Toward a strategic vision for forestry: The environmental and social context

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Introduction

Going back 28 years - the rotation of a typical radiata pine crop - takes us to 1975, the year of the Forestry Development Conference (FDC). The FDC set out to unify the forest sector and its stakeholders around an ambitious vision for the future of forestry.

Today, however, the planted forest sector is facing a difficult challenge delivering on that vision. While the planting boom sought by the FDC did occur, albeit slightly later than would have been needed to achieve the target harvest of 35 million m³ of plantation wood by 2005, it has proved much more difficult than expected to deliver on the conference's intention "that in general, logs be processed within New Zealand and not exported" (FDC 1976).

It was projected that twenty pulp mills, each with the equivalent capacity of the then Tasman pulp mill at Kawerau, could be built between 1995 and 2010 with the harvest volume expected to be available (O'Neill 1974). Annual harvest has trebled since 1975 - an increase of 15.7 million m³ - but virtually half of that increase has gone to log exports.¹ The oncoming "wall of wood" offers a further 50% increase in harvest by 2015 - an increase of 12 million m³. Unless there are significant changes in factors influencing investment decisions, most of this wood seems destined for log exports. In some areas, it will be left unharvested.

Prices received for logs and sawn timber have been depressed for almost a decade by huge flows of cheap, unsustainably produced wood from Russia and Indonesia. As a result, billions of dollars have been written off the value of New Zealand's planted forests, and the impetus for substantial new planting in New Zealand has been lost. New Zealand's icon planted forest, Kaingaroa, is in receivership.

Faced with this challenging situation, the New Zealand forest industry has belatedly turned to the government and civil society for support and partnership in achieving its goals. Two main collaborative initiatives are under way: the Wood Processing Task Force and the National Initiative on Forest Certification.

It is a long time since any real collaboration between the industry and its stakeholders has occurred. In the interval, a culture of polarised debate has flourished, exemplified in recent years in the industry's handling of issues around the Resource Management Act and the Kyoto Protocol, and in the efforts of much of the environment movement to scuttle the West Coast Accord and Ngati Porou forest development. The complex legacy of these events, together with the loss of the feeling that we are all working for New Zealand (a feeling that was

palpable at the FDC), makes collaboration today more difficult.

On the other hand, it is more apparent today than it was in 1975 that forestry can confer social and environmental benefits desired by stakeholders. The emergence of the threat of global warming has placed a premium, both on the expansion of forests, and on the use of wood-based products in place of other, fossil-fuel intensive building materials. It is timely to ask afresh, whether there are ways in which civil society and government can advance collective objectives through assisting the advancement of forestry.

Four big, contemporary global trends affecting the forest sector matter a lot to forestry's social and environmental stakeholders. These trends, discussed below, are:

- Corporate social responsibility.
- · Protection of natural forests.
- Tackling climate change.
- · Product certification.

A fifth trend - recognition and accommodation of indigenous people's aspirations - is also important in many countries, and is increasingly reflected in certification requirements for forest products.

