

Why we need a national forest policy

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New Zealand has greater need for a national forest policy than at any time since the 1913 Royal Commission on Forestry, 100 years ago this year. At the same time, the probability of developing one is quite low.

Forests, more than most land uses, are long-lived and provide many benefits, not just to the owners of the forests but to the economy, environment and society. It is in the interests of any country to ensure that these benefits are maximised in a way which encourages participation by the private sector. This requires a clearly stated forest policy which is acceptable to affected parties and which provides a framework within which other policies can be developed. Development, promulgation and support for the policy must be led by government with input from experienced and qualified staff at senior levels.

Over the last three decades the way forests are owned, administered and managed in New Zealand has undergone considerable change. Examples are in the table below.

Administration and management of forests and forestry is now more diversified, including within government, with a lot of participants, many of whom may have little regard for the wider benefits that forests provide to society. Development of a forest policy supported by the majority of those with an interest in forests will not be easy.

What is a national forest policy?

Based on the key elements identified in the recent Food and Agriculture Organisation (FAO) policy guide (FAO, 2010a), a national forest policy for New Zealand would be a negotiated agreement among stakeholders and adopted by government. It would establish a common vision and goals for the country's forests, together with an outline of action needed to achieve the goals. It would need to include all forest resources in the country – commercial, non-commercial and conservation forests, natural and plantation forests, native and introduced species, private forests, agroforestry, trees outside forests, urban forests, and the

Previously	Currently
A single government department was the major owner of the country's indigenous forest, about 50 per cent of the plantation forest and two large sawmills, and also had responsibility for forest research, training, biosecurity, policy advice and other matters. The department was staffed by forestry professionals with much operational experience, including the chief executives.	Government has largely exited from forest ownership, except for indigenous forests managed by the Department of Conservation. Senior officials do not have professional forestry qualifications and experience. Responsibility for forests and forestry is spread across several departments (conservation, primary industries, environment and business, innovation and employment) and Ministers.
Forest owners usually owned the land and trees.	Land and trees often in separate ownership. This lessens the interest of the landowner in the trees and vice versa. Rights to the tree crop can be restricted to a single rotation.
Plantation forests in private ownership were owned by a few large vertically integrated forest management and processing New Zealand companies and many enthusiastic farm foresters.	Ownership spread across many companies in New Zealand and overseas and many more small-scale owners. A lot of the latter invested solely on the basis of high log prices in the 1990s, have little practical experience or qualifications in forestry, and do not belong to any of the forestry associations.
Most forests were owned by New Zealanders and many owners had a direct role in their management.	Some overseas investors, particularly those who own trees but not land, are likely to view their forest operations in New Zealand as just part of a larger international investment portfolio. As such, they have little specific commitment to this country or the health of the wider domestic forestry sector. If regulations make operations difficult and less profitable, such investors may quit New Zealand and move elsewhere.

management and use of forests irrespective of tenure or ownership.

Preparation of the policy would require sound information on the status and future trends with regard to forests and the social, political, economic, environmental and technological factors which determine their use. It also needs a broad perspective of land use and natural resource management. The policy would provide strategic guidance, but would not itself be a forest strategy. Forest policy and forest law are complementary, with the policy providing direction and the law establishing rights and responsibilities.

Why have a national forest policy?

What is it about forests that they might need their own policy when other land uses may not? According to the FAO guide: 'Forests and their products and services are key for the well-being of society'. More than any other land use, forests are multi-functional. They provide –

- Wood for energy, construction and furniture
- Cultural and spiritual benefits
- Food
- Environmental services such as water quality, erosion control, biodiversity, climate regulation, carbon sequestration and landscape.

Forests also offer recreation and tourism opportunities and are sources of income for individuals, families and companies.

Unlike most land uses, forests take time to mature and are long-lived, and may even be thousands of years old. Even short rotation commercial forest crops require a longer time to reach maturity than most agricultural and horticultural crops. If the time scales are not understood and accepted by government, it is likely land use policies will place some of the benefits of and investment in forests at risk.

The FAO policy guide also notes a number of developments which affect the way forests are governed including –

- Globalisation
- Decentralisation
- Privatisation
- Changing demand for products and services from a growing and often more urbanised population
- Heightened awareness of the role of forests in regulating climate and providing other environmental services
- Greater recognition of the multi-functionality of forests
- A shift from timber-centred to people-centred forest management
- The contribution of international forest-related

conventions, agreements and initiatives.

