Social Assessment NSW Upper North EAST CRA Regions

A report undertaken for the NSW CRA/RFA Steering Committee
22 September 1999

A Report undertaken for the NSW CRA/RFA Steering Committee. This includes the projects NU 02/ES, NA 58/ES, NU 01/ES and NU 09/ES

For more information and for information on access to data contact the:

Resource and Conservation Division, Department of Urban Affairs and Planning
GPO Box 3927
Sydney 2001

Phone: 02 9228 3166
Fax: 02 9228 4967

Forests Task Force, Department of Prime Minister and Cabinet
3-5 National Circuit
Barton ACT 2600

Phone: 1800 650 983
Fax: 02 6271 5511

This project has been jointly funded by the New South Wales and Commonwealth Governments. The work undertaken within this project has been managed by the joint NSW/Commonwealth CRA/RFA Steering Committee which includes representatives from the NSW and Commonwealth Governments and Stakeholder groups.

The project has been overseen, and the methodology developed, through the Economic and Social Technical Committee which includes representatives from the NSW and Commonwealth Governments and stakeholder groups

ISBN No: 1740290178

Acknowledgments
This report has been possible through the participation of key stakeholder groups, forest management agencies, forest industries, their employees and contractors, and communities. The Social Assessment Unit acknowledges this important contribution

EXECUTIVE SUMMARY

The Upper North East NSW social assessment has defined the demographic characteristics of the region and of those people and communities that depend on the forests in the region. A profile of the social conditions within case study communities is described, as well as recent history and community vision, from the perspective of those communities. In addition, community attitudes to forested lands in the region have been sought, and a history of change and mitigation processes in the region. People who depend on forest industries are linked to communities of residence through analysis of primary research data.

The following presents a summary from a series of technical projects, which were proposed and approved by the joint CRA Technical Committee and which are separately available.

The approach taken to social assessment was to make an assessment of the sensitivity to forest use and management changes, at the community or township level. Communities to be included in the assessment for sensitivity to changes in forest management were broadly selected on the basis of forest industry presence, then confirmed in consultation with industry and stakeholder groups. The final list of communities under consideration in Upper North East NSW comprehensive assessment phases were: Byron Bay, Casino, Coutts Crossing, Coffs Harbour, Dorrigo, Lismore, Guyra, Tenterfield, Rappville, Pottsville and Grafton.

Social indicators used in the social assessment

As part of the initial development of the assessment framework, the Social Assessment Unit of DPIE and the Technical Committee approved a range of social indicators which may be used in the assessment of impact, following the identification of land use options. These indicators were broadly:

- Population changes
- Economic diversity
- Employment and Labour force
- Infrastructure and amenity
- Community vitality
- Social well being
- Community resilience
- Mitigative change factors
- Community Attitudes

Regional profile

The region covered by the Upper North East social assessments covers seventeen local government areas. These local government areas, described in detail in the regional profile, are Ballina, Byron, Casino, Coffs Harbour, Copmanhurst, Glen Innes, Grafton, Guyra, Kyogle, Lismore, Maclean, Nymboida, Richmond River, Severn, Tenterfield, Tweed and Ulmarra

The Upper North East study area has a rapidly growing population. In the period 1991 to 1996, the population change in the Upper North East study area (10.72%) was double that of NSW (5.34%).

Within the study area, the fastest growth occurred in the northern coastal fringe with Byron LGA (21.06%) and Tweed LGA (19.5%) experiencing the highest rates of growth.

Population decline was experienced in Severn LGA (-6.66%), Glen Innes LGA (-.54%) and Guyra LGA (-9.63%).

The 1996 census figures showed unemployment was higher in the Upper North East study area (15.38%) than in NSW (8.8%). Unemployment rates ranged from 11.3% in Glen Innes and Tenterfield to 20.6% in Ulmarra.

The Australian Bureau of Statistics 1996 census showed approximately 1,928 persons were employed in the timber industry, including both hardwood and softwood sectors, in the Upper North East study area. Of those people, 75% were employed in timber processing, including sawmilling, timber dressing and other wood product manufacturing.

The largest proportion of persons working in forestry and logging (26.7%) were employed in the Coffs Harbour LGA. The majority those employed in sawmilling and timber dressing were employed in Kyogle LGA (17.7%). Other wood production and manufacturing was focused in two locations, both employing 111 persons (15.8% each). These were Coffs Harbour LGA and Grafton LGA (ABS 1996).

Summary results of case study communities

The following community case study summaries have been produced, providing details on agreed social indicators.

Byron Bay community profile

- Population 1996 : 6,130 people (1991 : 5007 people).
- Population change 1991 – 1996: 22.4%.
- Median age 1996 : 34 years (1991 : 33 years).
- Dependency ratio : 0.41.
- Unemployment rate 1996 : 21.3% (1991 : 21.6%).
- Median household income 1996 : $300 to 499 per week.
- Major industries: accommodation, cafes, restaurants (16%; retail trade (16%); property and business services (10%).
- Byron Bay has developed as a tourism icon destination, bringing accommodation development beyond the capacity of the infrastructure to cope.
- Byron has two primary schools and a specialist primary school (Steiner), with stable enrolments. Its High School enrolments are increasing.
- Community services include childcare, youth and aged care facilities.
- Byron has a hospital offering comprehensive clinical services including medical and specialist services.
- A finely balanced community, juggling the interests of its core population with the need of tourists and transients.
- Conflict about development directions and environmental capacity to cope with tourism impact.

Summary of sensitivity

- Perceived increase in water quality with increased timber reserves and an increase in ecotourism potential.

- A wide range of forest values is held.

Casino community profile

- Total Population 1996 : 9,990 people (1991: 10,856 people).
- Population change: - 7.97%.
- Median age 1996 – 35 years (1991 – 33 years).
- Dependency ratio : 0.68.
- Unemployment rate 1996 : 12.5% (1991: 17.06%).
- Median household income 1996 : $300 to $499 per week.
- Major industries: manufacturing (23%); retail trade (16%); health and community services (11%).
- Between 1986 and 1996 there has been approximately 1% decline in population.
- In 1996 a smallgoods factory closed with a loss of many jobs.
- A district hospital with accident and emergency, 3 primary and 2 high schools and a range of community services.
- Specific services identified as requiring development include job creation, welfare and Aboriginal community services infrastructure.
- Large annual festivals associated with Beef Week and a primary industries expo.
- Strong support expressed at the workshop for continued timber resource from State forests to provide a perception of stability of employment in the town.

Summary of sensitivity

- Casino has been impacted by the loss of timber resource to mills around Casino for the past ten years.
- The community is struggling to maintain its prosperity, having been affected by the loss of government services and rural commodity price decline.
- The timber industry is seen as a small but vital part of the community’s prospects.

Coffs Harbour community profile

- Total Population 1996: 22,177 people (1991: 20,315 people).
- Population change : 9.16%.
- Median age 1996: 38 years (1991: 36 years).
- Unemployment rate 1996 : 15.80% (1991 : 17.04%).
- Median household income 1996 : $300 to $499 per week.
- Major industries: retail trade (22%); accommodation, cafes, restaurants (10%); health and community services (6%).
- Urban development and change in identity from bananas and timber to a regional city based on residential/retirement and tourism.
- Wide range of educational facilities including a university campus.
- Broad spectrum of regional community, business and human services.
- Local conflict concerning development, infrastructure and highway/retail issues.
- Tourism infrastructure continues to develop.

Summary of sensitivity

- The timber industry in Coffs now consists of six mills close to the town, some softwood and others depending mostly on private property.
- State forests and National Parks and Wildlife Service Regional Offices are located in Coffs Harbour.

Coutts Crossing community profile

- Total Population 1996 : 510 people (1991 : 446 people).
- Population change : 14.3%.
- Median age 1996: 32 years (1991 : 31 years).
- Major industries: retail trade (15%); transport and storage (13%); health and community services (8%).
- Dependency ratio : 0.57.
- Unemployment rate 1996 : 13.3% (1991 : 12.5%).
- Median household income 1996 : $500 to $699 per week.
- A small village identified by subdivision, new housing and proximity to Grafton.
- A small primary school, hall and park committee, bush fire brigade are located in the village.
- Most other services are accessed in Grafton.
- At this point, community vitality appears to be at a low level.
- At this point, there are no mitigative change measures identified.

Summary of sensitivity

- A small commuter village which may be affected by any impact in Grafton.

Dorrigo community profile

- Total Population 1996 : 1,013 people (1991 : 1,132 people).
- Population change : -10.5%.
- Median age 1996 : 38 years (1991 : 36 years).
- Dependency ratio : 0.75.
- Unemployment rate 1996 : 12.6% (1991 : 7.29%).
- Major industries: manufacturing (15.5%); accommodation, cafes, restaurants (12%); agriculture, forestry and fishing (11%).
- Median household income 1996 : $300 to $499 per week.
- Closure of abattoir, court house, bank, milk depot, maternity ward, Telstra office and NRE office, downsizing of State forests.
- Opening of Rainforest Centre, restaurant, grocery store, public toilets – tourism infrastructure.
- Reported conflicting values in the community over forests and directions for the town.

Summary of sensitivity

- Highly sensitive to social values around forest management.
- Timber industry has, in the past, been central to the wellbeing of the town.
- Current difficulties with change to tourism centred identity, while maintaining a sustainable timber industry.
- Business and NPWS joint strategies to maintain tourists and income needed.

Grafton community profile

- Total Population 1996 : 16,562 people (1991 : 16,637).
- Population change : - 0.45%.
- Median age 1996 : 35 years (1991 : 33 years).
- Dependency ratio : 0.65.
- Unemployment rate 1996 : 13.6% (1991 : 14.6%).
- Median household income 1996 : $300 to $499 per week.
- Major Industries: retail trade (19%); manufacturing (11%); health and community services (11%).
- Movement of large regional government services (Telstra, railway, police), Tooheys brewery and North Power (200 jobs).
- Closure of many bank branches in Grafton and South Grafton.
- Small business closures are reported.
- Grafton is a medium sized rural city with a wide range of retail, wholesale, business and community services. Grafton has retained some government personnel and services.
- Grafton is the administrative centre for the Northern Rivers Health Service; it has four primary schools and three High Schools, each with stable enrolments.

- Grafton has sought to care for its senior population by providing residential and service facilities.
- Grafton Racing Carnival is a major event bringing income into the town.
- Loss of professional and skilled people.
- A perceived loss of political clout as community feels helpless to stop the employment reductions.

Summary of sensitivity

- The hardwood timber industry is seen as a major source of stability in the community.
- Within the UNE region, Grafton and its immediate vicinity, has the highest concentration of people who work in the hardwood timber industry. As such, Grafton is considered highly sensitive to changes in forest use and management.
- Major value adding hardwood facility in the town.

Guyra community profile

- Total Population 1996: 1,801 (1991: 1,937).
- Population change : -7.02%.
- Median age 1996 : 34 years (1991 : 31 years).
- Dependency ratio : 0.58.
- Unemployment rate 1996 : 21.0% (1991 : 7.6%).
- Median household income 1996 : $300 to $499 per week.
- Major industries: retail trade (15%); manufacturing (14%); agriculture, forestry and fishing (11%).
- One resident doctor, although full medical and specialist facilities available in Armidale.
- There is an Aboriginal Medical Service.
- There is a 22 bed hostel and seven self-care units for older people.
- Final closure of abattoir in 1996.
- Local state forests gazetted as reserves and wilderness.
- The community organises many annual events, the most famous of which is the historic car rally, which boosts tourism and the gives the town a positive identity.
- Local employment in forest conservation and management of feral weeds and animals and fire in reserves.

Summary of sensitivity

- There are no mills accessing public resource in Guyra, although many in the community identify it as a timber town.

Lismore community profile

- Total Population 1996: 28,380 (1991: 27,245).
- Population change : 4.16%.

- Median age 1996 : 32 years (1991 : 31 years).
- Dependency ratio : 0.54.
- Unemployment rate 1996 : 13.9 % (1991 : 16.13%).
- Median household income 1996 : $500 to $699 per week.
- Major industries: retail trade (20%); health and community services (15%); education (9%).
- Lismore city is the regional capital of the Northern Rivers Region, supporting a wide range of retail, wholesale, manufacturing, business and community services.
- Lismore Base Hospital provides a wide range of medical and specialist services.
- An estimated 300 government jobs have gone from Lismore since 1993.
- Gradual change from regional rural and forestry service town to regional city.
- Ten thousand students attend the Southern Cross University.
- Some evidence cited of community differences – hippie invasion, some celebrations are intended to celebrate this diversity.
- "It will be a challenge for Lismore to re-invent itself".
- Increasing positive presence of Aboriginal communities in Lismore activities.

Summary of sensitivity

- One large hardwood sawmill in the town with value added component is dependent on public forest resource.
- Potential for further community division on forest social values, unless information on forest outcome explained and accepted by community.

Pottsville community profile

- Total Population 1996 : 1,987 people (1991 : 1,289 people).
- Median age 1996 : 37 years (1991 : 34 years).
- Population change : 54.15%.
- Dependency ratio : 0.77.
- Unemployment rate 1996 : 18.3% (1991 : 27.6%).
- Median household income 1996 : $300 to $499 per week.
- Major industries: retail trade (16%); construction (10%); health and community services (10%).
- A primary school has 446 students with a projected rapid rise in enrolments over the next few years.
- Population growth of 54.15% between 1991 and 1996 with new subdivision development housing retirees and young families.
- Difficulty sustaining a stable population with a substantive employment base.
- Median household income is relatively low reflecting the numbers of people on income support, superannuation and pensions.

- In order to support the rapid population growth anticipated, the Tweed Council plans to undertake community development strategies in Pottsville to foster self-help and community support infrastructure, identified as currently lacking.

Summary of sensitivity

- Very low.

Rappville community profile

- Total Population 1996: 113 people (1991: 109 people).
- Median age 1996: 26 years (1991: 36 years).
- Unemployment rate 1996 : 35.7% (1991 : 45.45%).
- Median household income 1996 : $500 to $699 per week.
- Major industries: accommodation, cafes, restaurants (22%); manufacturing (33%); agriculture, fishing and forestry (33%).
- Most community services are accessed in Casino or Lismore.
- Rappville Primary School has 26 students.
- Rappville is on the edge of the Rainbow Region, with land subdivision and new families moving into the area but not necessarily the town of Rappville.
- A new take away store opened in 1996.
- There are several rural annual events in Rappville, however the town currently does not have a strong community focus.
- New tea-tree industry.