Corporate social responsibility

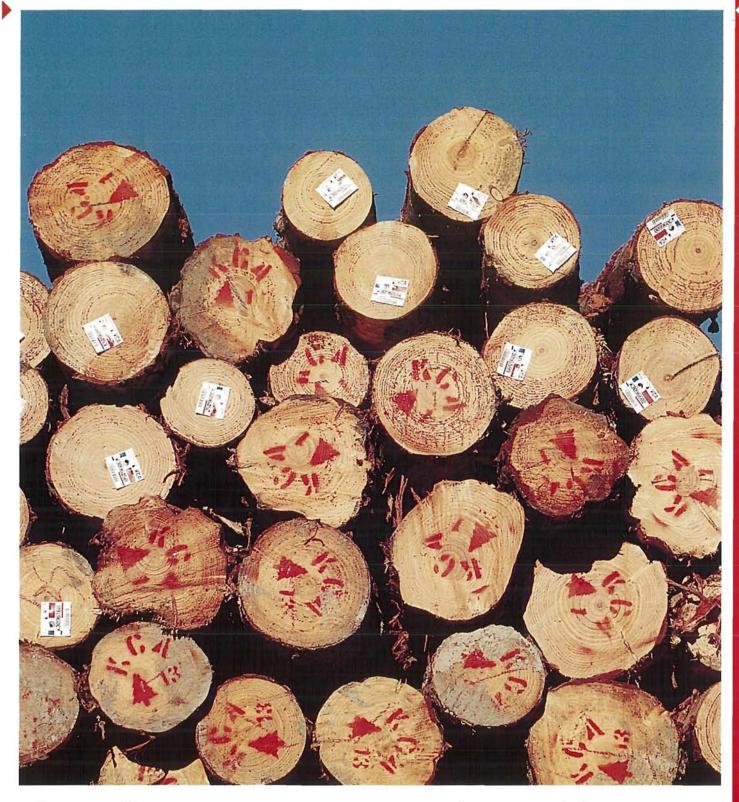
Forestry is a long term investment, tied to a particular place. Successful forestry depends on getting relationships right for the long term. Forestry needs a secure place in the community's loyalties. Recognition of this provides the foundation of the business case for corporate social responsibility (CSR) in this sector.

CSR is a huge movement in Europe and North America. Society expects social responsibility, and those expectations are growing. The NZ Business Council for Sustainable Development is the leading forum for large businesses which broadly support CSR, but its list of 45 corporate members includes not a single forest sector company. The main forestry companies are also conspicuous by their absence from the membership of the Sustainable Business Network. Perhaps forestry companies see New Zealand primarily as a cheap growing platform for their raw material. But is the industry really so independent of the community that it can afford to isolate itself from the contemporary movement toward CSR?

Biosecurity issues illustrate the importance of fostering CSR in the planted forestry business. Pathologists are warning that, despite intensive efforts to keep diseases

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Forestry Production and Trade Statistics (MAF 2003); Statistics of the forest and forest industries of New Zealand to 1987 (Ministry of Forestry 1988). All data are for March years.



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out, new and seriously damaging incursions of diseases in planted forests are occurring in all countries of the Southern Hemisphere with increasing frequency.² These incursions can only be combated with the support and forbearance of local communities. This in turn depends on a widely shared sense of commitment in the community toward the interests of the forest industries.

Auckland suburbs have, twice in the last five years, endured aerial spraying campaigns to stamp out incursions of forest-threatening pests. Similar operations are bound to be needed in future. The spraying operations cause health effects in a significant minority of people, many of whom have to be moved out of the target area. Public support for these operations is eroding, and antagonism is apparent toward 'vested interests' behind the spraying programme. This is a serious matter since, if a spraying programme is halted through public opposition, it will almost certainly not be possible to start another one in the future.

Pest control within forests raises similar issues. In New Zealand, the chemical 1080 is an essential tool for possum control. Despite precautions, 1080 use can have damaging effects on non-target species such as deer, farm livestock and farm dogs. There is widespread, grassroots community opposition within New Zealand to the use of 1080, but no alternative is in sight. Consequences for the forest industry of a ban on the use of 1080 would be significant.

The Department of Conservation (DOC) has shown in a series of regional community debates that such tensions can be managed, allowing 1080 use to go ahead. Best practice examples of DOC's performance highlight the role of effective, genuine community consultation, and the huge credibility advantage an organisation has if it is perceived as being a socially responsible organisation. DOC faces an enormous span of incompatible viewpoints about its activities, yet it wins grudging consent for most of what it does. Had it not been there on the front lines of all the 1080 debates during the 1990s, it is unlikely that industry would be able to use that chemical today.

In a democratic society, the licence to operate has to be earned. The forest industry is running on reputational capital built up a long time ago. Unless a greater sense of identity can be forged between the industry and the people of New Zealand, it is difficult to see that New Zealanders will be willing to continue making perceived sacrifices to ensure the biosecurity and good health of planted forests owned mainly by foreign corporate businesses.

The initiators of the visionary, 1991 New Zealand Forests Accord understood the importance of CSR. Yet despite much effort, it has proved difficult to replicate similar, durable forestry accords in Australia, Canada or the United States; while in New Zealand, the West Coast Accord has collapsed. Could this reflect - in part - cultural

characteristics? Difficulties in collaborating for the common good are universal: but they seem to be particularly pronounced in this Anglo-American group of countries.

