Industry Skills: a Focus on Wood Processing

1 Overview

The total New Zealand net stocked planted production forest area was estimated at 1,814,266 hectares as at 1 April 2002. Radiata Pine is the dominant species, making up 89% of the resource.

Table 1 shows the base forest cut as at 2002 and the projected forecasts of wood volume by region, which demonstrates the substantial increases in wood volumes expected over the next 20 years.

Table 1: Current and Prospective Wood Volumes

(Millions Cubic Metres/Year)

Wood supply region	Actual harvest 2002	Base cut forecast 2016-20 (5 year average)	% Change from 2002
Northland	1.6	4.1	156
Auckland	0.7	1.0	43
Central North Island	10.8	11.8	17
East Coast/Hawkes Bay	2.2	6.0	173
Southern North Island	0.9	3.0	233
Nelson & Marlborough	2.1	3.0	43
West Coast	0.2	0.4	100
Canterbury	1.0	1.3	30
Otago & Southland	1.6	2.6	38
Total New Zealand	**20.9**	**33.2**	**58**

Source: **Ministry of Agriculture & Forestry,** based on *National Exotic Forest Description - National and Regional Wood Supply Forecasts 2000* Wellington, August 2000
http://www.maf.govt.nz/statistics/primaryindustries/forestry/nzstats2000/asection/a12.htm

Forestry exports for the year ended March 2003 were $3.681 million, which is 13% of New Zealand's total exports of NZ$29,121 million.

The size of the forestry and wood processing labour force, and its importance in particular regions, is shown in Table 2. Employment in **forestry and first-stage processing** as at mid-February 2002 was 25 215 Full-Time Equivalent persons engaged**,** an increase of 5.3 percent compared with 23 940 persons at mid-February 2001.

Table 2: Employment in Forestry and Wood Processing by Region

FTEs 2002	Forestry & Logging	First-Stage Processing	Total
Northland	1,310	1,090	2,400
Auckland	640	1,335	1,975
Central North Island	3,690	6,373	10,063
East Coast/ Hawkes Bay	1,070	900	1,970
Southern North Island	960	1,285	2,245
Nelson/Marlborough	960	1,063	2,023
West Coast	390	335	725
Canterbury	580	1,080	1,660
Otago/Southland	780	1,373	2,153
Total New Zealand	**10,380**	**14,835**	**25,215**

Source: Tabled compiled by Forestry Statistics Section, MAF, based on data from Statistics New Zealand. Figures may not sum exactly because of rounding errors

The projected increase in wood volumes provides both significant opportunities for growth, and major challenges if these opportunities are to be exploited.

As discussed below, labour and skills are one of the critical challenges, especially given the significance of forestry and wood processing in many non-metropolitan regions. There are already widespread anecdotal reports of labour and skill shortages in these industries (as in most others). These pressures may be diminished in the short-term, with the current downturn in wood volume exports. However it is important to distinguish between short-term cyclical changes which this (and many other primary) industries are subject to, and the longer-term trends which Table 1 illustrates.

2 Wood Processing Strategy

The Wood Processing Strategy (WPS) arose from initial work of the Tairawhiti Development Task Force in early 2000. It became apparent that the barriers to maximising the opportunities from its prospective growth in wood volumes in that region – e.g. infrastructure, labour and skills - were common to a greater or lesser extent across many regions.

As a result of this the WPS was initiated in January 2001, under the direction of a steering group composed of key people from the private and public sectors. It operates on the basis of *partnership* between business and central and local government, and from a central government perspective, was one of the first examples of an effective *whole of government* approach.

The first phase of its work was summarised in a report prepared by Industry New Zealand in July 2002. The industry has set itself the following objectives for 2025, compared to 2002 levels:

- $20b outputs, vs $5b
- 14% GDP, vs 4%
- Employing 60,000 FTEs (directly), vs 23,500
- $14b in export earnings, vs $3.7b
- To become the largest export sector in New Zealand, vs third
- To become one of the top 5 global exporters, vs one of the top 20
- 3.5-4m hectares planted, vs 1.8m
- 50m m^3 harvested, vs 20m m^3
- $1b supporting technology industry, vs NZD$100m.

A number of barriers to achieving these goals were identified, along with actions to overcome them. A summary of these is attached in the Annex to this document. Section 4 describes actions taken to address labour and skills issues within the framework of the WPS.