Summary of sensitivity

- There is strong support amongst long term residents in the community for a sustainable forest industry and a continuation of the grazing leases.
- There is one small mill in the area with dependence on salvage logs and timber from private property. There is also a mill at Wyan which is dependent on plantation pine, which is currently expanding following FISAP assistance 1997 to incorporate hardwood.

Tenterfield community profile

- Total Population 1996: 3,205 (1991: 3,310).
- Population change : -3.17%.
- Median age 1996: 40 years (1991: 37 years).
- Dependency ratio : 0.63.
- Unemployment rate 1996: 8.7% (1991: 12.8%).
- Median household income 1996 : $300 to $499 per week.
- Major industries: retail trade (18%); manufacturing (12%); accommodation cafes and restaurants (10%).
- A service town for the local agricultural industry.
- The hospital has accident and emergency facilities and there are two doctors in the town.

- The town supports two primary schools and a high school.
- Eighty four community organisations are listed in the Shire directory.
- Closure of abattoir had a severe impact on the town, exacerbated by a perceived withdrawal of government and community services including State forests, RTA, health services, electricity and the downgrading of the State and Westpac Banks.
- The town of Tenterfield sponsors at least six major annual events.
- The community has developed a strong lobbying capacity.
- The Timbarra gold reserve is currently being reviewed for mineral production.
- Grape growing is a new industry, however access to water has been a problem. New water reform may improve this situation.

Summary of sensitivity

- Tenterfield no longer has mills dependent on public forest resources. The town may be affected by flow on business and service impacts if the management of forest grazing leases alters.
- There are timber mills in the area dependent of private property resource.
- Several contractors and their employees, as well as some beekeepers' employees who access private native forests, reside in the town.

Woodenbong community profile

- Total Population 1996: 377 (1991: 349).
- Population change : 8.02%.
- Median age 1996: 34 years (1991: 31 years).
- Dependency ratio : 0.64.
- Unemployment rate 1996 : 5.6% (1991 : 8.05%).
- Median household income 1996 : $300 to $499 per week.
- Major Industries: manufacturing (22%); education (20%); construction (10%).
- Closure of chemist, butcher, saddler, greengrocer and garage.
- Enrolments in the primary school are declining, funded under Disadvantaged Schools Program.
- Steady decline of student numbers at high school to 110 in 1997.
- FISAP value adding created 15 new jobs.
- Community health care is provided by mobile services to the town.
- Five community organisations are managed by voluntary committees.
- The community raised $35,000 to build a multipurpose indoor sports centre.
- Visions for the town combine tourism and the timber industry, which might include both Aboriginal and non-Aboriginal sectors, given added infrastructure and support.

Summary of sensitivity

- The timber industry has been of central importance to the town of Woodenbong.
- There is a significant (11%) Aboriginal and Torres Strait Islander population.

- The timber industry has accessed Forestry Structural Adjustment funding to support investment in a value added facility.

Summary results of forest-related occupational communities

Demographic and occupational information was gained from four types of surveys.

- Forest and Forest Product Workers: this survey covered employees working in hardwood mills, private property mills, softwood mills, contractors employees (bush crews - salary) and forest management agencies.
- Contractors and Subcontractors: covering harvesting and hauling where the work was undertaken on a contract basis.
- Other Forest Users: beekeepers, graziers, seed collectors, and minor/specialty timber gatherers.
- Tourism: tourism operators in the UNE region.

The following summaries of the characteristics are presented. The full details are presented in the chapter "Occupational Communities".

1. Mill workers -Hardwood Mills (principally dependent on State forests)

Age	45% aged 30–45 years
Annual salary	63% earn $12,000 – $25,000 pa
Household income	34% earn $12,000 – $25,000
Average length of time in industry	40% > 10 years
Aboriginal representation in sample	3.9%
Education	50% completed year 10
Communities of residence (> 4% of sample)	Grafton 31%; Coffs Harbour 10%; Woodenbong/Ubenville 9.6%; Dorrigo 6%; Kyogle 9%; Macksville 4.6%; Casino 4.3%; Lismore 4%.
Dependent children	47% have dependent children
Home ownership	41% rent; 23% own outright

Source: AFFA Social Assessment surveys 1996 (N = 280)

2. Mill workers — Softwood Mills

Age	59% between 30–45 years
Annual salary	66% earn $12,000 – $25,000
Household income	41% earn $25,000 – $40,000
Average length of time in industry	58% in timber industry > 5 years
Aboriginal representation in sample	None in sample
Education	
Communities of residence (> 4% of sample)	Kyogle (42%); Casino (28%); Lismore (5.3%)
Dependent children	54% have dependent children
Home ownership	

Source: AFFA Social Assessment surveys 1996 (N = 76)

3. Mills depending primarily on private property wood resource

Age	51% aged 25 – 40 years
Annual salary	74 % earn $12,000 – $25,000 pa
Household income	53% earn $25,000 – $40,000
Average length of time in industry	78%% > 6 years
Aboriginal representation in sample	None in sample
Education	50% completed year 10
Communities of residence (> 4% of sample)	Grafton (30%), Coffs Harbour (16%), Toormira (8%), Meaghan (6%)
Dependent children	54 % have dependent children

Source: AFFA Social Assessment surveys 1996 (N = 61)

4. Contractors and Sub Contractors

Age	60% aged 40 – 50 years
Household income	30% earn $25,000 – $40,000
Average length of time in industry	40% > 10 years
Aboriginal representation in sample	None in sample
Education	50% completed year 10
Communities of residence (> 4% of sample)	Grafton 20%; Urbenville 15%
Dependent children	47% have dependent children
Home ownership	50% own outright

Source: AFFA Social Assessment surveys 1996 (N = 20)

5. Contractor Employees (Bush Crew)

Age	Mean age 39 years
Annual salary	68% earn $25,000 – $40,000 pa
Household income	62% earn $25,000 – $40,000
Average length of time in industry	83% > 5 years, 17% > 10 years
Aboriginal representation in sample	3%
Education	76% left before or completed Year 10
Communities of residence (> 4% of sample)	Grafton 15%; Casino 12%; Walcha 12%; Woodenbong 9%, Uki 6%; Tenterfield 6%
Dependent children	Over 50% have dependent children
Home ownership	20% rent; 26% own outright; 50% mortgage

Source: DPIE Social Assessment surveys 1996 (N = 34)

6. Beekeepers

Fifty-three businesses of the 98 surveyed responded. Beekeepers residences are widely dispersed in the region, with no concentration in any urban centre. On average, each beekeeper employed one full time person, one part time person and one casual. Respondents spend an average of almost 80% of their time on the enterprise with 56% relying on state forest sites.

Source: AFFA Social Assessment surveys 1996 (N = 53)

7. Grazing

Seventy businesses with grazing leases in state forests responded to the survey.

Twenty-nine per cent rely on 100% state forests use for other business, 20% indicate they have one employee and a further 19% have two employees. Grafton, Tenterfield and Woodenbong were the most common townships of residence cited.

Source: AFFA Social Assessment surveys 1996 (N = 70)

8. Tourism

Twenty per cent of the mailed 641 business surveys responded in part. 1.6% of respondents identified as Aboriginal or Torres Strait Islander.

Almost half of respondents had lived in the town for less than five years.

On average, each respondent business employed 3.5 full time employees, 1 part time and 3 casual staff.

For 30% of tourism operators the combined household income was $25,000 – $40,000 pa, and a further 25% in the range $40,000 – $60,000.

Thirty two per cent of operators did not nominate any dependence on forest areas. Thirty four per cent nominated one forest area as important and 21% nominated two forest areas as important to their business. Approximately 34 forest areas were named as important, the majority of these being existing national parks with high visitation, such as Bunjalung, Night Cap, Washpool and Boonoo Boonoo. The highest nominated area was 'Dorrigo'. Other state forests mentioned were Boondo, Whian Whian, Torrington Recreational Reserve, Clarence Valley Forests, Wedding Bells State Forest, Boambee Reserve, and Never Never Reserve.

Of those who nominated forest areas as important to their business, 40% rated forests as highly important, 26% medium and 16% low importance.

Source: AFFA Social Assessment surveys 1996 (N = 129)

Locational impacts of forest industry expenditure

A study has been carried out of the locational effects of change in the native hardwood timber industry in the Upper North East Forestry region of NSW by Rush Social Research Agency (RSRA) consultants.

A small number of mills and contractors/haulers provided very detailed information on business accounts and performance, while at the other extreme, some businesses chose not to participate at all. Questionnaires have been received from 16 mills (representing approximately 14% of mills and 53% of employees), and from 7 contractors and hauliers.

In terms of timber industry dependent businesses, a useable sample of 102 businesses responded. However 2 of these were contractors and were removed from the sample to avoid double counting. The businesses in the final sample are generally those nominated by the mills and contractors, as their suppliers. This response comes from a mail-out to 400 such businesses, followed up by a telephone contact to a sample by RSRA. As with the mills and contractors, the information returned was variable in its completeness.

In view of the limited response to the survey, care has needed to be exercised in analysing and interpreting the results.

Businesses in the timber industry

Information available suggests that there may be about 115 mill companies operating in the UNE at about 117 sites and employing about 860 individuals. The mills vary considerably in size, from those employing over 100 to many operated by one or two people.

There may be as many as 35–40 independent contracting and haulage companies existing in the UNE, employing possibly 170 workers.

The major focus of industry activity in the UNE is the Grafton area, which draws in over one-third of activity (measured as employment). Lismore and Casino are also significant centres, with Coffs Harbour, Woodenbong, Kyogle and Murwillumbah/Mullumbimby also providing more local foci for the industry.

The average annual wage for a mill worker in the UNE is about $26,690, with a range over different sites of from $31,000 – $15,000. There is a tendency for larger mills to pay a somewhat higher wage on average than smaller.

The average annual wage for mill contractor and haulier employees in the UNE is about $24,500 (range $31,000 – $15,500). Haulage only contractors may be at the lower end of this range.

About two-thirds of workers live within ten kilometres to their place of work, and over 90 per cent live within 40 kilometres; a minority travel longer distances to work, in some cases over 70 kilometres.

Individual mills spend about $12,810 per employee per annum outside the timber industry in the local economy (as defined).

Based on data provided by respondents to the survey, mill employment has risen by nearly 10 per cent over the three years 1995–96 to 1997–98, although individually some mills have registered gains in employment, and others losses. Average wages appear to have fallen about 4% over the period.

The data suggest that the average annual wage of contractors and hauliers has been static over the period 1995–96 to 1997–98.

Many respondent mills and contractors contribute to the life on their local communities by donations in cash or in kind.

There were wide divergences amongst individual companies about prospects for the future.

From the face-to-face interviews with mill owners/managers and contractors, three issues stood out as major concerns:

- the wide divergence amongst businesses in their experience of recent years: some had expanded, some had maintained the status quo, and some had contracted
- the paramount importance of resource security, the lack of which was decreasing financial security, the ability to forward plan and to invest

Local businesses supplying the timber industry

The businesses responding were concentrated to some degree in the automotive retail area: tyres, petrol/fuel, repairs and service, auto electrical services etc, and in business services and the wholesale trade, since these businesses are most often nominated by mills and contractors. The businesses were also concentrated in Grafton, Coffs Harbour, Lismore and Casino with representation at a lower level from 10 other centres.

As at June 1997 the average staff numbers were: 8 full time employees: 2.5 part time employees and 4.1 casual employees. As at June 1998 the figures were: full time staff average 8; part time staff average 2.3 and casual staff average 3.3. Only three suppliers indicated that they had paid redundancies.

About one-quarter of the sample had a low gross **income** (up to $100,000) for the year ending June 30 1997, compared to approximately 18 per cent with a high gross income of $1M or more. The median gross income across the two financial year 1996–97 and 1997–98, remained the same for the businesses at $300,000. Changes in income across a range of income brackets have tended to be complementary, with small numbers of companies going up a bracket and small numbers going down an income bracket over the two years.

Most had 50 or more customers: some sectors however concentrated a large proportion of their sales on the ‘top five’ customers. In particular this was the transport/storage, finance/insurance, and construction sectors. Those with a high proportion of income (sales dependency) from the timber industry were: transport/storage; construction; auto repairs/tyres/service; manufacturing; and wholesale trade.

Money into the community

There was little movement in the gross wage bill to employees, with a constant median of between $75,000 and $100,000 over the two financial years 1996–97 and 1997–98.

The median amount spent on business services in the financial year 1997–98, was between $20,001 and $50,000.

The median amount spent on suppliers was $130,000: 22% spent more than $500,000 and 9% spent over $2M. At the lower end 32% spent up to $50,000. Three sectors spent more on suppliers than other: general retail trade; construction; and the automotive retail sectors.

An average of 58.9 per cent was **spent locally** by the 70 businesses completing this section of the questionnaire. Highest local spend was by finance/insurance (96.7%) and property/business services (82.2%) and lowest was by the manufacturing (29.4%) and wholesale sectors (33.3%).

Out of a score between 1 (not at all optimistic) and 5 (very optimistic) the average score on optimism amongst the sample of suppliers to the mills and contractors in the UNE lay at 3.3, with over a quarter of the scores sitting at 3.

Community attitudes survey — UNE region

A telephone survey of 112 respondents living in the region was carried out in July – August 1997. The following social values were recorded.