How good are New Zealanders at long term relationship-building or consensus forming in the public sphere, let alone at honouring accords, or implementing a shared vision? Yet those countries that are good at these things may be better placed to gain competitive advantage in the forestry world of the future.

Two major forest products exporters - British Columbia and Finland - represent the polar opposites in that respect. After almost thirty years of bitter debate, British Columbia's coastal forest industry has been unable to establish settled and mutually supportive relationships with its major stakeholders, especially environmentalists and indigenous peoples. As a result of this continuing failure it faces huge problems, both in the marketplace, and in obtaining the resource security needed for new investment.³

Finland, on the other hand, has been able to proceed by consensus to resolve major issues around forest management, biodiversity protection on privately-owned forest lands, and other difficult issues such as Kyoto. Almost all environmental policy and law in Finland is adopted by consensus. Importantly, Finland also illustrates that new national behaviours can be learned: for Finns still living can remember their own civil war, between the Reds and the Whites, and can recall which families were on which side.

If Finland and British Columbia today represent a spectrum of cohesiveness behaviours, New Zealand seems to lie about the middle of the spectrum. Yet as Finland shows us, our past patterns of behaviour are not destiny; self-awareness, visionary leadership and social learning can all play a role. Important choices are looming now, about how relationships in the New Zealand forest sector are going to be managed.

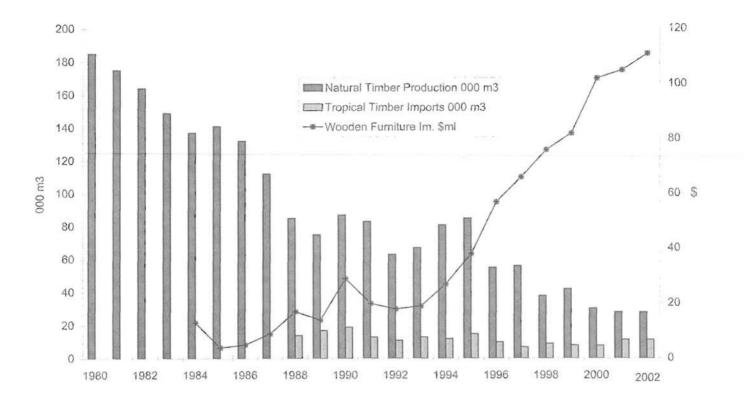
Protection of natural forests

With the Government's 1999 rejection of Timberlands West Coast's sustainable forest management project, the only production of native timber in New Zealand today is from private and Maori land. The slogan of recent native forest campaigners, "No whaleburgers, no tuatara handbags and no rimu furniture" seems to suggest that all native trees, whether on public land or not, are sacred

² "Plantations under threat" Press 14 February 2003.

The writer recently returned from a study visit to Finland and British Columbia, and has an ongoing research project comparing Finnish and New Zealand resource management institutions. For information and insight on the long, polarised and unresolved debates in British Columbia, see Wilson, J 1998, Talk and Log: Wilderness Politics in British Columbia 1965-96 UBC Press; Cashore, B et al 2001, In Search of Sustainability: British Columbia Forest Policy in the 1990s UBC Press; Hayter R 2000, Flexible Crossroads: The Restructuring of British Columbia's Forest Economy UBC Press.

Fig. 1: Tropical Timber Imports and Furniture Imports have increased while New Zealand Natural Timber Production has decreased. (Data are from MAF Forestry Production and Trade Statistics 2003. It is not possible to compare these trends on a volume basis, as wooden furniture import figures are available only in dollar value terms.)



and should not be harvested. This ideology has led some environmentalists into conflict with private landowners, especially Maori, who object to the idea that, in effect, a national park is to be declared over their private land without their consent.

