the desire to develop a strong forest products export industry (Kirkland and Berg 1997). However, NZFS's operations were driven by a range of goals and objectives, only some of which were directly related to expanding the estate for commercial purposes. In 1976 the official objectives of the NZFS were changed to include 'policies and directives to undertake afforestation in regions requiring economic development, employment provision, utilization of low productivity lands and respect of planting targets and environmental objectives' (Clarke 1999). The NZFS was trying to achieve varied objectives including assisting private sector afforestation, meeting employment and regional development objectives, and meeting environmental demands.

STATE ASSISTANCE TO THE PRIVATE SECTOR

The State put in place various incentives to encourage planting by the private sector during the second planting boom. Some incentives aimed to encourage planting on agricultural land, rather than on land marginal for agriculture, which was often far from markets. Farm forestry – tree planting by small land owners – began to be encouraged by the State as a way of bringing plantations in from the 'peripheries'. Le Heron and Roche (1985: 217) also suggested that '... the encouragement of private planting may have been intended as a device for curtailing the forestry companies by reducing the ... forest resource under their direct control in the future.' Taxation and legislation reform was undertaken to provide incentives for planting on agricultural land, and planting loans were provided through the *Farm Forestry Act* 1962. The tax reforms, allowing immediate deduction of many expenses, encouraged both companies and individuals to establish plantations (Le Heron and Roche 1985).

As a result of these measures, State funding contributed to a considerable proportion of the private afforestation undertaken in the second planting boom. While the majority of the area of new planting in the second planting boom was established by the private sector, there are estimates that taxpayer funding accounted for 70-75% of total afforestation costs from 1970 to the mid-1980s once taxation, loan and other assistance schemes were included in calculations along with direct State involvement in plantation establishment (Horgan 1990 cited in Cox *et al.* 1993).

REGIONAL DEVELOPMENT AND EMPLOYMENT

The Government used the NZFS to try to achieve social objectives, particularly reducing rural unemployment as 'New Zealand's unemployment figures climbed to politically embarrassing levels' (Birchfield and Grant 1993: 15). This led to significant over-staffing of the NZFS, particularly in many economically depressed rural regions. The NZFS was seen as a 'job for life' for many who joined it, and considerable institutional barriers existed to dismissing staff (Birchfield and Grant 1993).

Plantations were promoted as providing social, economic and environmental benefits for rural communities. Planting for erosion control was generally accepted as a success (MAF 2002b). The claims of social and economic benefits, however, were challenged by some members of rural communities, who believed plantations had negative impacts on agricultural enterprises and rural social structures (Aldwell 1984, Le Heron and Roche 1985, Roche 1990b).

MEETING ENVIRONMENTAL DEMANDS

The NZFS managed both indigenous forests and plantations. Concern about the sustainability of indigenous forest logging, and about conversion of indigenous forest to plantations, was expressed by a growing environmental movement during the time of the second planting boom. The types of concerns held were exemplified by the opposition to the 'Beech Scheme' in which a proposal to convert some beech forests to exotic plantations as part of a broader scheme of logging indigenous beech forests was strongly protested, with a 340,000 signature petition opposing the scheme presented to Parliament in 1975. The scheme was eventually rejected (Rockell 1974, Roche 1990a). ENGOs were highly critical of the NZFS, and called for separation of its conservation and commercial roles as a way of making it more accountable for its environmental impacts.

FINAL DAYS OF THE NZFS

While being required to meet many social and environmental objectives, the NZFS still had economic objectives to meet. Yet it had not managed to turn an operating surplus, requiring Government support to fund its operations. At the same time, it was effectively subsidising wood processors by selling its logs at low prices (Birchfield and Grant 1993).

When the Labour government was elected in 1984 with an economic policy of deregulation and privatisation, the NZFS was a clear candidate for some kind of change. When the 1981 proposed target of 43,800 hectares was presented to the new Government, it was rejected, with the Treasury arguing that planting levels should be determined by 'the overall economic climate and individual investors making their own planting decisions' (Kirkland and Berg 1997: 93). Despite this, the State still managed to establish the amount suggested in the targets up to the time of corporatisation in 1987 (Kirkland and Berg 1997). The 1984 budget increased the prices of logs from State plantations and forests and removed forestry investment concessions (Birchfield and Grant: 25). But the Government believed more fundamental change was needed, and in 1985 announced that the commercial and non-commercial functions of the NZFS would be separated.

PRIVATELY-OWNED PLANTATIONS: DEVELOPMENT AND EVOLUTION 1800s TO 1980s

Private planting 1800s to 1920s

Prior to direct State involvement with tree planting in 1897, the majority of knowledge about the ability to grow exotic trees in New Zealand came from enthusiastic private planters. Private planting of trees was encouraged through some legislation in the 1800s. The *Planting of Trees Ordinance* of 1858, for example, aimed to protect the investment made by tenants planting trees on leasehold properties,

although it is not known to what extent, if any, the Ordinance was actually applied. The *Otago Waste Lands Act* in 1872 also contained provisions relating to tree planting (Roche 1987).

The first direct incentives for private planting, however, came with the passing of the *Forest Trees Planting Encouragement Act* in Canterbury in 1871. The Act 'provided for a grant of two acres of Crown land for every acre planted in forest trees' but achieved only limited success (Roche 1987: 49). Most private planting was undertaken without recourse to assistance schemes, and the area of private plantations expanded from around 4,000 acres in 1871 to 60,000 acres by 1919. Motives for planting varied, but a strong influence was the belief that trees could influence climate and rehabilitate waste land (Roche 1987).

The bond holding companies: private planting in the 1920s to 1930s

In the private sector, planting during the first boom in the 1920-30s was undertaken primarily by bond-selling companies, who sold bonds entitling the owner to an acre of land on which the selling company would establish trees and maintain them for a length of time, usually 20 years (Roche 1990a). The companies developed in response to a range of factors, including favourable tax regimes for the dividends and on the land put under afforestation. The companies used concern about an impending timber famine to convince investors to put money into growing trees, as well as promises of big profits. Afforestation Proprietary Limited (1926), for example, proclaimed on the cover of its investor information booklet that '... by the time this Charlestoning and bobbed haired generation is discussing the degeneration of its adolescent offspring, timber will be so scarce that countries which have it will be almost as well off as the gold-holding nations of today.'

The bond companies came under considerable criticism for the methods they used to convince people to invest, the profiteering of some companies, and their plantation establishment methods. Rising concern led to the establishment of a Commission of Inquiry into company promotion methods in 1934, and the fall-out from the revelations associated with the Inquiry, as well as its recommendations, led to the end of the bond-selling era. Many companies effectively folded, became inactive, and later were often purchased by other private companies.

The largest bond company, Perpetual Forests Ltd, eventually became New Zealand Forest Products (NZFP), when the recommendations of the Inquiry led to legislation enabling bond companies to reorganise into share-issuing companies which enabled the companies to progress their business and enable realisation of returns for bond (now share) holders (Roche 1990a). NZFP was established in 1935 to take over the 176,000 acres of plantations Perpetual Forests had established in the central North Island between 1920 and 1928 (Simpson 1973).

NZFP established processing operations at the same time the NZFS was establishing its own sawmill and assisting Tasman. As described by Kirkland and Berg (1997: 84), NZFP '...pioneered a pulping-sawmilling development of comparable magnitude to the Murupara project by Tasman through the normal workings of the commercial marketplace, receiving more hindrance than help from the outgoing Government.'

The second planting boom: the private sector 1960s to 1980s

As discussed above, private planting made up a slight majority of the area planted during the second planting boom of the 1960s to 1980s. The majority of these private plantings were undertaken by large forestry companies, despite efforts by the government to promote and encourage farm forestry plantings. Whereas in the 1920s plantations had been established by bond companies with no processing interests, from the 1960s private planting was largely undertaken by utilisation companies which aimed to supply their own mills with wood (Le Heron and Roche 1985). The two big private utilisation companies, NZFP and the Tasman Pulp and Paper Company, established large new plantations. Tasman had a guaranteed wood supply from State plantations, but established their own plantations as well to 'provide an adequate reserve against the company's continuing wood requirements and to provide for future expansion of operations' (Le Heron and Roche 1985). NZFP, meanwhile, decided the plantations it had established in the 1920s and 1930s were not enough to supply future processing. In 1969, it decided to expand its plantation estate to 400,000 acres (161,871

ha). In 1973, after losing a contract to buy logs from the Kaingaroa forest State-owned plantations, NZFP increased this target to 500,000 acres (202,339 ha) (Le Heron and Roche 1985).

Revision of the taxation system in 1965 allowed companies to deduct various costs of establishment and maintenance from current income, contributing to expansion of planting (Le Heron and Roche 1985: 220). The Government was also influential, as discussed earlier, through its setting of planting targets for both public and private sector through the Forestry Development Conferences.

When the new Government was elected in 1984, however, many incentives for planting were removed – the Forestry Encouragement Grants Scheme was stopped, and tax deductibility of planting and maintenance expenses from current income was removed (Cox *et al.* 1993). From the late 1980s, utilisation companies focussed on purchasing State-owned plantations through the privatisation process, rather than establishing new plantations. Total new establishment rates (public and private) dropped from around 56,000 hectares in 1984 to 16,000 hectares in 1991 (Mead 1995).