3 Existing programmes

As would be expected in an industry of its size, there is already significant publicly funded training and education in this industry. The Tertiary Education Commission (TEC) funds a wide range of forestry and wood processing training programmes and qualifications. Some of these qualifications are short-term qualifications relating to logging and wood processing, and others are long-term qualifications in forestry science/silviculture.

As at 30 June 2003 there were:

- 12,287 Industry Trainees in forestry (57%) and wood processing (43%), with the regional distribution as shown in Table 3 below
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- 428 Modern Apprentices in forestry (75%) and wood processing (25%), per table 4 below

Table 3: Forestry and Wood Processing Industry Trainees as at 30 June 2003

Region	Trainees
Southern	1,063
Canterbury	321
Nelson/Marlborough/West Coast	990
Wellington	467
Central	898
Eastern Coast	1,272
Waikato	1,751
Bay of Plenty	3,608
Manukau	436
Tamaki Makaurau	439
Northland	1,042
Total New Zealand	**12,287**

Source: TEC

Table 4: Forestry and Wood Processing Modern Apprenticeships as at 30 June 2003

Region	Trainees
Southern	41
Canterbury	13
Nelson/Marlborough/West Coast	45
Wellington	17
Central	50
Eastern Coast	52
Waikato	61
Bay of Plenty	80
Manukau	1
Tamaki Makaurau	29
Northland	39
Total New Zealand	**428**

Source: TEC

Training in these industries has increased in recent years, as shown in Table 5 below:

Table 5: Trends in Forestry and Wood Processing Industry Trainees and Modern Apprenticeships

	Industry Trainees		**Modern Apprenticeships**	
as at 30 June	*Number*	*Annual Change*	*Number*	*Annual Change*
1999	7,674			
2000	8,507	11%		
2001	9,264	9%	225	
2002	12,509	35%	408	81%
2003	12,287	-2%	428	5%

Source: TEC

The reduction in industry trainees between 30 June 2002 and 2003 reflects standard entry/exit turnover from training programmes during the course of the year. The underlying trend is better observed through the increase of 60% in the number of industry trainees in the last four years.

As at 1 August 2003 there were:

- 156 Training Opportunities trainees
- 130 Youth Training trainees
- 8 Skill Enhancement trainees

in forestry and wood processing, 294 in total.

During 2002, there were 41 forestry and wood processing qualifications offered by 15 Tertiary Education Organisations funded through the Student Component (EFTS) system.[1]

In addition, the TEC is involved in a number of workplace literacy projects in conjunction with ITOs and employers in many sectors. The projects promote a range of models using a diversity of approaches to meet literacy needs in the workplace. The projects involve companies and industries undergoing significant technological and structural change requiring higher levels of literacy from their employees, and aim to strengthen the capacity of ITOs in workplace literacy as key project partners.

There are currently two such projects in the wood processing industry, with a third recently completed. Each project offers literacy skills training for up to twenty employees.

4 National Wood Processing Labour and Skills Sub-Group

This group was established to provide a national approach to skill and labour issues facing the industry. The group sits underneath the National Wood Processing Strategy, along with the sub-groups described in the Annex, and is operationally linked with the Tairawhiti Strategy. It was chaired jointly by the Department of Labour and Forest Industries Training, the relevant Industry Training Organisation (ITO).

It has identified a series of key labour and skills issues for future focus, and initiated activities on a number of fronts. Critical issues (identified at its March 2003 meeting) include:

- Lack of co-ordinated purchasing of industry training
- Staff retention
- Recruitment of suitably skilled staff
- Drug and alcohol abuse
- Contractors' certification
- Regional labour co-ordinators and careers advisers

The sub-group has undertaken research on many aspects of these issues

The main achievements to date include:

National Centre of Excellence

[1] These data relate to EFTS funded qualifications in 2002, defined through NZSCED categories 050502 *Solid Wood Processing*, 050501 *Forestry Studies*, and 050500 *Forestry Studies not further defined*.

The “flagship” of the labour component of the WPS is the establishment of the National Centre of Excellence in Wood Processing Education and Training in Rotorua, to open to students from January 2004.

It is a joint initiative between the Forest Industries Training & Education Council, Waiariki Institute of Technology and the University of Auckland. It is intended to help overcome the shortage of skilled workers in wood processing, and to meet industry demands for skilled workers, engineers, technologists and researchers.

Central Government agreed to grant $2million for this as a Major Regional Initiative under the Regional Partnerships Programme in March 2002 (with the project partners and the forestry industry also providing part-funding for its establishment).