As New Zealand's native forest harvest declined during the 1990s, it was accompanied by an upsurge in wooden furniture imports (Figure 1). More than 60 percent of this substantial import volume was sourced from Asian tropical forests. Almost none of the imported product was certified as being from well-managed forests. In short, New Zealand's demand for furniture woods, formerly sourced from its own natural forests in which sustainable management practices had recently been introduced, has now been shifted offshore to mainly tropical natural forests, where the wood is being sourced by cut-out-and-get-out methods.

New Zealanders' collective demand for wooden furniture is large, and environmental NGOs have done almost nothing to curb that demand. Instead, New Zealand's native forests have simply been "saved" at the expense of someone else's. Our ecological footprint has been slammed down somewhere out of sight. Assuming a continuing motivation to help the world's forests, NGOs now need to consider what should be done about this situation.

The global trading system does not yet allow governments to discriminate against unsustainably produced products at the border. Product certification, however, does allow retail chains, other large purchasers and consumers to discriminate. The desirable next step would be for NGOs, the forest industry and enlightened retailers like The Warehouse to work together on a campaign to persuade New Zealanders to buy only certified wood products.

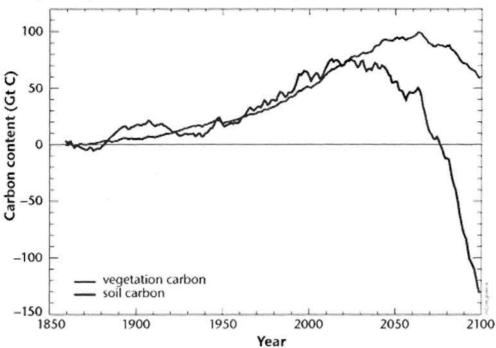
In order to take that step, it is necessary to ensure that New Zealand's own native forest owners can obtain certification for their products. To oppose such certification on the grounds that native trees are sacred would mean opening the New Zealand market to certified wood from overseas, while discriminating against New Zealand's own forest owners and potential producers who are mainly Maori. Running a public campaign for certified wood which discriminated against Maori and other New Zealand producers would rightly be condemned by many, and would not be accepted by the public.

Environmentalists now have a clear strategic choice. We can preside over the continuing unsustainable consumption of natural forest products, or we can negotiate a national standard for certification of well-managed, New Zealand natural forests as the first step toward a collaborative national campaign for sustainable wood use.

Climate change

Global climate change is driven primarily by burning fossil fuels, but this dynamic is buffered by large stocks

Fig. 2: Predicted change in global stocks of carbon in vegetation and soils (Source: Hadley Centre for Climate Prediction and Research)



of carbon in the biosphere. A recent, broad-brush carbon budget for New Zealand's terrestrial biosphere suggests that fossil fuel emissions from this country are dwarfed by huge greenhouse gas fluxes associated with our use of land and forest resources (Tate *el al.* 2000).

Forests - both expanding plantations and reverting scrublands - absorb and store carbon, and are big positives for New Zealand's emissions budget. However, while there are some major uncertainties, these positives appear to be outweighed by three negative factors:

- Carbon dioxide emissions associated with soil erosion losses on millions of hectares of hill country soils;
- carbon dioxide emissions associated with soil carbon losses from agricultural drainage of peat soils;
- methane and nitrous oxide emissions associated with farming activities on formerly forested soils.

These land-based emission sources and sinks account for the largest part of New Zealand's contribution to global climate change, and it is important that we manage them actively. Forestry seems likely to have a major role, not just as a one-off store of carbon, but also as a technology which can be used to curb a large part of New Zealand's ongoing emissions.

Global emissions must be curbed rapidly if we are not to damage the biosphere's capacity to absorb and store carbon. Figure 2, sourced from the UK's Hadley Centre for Climate Prediction and Research, models the effects of increased atmospheric carbon dioxide and temperature on global stocks of carbon in vegetation and soils. It shows that, while increasing quantities of carbon are currently being stored in biomass, both above and below ground, some important limits are being approached.

By the middle of the current century, climatic conditions will have become unfavourable for many of the world's forests, whose total standing biomass is predicted to decline, led by extensive die-back in the Amazon basin. Starting even earlier, and proceeding more rapidly, losses of organic matter from the earth's soils are also predicted. If unchecked, these trends could rapidly reduce the lifesupporting capacity of the earth's biosphere, and create a strong feedback loop of increased carbon emissions with potential to accelerate the global warming trend (Cox et al. 2000).