CORPORATISATION AND PRIVATISATION OF STATE PLANTATIONS: 1984 TO 2003

The New Zealand Labour government elected in 1984 is famous ‘for ... implementing the most radical free market policies in the OECD – some claim, in the world.’ (Kelsey 2002). The Government was elected following a severe economic crisis associated with the flight of foreign capital from NZ and liquid reserves falling to a point where the Reserve Bank warned it might collapse (Birchfield and Grant 1993). The new government inherited a sluggish domestic economy, rising foreign debt and high unemployment, and focused on addressing the economic problems facing the country (OECD 1999).

The structural adjustment program undertaken by the Labour, and subsequently National, governments from the mid-1980s onwards involved a range of measures including (OECD 1999, Kelsey 2002):

- ❑ deregulating domestic markets and encouraging free trade and investment;
- ❑ deregulating the labour market by encouraging individually negotiated employee contracts rather than union negotiations and collective bargaining;
- ❑ cutting income tax rates and government spending; and
- ❑ ‘reducing the size, role and power of the state through corporatisation, privatisation, devolution and managerialism.’(Kelsey 2002).

Corporatisation

THE DECISION TO CORPORATISE

In 1985, the government announced that the NZFS would be corporatised. This decision was driven by two primary forces. The first was the government’s overall structural adjustment program, in which commercial and regulatory functions of government were to be separated by creating State-owned enterprises (SOEs) and privatising any government business unless there was good reason not to do so (Clarke 1999). The second was pressure from ENGOs to have the conservation and wood production roles of the NZFS separated, and a new department created specifically to be responsible for protection of the environment. ENGOs had ‘repeatedly rejected Forest Service claims that it could successfully and simultaneously reconcile commitments to production forestry, conservation and a recreational role for forests’ (Birchfield and Grant 1993: 16).

There were a number of reports and inquiries into the operations of the NZFS in the years preceding the decision to corporatise. As early as 1972, a report to the Minister of Forests recommended some plantations should be sold to private enterprise (Schmitt 1972). In 1978, the Auditor-General produced a report critical of accounting procedures in the NZFS, which were difficult if not seemingly impossible to interpret (Schmitt 1972). This led to an investigation by a sub-committee of the Parliament’s Public Expenditure Committee, which recommended separating the trading and non-trading functions of the NZFS. Other reports directed attention to the problems created by the multiple roles of the NZFS, and

there was debate over the best way of structuring the NZFS to help it meet its wide range of obligations (Roche 1990a,b).

In September 1985, the government announced that the preservation and commercial functions of the NZFS would be separated, although the form this change would take was left open, and discussions began on the future of the NZFS.

THE PROCESS OF CORPORATISATION

In February 1986, the Forestry Corporation Establishment Board was set up 'to advise on the form and function of [the new] organisation' (Roche 1990b: 951). The Board was primarily made up of businessmen from various industries. The private forestry industry was not represented on the Board due to 'the industry's already expressed antagonism to the idea of corporatisation and its historical approach of seeking privileged access to state forest resources' (Birchfield and Grant 1993: 49). Essentially, the Board was free of vested interests in forestry from either the public or private sector.

The Board recommended full privatisation, but the government decided instead to corporatise the commercial functions of the NZFS (Roche 1990a,b). The Board then recommended that the corporatised entity should be a limited liability company under the terms of the Companies Act. The Board envisaged eventually being able to sell shares in the corporatised entity and list on the Stock Exchange, in other words, to transition to a fully private entity (Birchfield and Grant 1993).

In 1987 the non-commercial functions of the NZFS were transferred to the Department of Conservation (DOC), which subsequently managed the indigenous forests, and to the Ministry of Forestry (MOF). The MOF subsequently became the Ministry of Agriculture and Forestry (MAF) in 1997 (Clarke 1999). The New Zealand Forestry Corporation (NZFC), a limited liability company, was established to manage all commercial forestry operations, including plantations, sawmills and nurseries, and began operations on 1 April 1987 (Clarke 1999). The NZFC had one principal objective: to operate as a profitable business. The social and environmental objectives the NZFS had formerly had to meet were now the responsibility of the DOC and MOF.

The splitting of functions and creation of the DOC, MOF and NZFC was a massive change. Several strategies were used to try to make the transition from NZFS to the new arrangements as efficient, and as socially responsible, as possible.

Once corporatisation had been decided on, the Board was proactive in 'selling' the concept to groups including government bureaucrats, unions, and employees of the NZFS. Birchfield and Grant (1993) claim there was considerable opposition to corporatisation from the NZFS and Public Service Association. However, Kirkland and Berg (1997) believe there was relatively rapid acceptance of corporatisation among NZFS managers. In the private industry there were reportedly some concerns about the corporatisation process, for a range of reasons including concerns about long-term supply contracts and the potential for the corporatised entity to become a more direct competitor with private companies that currently sourced many logs from State-owned plantations (Birchfield and Grant 1993).

Perhaps the biggest issue in the transition to corporatisation was employment. The NZFS was considerably overstaffed, as discussed above. The NZFC had a mandate to operate as an efficient business, and needed to reduce the number of employees. The methods used to achieve this need to ensure the industry would function effectively.

Early on, the Board decided to re-employ as many NZFS employees as possible in the new NZFC, including Andy Kirkland, the head of the NZFS, as the chief executive of the NZFC. The underlying philosophy was that problems in the NZFS had arisen from its structure, rather than the staff in the organisation (Birchfield and Grant 1993). The NZFC was, however, created without automatic transfer of staff from the NZFS, enabling it to create a new employment structure more suited to a commercial corporation. The new NZFC structure had less management layers than the NZFS, encouraged some competition between managers in the NZFC, and eliminated many jobs to enable a leaner, more decentralised structure (Birchfield and Grant 1993).

The way in which this change was achieved differed for salary and wage workers. In total, the changes resulted in the 7070 employees engaged in commercial forestry in the NZFS (both salary and wage

workers) being reduced to 2770 in the NZFC, a figure including self-employed contractors who were contracted full-time to NZFC (Birchfield and Grant 1993: 77).

The number of salaried staff positions in the NZFC was less than a third the number in the NZFS. A 'Green Book' was produced which listed the salaried positions available in the NZFC, and NZFS employees had to apply for these positions. NZFS salaried employees either transferred to DOC or MOF, applied for jobs in the NZFC, or took a redundancy package offered by the government. Only 700 white collar jobs were identified in the new organisation, and less than that were employed when the NZFC started operations (Kirkland and Berg 1997). Managerial and staff positions in NZFC were negotiated on individual contracts, with 95% of the non-clerical staff voting against union – in this case the Public Service Association (PSA) – involvement in negotiating salaries and work conditions. The PSA was able to represent only the clerical and related staff in the NZFC. The effective end of union involvement in salary negotiation transformed the employment environment (Birchfield and Grant 1993).

Wage workers were largely eliminated in the NZFC, which instead engaged a much lower number of independent contractors. A series of discussions were held between the Timber Workers' and Workers' unions, NZFS and State Services Commission, resulting in agreement on a process for deciding which wage workers stayed and which left.

Under the decision, 'All wage workers would be offered a choice: one year's guaranteed work from April 1 [1987] with no promises and no redundancy thereafter or redundancy, with compensation based on the standard state sector formula, on March 31' (Birchfield and Grant 1993: 70, emphasis in original). At the same time, the NZFC offered an Enterprise Opportunity Scheme which helped arrange finance for those who wanted to become contractors to purchase equipment and set up as private business entities. Under the Scheme, workers submitted proposals for contracting businesses. Three hundred and eighty one proposals were submitted by April 1 1987, and around 120 were approved, employing around 500 people. The shift to self-supervising contracting effectively removed many of those who were paid by the NZFC from coverage by the New Zealand Workers' Union (Birchfield and Grant 1993).

This system of transferring employment allowed corporatisation to occur without any compulsory redundancies. A considerable number took voluntary redundancies, and there is evidence that many, particularly the less skilled wage workers, did not find work for a long time afterwards, and/or had to shift to different regions in order to find work. In 1990 the NZFC initiated a program to give these ex-employees assistance in getting employment, through actions such as training in CV preparation and job applications, and a follow up indicated this program had some success (Birchfield and Grant 1993).

Changes to employment, log pricing and business structure resulted in the NZFC making a NZ\$53 million profit in its first year of operations (Roche 1990b). In the first two years of its operations it generated \$174 million in cash surpluses, compared to a \$117 million deficit on commercial activities in the final two years of the NZFS (Birchfield and Grant 1993). Clearly, the NZFC was successful in achieving the improved commercial operating environment hoped for by the Government. The NZFC was short-lived, however, with the government deciding to privatise the Corporation.

Changes accompanying corporatisation

The State withdrew itself from influence in the plantation industry in a number of ways other than corporatisation. Changes that contributed to making corporatisation, and subsequently privatisation, successful included:

- Making log prices competitive prior to and during corporatisation;
- Deregulation of the transport industry, which significantly reduced costs of transporting logs and processed wood products;
- Deregulation of the ports, which also reduced costs and also reduced the amount of time taken to export logs and wood products;

- ❑ Deregulation of the labour market, enabling flexible contracts which reduced labour costs and allowed more flexible working hours; and
- ❑ Deregulation of the financial market, enabling easier access to finance for many businesses, including some plantation businesses, particularly processors needing to restructure and become more competitive.

The State had a mixture of long term and short term supply contracts in the early 1980s when log prices began to be reformed. The Minister of Finance, Roger Douglas, announced in the 1984 Budget that prices of plantation wood would be aligned with current market values within five years (Kirkland and Berg 1997).