Social value of forests — Upper North East NSW	% agree
▪ Aboriginal sites of significance should be protected	55.3
▪ Environmental protection cannot co-exist with forest industries	79.5
▪ The forest industry can be important for some small communities and therefore should be maintained	71.4
▪ Australia should draw its timber products from Australian forests rather than overseas forests	78.2
▪ I would like to see more forested land conserved even if it means a loss of state income from timber harvesting	56.3
▪ Tourism from conserving forest areas may generate regional income and employment	75.1
▪ Timber harvesting may have an adverse impact on the abundance of native plants and animals. If the environmental costs are too high it might be better to compromise on forestry activities	66
▪ Do you think current management of forested land is ecologically sustainable	33
▪ Forestry jobs may be lost to create new environmental reserves. This may then affect some small communities. If this is the case, it is unfortunate for these communities but we need environmental reserves for the benefit of future generations	50
▪ Some forested areas are rarely visited by people. It is personally satisfying to know that there is forested land that is untouched by humans even if it is never used for recreational or economic activity.	90

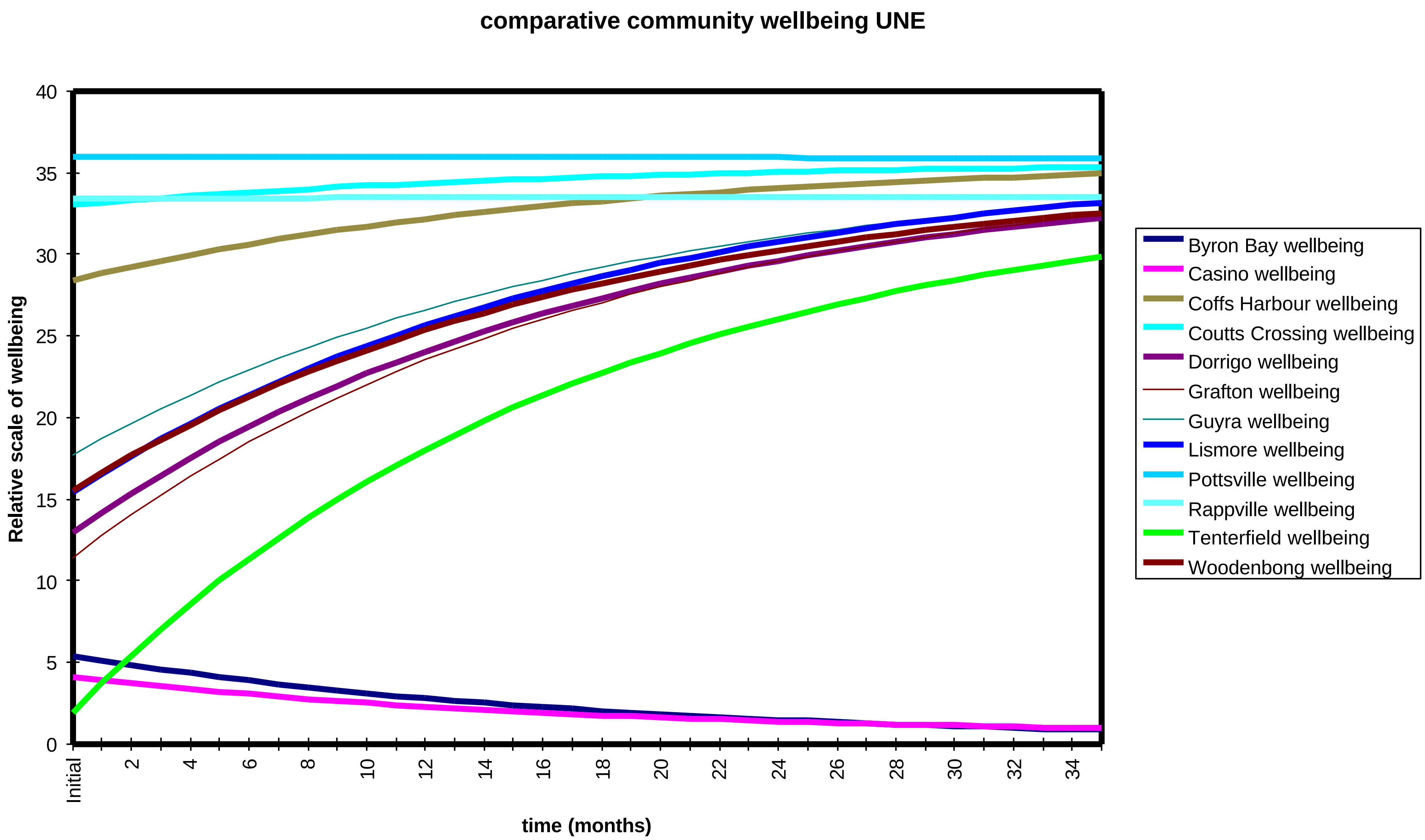
Source: University of Sydney Department of Geography, consultants, 1997

Survey of mitigation and adjustment processes

A survey of structural adjustment and mitigative processes in the Upper North East region was commissioned as part of the social assessment. The study intended to document the experiences of workers and contractors in the native hardwood timber industry affected by forest industry structural adjustment from January 1996 to August 1998. This study was completed by Rush Social Research consultants and the data is held by NSW Department of Urban Affairs and Planning.

Social impact assessment modeling

Following collection of this assessment data, a computer modelling exercise has been undertaken in order to identify communities sensitivity to forest management changes and their capacity to change as a response.



comparative community wellbeing UNE
Relative scale of wellbeing
0
5
10
15
20
25
30
35
40
Initial
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
time (months)
Byron Bay wellbeing
Casino wellbeing
Coffs Harbour wellbeing
Coutts Crossing wellbeing
Dorrigo wellbeing
Grafton wellbeing
Guyra wellbeing
Lismore wellbeing
Pottsville wellbeing
Rappville wellbeing
Tenterfield wellbeing
Woodenbong wellbeing

1 INTRODUCTION

Social assessment within the Regional Forest Agreement process

The social consequences, both positive and negative, of policy changes to forest use and management in the Upper North East Regional Forest Agreement (RFA) region will largely occur at the individual and community level, while the policy settings will be driven by State and national objectives.

The two broad objectives defined in the National Forest Policy Statement are:

- a comprehensive and adequate reserve system (CAR), and
- an efficient, viable and competitive timber industry.

In achieving these two objectives for the Upper North East region there may be social consequences for communities. The social assessment work was negotiated through an Economic and Social Technical Committee which included Commonwealth and State agencies and stakeholder groups representing the interests of conservationists, industry and union members.

Social impact assessment

Social impact assessment follows a comprehensive social assessment at a community level. Social impact assessment aims to:

- address some of the equity issues involved in achieving the objectives of the National Forest Policy Statement;
- highlight any undesirable or avoidable consequences in meeting these objectives;
- model probable community responses to various change options.

While the objectives of the CAR system are driven by the conservation criteria, and have defined targets, social and economic objectives are not readily quantifiable. However, within the RFA process, social assessment will identify communities which may experience significant social consequences and suggest where these may be enhanced or minimised.

Social objectives

Social objectives within the RFA process are defined at the community level. They aim to:

- minimise social dislocation;
- minimise social disadvantage;
- minimise social costs arising from any land-use changes;
- enhance community vitality and social cohesion;
- maximise employment opportunities and skills development within communities;
- identify previous and proposed community mitigation measures.

The following text provides a broad description of some of the key identifiers.

Social dislocation

Social dislocation may occur at the community level when a significant proportion of the population relocates and/or change its employment status. Measures include demographic changes; changes in age structure, and significant numbers of dependant young and older people.

Social disadvantage

Social disadvantage may occur at the community level with land use changes. Measures include unemployment levels, participation in the workforce levels, relative median incomes, and significant numbers of single parent and/or absent parent families.

Social costs

Social costs arising from land-use changes, such as welfare payments, increases in health requirements, and distances to travel to attend schools and access community services, may affect a community's viability. Measures include the availability and extent of transport facilities, education facilities, health facilities and other community services.

Community vitality and social cohesion

The quality of life for communities will be affected by the extent and type of cumulative changes that have occurred and the ability of communities to adapt to those changes. Measures include adequate leadership, and optimism about alternative visions for social and economic development.

Employment opportunities

The availability/accessibility of employment and training opportunities will affect communities which are more sensitive than others to hardwood resource supply issues. The JANIS agreement states that reserve configuration and target seeking should minimise the impact on the most sensitive communities where possible. While reserve targets may be defined at a community level, there may be some flexibility for meeting targets in communities which are highly-moderately sensitive to hardwood resource supply cuts.

The key indicators outlined in the table below are based upon outcomes from a Social Indicators Workshop that were agreed to at a Montreal Process Conference held in Tasmania, November 1996. National stakeholders were involved in workshops at this conference.

The table below incorporates the social indicators developed at the conference, adapting them to maximise information gathered from the approved social assessment data collection projects.

The methods used in these projects provide for the collection of both quantitative and qualitative data. This was obtained through published documents, surveys, community workshops, and through networking widely across the region. The data has been collected with scientific rigour and cross-checked to ensure validity, and will be used at the integration phase to identify and describe sensitive communities, and for predicting impacts from a number of resource scenarios.

Table of social indicators

Key indicator	Sub-indicators	Measures	Source
Socio-demographic structure of communities	Age structure of communities and region	Percentage of population per age category	ABS
	Ethnicity	Country of birth	ABS
	Level of household income	Annual family and household income	ABS
	Mobility	Usual residence 1991 and 1996	ABS
		Nature of occupancy	ABS
		Percentage of population per age category	ABS
		In/out migration	ABS DUAP
Economic structure of communities	Size/range of local businesses	No. and size of business per category	Aust On Disk
	Locational dependence on forest-based industries	Level of dependence by location	ABS
		No. of employees	Business surveys Councils
Employment and labour force characteristics	Unemployment levels	Unemployment levels 1991 and 1996 and State averages	DEETYA/ABS
	Industry diversity	Employment by industry	ABS
	Occupational community characteristics	Percentage of labour force in forest industries	ABS/surveys Surveys
		Age	Surveys
		Length of residence	Surveys
		No. of school-age children	Surveys
		Income	Surveys
		Place of residence	
Community services and infrastructure	Current service provision and trends across key service areas	No. and type of health services	Health Dept
		No. and size of schools	Education Dept
		No and type of retail outlets	Aust On Disk
	Identification of any threshold services	Level of post office service	Aust Post
		No. of financial service areas	Aust On Disk
	Lobbying capacity	Appropriate comparisons , trends and policy thresholds for key service areas	Relevant Departments
		Level of past activity on local service issues	Network
Additional qualitative stressors	Identification of cumulative change over past 15 years at 2 year intervals	Compilation of qualitative data	Lit review
		No. and range of services lost	Workshops/Reports
		Significant industry trends	Councils/ABARE/ABS
	Service closures	Rural trends	
Community vitality	Community events	No. of annual events	Workshops/Council
	Past management of change	Analysis of qualitative data	Network/Council
	Community participation	No. and range of community organisations	Council
	Occupational communities participation	Average involvement in community organisations	Aust On Disk Surveys/ABS
	Income levels	Average household income	
Social well-being	Attachment to place (occupational community)	No. of family members in area	Survey
		Length of family residence in area	Survey
		Reasons for living there	Survey/workshops
	Sense of community	Occupational community responses	Surveys/workshops
		General community responses	Survey
Mitigative change factors	Structural adjustment packages	Situation report and analysis	Mitigation project
		List no. and types	Network
	Other community mitigation		Workshops
	Alternative industry/community development options	List no. and types	Council Development organisations ABARE
Community attitudes	Social values of forests	Regional community attitudes	Community attitudes survey
	Attitudes to policy proposals	Stakeholder attitudes	Regional Forest Forums

2 METHODOLOGIES

A multiple method approach was taken to the Upper North East social assessment. The following describes the research methods applied at each project level.

Post-impact and regional profile methodology

A significant aspect of social assessment is to review past patterns of change within the region and to provide a socio-demographic baseline data. Primarily this is achieved through researching material that provides insights into the trends and responses of communities within the study region.

The objectives of the post-impact analysis are:

- to provide a review of national and international studies relating to social impacts on resource-based communities;
- to provide a review of social impact studies conducted within the Upper North East CRA/RFA region;
- to develop a regional profile for the Upper North East region;
- to develop a profile of service sectors within this region.

Most of this information was collected through desktop research.

Community case studies methodology

Detailed case studies have been developed as part of a social values project undertaken in the Upper North East Region

A variety of methods were used to develop a profile of each case study area. They include an assessment of the social and economic structure of communities, a historical assessment of significant events in the community, and an outline of community concerns and visions for the future.

The analysis draws upon data collected from workshops, interviews, and participant observation methods. Extensive fieldwork was undertaken by the Forest Community Coordinator for the Upper North East Region.

Criteria for selection

The case study communities were selected for their diversity of size, industries, infrastructure, growth/decline, urban/rural, and the likelihood of significant social impacts as a result of changes to forest management and land tenure.

Byron Bay, Casino, Coffs Harbour, Coutts Crossing, Dorrigo, Grafton, Guyra, Lismore, Pottsville, Rappville, Tenterfield and Woodenbong were approved by the Social and Technical Committee as case study communities.

Community workshop process

A community workshop was conducted within each case study community; members representing specific industry groups, conservation groups, community infrastructure, indigenous communities and landholders were invited to attend.

Participants were asked to focus on a number of questions designed to reflect the characteristics of their community including:

- What have been the significant events in your community since 1980?
- How did the community manage two of these events (one positive and one negative)?
- How do you feel about your community?
- What are your visions for your community?

Participants were also asked to consider the potential negative and positive impacts of two public forest land-use scenarios in reference to forest areas deferred from harvesting by the 1996 New South Wales Interim Assessment Process.

- Deferred areas remain available for conservation and recreational uses;
- Deferred areas remain available for timber & other industry uses.

Trained facilitators conducted the workshops and the outcomes of discussions were noted. Scribes were also present at each workshop to record additional information. Where the number of participants exceeded 20 (generally in the larger communities), the groups were split in two following the introduction phase.

At a subsequent workshop, information was fed back to participants to ensure that representations and information were accurately recorded. However, in the event of a projected participation rate below one-third of the first workshop, the second workshop was cancelled. Instead telephone calls were made to individuals and/or organisations to verify information provided.

The outcomes of all workshops are included with each case study area.

Profiling occupational communities methodology

The objectives of this project were to survey forest-related industry groups for the purposes of: linking community dependence to areas of forested land and the social values of forests held by these groups, establishing the impact felt to date by these groups from changes to forest management, and identifying the social use of values of forests held by these groups.

