

Devolving Forest Ownership through Privatisation

processes, issues and outcomes

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NZ INSTITUTE OF ECONOMIC RESEARCH (INC.)

8 Halswell St. Thorndon

P O BOX 3479 WELLINGTON NEW ZEALAND

Tel: +64 4 472 1880

Fax: +64 4 472 1211

Website: www.nzier.org.nz

Preface

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- by the interaction of team members on individual projects;
- by exposure of the team's work to the critical review of a broader range of Institute staff members at internal seminars;
- by providing for peer review at various stages through a project by a senior staff member otherwise disinterested in the project;
- and sometimes by external peer reviewers at the request of a client, although this usually entails additional cost.

Authorship

This paper is based on a speech Mary Clarke first gave to the "Decentralisation and Devolution of Forest Management in Asia and Pacific" conference, which was jointly hosted by the United Nations Food and Agricultural Organisation (FAO) and the Philippines Department of Natural Resources, and held over 30 November to 4 December 1998. A revised version of it appeared in FAO's quarterly forestry periodical *Unalsylva*. This is the latest version. It was presented at the FAO Advisory Committee on Paper and Wood Products' forty-first session held in Rotorua in May 2000.

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1. INTRODUCTION

Nineteen-eighty-seven to 1996 marked a decade of change for New Zealand's plantation forestry sector. The first apparent change occurred in 1987 when the New Zealand Forest Service was dismantled and the government's commercial forestry operations were taken over by a State-run enterprise, the New Zealand Forestry Corporation. However, the seeds of change were sown long before this. Indeed, the changes that took place could be regarded as a natural and logical evolution of forest management in New Zealand: as the industry grew from an "infant" in need of nurturing to a mature and competitive force, the need for State involvement diminished. The most recent stage of this evolution has been the privatisation of New Zealand's forests. Between 1990 and 1992 the government sold to the private sector over 350 000 hectares of planted forests, sawmills, nurseries and other forest assets. An additional 188 000 hectares of government-owned forests and the Waipa sawmill were sold in 1996.

This article traces the process of privatisation, discusses the policy intentions and results and examines the issues and outcomes.

2. FROM GOVERNMENT AGENCY TO CORPORATION

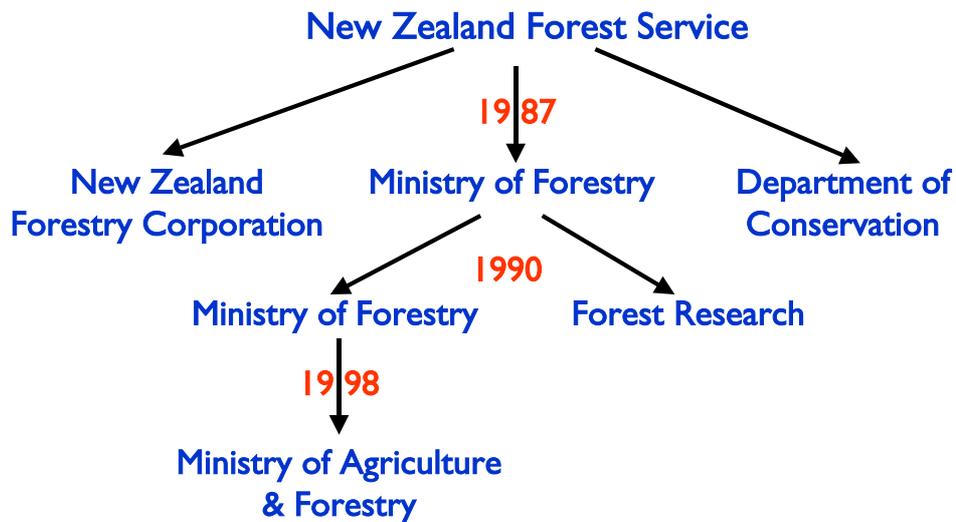
From 1919 to April 1987 the government's forestry operations were run by a single agency, the New Zealand Forest Service. The department's governing legislation of 1949 established that its primary objective was to produce and market forest products profitably. This objective was amended in 1976 to take other factors into consideration, including policies and directives to undertake afforestation in regions requiring economic development, employment provision, utilisation of low productivity lands, meeting of planting targets and environmental objectives.

By the mid-1980s a number converging factors suggested that it was time for the government to rethink how it managed its forest assets.

- A surge in the supply of wood from the forests was forecast for the 1990s, and a more commercial operating environment was regarded as necessary to maximise returns; this would require downstream investments.
- The environmental movement was seeking to ensure that the government broadened its focus to consider not only wood supply, but also other aspects of sustainable management, including environmental issues.
- The government's economic policy was to deregulate industries and thereby to expose business enterprises to the pressures of a competitive environment for efficiency.
- As a subset of the above, government policy was to clarify organisational objectives and thereby enable transparency and accountability.

In 1985 the decision was made to corporatise the commercial functions of the New Zealand Forest Service, i.e. to transfer these functions to a State-run enterprise. Thus in April 1987 the New Zealand Forestry Corporation was established as a limited liability company empowered to manage the government's commercial forestry operations (550 000 hectares of forest plus sawmills, nurseries and other assets). The non-commercial functions of the Forest Service were transferred to two new government departments: the Department of Conservation, which would manage the State's natural forest estate; and the Ministry of Forestry, which would have policy, forest health and protection and forestry research functions. In 1990 the Ministry of Forestry's research function became the domain of a stand alone Crown research institute, Forest Research. And in 1997 the remaining roles of the Ministry were transferred to the new Ministry of Agriculture and Forestry. Figure 1 illustrates the restructuring of the government's forestry functions.