In 1984, long-term contracts were held over around two-thirds of the high quality logs coming from State forests, but these only brought in around half the revenue received by the NZFS, with short term contracts making up a disproportionate share of total revenue (Kirkland and Berg 1997). A shift to tendering for short-term contracts began to bring in higher prices for timber from the late 1980s, but the long term contracts remained problematic. The NZFC was largely able to return an operating surplus during its operation because it managed to increase returns from short-term contracts considerably, as well as selling logs on export markets (Kirkland and Berg 1997).

The long-term contracts with CHH were, after long negotiations, realigned with market values in 1987, while renegotiating prices under the Tasman contracts required an arbitrated settlement which took some time and resulted in \$20 million of back payments for wood to the NZFC (Birchfield and Grant 1993, Kirkland and Berg 1997).

The removal of various import controls and export subsidies, which had previously helped support outdated and uncompetitive processing facilities, forced rapid change and restructuring in the processing industry, and resulted in more exposure to global economic fluctuations (Grebner and Amacher 2000, Stringer 2002). At the same time, processors faced lower costs for transport of logs and products, for export of products, and were able to have a more flexible labour force, allowing efficiency improvements.

PRIVATISATION

The decision to privatise

In 1988, the government announced that plantations would be privatised (Clarke 1999). There has been some debate about the factors that ultimately led to the decision to privatise. Suggested influences include:

- ❑ The government's desire to reduce public debt;
- ❑ The ideology of the government at the time;
- ❑ Concerns about potential political interference with the NZFC;
- ❑ Concerns about NZFC's capital raising ability;
- ❑ A perceived need to ensure security of wood supply through processors purchasing plantations; and
- ❑ The inability of the NZFC and Treasury to come to an agreement about the valuation of the NZFC's assets.

The Government publicly stated that reducing public debt was a primary motive for privatisation (Roche 1990b). This may have been more of a justification for the decision than a driving force. Birchfield and Grant (1993: 163) quote Roger Douglas, the Minister of Finance at the time, commenting afterwards "... We knew it [debt reduction] was a poor argument but we probably felt it was the easiest to use politically."

The Government's broader economic ideology stated that any State owned enterprise (SOE) should be privatised unless there were compelling economic or social reasons to retain them in government ownership (Clarke 1999). There was a strong, overriding belief that privatisation would result in the

highest possible economic efficiency, bringing benefits to the economy and hence society (Birchfield and Grant 1993).

There had been some concern before and during the process of corporatisation that 'the SOE structure might only incorporate the worst of the public and private sectors and that the justifications for corporatisation in many cases applied equally well to privatisation' (Roche 1990b: 952). Some were concerned that the NZFC would be subject to political interference, and believed it should therefore be fully privatised (Clarke 1999).

The NZFC had limited capacity to raise capital for further investment in expanding its operations, with any investment requiring approval from the shareholding ministers (Birchfield and Grant 1993, NZIER 2000). Many also believed that the major processors would achieve security of wood supply if State plantations were privatised, primarily through processors being able to purchase their wood supplies.

Finally, there was an ongoing disagreement between Treasury and the NZFC over the value of the NZFC's assets. The NZFC was operating under an interim licence until a value for its assets could be agreed on and they could be officially 'purchased' by the NZFC from the Government. The valuations made by the NZFC and the Treasury varied considerably, due to differing beliefs about future markets, log prices, appropriate discount rates and use of different valuation models. At one point there was a gap of 750 percent between the two valuations (Birchfield and Grant: 123-24). Privatisation – in which a valuation would be obtained through the sales of the assets – was one way of resolving this dispute (Birchfield and Grant 1993, Kirkland 1996).

Deciding the form of privatisation

After the decision was made to privatise, the Forestry Working Group – which included representatives from government and the private sector – was formed to make recommendations about how privatisation should take place.

The NZFC organised and was the sales agent for sale of the plantations (Birchfield and Grant 1993). The use of the NZFC in this role created some concern amongst some members of the private forestry industry, who believed the NZFC had motivation to delay sales, having just invested considerable effort in creating and profitably running the NZFC.

The decision had already been made to sell NZFC's assets, rather than to sell the NZFC as a going concern. Birchfield and Grant (1993: 12-13) described the reasons for this decision: '... there was little or no logic to the Corporation's portfolio of forests and processing activities and it would take a considerable time to rationalise the business to the point of it being a credible contender for public listing. Now that sizeable cash surpluses were establishing value [for NZFC's assets] it [was] more logical to sell the forests to the highest bidders.' In addition, there was uncertainty as to whether the New Zealand market was in a position to absorb a float of a corporation the size of the NZFC. Finally, the uncertainty arising from the existence of Maori land claims for much of the land on which State plantations were established meant that selling the NZFC as a going concern would likely result in court action (Birchfield and Grant 1993).

One of the first decisions to be made was whether both the trees and land should be sold, or only the trees. Ongoing claims over large areas of land under the Treaty of Waitangi meant that selling government land was unlikely to be acceptable, and would also likely result in low prices as buyers would be aware of the potential legal difficulties relating to the Maori land claims. There was also strong public resistance to foreign ownership of the land. The decision was made to sell the trees but not the land, by selling long-term cutting and management rights, in the form of long term leases called Crown Forestry Licences (CFLs).

The sections below discuss the two aspects of privatisation that followed this decision: sale of the trees, and the payment of rent on and arrangements for transfer of Crown land.

SALE OF THE TREES

Designing the sale of the trees

SIZE OF PLANTATION UNITS TO BE SOLD

The Forestry Working Group decided to split the plantation estate into a number of parcels, each of which formed an appropriate unit for plantation management and harvesting. It was believed this approach would result in a higher total price being received for the estate than if it was sold as a single bundle (Birchfield and Grant 1993). Under the *Crown Forest Assets Act* 1989, the plantations were divided into 90 units which varied in size from 51 hectares to 132 112 hectares, in theory ensuring maximum flexibility by allowing both small and large organisations to bid (Clarke 1999).

COVENANTS AND RESTRICTIONS ON THE CROWN FORESTRY LICENCES

Each unit had a Crown Forestry Licence (CFL) assigned to it, with 'individual terms and conditions of sale' (Clarke 1999: 37). The CFL's were designed to be as close to freehold land with rent as possible, to minimise the constraints placed on CFL holders. Each unit had to be comprehensively surveyed as the process of assigning CFLs began, to enable adequate information to be given to bidders. Many plantations had not been adequately surveyed, and had to have rights held over them identified and included in the CFLs. Identifying all these rights was a long process (Birchfield and Grant 1993). Rights were written into the CFLs as covenants. Examples of covenants included provisions for vehicular access rights, conservation requirements, grazing rights, and others. All CFLs included a 'wander at will' clause allowing pedestrian access to the plantation unless safety or other reasons precluded access; this 'wander at will' provision was annulled if the land was transferred to Maori or other private owners.

Some other provisions were also put in place for such time as the land underlying the plantations was transferred from the Crown to Maori owners. Included in this was that the rights to give access through those roads would also transfer to Maori – in other words, access rights on roads were not guaranteed once ownership transferred from Crown to Maori. The lack of guaranteed access once land transfers to Maori is currently creating concern surrounding claims over the 22 CFL's granted over the Central North Island plantations, discussed further below (Neilson 2003).

Another question that had to be resolved was whether purchasers of land would be required to replant the land in perpetuity. In the initial round of sales in 1990, no replanting conditions were imposed. It was considered that reforestation and afforestation were likely to be attractive options. By the time of the 1992 and subsequent sales, a condition was imposed that the land must be replanted, or converted to another sustainable use that had to be approved by government, to reassure a range of groups who had expressed concerns that replanting might not occur (Clarke 1999).

The question of processing also became a consideration. In the 1990-91 sales, bidders were not required to guarantee to maintain or expand domestic processing. In 1992, the bidders were required 'to honour five-year supply arrangements with existing clients', and in 1996 'the sales process required potential bidders first to demonstrate their intention to add value to the resource within New Zealand' (Clarke 1999:43).

All CFL's could be terminated in the event of land being transferred to Maori owners. Once a termination notice was given, the land would be returned as the trees were harvested. Some CFL's had an initial fixed term before termination notice could be given, to allow for adequate infrastructure to be developed, or for other conditions to be sorted out – eg for long-term contracts to expire – before termination could be given.

SELLING THE CROWN FORESTRY LICENCES

A competitive bidding system was used to sell CFLs. Interested parties submitted sealed bids for particular parcels of plantations. The primary determinant of successful bids was price. Bidders could bid for any combination of the 90 plantation units they chose. The aim was to allow as wide a range of potential bidders, both large and small, as possible into the sale process. The sales were promoted both domestically and internationally to attract as many bids as possible (Birchfield and Grant 1993). Bidders had to pay a registration fee of \$5000, which was refunded once a genuine bid had been

received, and were given 'access to detailed information on over 27,000 individual stands in the estate' (Birchfield and Grant 1993: 224).

PRESSURES AND ISSUES DURING THE BIDDING PROCESS

Some uncertainty was created among investors when seven units were withdrawn from the initial bidding process, and formed into Timberlands (Bay of Plenty) as a result of ongoing issues with long-term sales contracts, discussed below. However, once the units affected were withdrawn, the bid process continued with no further changes to the units on offer (Birchfield and Grant 1993).