The surveys developed for each occupational community addressed four main content areas:

- demographic characteristics including age, gender, marital status, education, number of children and other dependents, and home ownership;
- business/employment characteristics including the nature of employment, age and structure of the workforce, years worked in the industry, experience in other industries, and education/skill level;
- community characteristics including length of residence, attachment to community, local expenditure, and use of community services;

- attitudes towards the forest debate and perceived social impacts on businesses, individual, families and communities.

Occupational communities have been classified into the following groups: mill employees, contractors (including harvesting and hauling contractors), contractor employees (bush crews), workers in forest management agencies, other forest users, and tourist operators.

Profiles of these communities have been developed based on their response to survey questions.

Sawmills

Initially a NSW State Forest database was used to identify industries in the region that are economically dependent on the forests. This was extended and validated through fieldwork during the 1996–97 survey period.

A census approach was undertaken, with all mills being requested to participate in the mill worker survey exercise. With the exception a few of the smaller mills, most were surveyed and a sample from each obtained.

Methods used to maximise the response rate for survey mill employees included face-to-face interviews, telephone interviews, and mail-outs.

Most of those mills that employed over thirty people were surveyed face-to-face. Mills employing 10 to 30 people received mail-outs. Those employing 10 people or less were surveyed by telephone. However, a number of the mills in these last two categories were also surveyed face-to-face to ensure that an adequate sample was obtained.

Before surveying a letter of support from industry stakeholders was requested and obtained. Agreement to undertake surveys at the mill site was obtained by contacting the owner/manager of the mill to arrange an appropriate time and method of surveying employees. All care was taken to ensure that face-to-face surveys did not unduly disrupt production lines.

In the event of mail-outs, a letter of introduction and explanation of the purpose of surveying was sent to the mill owner or manager. Prepaid return envelopes were supplied to ensure confidentiality was maintained and respondents did not incur any financial cost.

At completion managers/owners of mills were contacted and full employment details were obtained. These details were compared with survey responses and NSW State Forests estimated employment numbers.

Harvesting and hauling contractors and employees

There were some major constraints for surveying this group.

Initially, surveys were undertaken through visiting log dumps and surveying contractors and bush crews on site. However, this proved to be unsatisfactory. Contractors reported that it interrupted their work schedules and that they were worried that it might lead to accidents.

Other factors limited data collection. For example, although interview times at log dumps were set up in advance, sometimes the contractor was unable to be there on the day due to adverse weather conditions.

Trying to locate contractors/hauliers at the mill site also proved to be ineffective. On the rare occasion they were located they were reluctant to take time off to be surveyed.

It was decided to mail surveys to contractors and include a number for their employees so that a sample of their bush crew workers could be obtained. A letter of introduction and explanation to the contractor/haulier accompanied these surveys. Prepaid return envelopes were supplied for each survey to ensure confidentiality was maintained. The response rate was still fairly low.

Workers in forest management agencies

To survey this group, surveys were taken to the NSW State Forest and National Parks and Wildlife Service regional offices where they were distributed to the managers in each subregion who then provided each employee with one survey. Upon completion they were returned to the regional offices and collected by the Social Assessment Unit, Lismore.

Other forest users

Other forest users included graziers with State forest leases, apiarists, extractive industries, and other users. This group was surveyed through mail-outs. A covering letter was provided with each mail-out explaining the purpose of the survey. Contact details of agency representatives including NSW Farmers, NSW Apiarists' Association, Forest Protection Society, Forest Products Association, Construction, Forestry Mining and Energy Union were provided in the covering letter.

Tourism

The database for tourist operators, accommodators and other tourist-based businesses was obtained from Tourism NSW. This group was surveyed through mail-outs. A covering letter explained the purpose of the survey and provided the contact details of the Tourism representative on the Upper North East Regional Forest Forum.

Community attitudes to forest in the region — methodology

Questionnaire design

The questionnaire was divided into five sections to investigate the five original aims of the report:

- demographic attributes of the respondents;
- employment details of the respondents;
- respondents' opinions towards social and environmental issues;
- respondents' current personal uses and desired future uses of forested land;
- the values respondents invest in forested land.

The questionnaire design consisted of four main phases.

- Comments submitted by members of the Social and Economic Technical Committee were collected and a brief literature review was carried out. Basic questions were considered and tested through a focus group interview session. The results of these three procedures were used to draft the base questionnaire which took the consultancy aims as its rationale for including or excluding questions.

- The base questionnaire was circulated amongst committee members for review and comments. A modified questionnaire was designed to incorporate the committee's comments.

- The modified questionnaire was recirculated amongst the committee and a meeting was held on 15 July 1997, where further changes were made.

- Twenty New South Wales residents were interviewed on 15 July 1997 and problem spots identified. Final adjustments were made to the questionnaire liaising with representatives from RACAC and the SAU.

The final questionnaire covered standard demographic variables whilst investigating the economic, environmental and social dimensions of people's opinions about forest use and values. Restrictions were placed upon the questionnaire structure due to the telephone interview format, the main restrictions being on the time taken to conduct the survey which was limited to fifteen minutes, and a restriction in the complexity of the questions due to the verbal communication medium. The final questionnaire is contained in Appendix 1.

Site selection

In order to generate phone numbers and enter results into a GIS program standard geographic units were required to indicate the boundaries from which the phone numbers could be drawn. Whilst the Upper North East CRA region overlaps standard geographic units, postcode boundaries were found to be the most accurate method of delineating the Upper North East region. Whilst there is some overlap with other regions it was not thought that this would alter the results of an attitudinal survey in any significant way.

The postcodes delineating the boundaries of the Upper North East sample were 2365, 2369–2372, 2450, 2452–2454, 2456, 2460, 2462–2465, 2470–2472, 2474–2490 (see map 1).

Telephone number selection

Three hundred and eighty domestic telephone numbers were randomly selected using an electronic White Pages database from the postcodes of the Upper North East CRA region. Using 1991 census data this conforms to approximately one call to every 717 people living in the Upper North East CRA region**.**

Interview procedure

Thirty interviewers were employed in this study. Each interviewer was allocated a list of randomly generated phone numbers to call between 6 pm and 9 pm on week nights and between 10 am and 9 pm on weekends. Phone calls were carried out between 17 July 1997 and 2 August 1997. If no-one answered the telephone at the first attempt, the phone number was called two more times with a minimum interval of two hours between the calls. If after the third call no-one answered, the call was considered a rejection.

If an answering machine was operating the interviewer read out a standardised statement informing members of the household about the objectives of the interview and indicated that the household would be called again in the next few days. No more messages were left on subsequent calls and the number was considered a rejection after three calls.

If the call was answered but the respondent did not wish to participate, interviewers asked whether it would be appropriate to call back at another time, or alternatively if anyone else in the household would be interested in participating. As asking other members of the house to participate might compromise the random selection criteria, interviewers recorded the number of respondents located through this technique.

The only criteria for successful phone calls was that the respondents be 17 years of age or over. For 'closed' questions interviewers were instructed to indicate on the questionnaire which of the selected options the respondent had chosen. For open-ended questions the interviewer recorded the response of the respondent by entering one of the preselected codes on the questionnaire sheet, or if the response did not fit any of these codes the response was written into the question sheet for later coding and analysis. If respondents were unwilling to answer any of the questions they were not required or encouraged to do so.

Response rate

Of the 380 phone calls made to the Upper North East CRA region 112 successful interviews were carried out. This is a response rate of 29.5%. Very few contacts were made with secondary respondents and their responses were not thought to affect the results in any significant way.

Review of mitigation research methodology

The research process was broken into three components: a desk research phase, telephone-based surveys and face-to-face in-situ interviews.

Desk research

The desk research component made use of data published by State Forests NSW, Rail Services Australia, National Parks and Wildlife Services, TRAIN, FISAP and FILAP. This data was used in conjunction with mill and contractor survey data to determine the extent of use of mitigative measures by various types of forest worker groups.

Telephone and face-to-face interviewing

The primary data collection involved interviews with a total of 60 affected workers and business owners in the Upper North East region. Of these, 33 were completed via telephone interview, obtaining mostly quantifiable data, and the remaining 27 were conducted face-to-face, so that both quantifiable and qualitative data was able to be collected.

Sampling

A combination of methods were used to draw the sample of interviewees. Lists of those who had applied for Worker Assistance were supplied by the Forestry Structural Adjustment Unit. In addition, we compiled our own list of displaced workers through contact with key informants. This ensured that timber industry workers without access to FISAP-funded programs were also included in the sample.

Procedures

Telephone interviews were of 20 to 40 minutes duration. The face-to-face interviews were of 50 to 120 minutes duration, depending on the experiences of the individual. These were mostly conducted at the interviewee's home, and more often than not the interviewee's spouse also participated.

The following table outlines the numbers interviewed in each type of work.

Table 1: Type of work

	Telephone (n)	Face-to-face (n)
Large mill workers/owners	23	16
Contractors and small mills	10	10
Total	33	27

Locational impacts of forest industry expenditure methodology

The approach adopted in this project closely followed that employed by Rush Social Research in its investigations of the local impacts of forest industry expenditure in the Eden region. The detailed description of and rationale for the approach is described elsewhere.[1] Here it is appropriate to state that the overall study is carried out as a two step procedure:

- Step 1: involving a survey of timber mills and contractors and timber hauliers;
- Step 2: involving a survey of local suppliers to the timber mills, contractors and hauliers.

With regard to Step 1, it is noted that the Upper North East region, relative to the Eden region, covers a very large area and includes very many more mills and contractors and hauliers. Consequently, face-to-face contact with all such businesses was not possible for the Upper North East. A sample of face-to-face interviews was achieved, and this was supplemented by a mail-out survey of the remainder.

In Part II of this report, the method used in the survey of timber mills and contractors and hauliers is outlined. Details of the responses achieved, and the consequences for the subsequent analysis, are also discussed.

Part III of the report contains details of the analysis of the survey of mills, contractors and hauliers.

The views of mill and contract company owners and managers, recorded in the series of face-to-face interviews, are set out in Part IV.

The approach to and results from the survey of local suppliers to the timber industry (Step 2 above) are given in Part V.

[1] Rush Social Research, *Local Impacts of Forest Industry Expenditure in the Eden CRA*, a research report to SAU/DPIE and RACAC/DUAP, December 1997.

The population of mills and contractors in the Upper North East

The primary database on mills and contractors used for the Upper North East project has been provided by NSW State Forests.

This database contains various information, with records essentially based on the administrative requirement of the issuance of licences to carry out forest activities, such as milling. A number of mills have ongoing relations with NSW State Forests. These mills are often the larger ones with log quotas from Crown land native forests. Many licence holders have smaller operations, involving non-quota salvage timber operations, and involving harvesting from private property either partly or wholly. These operations may involve only part-time or ad hoc work: a mill licence holder may be a farmer with a stand of trees on his or her own property. For such licence holders, use of the licence may be a sometime affair.

The timber industry in the Upper North East is in a constant flux at the present time. Businesses are closing, continuing with reduced staff, or amalgamating; and some are expanding. Businesses with valid licences may have wound up; amalgamated businesses may have changed names; staff numbers may have changed since the most recent industry survey. These changes make it difficult for any database operation to ensure that its records are completely up to date.

Following a process of updating and editing, the lists provided by State Forests for the Upper North East contained the names of about 117 mills and of 11 contractors. A further independent process of editing attempted to cross-check these lists, so that as far as possible they represented the current situation of mills and contractors in the Upper North East.

Whereas the list of mills was not changed substantially as a result of these enquiries, in the course of the project over 30 further contractors were identified, some of whom had been active in the 1997–98 financial year. We have attempted wherever possible to include these businesses in the survey work.

Elements of the survey

Face-to-face interviews

From the lists of mills and contractors available, a selection was made of 23 businesses for face-to-face interviews. These businesses were seen as important for the project in terms of their location and size. The interviews with the 23 businesses involved a wide ranging qualitative discussion of the timber industry within the region and the businesses' experiences over the past few years. Following this, the participants were asked to respond to a semi-structured questionnaire which covered the key topics with regards to locational impact. This questionnaire was developed by Rush Social Research and confirmed by the client.

In some cases the questionnaire was left on site, for later return to Rush Social Research. This enabled the questionnaire to be completed by the participant in his or her own time, since questions often covered data only available in annual reports or financial statements. The completed questionnaires were varyingly comprehensive in the information provided, and some were not returned at all.

The face-to-face interviews were conducted during the week of 27–31 July 1998, and consisted of:

- mill owners/managers — 15 (including two NSW State Forest regional representatives);
- contractors — 9.

Mail survey of remaining mills/contractors

The data collected and the comments from the businesses interviewed face-to-face focused attention on the content of a questionnaire that was to be mailed to all other known mills and contractors within the Upper North East. The content of the questionnaire was confirmed by the client. The mail survey was intended to provide a better geographical spread than was possible using a face-to-face method. Included in the mail-out was a return slip which could be used to indicate if that business had closed down.

Subsequently, to those of the larger mills who had not responded to the mail questionnaire, telephone calls were made from the Rush Social Research offices in Sydney reminding them of the questionnaire and inviting their response and participation in the project. However, a poor response rate was achieved overall.

3 POST-IMPACT STUDIES ANALYSIS

In 1991 the Department of Arts, Sports, the Environment, Tourism and Territories commissioned Kinhill Engineers Pty Ltd to evaluate the effectiveness of a $73.5 million Structural Adjustment Program following the nomination of the Wet Tropics of Queensland to the World Heritage List in June 1987. This program was implemented by the Queensland Government to:

- assist displaced timber workers to adjust to the immediate and long-term effects from the cessation of commercial logging;
- create economic opportunities in areas affected by World Heritage Listing; and
- compensate businesses directly and substantially affected by the nomination of these forests.

Within the study Ravenshoe was selected as a case study community because of its dependency on logging before World Heritage Listing and its limited scope for creating new employment opportunities. However, interviews and surveys were also carried out throughout the region.