A forest policy, when compared with separate single issue policies such as climate change and water quality, is more likely to increase the total benefits produced by forests and reduce the risk of achieving one objective while significantly reducing other important values. A single forest policy is more easily able to cope with the long-term nature of forests and to provide a framework within which other developments can be accommodated.

In 2010 (FAO, 2010b), 143 countries had forest policy statements, 76 of which had been issued or updated since 2000. The FAO guide identified frequently found objectives to include –

- Protecting and enhancing the extent and quality of the resource for the benefit of citizens and future generations, including productive capacity, health and vitality
- Ensuring the extraction of all products from the forest is sustainable and in accordance with laws and regulations or codes of practice
- Maintaining or enhancing the ecosystem services provided by forests
- Managing forests to produce the range and mix of goods and services demanded by society.

What is New Zealand's forest policy?

The 2009 *Forestry Sector Study* (MAF, 2009) set out the vision of the Ministry of Agriculture and Forestry, since renamed Ministry for Primary Industries (MPI), for the next 20 years as:

... an innovative and profitable forestry sector that takes full advantage of increasing demands for timber and wood products and an extended and sustainably managed forest resource providing valuable environmental services.

The study noted that an important role for government is to provide leadership, send clear signals about its vision for forestry, and ensure effective and efficient regulatory and economic frameworks. The *Forestry Sector Study* also set out three reasons (taken from Westoby, 1983) for a forest policy.

- Educational – an effective national policy for any resource depends as much on informed public opinion as on official statutes, decrees and regulations, or actions by specific interest groups.
- Long-term continuity – there is less temptation to depart from a declared policy that is aligned with the national interest for short-term expediency and any departures are likely to be exposed in public debate.
- Management decisions – agencies will find it easier to exercise sound judgement if guided by a clearly understood policy.

Curiously, having apparently made a good case for

a national forest policy, the Ministry concluded:

New Zealand does not have a 'comprehensive' national forest policy. Domestically, there have periodically been calls for a 'comprehensive' forest policy from forestry sector representatives; and internationally, New Zealand is often asked about the absence of such a policy.

The Ministry's explanation was that the government's economic and regulatory regimes provide the framework within which strategic decisions have been made:

A national forest policy might provide a coordinating mechanism for government and private sector initiatives, but there are also questions about whether such a policy would deliver superior outcomes to those achieved under the current approach.

Before the New Zealand 2011 parliamentary election the NZ Institute of Forestry (NZIF) put a number of questions to political parties including: 'Would your party entertain the idea of a forestry development conference or similar to establish a framework for driving a more holistic national policy for the management of our forests?' The responses included (NZIF, 2011):

- *National Party* – 'Would certainly entertain the idea of a forestry development conference, but only if the whole industry was enthusiastically behind the idea, and provided we were assured that concrete and pragmatic solutions would be delivered from such an event'.
- *Labour Party* – 'Absolutely'.
- *Green Party* – 'Would support a forestry development conference or similar. We responded to Minister Carter's call for development of a cross-party national policy on forestry early in 2009. Unfortunately both the Minister and the Labour Party were not prepared to work together to start the process'.
- *Maori Party* – 'Yes, absolutely'.

Although the questionnaire specifically referred to conservation forests, most parties responded as if the questions only related to commercial plantation forests.

I recently asked NZIF members how they would respond to a visitor with expertise in forestry who wanted to access details of current New Zealand forest policy. The responses included the *Forestry Sector Study* (MAF, 2009), the *NZIF Forestry Handbook* (NZIF, 2005), various websites such as the Department of Conservation, MPI, Ministry for the Environment and forestry associations, the *Green Party Forest Policy* available at www.greens.org.nz, the *NZIF Policy on Forestry and Indigenous Forest Policy* available at www.nzif.org.nz, and legislation such as the Forests Act 1949, Conservation Act 1987, Resource Management Act 1991 and Climate Change Response Act 2002. None of these documents approaches the

FAO requirement for a negotiated agreement, adopted by government, establishing a vision and goals for all of the country's forests, together with an outline of the action needed to achieve the goals.