Figure 1 Restructuring the government's forestry functions



The principle objective of the New Zealand Forestry Corporation, as with all State-owned enterprises, was to operate as a successful business. A clear commercial focus was regarded as a prerequisite to enable the corporation to compete effectively with the private sector.

Indeed, the New Zealand Forestry Corporation proved very successful in turning a loss-making government agency into a highly profitable corporate enterprise (refer Figure 3). No longer constrained by social and environmental objectives (which were now the domains of the newly established government departments) it focused on its profit objective.

3. THE IMPETUS TO PRIVATISE

Commercial success was not sufficient, however, to entrench the new institutional approach to managing the government's commercial interests in forestry. A number of considerations meant that change was just over the horizon:

- The policy of the day was for government to sell its businesses, unless there were good economic or social reasons to retain ownership.
- There was a school of thought that a state-owned enterprise was a half-way house between government department and a full commercial entity, that only served to convey the worst of the two worlds.
- A growing appreciation among government and industry was that in order to derive maximum value from the forecast growth in wood supply from the forests, processors of that wood needed greater security of supply.
- The government and the New Zealand Forestry Corporation could not agree on the value of the forest assets.

3.1 Economic context: free market philosophy, deregulation and government privatisation policy

Since 1984 New Zealand's programme of economic reform has been underpinned by a free market philosophy. Protectionism and regulation had dampened any need or incentive to be competitive. Exposing industries to the realities of the international marketplace forced New Zealand's business enterprises either to continuously seek to create anew and build on their existing competitive advantages, or to face ultimate demise. The programme of deregulation in forestry included the removal of price controls that had existed for some products, the adoption of a market pricing strategy for export logs from State forests, a scaling-down of tariffs and other constraints on the import of forest products, the establishment of a stand-alone, commercially oriented forest research institute, the commercialisation of the State's planted forestry operations and, subsequently, the sale of the forest assets managed by these corporate bodies.

Within this wider programme of economic reform, in December 1987 the government announced a privatisation strategy aimed at substantially reducing the level of public debt. The policy was to sell State-owned corporations to maximise revenue, unless there were good economic or social reasons to retain ownership. The 1988 budget established criteria for determining which government businesses would be sold (Clarke, 1996):

- the government would have to receive more for the sale of the business than it expected to receive if it retained ownership;
- the sale of any particular business would have to contribute to, and not impede, the social and economic objectives of government.

The 1988 budget included the commercial forest assets – 550 000 hectares of planted forests – among the government businesses to be sold. The sale's objective was revenue maximisation.

3.2 Ambiguous status of the New Zealand Forestry Corporation

Despite its commercial success, many regarded the New Zealand Forestry Corporation as a hybrid between a government department and a full commercial entity. Some believed that its structure, caught between two worlds, would only convey the worst of both (Clarke, 1996).

Indeed, provisions in the State-Owned Enterprises Act allowed for political interference: the act granted shareholding ministers powers of intervention and access to all the information relating to the affairs of the corporation. While ministers deliberately restrained from interfering on the political level, this did little to sway perceptions that, because the New Zealand Forestry Corporation was State-owned, the government could intervene in the name of other than commercial objectives.

3.3 Need for greater security of supply to facilitate value-added processing

The New Zealand Forestry Corporation was constrained in its ability to process the wood derived from its forests. It was argued that its contractual supply arrangements with processors did not provide sufficient resource security to enable processors to expand their operations or establish new facilities. Another impediment was the New Zealand Forestry Corporation's limited ability to raise capital and the requirement that any intended investment first received the approval of shareholding ministers. It was hoped that the privatisation of the government's planted forests would overcome these impediments.

3.4 Disagreement over the value of the State's forest assets

When the government's commercial forestry operations were corporatised the intention was to transfer the forest assets from the government's books to those of the new State-owned enterprise. However, the government and the New Zealand Forestry Corporation came up with widely divergent estimates of the value of the forest assets (Kirkland, 1996). As the disagreement could not be resolved, officials ultimately suggested that a pragmatic way of resolving the dispute would be to sell the assets.

4. PRIVATISATION

4.1 The 1990-1991 sales

Shortly after the sale of forests was announced in 1988, a Forestry Working Group, comprising government officials and private-sector consultants, was appointed to recommend the optimal process for delivering the Crown of its forestry assets, that is, how to maximise sales revenue subject to a number of constraints. The working group advised that only the forests should be sold, and not the land on which they stood. It recommended that the forests be sold as transferable cutting and management rights and that the forest estate be split up into a number of sale parcels (Forestry Working Group, 1988). The New Zealand Forestry Corporation was appointed the government's sales agent in November 1988.

The Crown Forest Assets Act 1989 established the government's right to sell its forest assets and divided the forest estate into 90 units ranging in size from 51 to 132 112 hectares. Each unit was assigned tradable property rights called Crown Forestry Licenses containing individual terms and conditions of sale.

The government intended to accept sealed bids for individual units or groups of units. The combination of bids giving the best return would decide the forest allocation. The sales process was designed to allow bidders the flexibility to tailor their own packages, to attract a large number of bidders and thereby to facilitate a competitive bidding process.