The conclusions of the study were that:

- the Structural Adjustment Package assistance provided to the APS mill in Ravenshoe to restructure and process plantation timber, and payments made directly to individuals who would have been substantially affected by the cessation of commercial logging, ensured that 94 employees, including working proprietors, remained in employment;
- these jobs represented 34% of the employed labour force in the town. In a community with limited alternative employment opportunities, the assistance provided may have been the only viable approach;
- on the whole, the Labour Adjustment Package was not fully effective in returning former timber industry workers to the same standard of living as that enjoyed previously. However, it did largely succeed in offsetting major financial stress;
- overall the Structural Adjustment Package was only moderately successful in creating long-term employment;
- the retraining component appeared to be ineffective. Less than 50% of those made redundant utilized this assistance. In addition nine of the eleven trainees interviewed indicated that the scheme did not help them obtain a permanent job. Factors included the difficulty in predicting when retrenchments would occur and the extent of these, isolation from main centres which provide a range of courses, and a resistance amongst some displaced timber workers to the need for retraining

Other constraints to the success of the program were thought to be the general economic decline since the 1990s, and a lack of comprehensive monitoring of the progress of workers during the period they received assistance.

An extensive bibliography of Social Impact Assessment literature is available from the Centre of Rural and Social Research, Wagga Wagga, New South Wales 2678.

Post-impact studies review

A literature search was undertaken to identify existing social assessment work within the Upper North East region and studies of comparative communities which resemble the current impact context. It has the dual objectives of establishing a historical account of social change in the area and informing subsequent data collection for the current study.

The Upper North East Forests of New South Wales have increasingly come under public scrutiny since the first Australian forest blockade at Terania Creek New South Wales in 1979, the Washpool wilderness and the Hastings valley in the early 1980s, and Mt Nardi in 1982 (Watson, 1990).

Shortly after the blockade at Mt Nardi in 1982, the New South Wales Government announced the 'Rainforest Decision'. This landmark decision in environmental politics brought some respite from conflict over logging rainforest areas, particularly in areas like the Border Ranges which had been a major location for community conflict. A $1 million Rainforest Fund was provided to assist industries affected by the policy as they rationalised and restructured (Lugg, A., 1995). Land was converted from State forest tenure to national parks and nature reserves, including the Border Ranges National Park, Nightcap National Park and Washpool National Park (Gibbs, D. 1992).

In 1990 the New South Wales Government announced a Forest Strategy to address the environmental concerns of the wider community, particularly regarding the way native forests were managed. The strategy covered twenty-two management areas and included a moratorium on harvesting major areas of unlogged forests until environmental impact statements were completed. In 1992, the *Timber Industry (Interim Protection) Act* was passed, and the Commonwealth Government announced a National Forest Policy Statement (Commonwealth of Australia 1992).

A New South Wales Government Forest Reform Package, which was primarily driven by a commitment to the National Forest Policy Statement, was announced in June 1995. This was a strategy to consider environmental values on a regional basis, and to establish an ecologically sustainable sawlog hardwood timber industry. The sum of sixty million dollars over five years was provided for industry restructuring and retraining. The policy also provided for State Forests NSW to fulfil its July 1996 quota supply commitments with resources drawn mainly from regrowth forests and plantations. After this time sawlog quotas were to be reduced by 30%. $47 million was set aside to double hardwood plantation land areas by 1998 (New South Wales Government 1995).

In 1996, the New South Wales Resource and Conservation Assessment Council undertook an Interim Assessment Process. This identified areas available for harvesting from July 1996, and areas to remain under moratorium until a Comprehensive Regional Assessment (CRA) was completed, and a Regional Forest Agreement (RFA) leading to a Comprehensive, Adequate, and Representative reserve system was signed by both Commonwealth and State Governments.

Parallel to this, the New South Wales and Commonwealth Governments undertook an assessment to identify on a regional basis, forested areas in wood production tenures which would potentially be required to fulfil the requirements of a Comprehensive, Adequate and Representative reserve system.

Of the volume of literature on the Upper North East Forests, comment to some extent on the social contexts of forest operations in the Upper North East CRA region.

1981

In 1979, logging operations in the Washpool forests were halted pending the outcome of an environmental impact statement. In 1980 two Casino based mills — Duncans and Robb and Brown — which drew logs from the Casino West management area, commissioned a study to report on the social and economic effects on Casino and the surrounding district from total or partial loss to the timber industry of the loss of resources from the Washpool State Forest.

Questionnaires were sent to owners/managers of the two mills, their employees, and managers and employees of other businesses dependent on these mills. These including logging contractors, haulers, and machinery suppliers and repairers.

The study found that the Washpool State Forest represented a potential resource of approximately 200 000 cubic metres to the Casino West management area.

Projected impacts from the cessation of logging in Washpool were a loss of approximately 150 jobs which generated $4 million per annum in overall revenue, closure of Duncan's mill at Sandilands, and severe disruption to one of the planing mills in Kyogle. Of those likely to be made redundant, 57% were considered to be unsuited to other forms of employment, and were unlikely to find alternative employment locally. Despite this, most were unwilling to relocate to gain other employment.

Projected cumulative impacts included increased unemployment rates in the district.

The report recommended that quota policy be developed in consultation with the timber industry to solve the problem of sustainable yield and to maintain current employment levels in the timber industry (Kable, J.C. 1981).

1992

In March 1992 Diana Gibbs undertook a case study on the far north coast of New South Wales to ascertain the economic effects on the timber industry on the far north coast of New South Wales, and the surrounding region, from the cessation of logging in newly designated parks and reserves in New South Wales following the 'Rainforest Decision' in 1982. These included the Border Ranges National Park, Murray Scrub Flora Reserve, Nightcap National Park, and Washpool National Park which was extended in 1984. The designations revoked a total of 62 886 hectares from State forest tenure.

The study found that, from 1980 to 1990, activity in the sawmilling industry declined significantly. Contributing factors were the economic downturn during that period, the move by the Forestry Commission to conservation prescriptions including sustained yield management, and the 1982 Rainforest Decision.

In the forests districts of Murwillumbah, Casino, Grafton, Urbenville, Kyogle and Casino West, the 1990–91 total sales of sawlogs were approximately 85 000 cubic metres less than in 1980–81.

Impacts on the 14 major Crown mills receiving quota allocations in 1980–81 were identified:

- Munro and Lever's sawmill at Grevillia ceased operations;
- Standford Sawmilling was compensated for the cancellation of quota but later closed down;

- Duncans acquired several operations in the area including the Robb & Brown Mills at Bonalbo and Casino, and the Standford mill at Murwillumbah;
- other mills changed their operations to replace rainforest products with hardwoods.

Despite this, little or no investment was being made to upgrade mills and restructure the industry to produce value-added products

Estimated cumulative impacts were an employment loss of 38% between 1980–81 and 1990–91 in the Richmond–Tweed–Clarence districts, an overall loss of 600 industry jobs, a shift towards the public sector as a source of employment, and a marked increase in unemployment. After considering multiplier effects, this was estimated to represent a total output loss of more than $24 million and a loss of more than 1300 jobs.

Flow-on effects to support industries as well as sectors supported by household expenditure was assessed as being significant with rural communities, especially smaller communities, experiencing wider impacts as public and private sectors were withdrawn following a decline in economic activity.

The downturn in the timber industry has not been offset by an increase in tourist-related activities, despite the promotion of tourism as an alternative employment source for the region.

In contrast to these findings, Dailon Pugh (June1992) found that, nine years after the Rainforest Decision, there had been a slight increase in timber industry employment, plus an additional 200–300 jobs, some of which may have been created by tourism opportunities following the designation of the Murray Scrub Flora Reserve, Cambridge Plateau Flora Reserve, and the Bundoozle Flora Reserve. Taking into account the increase in employment and a (presumed) increase in productivity, it was assumed that the output should have increased, not decreased.

Pugh's study also found that while there had been reductions in the volumes of hardwood logs removed from the Murwillumbah and Grafton management areas, reductions had been 'foreshadowed' before the Rainforest Decision. Furthermore, the reduction of resource from the Grafton management areas which contained over 75% of the total volume of resource in the regions before the Rainforest Decision (Gibbs 1992) seemed to have been offset through allocations from other management areas and from increased production on private property.

It maintained that costs associated with damage to council roads by logging trucks should have been included in the Gibbs study, as should non-quantifiable costs such as loss of wildlife, stream pollution, loss of topsoil, reduced water yields, loss of old-growth forest, loss of wilderness and destabilisation of ecosystems. A detailed assessment to determine the overall resource change within the region was advocated.

Subsequent to this, Gibbs' study was reviewed by State Forests NSW, submitted to The Institute of Foresters of Australia Inc. in October 1992 and accepted for publication.

In 1992 to 1993, the Centre of Coastal Management was commissioned to assist the Margules Groome Poyry study team with the public consultation aspects of the Environmental Impact Assessment studies of forestry operations in the Grafton and Casino–Murwillumbah forestry districts.

Participants in the study were asked whether they had ever visited a State forest, which ones, and what activities they undertook while visiting them.

Most believed that there needed to be a balance between preserving forests for environmental and social reasons and utilising them as an economic resource.

In a second report, community input was obtained from personal and telephone interviews. These included people who had made submissions towards Environmental Impact Assessment content and issues, and those on community advisory panels.

In Murwillumbah, respondents stated that although the level of employment within the timber industry was not high, the industry was still important to the local economy because forestry supported several small industries and therefore some jobs. Concerns were expressed at the competition from ‘big operators’ which had resulted in smaller operations being closed down.

In Casino respondents assessed the impacts from curtailment or setbacks in the timber industry as quite severe. Further serious effects on the local and regional economies were predicted if more cutbacks or shutdowns occurred. A belief that replacement industries would probably emerge in the longer term was also expressed.

Constraints noted for the study were the difficulties associated with instantaneous responses to telephone surveys and a high degree of variability which made interpretation difficult. In addition, budgetary restriction influenced the precision of results.

1995

In 1995 Jacqueline Lee Tracey completed a three year study of the logging industry. The research, conducted throughout much of New South Wales, emphasised the Northern, Central, Southern, Western and Softwoods Forestry Regions.

Research methods included participation observation, personal evidence, unstructured and semi-structured interviews, demographic and firm surveys, official statistics, and previously documented evidence.

The study found that despite the logging industry being at the centre of debates over forest use for two decades, very little was known about the small family firms which characterised the industry in these regions, how they responded to insecurities and livelihood problems, or even about the logging industry in general.

Women often undertook much of the administrative work in these firms, while other members provided manual labour. These strategies were used by the predominantly self-employed and small employer type firms especially during difficult times. A common practice was to dismiss hired labour and rely solely on family labour whose wages would be put directly back into the business. Thus family members were integral to the continuing viability of these firms.

The major sources of insecurity and uncertainty for logging firms and their families were the flexible contract system in the timber industry, and the environment movement’s anti-logging campaigns.

Following criticisms of the annual quota system which had been formerly in place (Resource Assessment Commission 1991, Dargavel and Jennings 1991, and Public Accounts Committee 1990), the Forestry Commission made a commitment to deregulate log sales through implementing market-based selling and pricing practices. This meant that further log allocations would be competitively based and proportioned into annual and term agreements of up to ten years which would be both divisible and transferable.

These reforms had not been completed during the study period. However, it was asserted that when they were they would still not give the right to harvest to wood processing mills, nor to contractors.

While logging firms contracted directly to mills, these contracts were often informal and verbal, and altered according to the volume of timber required at a particular time and the demand for certain species and grades of timber. This ‘gentlemen’s agreement’ was defended by mill owners, who themselves were experiencing a lack of resource security, but it created a high level of anxiety for contractors and discouraged them from making the large capital outlays necessary to purchase or update logging equipment.

Contractor insecurity was exacerbated by the environment movement’s anti-logging campaigns which disrupted work schedules and outputs. At the same time many contractors felt excluded from the debate because they did not fully understand the scientific discussions which had become central to it.

Contractors reported that continued criticism had reduced the status they once held in the community. In addition the confrontations and clash of values and ways of knowing, coupled with uncertainty over their future prospects, created an unprecedented amount of stress. This had been manifested in social, health, and marital problems.

In 1995, following the establishment of interim protection through Deferred Forest Areas, the Commonwealth Department of Primary Industries and Energy commissioned ERM Mitchell McCotter to assess the social and economic impacts resulting from a 30–40% reduction in the volume of timber available for harvesting.

In September 1995, Mitchell McCotter completed a study of social impacts in the Mornington Forest Region in Western Australia, the Huon Region in Tasmania, and the Bombala and Gloucester Regions of New South Wales before the release of the Deferred Forest Area report. Further research was undertaken to expand on, to confirm and clarify the findings of the study, with studies conducted in the Urbenville/Woodenbong and Grafton Forest Regions of New South Wales. In addition the Gloucester Forest Region, which had been assessed in the earlier study, was reassessed to confirm, clarify and expand earlier conclusions.

The second study outlined the vulnerability of forest-dependent communities to changes in the supply of forest resource, and the importance of considering the social and economic impact assessment as part of the development of the Regional Forest Agreements.

The methodology included community involvement and consultation, Australian Bureau of Statistic (ABS) data, and surveys.

Indicators to assess community vulnerability included impacts on the local economy, impacts on employment, impacts on individuals and families, impacts on community services, and impacts on community vitality.

The study found that in the Urbenville/Woodenbong Forest Region:

- the timber industry accounted for almost 50% of the labour force in the area, while forest-related industries also supported employment levels in other sectors;
- the combined effects of the drought and uncertainty in the timber industry had resulted in some business closures, with few business willing to expand and no new businesses coming into the area;

- in the event of closure or downsizing at the Ford mill because of a lack of resource security, the lack of alternative employment opportunities would result in younger people leaving the area, leaving an aging population with little family support;
- potential cumulative impacts would be the closure of small businesses and the withdrawal of community services.
- participants in the study were very apprehensive about their future employment prospects and felt powerless to do anything about it. Many were unable or unwilling to relocate despite a lack of alternative employment opportunities locally, although they foresaw this would mean that they would have to rely on social benefits and lose self-esteem.

The impacts in Grafton were not expected to be as severe as in Urbenville/Woodenbong. While it was estimated that there would be a loss of employment among contractors, some losses in timber mills, and a flow-on effect to local business, it was assumed that the position of Grafton as a regional centre would help to reduce overall social and economic effects.