Regional Wood Processing committees

Work has also proceeded on forestry and wood processing at a regional level especially in Tairawhiti, Northland and Otago/Southland, to deal with specific local issues. The Sub-group monitors their activities in labour and skills, and serves to connect regional and national initiatives, and shares thinking around common issues.

Many of the successful achievements of the WPS in labour and skills are in fact local – for example, the Earnings Supplement Pilot in Tairawhiti to assist WINZ clients into silviculture work, careers advice in the Central North Island.

Forestry Contractors

The Sub-group assisted in the establishment of an industry organisation to assist the many small operators in the industry, including through development of contractors’ business skills. It has produced a Best Practice Guide on employing staff, to assist in improving employment practices in forestry gangs, and enable them to access appropriate support from government agencies.

Training Co-ordination

A major ongoing issue is co-ordination between the many funders (eg TEC, WINZ) and providers in the industry, and the difficulties experienced by the industry in having an effective involvement in this at national and regional levels, to ensure that training is relevant.

A number of issues have been discussed extensively, and activities to address them initiated, such as:

- ***Health & safety*** – clarifying legal requirements and promulgating safe practices

- ***Recruitment –*** promoting forestry as a career option, especially through specialist careers advisers

- ***Retention –*** fostering better employment practices to reduce staff turnover, including drawing on good employers who appear to have low turnover

- ***Drug and alcohol abuse*** – promotion of consistency in application of drug testing in the industry, and assistance to affected employees and potential employees.

5 Future Actions

The WPS was originally to have ended in early to mid 2002. At a WPS Steering Group meeting in July 2002, the forest industry lobbied for it to continue, as there was work that needed completion and extra issues had arisen. While progress has been made on a number of fronts, a continued and sustained effort is required to achieve several long-term goals. So the Steering Group decided that the WPS would move into Phase 2.

The Labour & Skills Sub-group's activities represent work-in-progress, and the Sub-group considers there is an ongoing need for its programme of work to continue. Forest Industries Training will lead future work on labour market issues, providing the secretariat, with the Labour and Skills Sub-group continuing as a reference group for its activities, including co-ordination of central government's involvement.

It is developing an Action Plan for the next phase of its work to be considered in August 2003, building on progress in the areas identified in the section 4 above.

Industry Training Needs
In addition, Forest Industries Training will now be required to develop a national training needs analysis (TNA) for the industry and to update this regularly. This is a statutory obligation for all ITOs.

The TNA will cover how jobs are changing, harvest levels, regional planning and interests of companies. The structure of the TNA will be completed by July 2003 and will be presented at the August Sub-group meeting.

Annex: Key issues and actions identified in the WPS

Biosecurity: Improvement in relationship with MAF Biosecurity Team. There is a need for industry involvement in Biosecurity policy and operations.

Certification: Establish a certification framework for NZ Forestry which will set an International benchmark for sustainable management of forests. A New Zealand National Initiative Working Group (NIWG) has been set up to develop forestry management performance standards for third party audit and certification.

Energy and Climate Change: The climate change framework has been put in place for the forestry industry and is being managed by MAF. Secure full and tangible recognition of the contribution both the forest and future development of the wood processing industry will make to the sustainable development of NZ.

Health and Safety: A Forestry Industry Safety Forum has been established between the industry and various employee representative organisations and involving OSH and ACC.

Infrastructure: Secure commitment from all levels of government to deliver a timely, cost effective and safe infrastructure through a equitable funding regime. Regional transport plans for the Northland and Tairawhiti regions were completed in 2002 and the government agreed to 100% funding under the Regional Development Fund. These plans take into account the increased expected volume outputs from each region.

International Market Development: The working group has engaged with NZTE to undertake some work on trade enhancement in international markets. The work is focused on market development and the commercialisation of identified market opportunities.

Labour and Skills: Assess and address concerns of a shortage in both numbers and skills of employees required to achieve Industry's potential.

Research, Science and Technology: Facilitate investment by government and Industry in R&D for future wood processing and products.

Resource Management Act: Streamline RMA assessment for new wood processing investment projects. A wood processing industry code of practice (COP) has been drafted and discussed at a series of industry/council best practice workshops.

Trade Access: Overcome barriers in international markets and ensuring the industry completes the work programme with the additional funding that has been secured by MFAT. Funding has been made available on the understanding it is met by a similar level of industry contribution.