Not just forestry, but also wood, has a significant role to play in combating climate that a modest 17% increase in wood usage in the New Zealand

building industry, at the expense of such emissionintensive materials as concrete, bricks, steel and aluminium, could result in a 20% reduction in carbon emissions from the manufacture of all building materials. Scaled up to the global level, a similar shift in the balance of the world's building materials could reduce total global emissions by roughly 1 percent (Buchanan & Levine 1999).

Using woody biomass to make liquid fuels for transport, in place of fossil fuels, is one of a handful of promising technological routes for reducing transport emissions. At the global level, about 150 million ha of plantations worldwide by 2015 would be sufficient to meet liquid fuel needs for transport, and thereby fulfill a key component of the low-emissions scenarios postulated by the IPCC and others.⁴ The goal of producing bio-fuel at a low enough cost to displace fossil fuels from transport may depend on genetic engineering, which could increase the growth rates and extend the site preferences of potential growing stock, and make the wood easier to convert to liquid fuel. Forest growing countries would become the new 'oil exporters.'

Against this backdrop, the New Zealand forest industry is seeking renewed government and community support for the long-standing FDC strategy of processing the oncoming 'wall of wood' within New Zealand. This strategy would increase electricity demand and

⁴ Read, P 2000. Plantation Sinks and the CDM. Paper published by Ecologic at COP 6 of the UNFCC, posted at www.ecologic.org.nz/index.cfm/carbon. See also Read, P 1994. Responding to Global Warming: The Technology, Economics and Politics of Sustainable Energy. Zed Books London.

potentially, push New Zealand's carbon dioxide emissions much higher, at the very time that the country is striving to reduce them. Yet the strategy could still make sense from an environmental point of view, if:

- New Zealand made itself the most Kyoto-friendly place in the world to process wood; and
- the resulting wood products succeeded in displacing more emissions-intensive materials from the global marketplace.

Could these conditions be met? Key success factors include the following:

- The forest industry must make clear that it supports the Kyoto Protocol, and its implementation in New
- · all existing and new wood processing facilities should make maximum use of biomass fuels and other renewable sources of energy:
- all future additions to the country's base load electricity generation capacity should be in renewables;
- research and development of wood product technologies, especially bio-fuel technologies, should be accelerated;
- environmental groups, in negotiating standards for forest certification, should recognise the importance of low cost wood production if wood products are to be competitive with emission-intensive materials in the global marketplace.

Certification of forest products

Environmental NGOs and enlightened professional foresters established the Forest Stewardship Council (FSC) in 1993. The initial response of the global forest industry was to establish rival certification systems, whose governance was unburdened by the need to take much notice of independent stakeholders' views. But FSC grew in strength worldwide, and recently the New Zealand forest industry was forced to seek FSC certification in order to access the US market. American outlets like Home Depot are insisting on FSC certification precisely because it embraces, and is supported by, independent NGO interests.

The FSC's great strength lies in its consensus-seeking process. This is being tested in New Zealand at the present time, as we work toward a national standard for certification of plantations and natural forests. Ideally, FSC certification of New Zealand producers will successfully isolate unsustainable producers and restore competitiveness to planted forests, by providing access for certified wood products to premium markets that are not open to the cut-out-and-get-out production methods of Indonesia or Russia.

If the process is inclusive, and the resulting standards well-designed and widely agreed, the development of a national certification standard may achieve a reconciliation with those Maori forest owners who have been driven, through historical events and circumstances, to practise forms of forest management

that are widely regarded as unsustainable - notably many owners of SILNA and Ngati Porou forests.

At this stage there is however, a grouping of interests that would apparently be satisfied if the standard did little more than block future research on genetically engineered trees, exclude access to certification for native forest producers, and exempt small planted forest growers from most requirements. From an environmental point of view, such a standard would be a travesty. Pressures for harvesting from natural forests, and for GM tree cropping, would simply be shifted to less controlled environments elsewhere, while many small forest enterprises would be legitimised in their failure to meet the higher standards of forest management generally practised by larger companies.