Tenders for 66 of the 90 units were called for in April 1990. The remaining units were removed from the public tendering process because of uncertainties involving contractual supplies to New Zealand's two major forestry companies - Tasman Pulp and Paper and Carter Holt Harvey.

By the time bids closed in July 1990, 82 parties had registered. About half of these were foreign based. However, only two bids met the mark:

- 47 030 hectares of forest were sold to New Zealand's Tasman Forestry Limited;
- 24 000 hectares and a sawmill were sold to the Singaporean-Malaysian interest Ernslaw One Limited for the combined sum of NZ\$364 million.¹

A substantial round of bids and negotiations followed between potential buyers and the New Zealand Forestry Corporation, the Treasury and outside experts. As a result a further 175 676 hectares of State forests were sold, including some of the units previously removed from tender, whose sale ended the legal disputes.

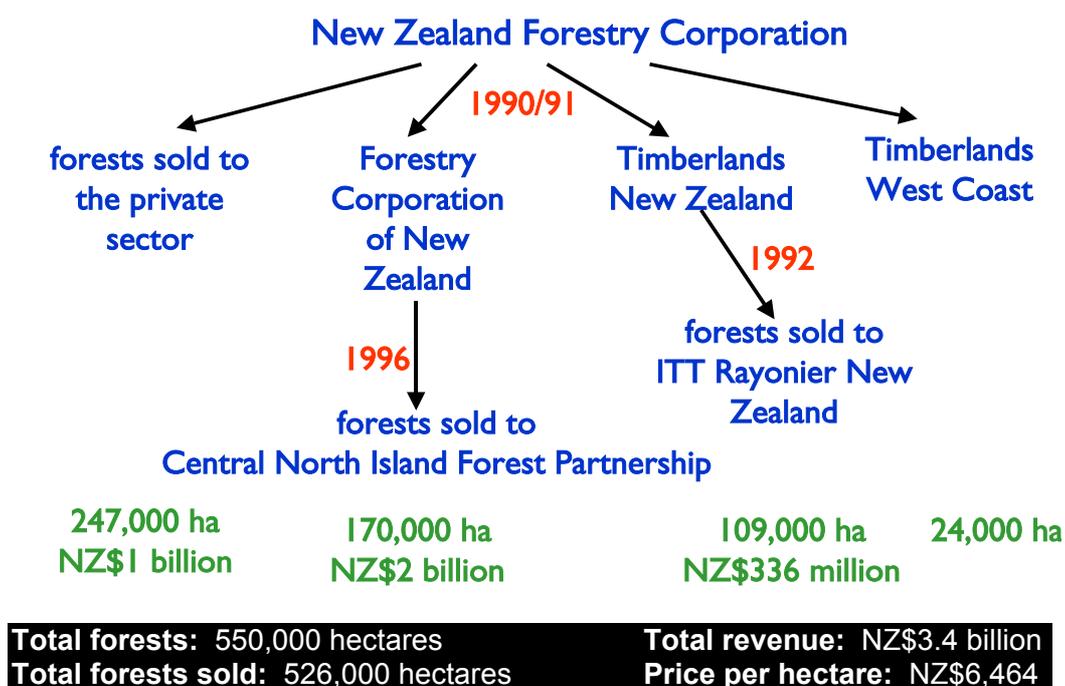
The 1990 sales process grossed over NZ\$1 000 million.

¹ NZ\$ 2.07 = USD 1.00 (May 2000)

4.2 Government's residual role

Three new State-owned enterprises were established to take control of the 55 percent of forest assets that remained unsold. These enterprises commenced operations in December 1990. The New Zealand Forestry Corporation ceased to exist in its original form on 30 November 1990, but remained as a shell company to receive dividends from the new state-owned enterprises. Timberlands Bay of Plenty (which was later renamed the Forestry Corporation of New Zealand) was formed to take control of the 170,000 hectares of forests in the central North Island and the country's largest sawmill, Waipa. Subject to the resolution of contractual difficulties with respect to the supply from these forests, this state-owned enterprise remained on the government's sales agenda. State-owned production forests on the West Coast were withdrawn from the sales agenda. Bids received did not reflect the true value of the forest resource. Timberlands West Coast was formed to take over the management of these forests, which included 21,000 hectares of natural forests. The remaining unsold forests became the responsibility of Timberlands New Zealand Limited. The next chapter in the privatisation of New Zealand's state forest assets picks up from here.

Figure 2 Where the forests went



4.3 Sale of New Zealand Timberlands

The government's intention to sell New Zealand Timberlands Limited as a going concern was announced in 1991. The planted forests managed by the state-owned enterprise totaled 109,000 hectares – the sum of 36 forests scattered throughout the North and South Islands of New Zealand in almost equal number.

In announcing its decision, the government indicated that it would maintain a flexible sales approach bids for individual forests, regions of forests, and the entire planted forest estate managed by the state-owned enterprise would all be considered.

Two key changes in sales conditions were the inclusion of a replanting covenant, and five years sales contracts to New Zealand Timberlands Limited existing clientele. The replanting condition applies unless the licensee wishes to use the land for an alternative sustainable purpose and gains Crown approval for such.