Constraints for the study were noted. In particular the short time frame for the study limited data collection and analysis. A further constraint was the difficulty of addressing cumulative socioeconomic impacts.

In 1995 a study was undertaken to determine whether the Grevillia community and mill employees experienced significant and negative social impacts following the government's 1982 Rainforest Decision. It provided a history of changes in forest use in northern New South Wales, and drew on research in Australia and America to demonstrate how the introduction or withdrawal of forest industries potentially effects significant social change.

In March 1983, the Munro and Lever's sawmill at Grevillia, which had drawn 75% of its input from the Roseberry and Wiangaree State Forests — now part of the Border Ranges National Park — closed down. It was reopened at a reduced capacity by a cooperative of former employees in May 1983, and in 1995 employed about 14 people.

The methodology for determining the social impacts on the Grevillia community and on mill employees included ABS data, surveys of former employees, records from newspapers, Forestry Commission sources, and interviews with community members and selected representatives of sawmill staff.

The study concluded that between 1981 and 1986:

- 49 jobs were lost. This did not include people formerly employed at the mill who lived in Kyogle;
- only a small proportion of people (nine, either alone or with families) who became unemployed relocated. Relocation appeared to negatively affect family life and self-esteem;
- women experienced a higher proportion of harmful effects on family life;
- property rental prices increased after the mill closed;
- there was a significant impact on cultural perspectives. There was no attempt to quantify this finding, but it was assessed as being a 'real and passionate' issue, and related to generational associations with the timber industry.

Additional findings were that:

- changes to forest use and production technology had had a cumulative effect on the timber industry on the North Coast of New South Wales. Contributing factors included major reductions in timber supplies, increased domestic and international competition, mechanisation, and labour force shedding. These had badly affected the Grevillia sawmill and other sawmills on the north coast;

- the Rainforest Policy did not include direct measures to mitigate adverse effects on timber-dependent communities. Therefore, neither the Grevillia community nor the Munro & Lever sawmill received any financial assistance, despite a 'Rainforest Fund' of $1 million to promote the development of new technology and to assist affected industries during the implementation of the Rainforest Decision.

It was proposed that the socioeconomic costs of changes to forest management not be borne by affected communities, and that measures such as the Growth and Development Package, which the Queensland Government had provided following the cessation of logging operations on Fraser Island in 1991, be introduced to alleviate socioeconomic impacts.

Limitations of the study were noted. Although it was assumed that the Grevillia sawmill ceased operations in 1983 as a result of the 1982 Rainforest Decision, other factors may have contributed to the closure of the Grevillia sawmill. They included commercial decisions made by the owners of the Grevillia sawmill as part of a major reorganisation of the business, substantial reductions in timber supplies in response to the Forestry Commission's policy of phasing out general purpose rainforest logging and reducing sawlog quotas to a level that could be sustained in the long term. Given these factors it would be reasonable to assume that there would have been contractions in the timber industry and substantial decreases in employment between 1982 and 1990 in any event.

A report prepared by a regional task force in 1995 as an industry response to Deferred Forest Area proposals, argued that the north coast, and particularly the Northern Rivers region, was especially disadvantaged in reaching the target of 15% of pre-1750 forest areas because of the extent of land clearing for agriculture and horticulture, and because 73 timber types were represented in the region.

Projected socioeconomic impacts from the implementation of 15% targets were a virtual closing down of the native hardwood industry in the region including its downstream value-added components, a loss of annual income to the region of $140 million, and the potential loss of 964 direct jobs in the Northern Rivers part of the region alone. Indirectly, another 2000 jobs loss was predicted with many jobs lost in towns and villages largely or solely dependent on the timber industry. This would result in high relocation costs for individuals and the State.

Environmental impact statements

A number of environmental impact statements have been prepared for State Forests NSW for the Upper North East region.

Within these reports, the social descriptions of State Forest Management Areas were based on the population growth, age structure, and labour force characteristics. Labour force characteristics included status of employment, occupation, participating population, and income distribution. Base datasets were obtained from the 1991 census and were compared to State trends.

The structure of the regional economy was described using employment and unemployment levels as community sensitivity indicators, and the level of economic activity in manufacturing, building, agricultural activity, shire outlays and visitor expenditure. Other economic activities including grazing, beekeeping, occupational permits and tourism were also indicated.

Where available, the literature outlining the social impacts of significant changes in forest-based industries for each management area is reviewed in the discussion below.

The Murwillumbah management area

The Murwillumbah management area environmental impact assessment covered the management areas of Casino, Grafton and Murwillumbah. In this report the region as a whole was studied because the forests of the Murwillumbah management area provided a relatively small volume of timber to the timber industry but were seen to be integral to the regional industry itself.

Given the scope of the study a general outline only of community services in the northern region was provided.

In 1991 the hardwood timber industry provided direct employment for 964 people in the region. This figure included smaller mills and all non-quota operations, as well as people employed in extracting non-sawn materials, such as fencing materials, sleepers, firewood, leaves and seeds. In the Murwillumbah management area itself 42 people were employed in forestry/logging activities, and 408 in wood/wood products.

Potential impacts from a reduction in resource were considered to be too difficult to ascertain given the relatively small contribution of the Murwillumbah management area to the total resource used by industry at a regional level, although some areas were more closely linked with the timber industry than others. Nor was it considered possible to estimate whether and to what extent there would be job losses, or what the impacts on community services would be.

However, when considered in the context of a contraction of economic activity within the region, it was thought that the proposed changes could exacerbate the problems for government in supplying or improving community services.

Dorrigo management area

In the Dorrigo management area interim environmental impact assessment, the local government areas of Bellingen, Nymboida and Grafton comprised the social study area, with an emphasis on Dorrigo and surrounding villages.

This environmental impact assessment found that Dorrigo was dependent on the timber industry, with a number of communities serviced by it highly dependent. These communities included Bostobrick, Briggsvale, Cascade, Timmsvale and Ulong. The district incorporating Briggsvale, Cascade and Megan had high proportions of people in the manufacturing sector due to the location of sawmills in these areas.

Small business had been negatively affected after a fire at the mill at Briggsvale destroyed its capacity to mill timber. With a lack of alternative employment opportunities in the area, people had been forced to move away from the area to find other employment. Flow-on effects were a reduced viability of local businesses, schools, medical services and other local services and facilities. Individuals experienced stress, psychological problems, and a stigma from having to rely on social security benefits in this area.

The potential impacts of proposed changes to forest management for the Dorrigo area included a direct and indirect loss of 40 jobs, some loss of population as people left the area, a lack of incentives for additional investment and development which would have implications for the population and the local economy, and increased stress levels associated with uncertainty and insecurity about the future.

The impacts for tourism, grazing and beekeeping were considered to be insignificant, with much of the accommodation and expenditure for tourism occurring in Coffs Harbour.

Urbenville management area

The Urbenville management area environmental impact assessment considered all the towns and rural communities which depend on the Urbenville management area. Urbenville and Woodenbong were identified as the most timber-dependent communities and chosen for case studies.

The study found that the local economy was very narrowly based on agriculture and forestry, with most people directly dependent on these industries for their livelihood.

In 1991 there were 250 employees in the labour force in Woodenbong and Urbenville. Of these 22 were employed by State Forests NSW at Urbenville, 25 were employed at the Ford sawmill at Urbenville and 30 were employed at the other Ford sawmill in Woodenbong. Fourteen contractors serviced these sawmills. Taking account of other contractors and sawmills, forest-related industries directly employed about 50% of the labour force of these two towns.

The most significant potential impact from changes for Urbenville and Woodenbong was the closure of one of the mills. Other impacts were fewer jobs in forestry activities and timber production which would negatively affect other businesses and services which could be forced to shed jobs. A decrease in employment levels would lead to a decline in income levels and an increase in dependence on social security.

Cumulatively, loss of employment would result in a further loss of young people in the area, and feelings of powerlessness. Reductions in population and employment levels would negatively affect the services and facilities available, and further affect the already low morale of the communities. Given the general fragility of Woodenbong and Urbenville, losing even a small number of people was considered to be an issue.

Coffs Harbour–Urunga management area

This Environmental Impact Assessment considered the Bellingen Shire, Coffs Harbour City, Nambucca Shire, and Ulmarra Shire, and included small parts of the Kempsey and Nymboida local government areas.

An inventory of facilities and services available in most of the communities in the study area was provided.

In 1993 there were 46 sawmills located within the study area, and another six mills adjacent to the management areas which processed timber from Coffs Harbour management area. Of these only 29 mills used State forests of the region; the remainder were dependent on timber from private property.

It was estimated that in 1994–95, 228 people were employed in mills associated with Coffs Harbour management area resources, 81 employed in logging operations, and 46 employed by State Forest NSW. Support and services industries created another 200 employment opportunities. However, a number of these mills and employees were located outside the study area, particularly in Grafton and Kempsey.

Given the uncertainty regarding future timber production levels, the impacts from changes to forest management were ascertained to be too difficult to assess accurately. However, potential impacts were reduced levels of employment in the smaller villages and rural areas more highly dependent on the timber industry; increased growth in larger towns at the expense of rural areas and smaller villages; and a possible reduction or loss of community services in smaller towns which would place at risk the viability of schools, banks and businesses. The loss of these services would further reduce the attractiveness of the area for investment and negatively affect the quality of day to day life of the communities.

Other communities outside the Coffs Harbour management area, but which drew resource from it including Grafton (20%) and Kempsey (10%) were expected to be affected. However, there was little analysis of the types or severity of impacts for these communities.

No significant impacts were identified for the grazing, apiculture, beekeeping and tourism industries. The future of Coffs Harbour and Nambucca depended on tourism rather than the timber industry. It was estimated by Powell (1986) that the tourism sector supported approximately 15% of employment in Coffs Harbour, and 9.3% of the total regional employment.

Casino management area

The main centres in the Casino management area environmental impact assessment study region were the local government areas of Lismore, Ballina, Tweed Shire (part B), Byron Bay, Grafton, Maclean and Casino. These local government areas accounted for over 83% of the regional population which was very heavily concentrated in coastal areas.

This environmental impact assessment found that the regional economy depended on the primary sector for employment, with forest resource-based employment accounting for over 12.5% of all jobs in the primary and processing sectors.

While agriculture and tourism were important industries in the area, they tended to be concentrated on the coastal fringes. Only 35% of all tourism and agricultural production occurred in the inland areas.

The CMA was characterised as a wood supply region with much of the primary processing being conducted outside the management area (mainly at mills in the Grafton Management Area). Much of the output of the primary processing sector was transferred to the Murwillumbah management area for further processing. This secondary processing sector operated on a regional basis, with green sawn output being drawn from primary processors all over the Far North Coast Region.

The timber industry provided direct employment for 964 people in the region, with residential locations of the mill workforce particularly concentrated in Grafton 43% and Casino 18%. Other important centres were Lismore, Murwillumbah, Woodburn and Kyogle.

In 1993–94, 120 sawmill licences were issued within the study region. Most of the mills consisted of one or two-person operations. Of these only 11 had quota agreements. Two of these mills were in the Grafton management area, and seven were in the Casino and Murwillumbah management areas. Three major processing plants at Kyogle, Grafton and Murwillumbah took green timber from other mills and processed it to higher-value products.

Potential impacts from changes were found to be unevenly distributed, with the timber industry and the regional business community likely to bear part of the costs which could lead to a loss of employment. The impact from employment reductions would be more significant in the Kyogle, Casino, Whiporie/Rappville and Mallanganee/Bonalbo areas which were more heavily reliant on the timber industry.

Both Mallanganee/Bonalbo and Rappville/Whiporie were considered to have a higher dependency on the primary and processing sectors. Eleven per cent of all jobs in the

Mallanganee/Bonalbo locality were directly dependent on the timber industry while the reliance for the Rappville/Whiporie locality was approximately 25%.

It was predicted that because a large proportion of the employment in these industries was provided by the public service sector, any reduced activity in the timber industry would lead to a decrease in the demand for community services. With 49% of employment in Bonalbo created by the public sector, any withdrawal of public services such as health and education was estimated to have dramatic consequences for the vitality of the community.

Other important forest-based industries within the region were grazing, beekeeping, and teatree oil production, but they were considered to be unlikely to be affected.

Grafton management area

The socioeconomic impacts of operations for the Grafton management area were considered in the context of three management areas which included Grafton, Casino and Murwillumbah. They included twelve local government areas: Ballina, Byron, Casino, Kyogle, Lismore, Richmond River, Tweed, Copmanhurst, Grafton, Maclean, Nymboida and Ulmarra.

Because the industry based around Grafton used a significant volume of timber from other areas, especially Casino, it was considered that it would not be useful to disaggregate the Grafton management area from the Casino and Murwillumbah management areas. In addition survey results indicated that in the study region only about 41% of resource was obtained from the State forests of the Grafton and Casino/Murwillumbah management areas with the balance obtained from State forests in other areas, and from private property in both the study area and in other regions.

The study found that native hardwood forests of the region formed an important resource for timber-based activities and for recreation and tourism. These in turn supported the services sectors and many other jobs in the region. Employment based on forest resource accounted for over 12.5% of all jobs in the primary and processing sectors of the regional economy. Excluded in this calculation were State Forests NSW employees, and employment associated with log (and mill output), haulage, beekeeping, grazing, and commercial recreation use of State Forests NSW.

In 1993–94 there were 120 sawmill licences issued within the study region, most consisting of one or two person ‘bush operations’. Of these mills, only 11 had agreements for quota, or a certain supply of a specified minimum quality of logs from State forest. There were also three major processing plants in the regions. These were concentrated around inland centres such as Casino and Grafton. In the region 964 people were directly employed within the industry. These included those employed in smaller mills and all non-quota operations, as well as people employed in extracting fencing materials and sleepers and other non-sawn material. Around 76% of this total employment consisted of jobs in the mills, with contractors accounting for just over 10% of industry jobs. State Forests NSW provided just under 8% of all jobs, and the remaining 6% consisted of jobs associated with other products such as sleepers, poles and posts, poles, and firewood as well as the collection of leaves for drugs and oils.