The standard-writing process needs to be animated by a shared, long term vision which identifies global sustainability needs and the role within that, of New Zealand forestry. Such a vision can only be developed by following the dictum, "think globally before you act locally." In practice, it suggests there is potential for a broad coalition of interests in support of sustainable forestry and wood use.

A coalition for sustainable forestry and wood use?

Such a coalition would be based on the need, in a greenhouse-constrained world, for a strategy to advance the use of wood in place of steel, cement, aluminium and (in the case of industrial boilers and transport fuels)



fossil fuels. Such a coalition could achieve much, through both political and market channels. The need in the marketplace is to make sustainably-produced wood widely favoured and fashionable. To achieve that, there are two prerequisites, which will take time to develop and deliver.

The first relates to certification. While certification of forest management is an important step, we need to progress to a whole life cycle, whole company certification, in which those companies that meet good environmental standards and minimize the use of fossil fuels throughout the life cycle of a tree and all its products, can gain advantage in the marketplace. Given that wood can be processed in a fossil fuel-intensive manner, such certification is a definitely needed underpinning for the credibility of claims made about wood and other forest products.

The second, related need is to create a new Accord between environmental, social and forest industry interests. This would set out a shared vision, commit to a range of actions to be pursued, and above all, establish an ongoing mutuality. Ultimately there is a need for a global Accord, but we can usefully begin in New Zealand.

The existing NZ Forests Accord is essentially defensive in spirit, offering forestry interests a quiet life if they quit clearing native forest. Environmentalism has moved on, to a larger vision of global sustainability. What is needed now is a new Accord that is much more positive in its commitment to forestry and to wood as a raw material. If it is to build commitment for action, it should also be more embracing, including Maori, employee and regional interests as well as environmental and forest industry interests.

The whole basis for saying that wood is an environmentally friendlier product comes back to the climate change issue and therefore to the Kyoto Protocol, imperfect though it may be. It really is untenable having forestry companies proclaim that wood is environmentally friendly while campaigning against governmental actions to mitigate climate change. Shared support of Kyoto is therefore, the necessary foundation for the type of Accord described here.

The Government's actions in retaining the ownership of Kyoto forest credits at the national level, and in using these conditionally to shelter wood processing activities, appears to provide a basis for the industry to support Kyoto. It certainly addresses the competitiveness issue, averts potential divisions within the sector, and helps to create a cohesive climate for co-operation with environmental interests. The option of a tradable emissions permit regime remains open for the longer term.

At this stage, the biggest barrier to a new Accord may not be any substantial conflicts of interests, but rather the oppositional habits that live on, and are so damaging to our national cohesion. It returns us to the question of where New Zealand is going to sit on the Finland-British Columbia cohesiveness spectrum.

Toward a more consensual style

The Environment Committee of the Parliament of Finland includes politicians from six very different political parties. Nonetheless, of 47 legislative and policy measures placed before it last year, the Committee was able to provide unanimous recommendations, adopted by the Parliament, on 46 of the 47 matters. Many of the matters reported on were potentially contentious, including action to curb nutrient discharges from agriculture; an action plan for protection of biodiversity on private land; and ratification of the Kyoto Protocol.

One key to the Committee's successful track record is its reliance on multi-stakeholder working groups which prepare policy proposals for political consideration. Much of the consensus-formation in Finnish politics is negotiated directly between representatives of interest groups in these forums, which also include government officials, and which have a strong focus on doing what is right for Finland as a whole.

Finland shares with some other Nordic countries a famous capacity for social cohesion, and an ability to identify and pursue collective interests. These Nordic habits are capable of being learned, practised and valued by people of other cultural backgrounds, and particularly by their leaders.

Sustainable development is not just about technical capacities, policies and institution-building. It is also about learning the political and leadership skills that are needed to implement this larger, more inclusive vision of development.

The New Zealand forest industry has recognised the need to work with others to achieve its goals. The industry, and its diverse stakeholders, still need to give greater attention to those Nordic strengths: the tireless cultivation of the habits of social cohesion, and of building a shared collective vision.

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