Indicative bids for the forests were received in the middle of February 1992, and parties approved to enter due diligence were identified within the following week. The tender was competitive with a healthy number of bids being received early in April 1992.

On the last day of April it was announced that New Zealand Timberlands Limited had been sold to ITT Rayonier New Zealand (now known as Rayonier New Zealand) for \$366 million.

Some forests were excluded from the sale because of environmental concerns or grievances of New Zealand's indigenous people – Maori.

4.4 Sale of the Forestry Corporation of New Zealand

In 1996 the Minister of Finance announced the government's intention to sell its shares in the Forestry Corporation of New Zealand. The Corporation's assets were Crown Forestry Licenses to what had expanded over the years to 188,000 hectares of planted forests in the central North Island, processing plants at Waipa, Kaingaroa and Mount Maunganui, a nursery and a seed orchard.

The resolution of the contractual supply dispute between the Forestry Corporation and Tasman Pulp and Paper towards the end of 1995 had enabled the government to consider its options in respect of the Corporation, including sale.

Following the announcement of the sale, potential bidders were faced with what ultimately became a three step process.

The first step required them to pass a threshold of confidence that they planned to add value to the woodflows from the Corporation's forests. The means of holding the successful bidder to its claimed intentions was by making such known to the general public. Stricter controls risked limiting the successful bidders flexibility to respond to market changes, and were determined to be difficult to police.

Once past the threshold, step two was the tendering of closed bids. The sole criteria was price. A handful of large forestry companies and consortia submitted bids.

However, as the strength of the bids was not as great as hoped, a third step was introduced into the sales process: bidders were asked to re-submit their bids.

In August 1996 it was announced that the Forestry Corporation had been sold to the Fletcher Challenge led consortium in a deal that valued the assets at \$2.026 billion. The other partners to the consortium were China International Trust and Investment Corporation (Citifor), and Brierley Investment.

5. ISSUES AND OUTCOMES

The privatisation of New Zealand's State forest assets gave rise to a number of issues. The following are a handful of the more topical issues:

- What would be the best way to preserve the rights of New Zealand's indigenous people, the Maori, to reclaim land proved to be rightfully theirs?
- What would be the implications of the institutional changes for the competitiveness and profitability of forestry?
- How would jobs be affected?
- Would the new owners replant and expand plantations?
- Would privatisation enable greater on-shore processing or further encourage log exports?

5.1 Preserving the rights of the Maori

The Treaty signed in Waitangi by the Crown and the Maori in 1840 guarantees the Maori ownership and governance of their land and other possessions. However, throughout New Zealand's history successive governments had taken land from the Maori for a variety of purposes and by a variety of means, some more questionable than others. There are now legal and institutional mechanisms for hearing Maori grievances and working towards their resolution.

The Maori have made claims against most forests on the North Island and all forests on the South Island. The 90-odd forests owned by the state before 1990 have been subjected more than 125 claims – an average of 1.5 claims each (Crown Forestry Rental Trust, 1997). One forest has as many as five claims from different tribal groupings. Appendix A details which claims are against which forests.

The Forestry Working Group of 1988, which informed the government's privatisation process, was also directed to analyse how to preserve the rights of the Maori without compromising the government's objective of revenue maximisation. Following consultations with representative Maori groups, the Working Group recommended (Forestry Working Group, 1988) that the government:

- sell the trees and not the land;
- charge a land rent and hold proceeds in trust for whomever the Waitangi Tribunal might rule to be the ultimate owner of the land;
- provide for the gradual return of land to successful Maori claimants as the existing tree crop is harvested;
- compensate the Maori for the lost opportunity to utilise their land, as they see fit.

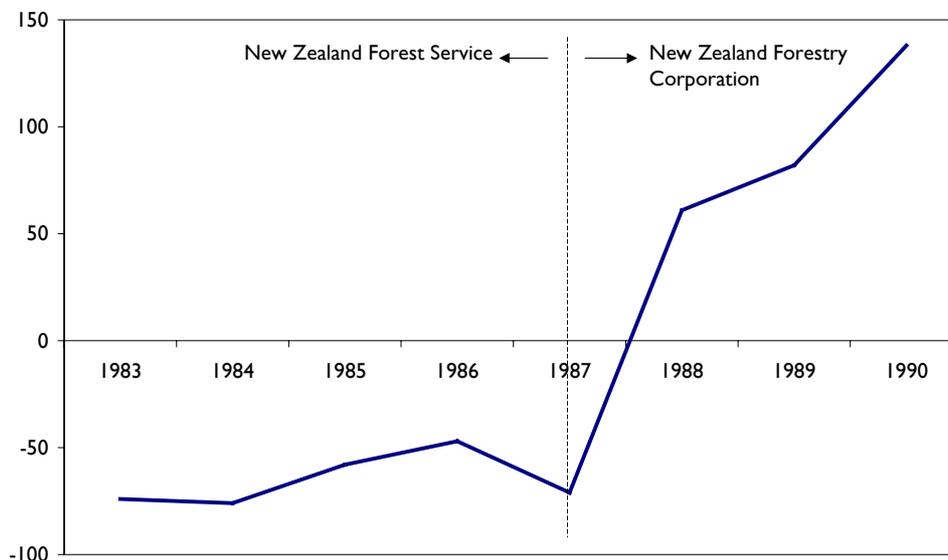
These recommendations were given legislative effect in the 1989 Crown Forest Assets Act. To date, only one claim has been fully resolved, largely using strategies not contemplated in the legislation. Resolution strategies are being developed in respect of another two successful claims. There are concerns about the capacity of the Waitangi Tribunal to hear and rule on claims, and controversy about whether alternative resolution processes should be followed.