The analysis above contrasts with the situation in Australia. The 1992 *National Forest Policy Statement: A New Focus for Australia's Forests* (available at www.daff.gov.au) covers all forests, followed extensive consultation, and was signed by the Prime Minister of Australia and the Premiers of each of the States. The document commits the respective governments to implement the policy for the benefit of present and future generations of Australians. It sets out a vision of ecologically sustainable management of the country's forests, national goals, a number of specific objectives and policies and discusses implementation. It appears to meet the FAO requirements.

Has lack of a forest policy affected decisions

Has the lack of a New Zealand forest policy affected decisions on forests? It is difficult to be specific about this, but two examples of government policies are described below which I contend are not achieving their objectives or have had unintended consequences. In my opinion the actual results were predictable.

Emissions Trading Scheme (ETS)

In late 2006 the government consulted on policy options for climate change. In a lengthy submission the NZIF analysed the options on the following basis.

- Effectiveness – Are they clearly seen to be making a positive contribution to measures to combat or mitigate climate change?
- Simplicity – Are the objectives easily understood by those who are affected by them?
- Equity between different sectors of the economy
- Relevance – Do the options recognise the characteristics of New Zealand's economy and have they been developed accordingly, such as by adapting international treaties and agreements to suit our conditions rather than trying to force inappropriate rules on domestic policy, recognising that on a country-to-country basis New Zealand will still need to account using the international rules
- Being comprehensive and cohesive
- Being forward-looking and sustainable.

The NZIF submission found the proposed policies and options failed to meet the above principles. Instead it recommended that the government should implement a carbon tax, particularly on emissions from fossil fuels as the major demonstrated cause of climate change. It also proposed that climate change policies should be directed at increasing the area of plantation and indigenous forests in recognition of the ability of forests to sequester greenhouse gases, and

because afforestation of farm land would also reduce agricultural emissions.

There are numerous other characteristics of forests that central and local government should recognise, including their ability to improve soil and water values, to promote biodiversity and protect landscapes. The proven environmental efficiency of wood in a vast range of end-uses is further cause to promote forests and use of forest products. The submission concluded the policy options in the discussion documents would discourage rather than encourage further forest development.

The government chose to ignore the NZIF submission and others made in subsequent years. When announcing its decision to implement the ETS (MfE, 2007), and to make forestry the first sector to enter it, the government stated:

The forestry sector ... is critical to New Zealand's response to the challenge of climate change ... higher planting rates and managing deforestation will reduce greenhouse gas emissions.

So how has the policy performed? The graph below shows the change in plantation forest area recorded in the National Exotic Forest Description (MPI, 2012) since 1920. Over the 83 years to 2003, total forest area increased every year except for 1959 to 1960 when there was no increase. For the eight years 2003 to 2011, forest area decreased every year, with a total decrease of 108,000 hectares – six per cent. Despite this, the Minister of Climate Change Issues, in a media release on 11 May 2012, claimed that a net increase of 6,000 hectares in 2010 and an estimated increase of 12,000 in 2011 meant the ETS was working well.

The release appears to have ignored land which may not have been replanted following harvest because total forest area in the year to 31 March 2011 decreased