Concerns over the potential for a monopoly situation if Tasman Forestry (Fletcher Challenge), Elders-NZFP or Carter Holt Harvey purchased a large proportion of the plantations led to a decision by the Commerce Commission to proscribe each of these organisations from buying more than a specified area of plantations in particular geographic regions. All three were allowed to buy individual but not all plantations in the central North Island and Nelson/Marlborough regions, and Tasman was also restricted in this manner in the West Coast region. All were allowed to submit bids freely in the other market regions (Birchfield and Grant 1993).

There was considerable pressure to proceed with the sales as rapidly as possible, in order to resolve supply issues for the processing industry. While the privatisation process was being developed and undertaken, processors were given maximum one-year contracts for wood supply from NZFC (Birchfield and Grant 1993).

EXISTING CONTRACTUAL OBLIGATIONS

Existing long-term supply contracts held over a large proportion of the State plantations were a significant obstacle to privatisation. Long-term contracts with both Tasman Forestry and with Carter Holt Harvey had to be dealt with before privatisation of the plantations affected by the contracts could go ahead.

The NZFS had a log supply agreement signed on February 17, 1955 with Tasman. The original agreement ran for 25 years, with two rights of renewal and eventual expiry in 2030. As government was originally a partner in Tasman, it had originally aimed to sell logs cheaply to the processor to maximise the profitability of the enterprise. The Government sold its interest in Tasman in 1979 but log prices under the supply agreement did not change. There had been two additional contracts increasing the supply of logs since the original agreement was signed, but in the contracts, according to Birchfield and Grant (1993: 183), 'the question of price adjustments over time was quite superficially addressed. The contracts required the two parties to reach agreement on any issues not explicitly covered, with recourse to independent arbitrators should reason and compromise fail.'

When the Government increased log prices in 1984, drawn out negotiations with Tasman to try to modify the prices charged under the supply agreements broke down in 1985. Negotiations resumed once the NZFC had been established in April 1987. Soon after negotiations had resumed, Fletcher Challenge, Tasman's parent company, approached the Finance Minister Roger Douglas with an offer to purchase enough plantations from the Crown to supply all Tasman's contractual wood requirements and half its pullog requirement. The bid was rejected as it was considered by the Government to be too low.

In the end, negotiations failed to get an agreement on prices for logs under the long term supply agreements with Tasman. As a result, the plantations which were required to supply logs under those agreements were taken out of the sale process and instead transferred to a new Crown subsidiary, New Zealand Timberlands (Bay of Plenty) Ltd (Birchfield and Grant 1993).

Carter Holt Harvey also had long-term supply agreements with NZFS. When privatisation plans were announced, CHH claimed that NZFS had made assurances to them that they would be able to secure a supply of wood from State plantations into the future, and that these assurances were not being honoured under the planned privatisation. CHH threatened court action over the issue, and rejected offers of short-term contract guarantees made by NZFC. CHH subsequently made a bid for the plantations in question, which was rejected by the Government as being too low. CHH took the matter to court, and hearings were held for several weeks. Before hearings were concluded and the case

decided, an agreement to sell the plantations to CHH for a price considerably higher than their initial bid was made, and the issue was settled (Birchfield and Grant 1993).

The sales

THE FIRST ROUND OF SALES

In April 1990, the NZFC called for tenders for 66 of the 90 units (Clarke 1999). The other units could not be sold because of unresolved issues over the long-term supply contracts discussed above. When the bidding closed, the bids for the 66 units were examined, and compared to 'a previously calculated expected market value' (EMV) (Birchfield and Grant 1993: 228). The total of the bids received was less than the EMV by a considerable amount. Many bidders had apparently viewed the bidding process as a 'first stage' in sales negotiations, and so they had not submitted their final bids.

To deal with this, 'it was decided that a Treasury-led negotiating team should approach two bidders whose tenders were within 90 percent of estimated market value. Both were prepared to negotiate and restructure their bids' (Birchfield and Grant 1993: 229). The first two sales were announced in July, with 73,000 hectares of plantations sold for \$364 million to the two successful bidders, Fletcher Challenge and Ernslaw One Ltd.

Several further sales occurred in 1990 after negotiations by Treasury with other bidders (Kirkland and Berg 1997). Bids for a second sales round of remaining forests closed on October 1, and resulted in further sales (Birchfield and Grant 1993). A joint venture of Fletcher Challenge, CHH and Elders-NZFP made a bid for the Timberlands (Bay of Plenty) plantations, which were still for sale although withdrawn from the main bidding process. The bid was considered too low and Timberlands (Bay of Plenty), later renamed Forestry Corporation of New Zealand, began operation as a SOE in December 1990.

In total, Crown Forestry Licences to over 250,000 hectares of plantations and other assets, representing 44.7% of the plantations and forests offered for sale, were sold in 1990 for over \$1 billion (Birchfield and Grant 1993, MAF 2002).

THE UNSOLD PLANTATIONS

The unsold plantations were formed into an SOE, New Zealand Timberlands Ltd. Many of these plantations had attracted low bids as bidders had doubts over their commercial viability – some were young stands that had not been harvested, others were in locations away from existing markets. The SOE focussed on demonstrating viability, setting up markets and sales contracts to prove that the plantations had commercial value.

There were now three SOEs managing the assets formerly managed by NZFC. Two - Timberlands (Bay of Plenty) and New Zealand Timberlands Ltd – managed plantations, and one – Timberlands (West Coast) – managed indigenous forests on the West Coast indigenous forests, after no acceptable bids were made for cutting rights there.

SUBSEQUENT SALES

The sale of New Zealand Timberlands was announced in 1991. The same flexible bid approach was used. A bid from ITT Rayonier for all the plantations in NZ Timberlands Ltd was found to be better than the total amount offered by other bidders for various combinations of plantation units, and the 100,000 hectares were sold to ITT Rayonier for \$364 million in 1992 (Clarke 1999, MAF 2002).

In 1996, Timberlands Bay of Plenty – by now renamed the Forestry Corporation of New Zealand (FCNZ) – was put up for sale. By 1996, the FCNZ comprised 188,000 hectares along with processing facilities (the Waipa sawmill) and a nursery and seed orchard (Clarke 1999). An initial round of bids was considered too low, and bidders were asked to resubmit bids. After this, in August the FCNZ was sold to a consortium led by Fletcher Challenge for \$NZ 2026 million (Clarke 1999, MAF 2002).

Plantations retained in Crown ownership

Not all plantations were offered for sale. Some were retained in Crown ownership, for a range of reasons. It was planned that most of these would be sold or transferred into private ownership at some

future date. The majority of these are plantations the Crown established on Maori land, with only a small area of other plantations now in Crown ownership.

The Crown had established around 65,000 hectares on land leased from Maori owners from the late 1960s to 1970s (Schell, pers. comm.) Various types of leases had been developed, including stumpage-sharing leases with the joint venture partners sharing eventual returns according to the percentage of input from each partner, as well as some simple land leases. The length of lease ranged from 33 to 99 years. The leases were developed for a range of varying reasons, from erosion control and catchment protection to regional development objectives, with commercial return from the trees not always a priority. All the leases had one thing in common: the lease contained no right of assignability. The Crown could not transfer its interest in the lease to another party.

The lease lands were originally transferred to the NZFC during corporatisation, until Maori landowners disputed the ability of the Crown to do this, given that there was no right of assignation. The leases were withdrawn from the NZFC and put under the Ministry of Forestry; they are currently managed by Crown Forestry.

The Crown wanted to divest itself of its interest in the leases, but due to the lack of an assignability clause was effectively dealing with a 'one buyer, one seller' situation. The policy of the Crown has therefore been that, where possible, they will divest themselves of their interest in the leases, but only if the outcome of doing this for the Crown is either neutral or positive in an economic sense.

Two mechanisms have been used to divest the leases: outright sale, and surrendering of the lease. At present, the Crown still manages 36,460 hectares of plantation on Maori land, and by 2040 will have divested itself of most of its interests in the leases.

OUTRIGHT SALE

Outright sale has taken the form of selling the Crown's interest in the lease to the Maori landowner. Maori groups have either found a joint venture partner to buy out some or all of the Crown's portion of the lease (sometimes increasing their proportion of the stumpage in the process), or have organised a back-to-back sale in which a purchaser is found for the plantation, and the Maori purchase the Crown's interest and on-sell it as well as their own interests to the purchaser.

SURRENDERING THE LEASE

Many Maori landowners, however, do not have the financial resources to directly buy out the Crown's interest in the lease. As a result, on the majority of the lease land, the Crown is exiting the leases by surrendering the lease after one rotation. This is done for stumpage sharing leases, and involves recalculating the percentage return to the partners. The recalculation must both enable the Crown, by surrendering to lease after one rotation, to break even in net present value terms with the expected returns it would have received had it operated for the entire length of the lease. The recalculation must also ensure the landowner has the resources to manage the plantation once it is returned to them. Once agreement is reached, the land is handed back as the trees are harvested. In some cases, the Maori owner is responsible for replanting; in others the Crown has agreed to replant before handing the land back.

The Lake Taupo Forest Trust (LTFT) provides an example of this process, being the single largest Crown lease on Maori land for plantations. The LTFT was a 70 year lease, entered into in 1969, under which 22,000 hectares of plantation were planted on 32,000 hectares of land owned by the Trust. The lease surrender option was implemented after the LTFT had already explored with the Crown the concept of purchasing the Crown's interest at an agreed value, and paying that value plus interest as returns were received from harvesting. While the Crown was interested in this proposal, the idea was not followed through as the Crown and LTFT could not come to agreement on valuation of the Crown's share.