The grazing industry contributed a significant amount to the regional economy, although this varied across the region. For example, income to State Forests NSW for grazing leases from Casino and Grafton in 1992 was $80 000, while the equivalent income for Murwillumbah was minimal. Based on an estimate of one-third of cattle sold through regional saleyards associated with forests and/or Crown leases, the value to the regional economy was calculated to be between $5 million and $10 million per annum.

While tourism activities were considered to be an important income for the region as a whole (contributing $466 million), 75% of this amount was generated in the coastal local government areas of Tweed, Byron, Ballina and Maclean. Inland areas including Grafton, Lismore, and Casino as well as forested areas accounted for less than one-quarter of the total.

It was estimated that restrictions to access to State forest of the Grafton management area would incur a number of costs for the industry which were expressed as lower values of outputs achieved. However, if all other supplies to the industry remained in place, there would only be a marginal effect on output levels. Even if there was a total restriction to the industry to the Grafton management area, it was assumed that this would only reduce total supplies by approximately 12%.

Glen Innes management area

The Glen Innes environmental impact assessment considered the Glen Innes and Severn local government areas.

In this region, a number of private enterprises in the region based their activities on or gained a proportion of their total outputs from the State forests in the Glen Innes management area. At the time of the study there were five sawmilling operations in the management area, and a mill in Armidale, which drew salvage logs from it. The largest mill was Duncan's Holdings, a quota mill which processed sawlogs, chipped the waste, and sold the sawdust to a local feedlot north of Glen Innes. Most of the sawn timber was transported to processing plants in Kyogle and Murwillumbah for value-adding.

The Department of Corrective Services Afforestation Camp had a small mill that utilised some hardwood sawlogs, but dealt mainly in pine. There were also a number of small bush mills which produced sawn and fencing timber.

The study found that 46 people were employed directly in the hardwood timber industry. These consisted of 37 people in logging, hauling and sawmilling and nine in the Forestry Commission. These figures did not include those employed primarily at the Glen Innes pine plantation. Nearly all forest-dependent people lived in Glen Innes itself where sawmilling employed more labour than any other local processing manufacturing industry.

It was estimated that with a reduction in quotas, the mill would not necessarily close, but there would be a loss of six jobs in forestry, logging, and wood production, and five jobs would be lost in the service sectors in Glen Innes/Severn.

Reduced grazing leases would reduce cattle operations and income for graziers and result in the equivalent of full-time employment loss of two to three people.

While these figures were not large, it was asserted that because Glen Innes was a small with a static population, and because there had been employment losses in other sectors of the town, social services such as schools, health facilities and other services might decline. Therefore, every decline in employment was considered by the local community to be a serious impact.

Tenterfield management area

In the Tenterfield environmental impact assessment, the study was confined to the Tenterfield local government area.

This study found that the rural economy was heavily dependent on grazing and wool production: 30% were employed in agriculture, forestry, fishing and hunting activities. This was 4% higher than the New South Wales average. Forestry contributed approximately 10% to agricultural employment.

Sawmilling employed more labour than any other processing or manufacturing industry, contributing 32% to the total manufacturing employment. Average annual production for quota quality sawlogs was estimated at 24 300 cubic metres which had an economic value of $2 114 000.

In 1991, 118 people were directly employed in forest industries. This included two large sawmills in the area, Robb and Brown in Tenterfield and the Ford mill at Drake which employed 48 people. (In 1995 employment levels at these mills had fallen, with the Robb and Brown mill and Fords employing 18 people each).

Other employment in forest based industries included harvesting for sawmills (20), independent contracting operations (4), sleeper cutters (12), oil and drug collection extraction (1), firewood collectors (7,) State Forests NSW employees (6), other products (9), giving a total of 59 people employed. Indirect employment was 131.

A large number of beekeepers accessed the Tenterfield management area. These included fourteen large commercial beekeepers who lived in Lismore, Inverell, Glen Innes, Emmaville, and Queensland, and 17 registered beekeepers who lived in the Tenterfield local government area. The economic value of honey production was estimated to be $376 000 — approximately 1% of the total Australian honey production. Value-adding in packaging and labelling, and wax and honey were not included in the estimates.

In 1993, 62% of State forests in the management area were held under Crown leases and occupational permits, with an estimated 80% of the total forest area used for grazing. It was estimated that this had an economic value of $116 000 per annum, and realised an annual income for State Forests of $20 900.

In 1991 the recreation value of State forests was estimated to be $150 000 per annum attracting 30 000 people.

It was predicted that the main impacts would be felt by the timber industry, where there would be some rationalisation of sawmills in the region. Either of the Boral mills (Robb and Brown or the Glen Innes mill) would close, and the Ford mill at Drake would close and divert its sawlogs to Woodenbong in the Urbenville management area.

The closure of a sawmill would have significant economic and social impacts. This would include a direct loss of approximately 30 jobs (18 at the mill and a further 12 logging and transport contractors who supplied the mill with timber). The indirect impacts on employment would be at least a further 35 jobs in the local economy. In addition, as most of the forest-dependent employees lived in Tenterfield itself, a rise in unemployment levels would have significant flow-on effects to the retail and services industries in the form of consumption effects as household incomes were reduced.

Reports 1996

A number of submissions were produced in 1996 which supported environmental impact assessment findings and predictions.

In July 1996 Ford Timbers made a submission to the Resources and Conservation Assessment Council to retain 70% of its 1995 logging quotas. This was to ensure that a restructuring program which entailed closing a sawmill at Drake, upgrading the facilities at the Urbenville mill and introducing a second shift, and closing the sawmill at Woodenbong and replacing it with a value-added plant was able to be completed.

The restructuring program was based on a log input level of 45 000 cubic metres, a drop of 2435 cubic metres from the volume of timber obtained in 1995. Resources during 1995 had been drawn from Tenterfield, Urbenville and Casino District Forests, and private property, and included quota, salvage, thinnings and girder quality logs.

The report highlighted the potential negative social and economic impacts from further reductions in quotas. It drew on the findings of Urbenville Management Area environmental impact assessment prepared by Manidis Roberts Consultants in 1995, which found that approximately 65% of the local population were employed in the timber industry, making Woodenbong, Urbenville, and the Muli Muli Aboriginal community the most timber-dependent communities in New South Wales.

Ford Timber's submission stated that any further significant reduction in regrowth logging opportunities would be a disincentive for completing their restructuring program, threaten the business's viability, and heavily affect the social and economic well-being of the Urbenville management area.

A submission produced by the Urbenville Progress Association which based its findings on the Urbenville forest management area environmental impact assessment (November 1993), emphasised the dependence of the economies of Urbenville and Woodenbong on forest related industries.

The study found that Urbenville and Woodenbong were the most timber-dependent villages in the Urbenville management area, although Kyogle was also considered to be timber-dependent because people who worked at the mill at Grevillia lived there. It emphasised the low economic status, poor employment opportunities, and the vulnerability of educational, health, community services, and shopping facilities in Urbenville and Woodenbong.

Conclusions from the study were that a reduction in timber production would have a significant impact including a loss of young people from the area, higher unemployment, lower levels of service, and low morale. This would result in a 'subtle' disintegration of the community. While alternative employment opportunities such as tourism and 'retirement' were considered as possible options, the basic infrastructure to support those industries was not readily available, nor did residents have the skills to gain employment in these areas. In addition, it was considered unlikely that many would be suitable for this type of industry.

In 1995 a personal submission by sawmiller Lexie Hurford was provided to the Resource and Conservation Assessment Council. The submission outlined the impacts on their workforce following the 70% quota cuts.

Hurfords had made staff with least skills redundant, retaining higher-paid multi-skilled workers who undertook lower skilled tasks part-time. Of special concern was the well-being of those employees who had 'little English, literacy, and the mentally handicapped' that the business had formerly 'taken under its wing' many of whom, it was doubted, would be able to find alternative employment.

Further log reductions were expected to result in retrenching employees who had only ever worked in the timber industry, and who had expected to remain with the company until retirement. Some were second generation employees.

The submission recommended that the social impacts be taken into account in formulating decisions by government with particular regard to the timber industry, and that further social impact studies be undertaken as a matter of urgency.

This submission was followed by another in 1996 which recommended that quota log resources to industry be maintained at a minimum 70% of 1995 allocation levels, and that Hurfords be offered a 5x5 agreement for quota quality logs equal to the 1995 quota with a possible reduction in minimum log diameter of 40 cm to 37 cm. This assurance was seen to be necessary to maintain the viability of the business and the continued employment of its workers.

1997

In 1997 M.J. Brennan, and M. J. Frank reported on the social and economic impacts following the revocation of 57 hectares of State forests in northern New South Wales and the establishment of seven new national parks, a nature reserve, three wilderness area, and six wilderness additions.

The study found many graziers had stands of commercial spotted gum which had supplemented their income, particularly in the preceding five years of drought and poor returns for their stock. It also found that forest revocations had had direct impact on pastoralists who had either not renewed their leases or had had them cancelled.

It was estimated that conservation measures would result in a loss of more than 160 jobs, more than $160 million gross income per annum, and a flow-on effect to rural infrastructure. On a population basis this was estimated to have a higher impact than the closure of the BHP steelworks in Newcastle. The report recommended that independent socioeconomic studies accompany each revocation review and that no further national parks or wilderness area declarations be made until they were completed.

4 REGIONAL PROFILE

The regional social profile is an overview document which is intended to provide a brief socio-demographic description of the defined region for the purposes of the Regional Forest Agreement. Its purpose is to describe the major socio-demographic trends and characteristics which may be pertinent to a consideration of changes in forest use and management in the region.

For the purposes of this study, the report begins with a brief overview of the region and then describes the socio-demographic characteristics, specifically relating to the agreed social indicators for the social assessment of forest uses in the New South Wales Comprehensive Regional Assessment (CRA) process, including trends within each local government area (LGA).

Overview

The Upper North East Regional Forest Agreement area contains the LGAs of Ballina, Byron, Casino, Coffs Harbour, Copmanhurst, Glen Innes, Grafton, Guyra, Kyogle, Lismore, Maclean, Nymboida, Richmond River, Severn, Tenterfield, Tweed and Ulmarra

Population

The Upper North East study area has a rapidly growing population. In the period 1991 to 1996, the population change in the Upper North East study area (10.72%) was double that of New South Wales (5.34%).

Within the study area, the fastest growth occurred in the northern coastal fringe with Byron LGA (21.06%) and Tweed LGA (19.5%) experiencing the highest rates of growth.

Population decline was experienced in Severn LGA (-6.66%), Glen Innes LGA (-0.54%) and Guyra LGA (-9.63%).

Labour force

The Upper North East study area had a workforce participation rate (51.89%) lower than that found in New South Wales (59.1%). No LGAs within the study area had workforce participation rates greater than that of New South Wales. The highest workforce participation rates were in Copmanhurst (57.5%), Guyra (56.16%), Lismore (57.5%), Nymboida (58.5%) and Severn (57.59%).

The 1996 census figures showed unemployment was higher in the Upper North East study area (15.38%) than in New South Wales (8.8%). Unemployment rates ranged from 11.3% in Glen Innes and Tenterfield to 20.6% in Ulmarra.

Industry

Agriculture, forestry and fishing, the retail trade and manufacturing were dominant industries in the study area, with the retail trade being more dominant in LGAs that included large urban centres.

The Australian Bureau of Statistics 1996 census showed approximately 1928 people were employed in the timber industry in the Upper North East study area. Within the forest industry sector, timber processing, including sawmilling, timber dressing and other wood product manufacturing, comprised the largest component of employment in the study area (75%).

The largest proportion of people working in forestry and logging (26.7%) were those employed in the Coffs Harbour LGA. The largest proportion employed in sawmilling and timber dressing were those employed in Kyogle LGA (17.7%). Other wood production and manufacturing was focused in two locations, both employing 111 people (15.8% each). These were Coffs Harbour LGA and Grafton LGA.

Other characteristics

The Upper North East study area was largely Australian-born and English-speaking. At the 1996 census, 2.68% of the population reported being Aboriginal and/or Torres Strait Islander, compared with 1.7% in New South Wales.

The study area also had a population that was both older and poorer than that of New South Wales in 1996.

The New South Wales median age of 34 years was lower than that found in all LGAs except Lismore LGA (33), which had a high proportion of young people at university and schools in Lismore urban centre. Median ages ranged to 44 years in Maclean, with most LGAs having a median age of around 36 years.

Median weekly rents, median monthly mortgage rates, median weekly individual incomes and median weekly household incomes were all lower than found in New South Wales.