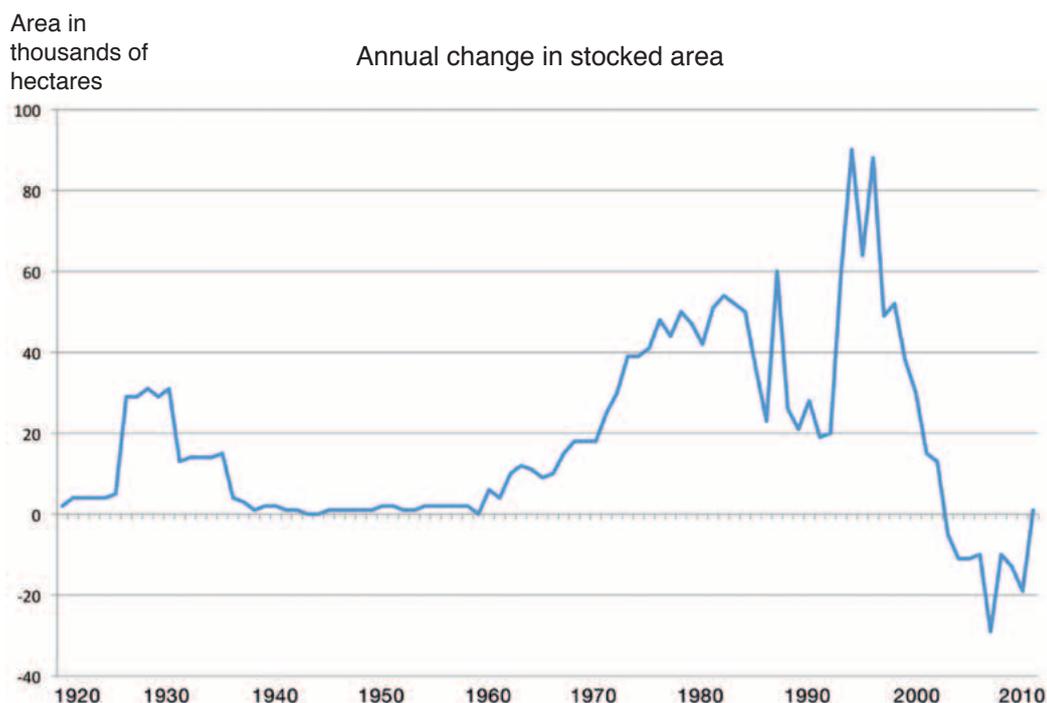
by 19,000 hectares and only increased by 1,000 hectares the following year. The Minister's 18,000 hectare increase was actually an 18,000 hectare decrease.

MPI estimates 19,000 hectares of new planting in 2012 based on surveys of planting stock in nurseries (MPI, 2013). However there is anecdotal evidence of increased conversion of forest land to agriculture. The nursery survey also predicts a significant decrease in seedling sales in 2013.

Why has a policy intended to increase planting and manage deforestation resulted in a decrease of forest area of 70,000 hectares since it was announced? Why was it preceded by a decrease of 37,000 hectares in the four years before its announcement?

Reasons include –

- From the late 1990s there was a decrease in forest investment as log prices receded from the highs of the early 1990s
- From the late 1990s there was increasing concern about the direction government and international climate change policy might take. Investors faced an increased risk of new policies reducing the value of their investment
- The 2007 ETS policy announcements included a liability on forest owners who deforested pre-1990 forest land, which could amount to \$20,000 a hectare. The liability was to come into force from 1 January 2008. Coupled with high prices for some agricultural land, this created an incentive to undertake conversion of forest land before the cut-off date, to maximise future opportunities
- Inequitable treatment between agricultural and forest land. Apart from the difference in treatment under the ETS, there are also differences under the



Resource Management Act, with forestry generally subject to more restrictions than agriculture. These combine to increase the price a purchaser will pay for land for agriculture compared with the price a forest investor can pay, effectively discouraging investment in forestry

- The low value of NZ ETS Units, which was down to \$2.45 in early 2013 (Thomson Reuters, 2013) compared with \$15 used by government in September 2007 (MAF 2007), does not encourage investment in carbon forestry and is at a level where conversion of pre-1990 forest land to agriculture could be economically attractive
- The high compliance costs and significant liabilities associated with forests in the ETS.

The forestry provisions of the ETS have done little if anything to mitigate climate change or encourage investment in forests and forestry in New Zealand.

Lake Taupo

A disturbing trend is for society, through elected representatives in central and local government, to 'nationalise' the benefits of forest by legislation and regulation rather than recognising value from some tangible benefit to the forest owner. We see this in provisions that now apply to land use around Lake Taupo, which effectively prevent change from forestry to some other use. For other uses, society has nationalised not the benefits but the liabilities, by not insisting on the application of the polluter pays principle which is one of the foundations of the Resource Management Act.

A 16 December 2003 media release from the Minister for the Environment announced the government would contribute 45 per cent of an \$81.5 million fund to reduce the amount of nitrogen entering the lake. Society, via the government, was prepared to pick up the cost of rectifying a problem created by some land uses. Taupo residents, including forest owners who had not contributed to the problem, would pay three times – as taxpayers and through regional and district council rates.

In an editorial 46 years ago, Jackson (1967) predicted a decline in water quality in the lake from agricultural intensification. The editorial cited evidence from some of the Rotorua lakes:

The significant fact ... is that their drainage basins have all only recently been developed for farming. The consequent process of pollution has been so rapid that the eutrophic transition has occurred in little more than a decade.