When the two parties agreed to negotiate a lease surrender after one rotation, they agreed to each calculate a stumpage share that would meet their needs. For LTFT, the needs were to be able to manage the plantation, and to pay dividends to their 10,000 owners from harvest returns. Many owners had waited 20 years for returns after the lease was initially developed, and it was important to ensure they could receive a dividend. The Crown, meanwhile, undertook its own calculations to find a

stumpage share that would give them a return equal to what they estimated the net present value of the benefit they would have received had they stayed in the lease until it ended in 2039. The two parties then negotiated until they settled on a share of 35% of stumpage to the LTFT and 65% to the Crown. The land is being returned as it is harvested, and the same managers are employed to manage both the Crown and the LTFT plantations as the proportions of each change. Costs such as roading and certification costs which apply to all the plantations are shared by the Crown and LTFT according to the proportion of plantations in each party's ownership at the time. The first rotation will be completed in 2020, after which LTFT will own all the plantations. Some second rotation plantations had been planted when the agreement was made, and the Crown and LTFT agreed to forgo a stumpage review which would have increased LTFT's share of stumpages in return for the Crown handing the second rotation plantations over the LTFT.

LAND ISSUES: OWNERSHIP, RENT AND TRANSFER

Land claims and privatisation: ensuring Maori rights were preserved over land

Maori land claims were lodged over much of the land on which State plantations were established, and had yet to be resolved by the Waitangi Tribunal. Some of the land in question has multiple claims over it (Clarke 1999, MAF 2002). Resolving these claims is an ongoing process, with only a small number of claims resolved by 2003.

The *State-owned Enterprises Act*, passed in late 1986, required that the Crown's responsibilities under the Treaty of Waitangi be preserved over any land transferred to the control of SOEs. The Forestry Working Group had to find a way of ensuring this, and was also concerned with fulfilling these obligations in a way that resulted in maximum value to the State from the sale (Birchfield and Grant 1993).

The Forestry Working Group believed that splitting ownership of the trees and the land and selling only the trees would resolve the issues, and consulted with Maori about this option. There was concern from the Maori Council that the proposal, in which cutting rights to two crop rotations would be sold, would prevent Maori from using their land for 50-70 years when land claims were resolved in favour of Maori. A national hui was organised to discuss the issues, with the Crown arguing that purchasers were unlikely to pay full price for the plantations if they had no certainty of being able to harvest more than one rotation. A series of regional hui were held, as well as a series of meetings with the Maori Council and the Federation of Maori Authorities.

This was followed by presentation of a draft agreement at a second national hui, and subsequent formalisation of an agreement in which, when the trees were sold, the State would 'charge [the purchaser] a land rent and ... hold proceeds in trust for whomever the Waitangi Tribunal might rule to be the ultimate owner of the land' (Clarke 1999: 39). Under the agreement the purchaser of the trees would be given the right to manage the land until any crop purchased or established had reached maturity and was harvested (Birchfield and Grant 1993). In addition:

'...the draft agreement provided that, if the Waitangi Tribunal recommended land be returned to Maori ownership, the Crown would: transfer its ownership to the successful claimant – including the right to the rental from that time and the progressively resume control of the land as trees were clearfelled; compensate the successful claimants for the fact that the then existing crop was retained by someone else by paying 5 percent of the value of the trees; and further compensate the successful claimant by paying such further proportion of the value of the tree crop as the Waitangi Tribunal recommended.' (Birchfield and Grant 1993: 180).

These conditions were written into the Crown Forestry Licence. At the time, it was expected claims over land would be settled relatively quickly, and few thought claims would be ongoing over a decade later. Since privatisation, rents from holders of CFLs have accumulated in the Crown Forestry Rental Trust, and some land has been transferred to Maori owners.

Determining levels of rent

Under the Crown Forestry Licence, holders of CFLs pay rent on the land underlying the plantations they purchased from the Crown. The rent is held in the Crown Forestry Rental Trust (CFRT) until such time as land claims are settled, at which time it is transferred to the owner of the land. Income earned on the funds held in the CFRT may be used by claimants to help meet the costs of making their claims.

The CFL's contain rent review clauses. There is a periodic rent review every third year, and a general review every ninth year. The rent review process has been problematic in some cases. Rent was originally calculated at 7% of land value. During rent reviews, the value of the land was disputed between CFL holders and the Crown, with some disputes being taken to arbitration. At the time of the general review, many CFL holders and the Crown reviewed the methods by which rent was being determined, and many switched to using a market rental to determine part or all of the rent. Debate over appropriate methods to determine rent is ongoing.

When the Crown reviewed the issues that had arisen, they found that the delays – which incurred large transaction costs for both Crown and CFL holders – were often caused not so much by dispute over the value of comparable land in the private sector, but were rather over the adjustments to be made to reflect the various terms and conditions placed on different CFLs. For example, if a CFL had a covenant requiring the holder to maintain an area for conservation purposes, the level of rent might be reduced accordingly. Another problem was that often new people were negotiating on behalf of the CFL holder every three years, and as a result the agreements on basic facts achieved in previous agreements had to be worked through again. The Crown as a result began implementing a system of developing protocols with CFL holders, in which both parties agree on the set of conditions applying to that licence – including site indices, potential productive area of the land, the distance the market – and include these details in the protocol. Joint inspections by the Crown valuer and representatives of the CFL holder take place, and there is an open exchange of information and facts to achieve agreement on the underlying information on which the valuation is to take place. This approach appears to be reducing the length of time taken to get agreement in the rental review process in some cases.

Where covenants on the CFL represent a cost to the CFL holder, this was reflected as a percentage deduction in the land value overall. However, this approach has been changed, as it resulted in large changes in the deduction given as land prices fluctuated. A cost, rather than percentage, adjustment is now usually made.

Transfer of land to Maori owners

Since sale of the CFL's, there have been some transfers of land ownership from the Crown to Maori claimants, although the majority of claims have yet to be settled. The settlement process has taken a different form than that the CFL's were designed for. When the CFL's were designed, it was expected that the Treaty of Waitangi Tribunal would settle individual claims by making a binding recommendation under which land would be transferred from the Crown to Maori owners.

However, the settlement process has generally taken a different form. The Crown has been settling groups of claims in a single cash settlement, and has then been offering Crown land for purchase by the group that has received that settlement. When this has happened, and land covered by a CFL has been purchased from the Crown by Maori, the conditions in the CFL relating to termination of the CFL and return of land to Maori owners apply, and the Maori owners receive the funds that have been held to that date in the Crown Forestry Rental Trust.

While this process has operated relatively smoothly, there have been particular issues for Maori looking to purchase land covered by CFLs. Two in particular have arisen: getting agreement on valuation of the land, difficulty obtaining finance to help purchase Crown land and manage plantations once land has been returned.

The use of a cash settlement followed by land purchase requires the parties to agree on a valuation of the land being purchased. Various valuation issues have already been discussed above, and the same issues apply to this process.

Where Maori groups have received a cash settlement, and wish to purchase land, they may wish to borrow money to be able to purchase land offered to them under the settlement over and above the amount received in the cash settlement. In addition, Maori may seek finance to allow them to finance management of plantations once land is returned to them. Either of these cases involves obtaining finance, and it can be difficult to obtain finance to purchase or manage CFL land, due to the fact that, as land is returned to Maori, annual rental will no longer be received from the leaseholder, while the Maori must incur the costs of plantation management (assuming the land stays in plantations). Without a guaranteed income, obtaining finance is difficult.

As a result of this, groups such as Ngai Tahu in South Island have developed their own leases, based on the CFL, and negotiated with the companies holding the CFL's to develop a lease agreement once land has been transferred to the Maori owners. This means income continues to be received from rent, giving a return from the land to the owners and making it easier to obtain finance. Negotiating a lease agreement with the current CFL holder has been difficult in some cases, as achieving agreement on rent payments under the new lease with Maori may affect rent review processes going on with the Crown for other CFLs held by the lessee, and so negotiations may be constrained. This has been resolved by Maori and the current CFL holder agreeing on a minimum rent, which can be used to obtain bank finance, and once land has been transferred agreeing on a rent.

Under this process land has been successfully transferred to Maori owners from the Crown, while Maori have been able to negotiate new leases with the previous CFL holders and receive an income from the plantations on that land.

In 2003, proposed land transfers to Maori in the Central North Island region have created concern. The CNI was split into 22 CFLs, and the land under the plantations has been claimed by various Maori groups, with some competing claims. A proposed settlement with Ngati Awa for a small area of plantation land has caused concern as the area to be settled contains roading that provides access to considerable areas of plantation. On transfer to Maori ownership, the Maori owners would be able to charge fees for use of the road to access other plantations (ie plantations covered by different CFLs). Many in the plantation industry are concerned both that this could impose significant costs on the industry in the event the Maori owners decided to charge high access fees, and also believe that, as the CFL holders have generally incurred the costs of establishing and maintaining roads, they effectively would be charged twice for the cost of the road if an access fee was now charged (Neilson 2003). The issue is ongoing, but points to the importance of making clear provision for access rights and road use in plantation areas in the privatisation process, particularly where trees and land are separated and the rights to associated infrastructure must be allocated to particular groups.

There are many complex issues relating to land claims and transfer of land to Maori; this brief review has only touched on a few of the issues.