5.2 Competitiveness and profitability

The New Zealand Forestry Corporation successfully turned the losses of its predecessor into profits, which were built upon from one year to the next.

Figure 3 Turning losses into profits

New Zealand dollars million

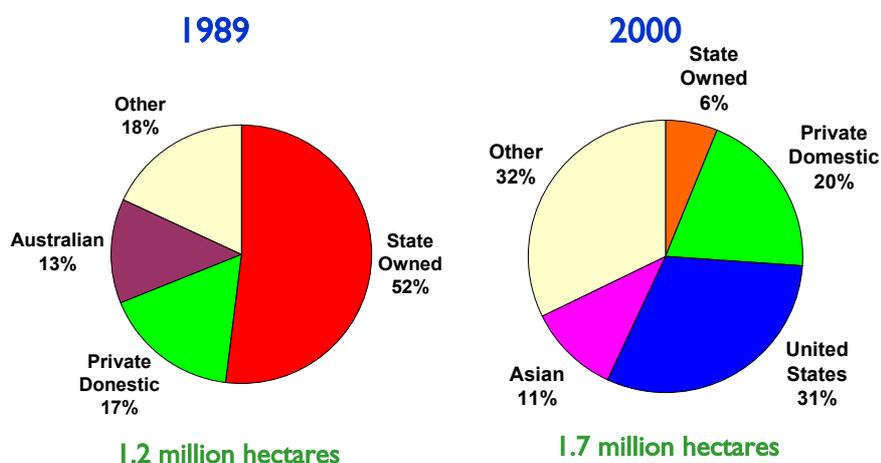


Source: Kirkland, 1996

Despite this success, many felt that the profits could be greater still if the forest assets were owned by the private sector.

Prior to the forest sales, the New Zealand forestry industry was dominated by the government (which either owned or leased 52 percent of the forest estate) and a handful of large domestic corporations. An Australian company held the only significant foreign investment in the industry.

Figure 4 Forest ownership



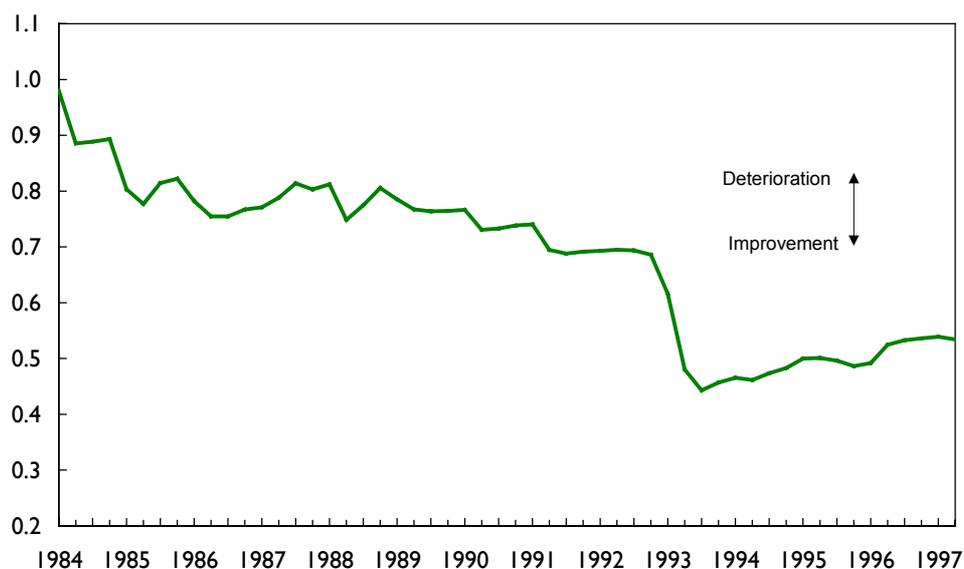
Source: Ministry of Agriculture and Forestry.

As a result of the sales and subsequent private-sector transactions, the government now owns only six percent of the planted forest area. New foreign players have entered the industry. The first round of forest sales in 1990-1991 saw the entry of Asian investors, who today account for just over 12 percent of the forest estate. After the second round of sales, together with International Paper's acquisition of a controlling interest in Carter Holt Harvey, and the sale of Nelson forests to Weyerhaeuser, has meant that United States investors now account for one-third of the New Zealand forest estate.

Have these changes enhanced the competitiveness and profitability of forestry, as many of the proponents of change claimed it would? It is not easy to answer this question. However, Figure 5 may serve as an indicator. The rate of mark-up on input prices in forestry relative to the non-tradable sector is an internal rate of exchange that measures the relative ability of forestry to attract resources from other sectors of the New Zealand economy. Graphically, an upward movement represents a deterioration in competitiveness as the mark-up on input prices in forestry has narrowed relative to those in the non-tradable goods sector, enticing resources to move out of the former sector and into the latter. Conversely, a downward movement represents an improvement, as forestry has become more profitable relative to the non-tradable goods sector.

Figure 5 Competitiveness of forestry

Mark-up relative to the non-tradeables sector



Source: Malcolm, 1996 (updated).