Even the risks of contamination attending much-accelerated urban development around the lake-shores are negligible by comparison ... Much has been made ... of the occasional topdressing around the Lake shores, but these obvious and easily remedied acts of thoughtlessness are insignificant

beside the steady accumulation of nutrients and salts added by livestock and topdressing to the normal load of solutes contained in drainage waters.

If land-development there must be in the Taupo basin, in the name of progress, let it be towards forms of resource management that do not involve practices so detrimental to the primary objectives in preserving Lake Taupo. Among these forms of management forestry stands pre-eminent in retarding normal trends towards eutrophication. There need be no pollution whatsoever from this form of land-use. On this point alone, the local and national authorities must regard forestry very favourably for any further development. Moreover, as the Maraetai Study (Ward, et al., 1966) has recently shown, residents of the district would secure just as much economic benefit from forestry as from farming.

This evidence was available over 40 years ago and before large-scale farm development, much of it government-funded, took place in the Taupo Basin. Why did it take so long to recognise the problem and do something about it?

In 2005 the Waikato Regional Council issued *Proposed Waikato Regional Plan: Proposed Variation No 5 – Lake Taupo Catchment*, which proposed capping nitrogen leaching on each property at existing levels. Property owners who decreased leaching would be able to trade some of their allowance with a property owner who wanted to increase leaching. Forestry was assessed as having a very low leaching rate, meaning a forest owner who wanted to change land use would need to purchase further allowance from a farm owner who wanted to reduce leaching rates. In a submission, the NZIF noted:

Forestry operations in the region are facing progressively more stringent standards associated with harvesting and other activities ... The costs of greater riparian setbacks, bio-diversity protection, environmental monitoring, storm-water and sediment control etc., are all expected to be accommodated ... irrespective of cost and the fact that the land use in question is and has been an existing activity for a prolonged period.

The Council's Section 32 Report acknowledges that 'The discharge of nitrogen from standard farming activities that leaches into water from fertiliser or urine patches from grazing animals is prohibited by s15(1)(b) of the RMA unless allowed by a rule in a plan or a resource consent or by regulations ... Accordingly there is no possibility of claiming existing use rights for such activities'.

To allocate on the basis of current use rewards existing polluters ('... pastoral farm land contributes most (93 percent) of the nitrogen leaching to the Lake' – Page 3 'Proposed Waikato Regional Plan Variation 5'), at the expense of non-polluters.

The NZIF submission was ignored and Variation 5 became operative in 2011. It sent a clear signal that pollution pays in the Waikato Region. The possibility that the Taupo Basin controls might spread down the Waikato catchment resulted in deforestation by some forest owners. Deforestation was further encouraged by the 2007 ETS policy.

Increased deforestation concerned the Waikato Regional Council (2006). It examined the effect of increasing conversion from forest to pastoral farming on flood hydrology, particularly peak discharge. The report expressed concern about conversion of forest land and the need to control it rather than concern about peak discharge from pastoral land – estimated at five to nine times that from forest land – and the need for it to be reduced.

Conclusion

The ETS and Lake Taupo policies are examples of discrimination against forestry in favour of other rural land uses. Both cases fail the NZIF tests of effectiveness, simplicity and equity. The results have been predicted in submissions made by the NZIF before policy implementation.

Discrimination in the form of increased regulation, loss of opportunities, imposition of costs etc. on forest owners, has the effect of reducing the competitiveness of forestry in comparison with –

- Other land uses
- Countries that compete with New Zealand produced forest products, both in domestic and export markets
- Materials which compete with forest products.

It therefore acts as a significant deterrent to investment in forests and forestry in New Zealand.

To reverse this situation and encourage investment in forests in New Zealand we need a comprehensive forest policy. It must be based on good science and practical knowledge and be supported by politicians, officials, those involved in forests and forestry, and the public. Such a policy would provide the framework for maximising the economic, environmental and societal benefits and the contribution they can make to the other objectives of the country. It could have avoided the consequences arising from implementation of the climate change and Lake Taupo examples described above.

Can we do it? I hope so, but it will not be easy.

Acknowledgements

This article has been influenced by discussions with a number of NZIF members and I thank them for that. The final product is my opinion and may not represent the views of the NZIF Council and members.

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