POST-PRIVATISATION: THE 1990S PLANTING BOOM

The rise of farm forestry and small owners

In the early 1990s, the third planting boom began. In this latest planting boom, up to an estimated 85% of planting have been undertaken by small plantation owners – farmers, investors, Maori Iwi and others - rather than large companies (Mead 1995).

This boom was driven partly by the re-introduction in 1991 of the ability to deduct tree planting and maintenance expenses from current income (Cox *et al.* 1993, Nagashima *et al.* 2002). The dramatic increase was also driven by increases in international sawlog prices in 1993 (Ministry of Forestry 1993).

Post-privatisation, ENGOs and large plantation growers made two agreements which have affected plantation management, as discussed earlier. The NZ Forest Accord achieved agreement that plantations would not be established on land just cleared of indigenous forest or regenerating scrub. Nagashima *et al.* (2002) found that between the 1970s and 1990s, conversion of scrubland to plantation was more common than conversion of cleared land to plantation in the Nelson region, although it is not possible to tell if this mostly occurred prior to the Accord being signed. This may

indicate that small owners, who are not signatories to the Accord, are clearing regenerating scrub to plant plantations, and concerns have been expressed about this by some ENGOs (Rosoman pers. comm.)

ENGOs have criticised the common claim that the plantation industry is sustainable⁵. The Principles for Commercial Plantation Forest Management in NZ signed in 1995 by ENGOs, private industry and the government acts as a way of trying to address some of the concerns over environmental impacts of plantation management.

During the 1990s there has been ongoing rationalisation and sale of various areas of plantation by the private sector, and the ability to transfer particular rights can make it challenging to define ownership of plantations - for example, Fletcher Challenge Forests (FCF) sold cutting rights over 8,490 hectares of mature plantation to UBS Timber Investors in January 2003 (Inwood News Services 2003b).

Post-privatisation role of Government in plantations

The Crown still owns some plantations, although they represent only around 2% of the total plantation estate. The Crown owns (MAF 2002):

- ❑ Some remaining plantations not subject to Treaty of Waitangi claims, which are in the process of being privatised, as well as some plantations subject to Treaty of Waitangi claims;
- ❑ Crown plantations established on leased Maori land;
- ❑ Several plantations either eased to the private sector or local authorities and plantations managed by Landcorp, Justice, the Department of Conservation and other government departments;
- ❑ Shareholdings in Tarawera Forests Ltd and Haparangi;
- ❑ The Forestry Encouragement Loan portfolio; and
- ❑ Proseed Ltd, the seed production business which is being privatised.

The role of government in the plantation industry in New Zealand has clearly changed significantly, with an almost complete cessation of direct commercial involvement in the industry. Government does, however, still play a range of roles that influence and often assist the development of the plantation industry. These roles include (Walker *et al.* 2000):

- ❑ Ensuring a competitive trading environment for industry, including facilitating market access, supporting industry initiatives and providing adequate infrastructure;
- ❑ Disseminating information on the environment and on technology through the Ministry of Agriculture and Forestry; and
- ❑ Providing funding for the East Coast Forestry Project, discussed below.

The plantation industry encourages active government involvement in attracting investment to New Zealand, particularly government investment in appropriate infrastructure (Inwood News Services 2002b). Some members of the industry have even called for Government to provide financial incentives to attract investment in large-scale processing plants in New Zealand (Inwood News Services 2002c).

Roading and provision of other infrastructure is a key role of government, particularly planning for transport and infrastructure development and allocating funding for improving and upgrading roads required for harvesting plantations, particularly the increased area of plantations established in a wide range of rural regions from the 1960s onwards (Inwood News Services 2002d). A particular problem has been that, as the plantings from the second planting boom period have matured, there has been much higher use of local authority roads than occurred previously, requiring attention to be given to road funding to local authorities (Ministry of Forestry 1993).

⁵ See Rosoman 1994 for a detailed examination of some of the issues

EAST COAST FORESTRY PROJECT

The East Coast Forestry Project (ECFP) is the only area in which the Crown is still involved in actively expanding the plantation estate in NZ. The ECFP was established in 1992, and initially aimed to plant 200,000 hectares of plantations over 28 years on eroding and erosion prone land in the east coast of North Island. Initially the project aimed both to reduce erosion and to provide social benefits in the form of employment and regional development opportunities, particularly for Maori, in a region which has had one of the highest unemployment rates in NZ (Office of the Parliamentary Commissioner for the Environment 1994, Cocklin and Wall 1997). In 1999, the objectives of the ECFP changed, with a target of planting 60,000 hectares of the most erosion-prone land, and a primary objective of achieving sustainable land management (MAF 2002b).

The ECFP grants are considered by government to be a way of equalising the financial return from afforesting erosion prone land with the return from afforesting other land not subject to erosion (Cocklin and Wall 1997). Private landholders have to tender competitively for a share of the grant funds (MAF 2002b). The grant proposals are evaluated based on the extent to which the land in the proposal is erosion prone, financial aspects of the bid, the forest management plan submitted as part of the bid, and the anticipated clearance of indigenous vegetation (Cocklin and Wall 1997).

The ECFP was initially criticised by various groups concerned about its potential to encourage clearance of indigenous vegetation. ENGOs believed the ECFP in its initial form breached the New Zealand Forest Accord. As a result of the criticisms of environmental groups, the ECFP changed the rules of the grant to make fewer areas of regrowing indigenous vegetation eligible for the grant. However, when they did so considerable areas of land owned by the Ngati Porou – the major Maori land owners in the region – became ineligible for the grant, reducing the potential of the scheme to provide them with social and economic benefits (Cocklin and Wall 1997). Tasman withdrew from a planned joint venture to establish plantations with the Ngati Porou after concerns that the planting on land with scrub would breach the NZ Forest Accord, to which Tasman was a signatory (Office of the Parliamentary Commissioner for the Environment 1994). Ngati porou subsequently formed a joint venture with Hansol, which is not a signatory to the NZ Forest Accord, to establish plantations.

1.4 Evolving demands and roles for plantations

For both public and private sector, motivations for plantation establishment have changed over time, from avoiding a future timber famine and improving climate, to providing domestic timber needs, and finally to providing timber for an export industry. Demands for improved environmental performance have been made on both sectors, and continue. The State, however, also had to meet a range of other demands which the private sector did not, including:

- use of afforestation to try to reduce rural unemployment and provide opportunities for regional development;
- planting for erosion control and environmental improvement; and
- increasing demand for multiple use management for recreation, aesthetics and environment.

The number and type of demands and roles placed on State owned plantations led to criticisms that influenced the decision to privatise.

Post-privatisation, demands and roles for plantations changed. The private sector is now seen as the appropriate vehicle for plantation establishment, with the rate of planting to be determined by market forces.

1.5 Balancing acts: reconciling public policy objectives and private sector investment

Evaluating the impacts of the changes resulting from corporatisation and privatisation in NZ is difficult. There has been a wide range of responses to privatisation, ranging from the belief that privatisation has been wholly positive and resulted in improved economic efficiency and hence social and other

benefits, to concerns about various impacts of privatisation and wholesale opposition to the concept of privatisation. Opposition to the third round of privatisations in 1996 was so intense that a petition against the sale garnered over 155,000 signatures (Anon. 1996).

The primary objectives of plantation privatisation in NZ were to improve the efficiency and competitiveness of the industry, and to give resource security that would encourage investment in domestic processing. Another stated objective of privatisation was the retiring of public debt. Other than this, there were few if any clearly stated objectives of plantation privatisation in NZ. Corporatisation had similar economic goals, but had the additional goal of separating commercial and conservation roles of the NZFS.

There have, however, been a wide range of criticisms of privatisation, and concerns over its impacts. Some of the key issues have been the impacts of corporatisation and privatisation on the quantity and quality of employment available and hence on small rural communities, and the impacts on recreation and access to the plantations.

The following issues are discussed below, with an emphasis on comparing the outcomes under the NZFS with outcomes in the privatised plantations:

- economic outcomes of corporatisation and privatisation;
- social outcomes - employment;
- social outcomes – access and recreation;
- environmental outcomes;
- the role of certification; and
- other outcomes and issues.

ECONOMIC OUTCOMES

Several positive economic outcomes of privatisation are often claimed. These include (Ministry of Forestry 1993, MAF 2002):

- development of a more competitive industry;
- increased resource security and certainty, resulting in investment in processing;
- the creation of a secondary market for plantations which had not existed previously;
- better access to overseas markets and distribution; and
- the updating of the sawmilling industry as it was forced to compete in a more open market environment.

Many of those interviewed for this study believed privatisation has led to increased efficiency and competitiveness, particularly in global markets. However, many also believed that it was not possible to separate the impacts of market, labour, port and transport deregulation from the impacts of corporatisation and privatisation, and others also questioned whether corporatisation and privatisation could have achieved improved economic outcomes without the associated economic restructuring.

Easton (1994), cited in Hall (1997) concluded that efficiency improvements often attributed to privatisation in various New Zealand privatisations actually resulted from factors such as the period of worldwide economic growth that coincided with privatisation and 'the freeing of government businesses from social obligations such as job creation' (Hall 1997: 185).

Clarke (1999) has argued that there was an improvement in the competitive position of the forestry industry as a whole from 1993 to 1997, the period after corporatisation and most privatisation had occurred. However, Clarke (1999) also points out that while at least some of the effect was due to the effects of corporatisation and privatisation, other factors also came into play, particularly the log price increase of 1993.