The figure indicates that forestry has clearly improved its competitive position since the late 1980s, concurrent with the period of corporatisation and privatisation. However, to attribute this entirely to the two processes would be misleading. A key factor underlying the movement in the graph is the log price spike in 1993. Nonetheless, economic theory, which states that contestability increases as the number of players in the industry increases, suggests that part of this movement can reasonably be ascribed to devolution.

5.3 Employment

In 1987, when the New Zealand Forestry Corporation opened its doors, it was a much leaner organisation than its predecessor. To improve labour efficiency, its deliberate strategy was to

place heavy emphasis on contractors and cut back heavily on head office staff. Table 1 details the changes.

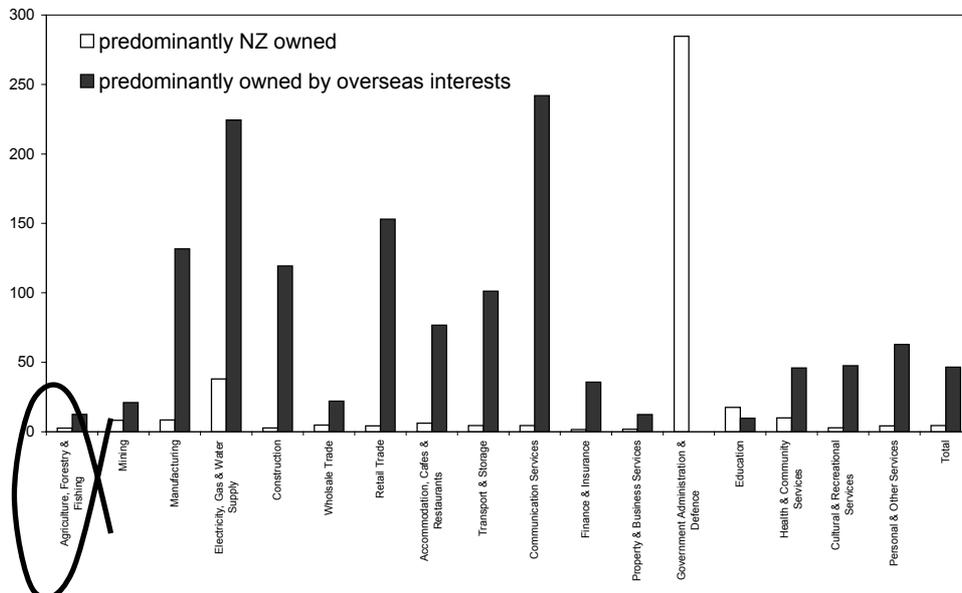
Table 1 Labour changes

	New Zealand Forest Service (1986)	New Zealand Forestry Corporation (1987)
Salaried staff	1,990	662
Wage workers	3,780	689
Contractors	1,300	1 419
Total	7,070	2,770

Whether jobs have been gained or lost as a result of privatisation is a debate that has generated more heat than light, which is compounded by a scarcity of empirical studies. Some jobs were simply transferred following acquisition; some new owners reduced staff numbers in pursuit of labour efficiency gains; others have created new jobs as they diversified forestry and wood processing activities. Whatever the net outcome, its importance should not be exaggerated: forestry is not the fountain of jobs that many within New Zealand perceive it to be. . The average number of persons employed in overseas owned agriculture, forestry and fishing enterprises New Zealand is 12. While this is certainly greater than an average of three for domestic enterprises in the same industries, it is a long way off the average for overseas owned enterprises in the communication services industry, for example, which is considerably over 200.

Figure 6 Average number of employees per enterprise

Average number of full time equivalent persons per economically significant enterprise



Source: Statistics New Zealand 1999.

5.4 To plant or not to plant?

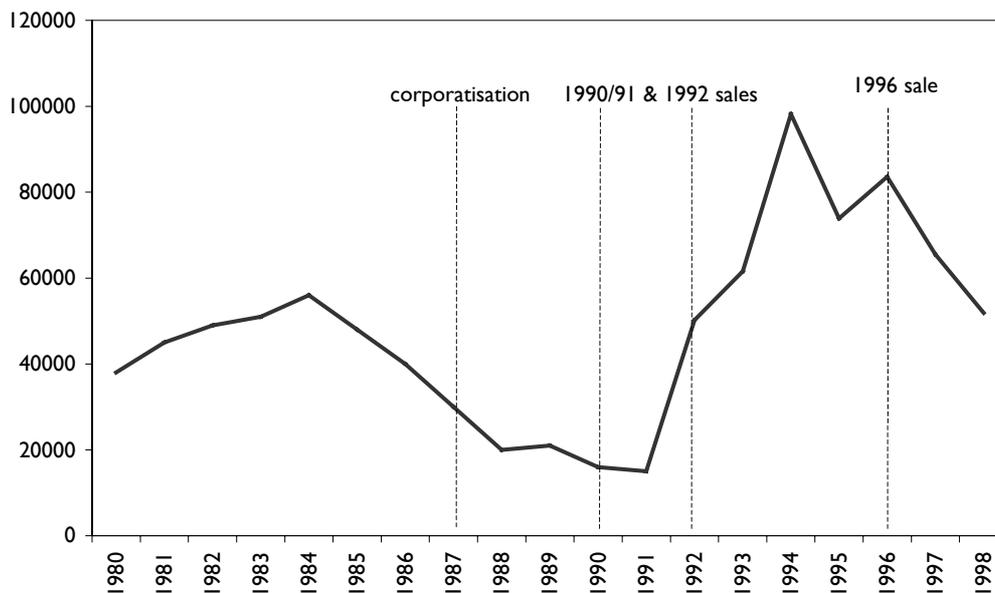
When the government first announced its intentions to privatise its forest assets, there was a considerable debate regarding whether a condition of ownership should be the reforestation of