There is also evidence of short-term decreases in economic performance due to privatisation and associated changes. Grebner and Amacher (2000) found, that in the short term, deregulation and

privatisation had negative impacts on cost efficiency. They found that deregulation contributed most to this effect, and suggest that cost efficiency dropped due to the need for investment in new technologies as deregulation exposed uncompetitive firms to the international market place. They believe that privatisation resulted in a short-term loss of cost efficiency because the plantations purchased had to be incorporated into new corporate structures. They made no conclusions about long-term results of deregulation and privatisation.

One of the goals of privatisation was to increase security of wood supply in order to encourage investment in domestic processing. There has been increased investment in domestic processing since privatisation. Clarke (1999: 43) found that 'All new forest owners have invested, or intend to invest, in value-added processing. ... Of the \$NZ 1600 million of intended investments in the period 1990 to 2005, 90 percent is attributable to the purchases of state forest assets.' Hall (1997) attributes much of this to the success of privatisation in attracting foreign investment capital into New Zealand. However, there are many who would prefer to see increased investment in domestic processing, and there are concerns that the RMA has prevented investment in new plants due to delays in approvals. Some question whether investment in processing may in fact have been curtailed as capital had to be tied up in buying trees, leaving less available to invest in processing facilities. This raises the question of whether using a different model, such as selling the cutting rights, might have resulted in more processing investment; using a cutting rights model would no doubt have raised its own set of issues.

Another question raised has been whether the same economic success could have been achieved through corporatisation without subsequent privatisation. Both the NZFC, and the SOE's which ran various parts of the Crown plantation estate for some years after the start of the privatisation process, ran their businesses profitably in competition with the private sector. Forestry Corporation of New Zealand, which was only sold in 1996, operated as an SOE for almost six years and was generally considered a very successful commercial plantation company.

Birchfield and Grant (1993: 243) reported that after the initial rounds of sales, some in the forestry industry believed that the new owners varied widely in their standards of management, and that to screen out the 'bad owners' future sales should screen bidders more carefully.

SOCIAL IMPACTS - EMPLOYMENT

There have been concerns that corporatisation and privatisation had negative social impacts on small rural communities, primarily through changing job opportunities in those regions. Corporatisation and privatisation resulted in downsizing by some companies, and there have been ongoing disputes over job shedding by forestry companies in New Zealand. For example in 2001 'the watersiders' dispute with Carter Holt Harvey at Nelson focused on saving local jobs' (Kelsey 2002). Impacts of corporatisation on available employment were discussed earlier.

The programs put in place by the NZFS/NZFC to assist employees to transition from wage work to setting up contractors when corporatisation occurs appear to have eased the transition for some workers; however many were not able to find new work for at least some years after corporatisation.

Any study of impacts needs to examine how different sectors of rural communities have fared (Scott *et al.* 2000). Roche (1990b: 951) pointed out that 'Of the NZ\$105 million that the government paid out in voluntary severance to public servants, NS65.7 million went to employees of the Forest Service. The social impact was also concentrated in spatial, class, and ethnic terms in that the predominantly Maori work forces of some central North Island timber towns such as Kaingaroa were virtually all made redundant'.

Most agree that the impacts of redundancy were severe, particularly in small rural communities where many ex-NZFS workers were unable to find work after being made redundant. However, many believe this process was inevitable over time, and that it is the role of government to provide subsidies, not of the privatised industry – in other words, their argument is that the issue is not one of impacts of privatisation, but of government choosing not to subsidise income for these workers any more, whether it be through the plantation industry or other sectors. Others believe that, overall, economic restructuring including privatisation had resulted in reduced unemployment in NZ, and so has had a positive effect overall despite particular sectors losing many jobs.

The debate over impacts on employment is not just over the number of jobs, but also over the quality of remaining jobs. Pawson and Scott (1992: 384) suggest that 'the bulk of those entering self-employment today struggle to survive, joining those whose work is poorly paid, insecure and often casual...' This suggests that the shift to contracting may not have resulted in improved quality of life for many of the workers. Critics believe the shift to contracting out many services means that many small contractors are dependent on shifts in international markets for their livelihoods, not able to know when they will have work. In 1999, two large plantation owners, Fletcher Challenge Forests and Carter Holt Harvey Forests, shifted their use of contractors so they now hire through key suppliers of contracting services, rather than dealing separately with many small contractors (MAF 2002). This shift may have increased security for those contractors who work for key suppliers, as they may be assured of more regular work, and hence able to make investments in new technology and machinery in the expectation of gaining enough work to justify the investment.

There has been difficulty in obtaining enough people to work in plantation management and harvesting, however, and research on the East Coast of the North Island recorded a very negative perception of 'forestry work'. Negative perceptions contributing to a lack of participation in forestry work included perceptions that the work is too hard, the pay too low, the occupation is dangerous, many contractors can't be trusted to treat their employees fairly, and overall working in the forest industries is undesirable (Tomlinson *et al.* 2000). This perception was reported by several people interviewed for this study. Clearly there are labour issues; the extent to which they are related to corporatisation and privatisation is difficult to analyse. A new certification scheme, discussed further below, may address some of the issues.

SOCIAL OUTCOMES – RECREATION AND ACCESS

As discussed earlier, the CFL's contained 'wander at will' provisions allowing public pedestrian access to plantations while the land was still owned by the Crown, except when safety issues such as fire risk precluded access. In addition, many CFL's had covenants requiring maintenance of vehicular access or of recreation related infrastructure placed on them.

There is debate about the impacts of privatisation on access and recreational opportunities in the plantations. Some suggest that, while most facilities – tracks, carparks etc – that existed at the time of privatisation have been maintained, further development has not occurred and sometimes road access has been stopped where it previously existed. The covenants on CFL's could not provide for future changes in the demand for use of plantations for recreation, whereas the NZFS under its multiple use mandate would have been likely to continue upgrading and providing new recreation and access facilities.

Knock (1993) found that recreation access decreased under the NZFC following corporatisation, and further found that recreation opportunities either remained static or decreased in many plantations following privatisation, with the amount of emphasis on recreation and access varying depending on the views of individual plantation managers. Knock found that some companies – for example Carter Holt Harvey – did provide recreation facilities and saw it as a useful public relations building exercise, while others did not promote, plan or allocate employee time to maintaining or providing recreation and access.

There have been particular issues relating to recreation and access in some plantations near urban and tourist areas. Hanmer Forest, a plantation providing a backdrop to the tourist town of Hanmer Springs on the South Island, is an example of the types of issues that can arise over recreation. The Hanmer Forest has been used for recreation for decades, and has also provided aesthetic benefits to Hanmer Springs, a tourist town, as the plantations cover the hills behind the town. The Forest itself has areas of old plantings of a wide range of species which are believed by many to have considerable heritage value. A 2001 survey found that 60% of tourists plan to visit the forest as part of their stay in the town (Keey 2001). Covenants were placed on the CFL requiring the CFL holder 'to preserve and protect the natural and historic resources ... and in particular to protect the landscape of the Hanmer Recreation Area' (Keey 2001). In 2000, the land underlying the plantation was sold to Ngai Tahu (a Maori iwi) as part of their settlement with the Crown.

According to Keey (2001), two sets of issues have arisen as a result of privatisation of trees and the transfer of land into Maori ownership. Firstly, concerns arose over the activities of the CFL holder and the amount of times public access was stopped for safety reasons, and the harvesting plans and their impact on landscape and aesthetic enjoyment of the plantation. Some of these issues have been at least partially addressed through improved consultation with the CFL holder and sympathetic management by the CFL holder. There are, however, ongoing discussions over the issue of maintenance of tracks in the plantation, and of the right of access to these tracks. The primary issue appears to be one of who should pay for maintenance of recreation trails that provide a benefit to the local and tourist community. This issue has not been resolved – clearly, the plantation provides a range of benefits beyond commercial wood production, but these benefits do not necessarily result in economic benefit for the CFL holder.

More concern arose as a result of the land being sold to Ngai Tahu. The transfer out of Crown ownership meant that the 'wander at will' provision no longer applied. The covenants regarding management for recreation and landscape remain, but can be reviewed now that land has reverted to Maori ownership, through notice to the responsible Minister, and public consultation would not necessarily take place before the Minister made a decision on whether the covenant should be retained, altered or discarded (Keey 2001). While Ngai Tahu have indicated they are willing to allow access as long as the leaseholder managing the plantation is also willing, concerns have been raised that there are now no long-term guarantees of access to the Hanmer Forest. These concerns led in September 2001 to a petition to the House of Representatives signed by 7448 people to request 203 hectares of the Hanmer Forest be restored to public ownership, and to try to 'secure in perpetuity the right of public access to recreational areas of Hanmer Forest'.

While this case is a specific example which relates to issues arising from the proximity of the plantation to a tourist town, it provides an example of the issues arising from the types of rights and provisions included in CFLs, and the loss of the mandate to provide for multiple objectives including recreation that existed under the NZFS.

ENVIRONMENTAL OUTCOMES

The separation of commercial and conservation roles when corporatisation of plantations occurred achieved a significant goal of many ENGOs. At the time, the primary concerns relating to the forest industry concerned logging and conversion of indigenous forest, and the splitting of roles benefited both ENGOs and the plantation industry – the plantation industry could now move on and operate without being tied up in conflict over logging and conversion of indigenous forest. In 2000, the Crown announced that it would stop logging in the West Coast forests, which had been managed (along with 39,000 hectares of plantations) by the SOE Timberlands West Coast Ltd⁶.

Many in the ENGOs felt that plantations did not represent the same environmental problem, as they were believed to be managed relatively well, and were regulated through the Town and Country Planning Act 1977 (which was replaced by the RMA in 1991). There have, however, been environmental concerns over various aspects of plantation management (see Rosoman 1994). Ongoing concerns related particularly to the clearance of regenerating indigenous scrub for plantation establishment were addressed by the signing of the New Zealand Forest Accord in 1991, and a wider range of social and environmental principles were agreed to in the Principles for Commercial Plantation Forest Management in New Zealand in 1995. These two agreements, however, were only signed by the large plantation owners – and do not apply to the many small owners who have established plantations through the 1990s, or to large owners who have since entered the NZ market. Maori are not signatories to either agreement, despite being managers of large areas of indigenous

⁶ While cutting rights in the indigenous forests managed by Timberlands West Coast were initially put up for sale along with the plantation trees, no suitable bids were received and political pressure was strongly against privatisation. As a result, Timberlands West Coast continued operating as an SOE. In 2002 logging of indigenous forest in the SOE stopped as the Crown ceased all logging in State-owned indigenous forests in response to ENGO campaigns against logging.

forests and plantations. As a result, there is continued concern over issues such as regenerating shrub clearance.

Many believe corporatisation and privatisation had a positive effect on environmental outcomes in plantation management because they allowed the opening of dialogue and agreement between plantation owners and ENGOs. Under the NZFS, such dialogue was difficult as the issue of native forest logging and conversion had to be addressed at the same time. However, some issues do remain. There is still concern about the low level of diversity of species in plantations, and some environmentalists believe the privatisation process could have been used specifically to achieve conservation outcomes – for example, by enabling ‘swaps’ in which indigenous forest owned by Maori would be conserved and in return Maori would receive an area of commercial plantation to enable them to receive an income while conserving their indigenous forest.

THE ROLE OF CERTIFICATION

Some who believed that corporatisation and privatisation had reduced the level of social and environmental benefits produced by plantation in NZ believed that the increasing use of certification is effectively bringing social and environmental considerations back into prominence in plantation management. Whereas under the NZFS, there was a Government mandate to manage for multiple outcomes, under certification there is a market-driven motivation.

With regard to contractors, the Forest Industry Contractors Association (FICA) is, in consultation with the New Zealand Forest Owners Association, currently developing a certification scheme for contractors. This scheme will require contractors to undergo ongoing training and development, to be good employers, and to meet various standards relating to social, environmental and economic aspects of their business. Being able to identify certified contractors will also assist plantation owners who are hiring contractors to undertake management activities in their plantations.

OTHER OUTCOMES AND ISSUES

There are a range of other outcomes and issues related to corporatisation and privatisation, including training and research issues, concern over foreign ownership, and the question of whether privatisation reduced public debt.

Before privatisation, it was common for foresters to work first for the NZFS, and then to shift to the private sector. The NZFS effectively provided a training ground for the private sector, and privatisation removed this ‘hidden subsidy’, according to foresters quoted in Birchfield and Grant (1993).

There have been significant changes in research on plantations as a result of corporatisation and privatisation. In particular, there has been a shift to more processing and market-related research, and some believe there is more research focussed on short-term gains, potentially at the expense of longer-term research with less direct commercial outcomes. It is difficult to evaluate the extent to which these changes have occurred.

There has been significant concern over the level of foreign ownership of plantations. The primary criticism is the view that foreign ownership results in profits leaving New Zealand, and also results in problems as the NZ economy is exposed to global market cycles and businesses profits change dependent on the exchange rate. Opponents of this view point out that there has been increased investment in the domestic economy by many of these foreign companies since they purchased plantations from the State (see for example Horton 1995, Swale 2001).

As discussed above, reduction of public debt was an often stated goal of privatisation, although it is questionable how significant this goal actually was to Government. Hall (1997) believes that privatisation of NZFC did not assist in reducing public debt. Public debt reduction has occurred as a result of the overall privatisation program in NZ according to Kelsey (2002).

1.6 Lessons from New Zealand's experience

New Zealand's experience provides a number of useful lessons and principles to assist the design of privatisation in other countries.

Ensure an appropriate market environment. It is important to ensure that an appropriate market environment is in place to ensure successful operation of privatised businesses. The success of corporatisation and privatisation in NZ was clearly influenced by the wide ranging market restructuring that opened up international trade, removed barriers to trade, and deregulated ports, transport, labour and finance markets. It is also important to ensure the regulatory environment is appropriate and effective in regulating management of the newly privatised plantations, while providing an environment where commercial operations are not unduly constrained.

Use covenants to protect interests of other users. When designing sales, it is important to ensure appropriate covenants are in place to protect various interests – for example, roading access, environmental, cultural and heritage values, recreational access, and other access. At the same time, it is important to recognise that the placing of some covenants on sales is likely to reduce the value received from those assets at sale, and so covenants must be clearly identified and specified in a way that does not restrict commercial operations more than necessary. Covenants that assist commercial operations, such as providing access easements for use by tree owners may increase the value of the sale. Where plantations may be of higher value for their non-commercial benefits, consideration should be given to retaining those plantations in Crown ownership.

Establish a market value for the assets. Being able to prove the commercial value of plantations while in Crown ownership may help increase sale value, and sales should be designed with this in mind. For example, it may be useful to hold off selling younger plantations until they have started to be harvested, when the price buyers are willing to pay is likely to be much higher. Shifting to corporatisation and proving the ability to make a commercial return may in NZ's case have increased the eventual sales price of the trees.

Ensure the plantation business is commercial and competitive. When corporatising or privatising (if selling the business as a concern, rather than selling only the assets), ensuring the structure of the plantation business is commercial and competitive is key. When the NZFS was corporatised, the NZFC operated with a completely different structure which enabled a rapid transformation into a commercial business; had the old NZFS structure been transferred to the NZFC it is questionable if such rapid change would have occurred.

Corporatisation may be a sufficient step. Consideration should be given to whether corporatisation would achieve the desired changes, and if full privatisation is necessary. In particular, if a goal of privatisation is encouraging domestic investment consideration should be given to whether selling trees – and hence having private firms tie up capital in trees – is the best way to achieve this.

Identify negative impacts of change. It is important to identify the potential and probable negative impacts of privatisation on the community, and where possible to develop programs to ease the transition to privatisation – for example by implementing retraining programs to assist people to develop their own businesses as occurred when the NZFS was corporatised.

The role of certification. The use of certification may help ensure the newly privatised plantations still have incentives to meet a wide range of social and environmental imperatives, as well as commercial ones.

Separation of land and trees. The separation of ownership of trees and land allows for rights held over the land by indigenous groups to be preserved. However, it also requires careful identification of associated issues such as the rights of land owners to impose particular conditions on the owners of the trees. Clarifying the issues of ownership and rights of access over roads is particularly important, and can be as important as clarifying ownership of trees and land.

Clear procedures for charging rent. Where ownership of land and trees is separated and the trees privatised, the processes for charging rent for use of the land must be clearly set out and designed to reduce the potential for costly litigation and arbitration over rent review processes.

Ensure the capacity of new owners. Where the land underlying plantations is transferred to indigenous owners, the processes used must provide the indigenous owners the ability and resources to be able to take on and manage the land – for example through assisting in accessing finance for land management, or provision of resources to assist in other areas.

Facilitate interaction between land owner and tree owner. When separating ownership of land and trees, consulting with potential future land owners and future tree owners to discuss suitable arrangements and conditions assists in designing appropriate mechanisms (eg CFLs) for allowing the owners of land and trees to interact without compromising the interests of either party.

Develop clear guidelines on the ways in which government will remain involved in the sector – for example, through grants which provide for the extra expense involved in afforesting degraded land over and above normal costs of establishment of a commercial plantation; through provision of infrastructure etc.

1.7 Conclusions and way forward

New Zealand's corporatisation and privatisation experience provides many lessons for other countries considering privatising their plantations. The importance of matching the instruments used to the needs and rights of different groups is clear from New Zealand's experience of separating ownership of trees and land, as is the need for ensuring transparent, appropriate rights and conditions of access and use are developed and are applied to the owners of both trees and land. Similarly, the importance of reforms to other sectors of the economy to the successful commercial operation of privatised plantations is clear from the New Zealand case.

The New Zealand plantation industry is undergoing many changes, some associated with privatisation of plantations. In particular, there is considerable change occurring in ownership of land as Maori claims are settled, and there is an increase in the proportion of plantations directly managed by Maori owners as Crown leases are terminated over plantations on Maori land. These changes, along with increasing areas of new plantation established by a wide range of small plantation owners, and the ongoing changing ownership of large private plantation, herald continuing change in the management of New Zealand plantations. The increasing use of certification, and the development of processing and export markets to utilise the increasing volume of timber maturing in domestic plantations will also change the industry significantly in coming years.

Evaluation of the true impacts of privatisation is difficult, as corporatisation and privatisation occurred in the context of a wide range of economic reforms in New Zealand. As a result, many questions and possibilities remain, including the question of whether privatisation has been primarily responsible for the economic successes of parts of the plantation industry since privatisation, or whether associated deregulation and other reforms were more influential. These issues need closer exploration to develop a better idea of the key reforms that influence the success or otherwise of privatisation.

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