logged areas. The first round of sales in 1990-1991 excluded any replanting requirements (unless conservation or other objectives deemed it necessary). The prevailing school of thought was that the new owners should be free to put the land to its most profitable use (Forestry Working Group, 1988). Given that the land was already in forests and since, at the time, forestry was a profitable activity, reforestation and afforestation were expected to be attractive options. Furthermore, the government was concerned not to include any sale condition that could result in a discounted price for its assets.

By the time of the 1992 and 1996 sales, the political sentiment had swayed. A condition of these later sales was that the land be replanted unless the forest owner intended to convert the land to some other government-approved sustainable use. This provision was not introduced because planting levels had declined, as they had not (refer Figure 7). Rather it was to provide assurances to the advocates of reforestation. Such assurances were arguably unnecessary, as several factors – tax changes, forest product price increases, publicity – were encouraging replanting in the 1990s and bringing afforestation levels to historical highs. The slow down in recent years reflects the hard time brought about by the Asian crisis.

Figure 7 New planting

Hectares



Source: Ministry of Agriculture and Forestry 2000.

5.5 Processing

As discussed above, one of the goals of privatisation was to enable growth in processing industries. Some observers, however, were not convinced that it would have this outcome. Independent processors were concerned that existing supply arrangements, however imperfect, would be threatened. Others argued that the new owners would export logs to provide an immediate cash flow to cover their purchase costs and that they would have little intention of processing the wood within New Zealand.

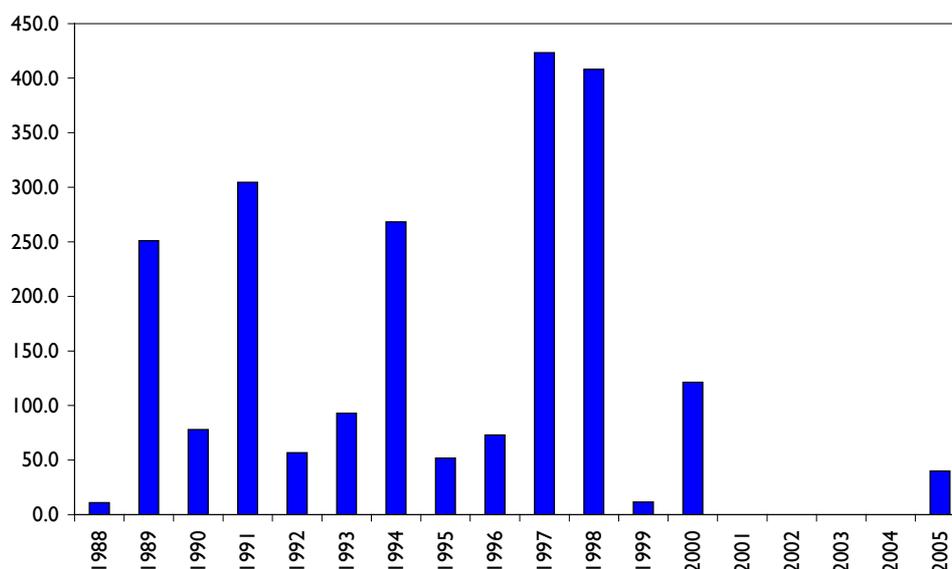
The government paid increasing attention to these concerns with successive sales:

- The 1990-1991 sales did not have as conditions any supply constraints or processing requirements. As with replanting, it was argued that the purchasers should be free to put the resource to the uses they judged to be most profitable.
- When New Zealand Timberlands was sold in 1992, the purchaser was required to honour five-year supply arrangements with existing clients.
- When the Forestry Corporation of New Zealand was sold in 1996, the sales process required potential bidders first to demonstrate their intention to add value to the resource within New Zealand. Public pressure was judged sufficient to hold the new owner to its claimed intentions: bidders were warned that any breach would be made known to the general public.

What has been the reality? All new forest owners have invested, or intend to invest, in value-added processing. Rayonier New Zealand, for example, has established an MDF plant. This is significant, as when the company first bought forests it had no intention to engage in processing; it was open about its plans to export logs. Of the NZ\$1,600 million of intended investments in the period 1990 to 2005, 90 percent is attributable to the purchasers of state forest assets (Ministry of Agriculture and Forestry 1998).

Figure 8 Announced wood processing investment intentions

New Zealand dollars millions



Source: Ministry of Agriculture and Forestry 1998.

While processing increased in the late 1980s, a large and increasing volume of logs continues to be exported. As New Zealand's wood supply grows, it is very likely that log exports will continue to increase. The investment necessary to process the wood within New Zealand has

been estimated at NZ\$4,000 million to NZ\$6,000 million (Ministry of Forestry, 1995). Investment intentions are nowhere near these levels. The debate continues as to why this is so: is this the optimal market outcome, or are there market failures (such as investment information gaps) standing in the way of more domestic processing?

6. CONCLUSION

Privatisation was a natural and logical change in the way New Zealand managed its planted forestry resources, consistent with the maturing of the industry. Changes in political sentiment and the commercial operating environment have shaped the outcomes:

- The right of New Zealand's indigenous people to claim land that is rightfully theirs is preserved in legislation. However, the process of advancing these rights has been slow to develop.
- The profitability and competitiveness of forestry has been positively influenced. Devolution can claim part, but certainly not all, of the credit for this.
- Whether devolution has led to a net gain or loss in employment levels remains unclear. However, given the very low labour intensity of forestry in New Zealand, this is more of a perceived than real issue.
- Market fundamentals rather than policy prescriptions have seen investment in afforestation surge to new historical highs.
- On-shore processing has been facilitated. However, the level of investment is a long way from the supply-determined potential. Whether it accords with the market potential is debatable.

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APPENDIX A: CLAIMS ON FORESTS

NORTH ISLAND

District	Forest	Claims	Count
Northland	Aupouri	Wai 45	1
	Otangaroa	Wai 58	1
	Waitangi		0
	Glenbervie		0
	Pouto	Wai 271	1
Auckland	Mangawhai	Wai 229	1
	Woodhill	Wai 312	1
	Riverhead	Wai 312	1
	Onewhero	Wai 30	1
	Maramarua	Wai 30* Wai 100 Wai 494	3
	Whangapoua	Wai 475 Wai 100 Wai 110	3
	Kauaeranga	Wai 100	1
	Waihou	Wai 100	1
	Tairua	Wai 100 Wai 177 Wai 355	3
	Athenree	Wai 215 Wai 370 Wai 227 Wai 100	4
Central North Island	Rotoehu	Wai 46* Wai 550 Wai 275 Wai 62	4
	Horohoro	Wai 155 Wai 212	2
	Whakarewarewa	Wai 233 Wai 317 Wai 288	3
	Crater		0
	Kaingaora	Wai 66 Wai 40 Wai 212 Wai 269 Wai 524	5
	Waimihia	Wai 269	1
	Marotiri		0
	Pirongia	Wai 48	1
	Tawarau	Wai 48	1
	Mangaokewa	Wai 48	1
	Pureora	Wai 48	1
	Waituhi		0
	Taurewa		0
	East Coast	Ruatoria	Wai 272 Wai 129
Tokomaru		Wai 272 Wai 129	2
Mangatu		Wai 283 Wai 129	2
Wharerata		Wai 274 Wai 129 Wai 301	3
Patunamu		Wai 144	1
Hawkes Bay	Mohaka	Wai 119 Wai 129	2
	Esk	Wai 299 Wai 400	2
	Kaweka	Wai 400	1
	Gwavas		0
Southern North Island	Erua	Wai 48 Wai 151	2
	Karioi	Wai 48 Wai 151	2
	Te Wera	Wai 143	1
	Lismore Hill	Wai 265 Wai 48 Wai 151	3
	Lismore Sand	Wai 265 Wai 48 Wai 151	3
	Santoft	Wai 265	1
	Tangimoana	Wai 182 Wai 113	2
	Waitarere	Wai 113	1
	Manakau		0
	Ngaumu	Wai 175 Wai 201	2
Average number of claims North Island			1.55

SOUTH ISLAND

District	Forest	Claims	Count
Nelson	Golden Bay	Wai 27* Wai 561 Wai 379	2
	Motueka	Wai 27* Wai 102 Wai 561 Wai 379	3
	Golden Downs East	Wai 27* Wai 102 Wai 561 Wai 379	3
	Golden Downs West	Wai 27* Wai 102 Wai 561 Wai 379	3
	Waimea	Wai 27* Wai 102 Wai 561 Wai 379	3
	Rai	Wai 27* Wai 102 Wai 561 Wai 379	3
	Hira	Wai 27* Wai 102 Wai 561 Wai 379	3
	Queen Charlotte	Wai 27* Wai 102 Wai 561 Wai 379	3
	Wairau	Wai 27* Wai 102 Wai 561 Wai 379	3
	Tutaki	Wai 27* Wai 102 Wai 561 Wai 379	3
Westland Exotic	Wai 27* Wai 102	1	
Canterbury	Hanmer	Wai 27*	1
	Island Hills	Wai 27*	1
	Balmoral	Wai 27*	1
	Omihi	Wai 27*	1
	Ashley	Wai 27*	1
	Okuku	Wai 27*	1
	Mt Thomas	Wai 27*	1
	Oxford	Wai 27*	1
	Eyrewell	Wai 27*	1
Otago	Glen Dhu	Wai 27*	1
	Berwick	Wai 27*	1
	Otago Coast	Wai 27*	1
	Tapanui	Wai 27*	1
	Owaka	Wai 27*	1
Southland	West Dome	Wai 27*	1
	Blackmount	Wai 27*	1
	Strathallen	Wai 27*	1
	Castledowns	Wai 27*	1
	Taringatura	Wai 27*	1
	Bare Hill	Wai 27*	1
	Hokonui	Wai 27*	1
	Rowallan	Wai 27*	1
	Longwood	Wai 27*	1
	Slopedown	Wai 27*	1
Average number of claims South Island			1.54

Note: * indicates successful claims.

Source: Crown Forestry Rental Trust, 1997.