Summary of LGA characteristics in relation to forest use and management

LGA	Relationship between socio-demographic trends and forests
Ballina	▪ No State forests within the LGA ▪ Projected population increase to almost double by 2021
Byron Bay	▪ Second fastest growing LGA in the State with population predicted to double by 2021 ▪ Highest unemployment rate in UNE region at 19.6% ▪ Almost 59% of those 15–19 years were employed in retail and tourism associated trades
Casino	▪ LGA predicted to continue to grow at 1% per annum, as it has since 1960 ▪ Growing Aboriginal population, currently at almost 6% of the LGA population ▪ Unemployment rates are decreasing from 1991 levels to 12%

LGA	Relationship between socio-demographic trends and forests
Coffs Harbour	▪ Second largest LGA in the Upper North East region ▪ 50% of the LGA is forested ▪ Employment in recreational and personal services sector increased by 131% from 1986 to 1996
Copmanhurst	▪ 11 State forests and two nature reserves in the LGA ▪ High proportion (25.4%) of people aged under 15 (New South Wales 15.7%) ▪ Projected population decrease to the year 2016
Glen Innes	▪ Large out-migration of people aged 15 to 19 ▪ Unemployment (11.3%) lowest in Upper North East region ▪ Median weekly household income fourth lowest in Upper North East region
Grafton	▪ Projected population decrease to the year 2016 ▪ Median age 34, second lowest in Upper North East region ▪ 10.86% of over 15 year olds earned nil income or under $80 per week
Guyra	▪ Population decrease of 9.6% between 1991 and 1996 ▪ Highest proportion of Aboriginal and Torres Strait Islanders in LNE region (7.76%) ▪ Rapidly increasing proportion of older members of the community
Kyogle	▪ Large increase in 40 to 49 age group between 1986 and 1996 (57.9%) ▪ Out-migration of 20 to 29 age group between 1986 and 1996 (24.9%) ▪ Very high unemployment rate in 15 to 19 age group (27.4%)
Lismore	▪ Third largest LGA in LNE region ▪ Second lowest proportion of people aged over 60 in LNE region ▪ Over half 15 to 19 age group employed in wholesale and retail trade
Maclean	▪ Population increase of 33% between 1986 and 1996 ▪ Highest proportion of 60+ age (30.27%) group in Upper North East region ▪ Third highest unemployment rate (17.5%) in Upper North East region
Nymboida	▪ Lowest proportion of people 60+ years (13.25%) in Upper North East region ▪ Highest proportion of people under 15 years (27.6%) ▪ Third highest unemployment rate (17.5%) in Upper North East region
Richmond River	▪ Population increase of 31% between 1986 and 1996 ▪ Third highest rate (21.32%) for 60+ age group for Upper North East region ▪ 40 to 49 age group increased by 66.6% between 1986 and 1996 (New South Wales 35.5%)
Severn	▪ Decrease in population of 7.68% between 1991 and 1996 ▪ Large out-migration of 15 to 30 age group ▪ 9.17% of those aged 15+ recorded negative or nil income
Tenterfield	▪ Ten State forests in LGA, 50% used for grazing permits ▪ One of the lowest unemployment rates in Upper North East region (11.3%) ▪ Higher median age of 39 years than New South Wales at 34 years
Tweed	▪ Highest growth rate in Upper North East region (19.5%) ▪ Median age 40 ▪ More than 20% of population earned between $80 and $100 per week
Ulmarra	▪ Highest unemployment rate of all LGAs (20.7%) ▪ 21.19% of the population is under 15 years old (third highest in Upper North East region) ▪ Retailing employs 45.5% of 15 to 19 year olds

Ballina LGA

The Ballina Local Government Area (LGA) covers 484 square kilometres and is the fourth largest in the Upper North East study area. It is a popular holiday area and includes the township of Ballina, a fishing town on the mouth of the Richmond River. The area has good beaches, sheltered swimming in the river, scenic places and a mild, subtropical climate.

Tourism, fishing, boating, surfing and bushwalking are all actively promoted within the area. Other urban centres within this LGA are Lennox Head, Alstonville and Wollongbar.

The main rural activities in the area are sugar cane growing, horticulture and dairy and beef cattle grazing. Macadamias, avocados and other fruits are major crops. Banana plantations are decreasing in importance while teatree plantations are becoming more extensive.

Light industry and marine industry are found in Ballina and there is also a light industrial estate in Wollongbar.

There are no State forests within the shire.

Population

In 1996, the Ballina LGA had a population of 34 702. The 1996 census showed 87.5% of the Ballina LGA populace was Australian-born with 95.7% speaking English only. The most popular religion in the Ballina LGA was Anglican.

Only 3% of the population were born in non-English speaking countries compared with 15.7% of those in New South Wales. In 1996, 2.15% (749) of the Ballina LGA population identified as being Aboriginal and/or Torres Strait Islanders. This was a 0.45% increase over the period 1991–1996.

The population of the Ballina LGA increased by 42.1% between 1986 and 1996. This included a 99.5% increase in people aged 40–49 and a 65.5% increase in people aged 65 years or more. This growth was higher than the New South Wales population which had an 11.8% population increase for the same period, an increase of 35.5% for those in the 40–49 age group (the age group with the greatest increase in New South Wales) and a 28.2% increase in people aged 65 years or more.

In 1996, Ballina LGA had the third highest population of people over 60 years of all LGAs in the Upper North East study area of New South Wales, behind the Tweed and Maclean LGAs with 23.98% of its population over 60 years. This was reflected in a median age of 39, considerably older than the New South Wales median of 34. The proportion of population aged less than 15 years was 20.98%, the third lowest proportion in the study area.

The NSW Premier’s Department forecast the population of the Ballina LGA will continue to grow, reaching 51 136 by 2021.

The workforce

In 1996, 12 597 people were employed and 1812 peoples were unemployed. Ballina LGA had a workforce participation rate of 52.6%.

The unemployment rate decreased 2.4% in the period between 1991 and 1996, dropping from 14.9% to 12.6%. In 1996, 1444 (79.6%) of those unemployed were in the 20 to 54 year age group.

Between 1991 and 1996, the distribution of unemployed within the Ballina LGA changed. In this period the labour force in all age groups increased but there was a 12.9% increase in the number of unemployed in the 15 to 19 year age group and a decrease in the unemployed aged 55 and over.

The 1996 census showed 8.2% of those in the Ballina LGA were employed in the agriculture, forestry, and fishing industries (compared with 3.6% over New South Wales). This was a 26.3% increase from 1991. For those aged 55 and over, this was the major industry of employment. In all other age categories, the major industry of employment was the retail trade.

Professionals comprised the largest proportion of the workforce in 1996 (16%), closely followed by intermediate clerical and sales people. This may reflect the influence of Ballina township as a service centre for nearby rural regions. Ballina LGA has the second highest median individual weekly income ($241) in the Upper North East region. The New South Wales median individual weekly income of $298 is higher than the median of any LGA in the Upper North East region.

The median weekly household income for the Ballina LGA is $484, lower than the New South Wales median of $652, and is third highest in the study area.

Education

In 1996, Ballina LGA had nine State primary schools, two State high schools, one non-government primary/secondary school, a preschool and a special school, along with a number of children's centres. Ballina LGA had a higher proportion of people attending primary and secondary schools than New South Wales, having 10.1% attending infants and primary schools and 7.4% attending secondary schools, compared with 9.5% and 7.0% attending in New South Wales.

School retention has increased over the period 1991 to 1996. In 1991, 43.6% of the population aged 15 years or more had left school aged 15 years or less. By 1996, this had decreased to 39.17%.

The Ballina LGA had a low proportion of people attending post-compulsory education. Only 4.9% attended this level of education in 1996 compared with 6.2% in New South Wales. At the 1996 census 2208 people (6.36%) were recorded as having tertiary qualifications. The largest category of people holding qualifications held skilled or basic vocational qualifications. In this category there were 4105 people (35.70%) in 1996, compared with 39.5% in 1991. The most popular fields of qualification in 1996 and 1991 were engineering, business and administration, health and education.

Health

New South Wales Department of Health figures show that the Ballina LGA had a much lower overall rate of hospital admissions than New South Wales in 1995–96. The area had a much higher rate of admission of those in the 0 to 4 years age group, having an admissions rate of 347 per 1000 compared with 198 per 1000 for New South Wales in 1995–96. There were lower hospital admissions in Ballina LGA than for New South Wales for those aged over 55 years.

The 1996 census figures show Ballina LGA had the third lowest birth rate in the Upper North East study area, having 1.99 births per 1000 compared with 1.82 births per 1000 in New South Wales. It had the fourth lowest standardised death rate for the study area, having a death rate of 6.0 deaths per 1000 compared with New South Wales which had 6.6 per 1000.

Housing

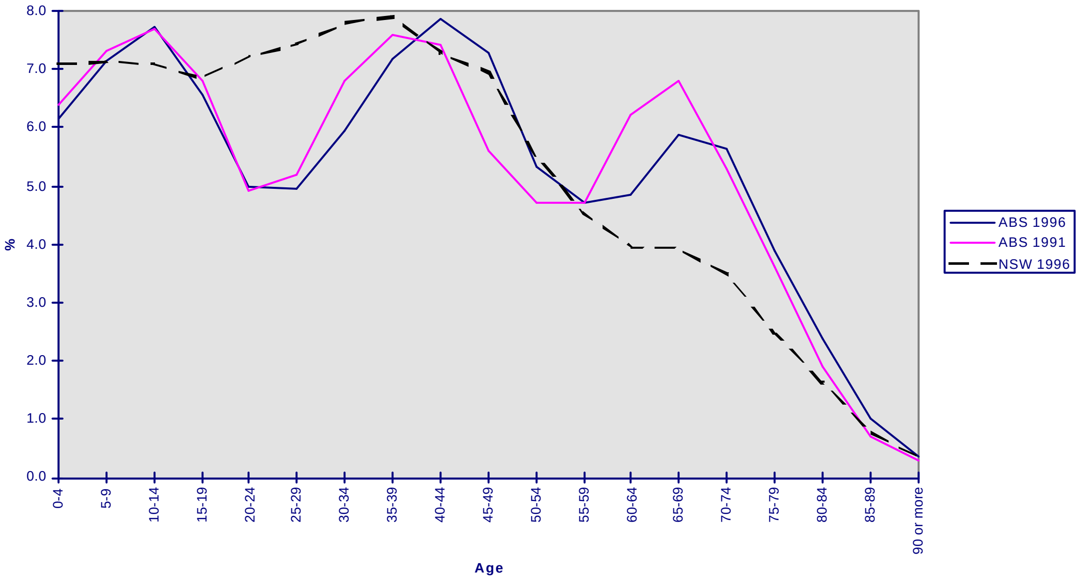
The population of Ballina LGA was a fairly mobile one. At the 1996 census, 51.3% of the population aged five years of more stated they had lived at a different place five years beforehand, compared to 37.2% of New South Wales residents.

In 1996 67.4% of the dwellings in the Ballina LGA were separate houses and the occupancy ratio was 2.8; 47.5% of dwellings were owned, 19.9% were being purchased and 28.5% were being rented (one of the higher rental rates in the study area).

The area had lower median mortgage and rent rates than those for New South Wales — $828 per month and $138 per week, respectively, compared with $902 and $142 for New South Wales. The Ballina LGA 1996 median weekly rental was third highest in the study area and the mean mortgage rate was highest in the study area. Most people in the LGA live in separate houses or semi-detached houses and the area has a higher home ownership rate and a lower occupational density than New South Wales (2.12 per dwelling compared with 2.28 in New South Wales).

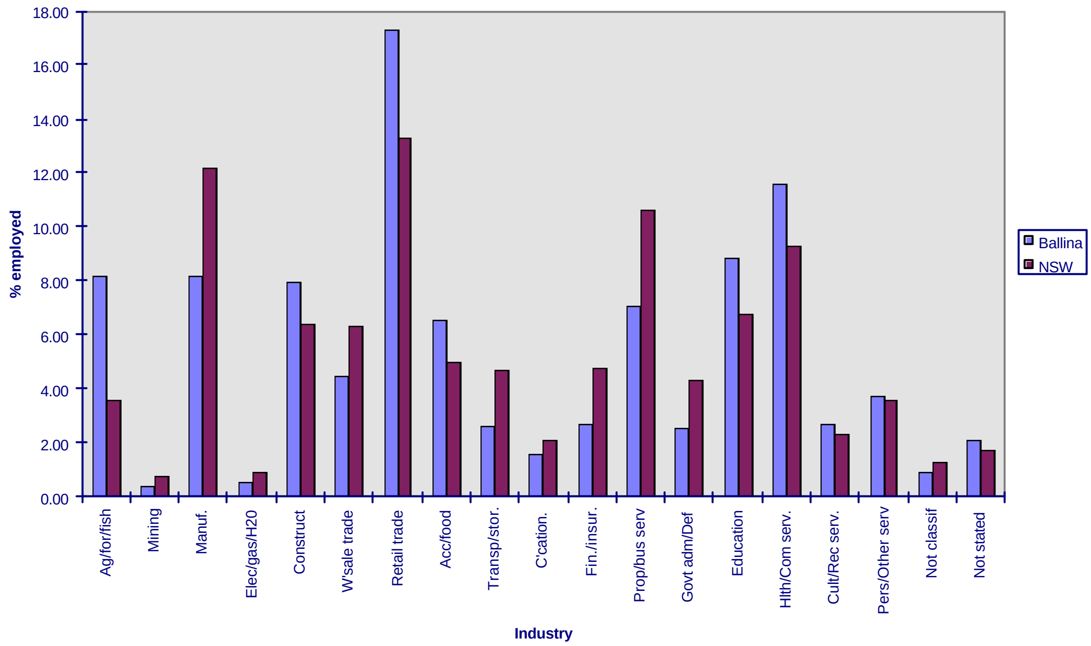
The Ballina Shire Council's *Urban Land Release Strategy* (1996) noted that the five year supply of suitably zoned land was reaching critical levels within several areas of the LGA, and further analysis and investigation of land supply and demand would be required to ensure planning kept pace with population growth.

Figure 1: Ballina LGA – age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 2: Ballina LGA – employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Byron LGA

The Byron LGA lies on the coast and hinterland areas of northern New South Wales and covers 566 square kilometres. It has a subtropical climate and a distinct wet season.

The primary settlement within the Byron LGA is Byron Bay, a coastal town with a population of 6130, ranked fifth largest in the Upper North East study area. Other settlements in the LGA include Ocean Shores, Mullumbimby, Suffolk Park, Brunswick Heads, South Golden Beach and Bangalow. The Byron LGA is a focal point for both alternative and the more traditional ways of life, and population in the area has increased by 3991 people (17.6%) in the period 1991–96.

An important industry in the area is tourism, focusing on the beautiful beaches and the diversity of marine wildlife and dive sites. Other industries include agriculture, horticulture, beef cattle grazing, light industry, sugar cane growing and service industries. Cottage industries are an emerging industry. In the period April to June 1997, takings from tourist accommodation amounted to $2 319 000.

Population

At the 1996 census, the population of the LGA was recorded as 26 620, 'average' in size compared with populations in other LGAs. It is the second fastest growing LGA in the State, growing at almost three times the New South Wales rate. The NSW Premier's Department projected that the LGAs population would almost double to 47 200 by 2021.

The Byron LGA has the lowest proportion of Aboriginal and/or Torres Strait Islander identified people in the Upper North East study area (1.23%) and the highest proportion of those identified as having a non-English speaking background (4.8%). Most of the population (80.28%) is Australian-born, and most is Anglican.

Byron LGA has not got a particularly high proportion of people under 15 years (22.19%) or over 60 years (17.25%) but both rates are higher than those for New South Wales.

The LGA has a median age of 36, higher than the New South Wales median of 34 and higher than it was in 1991 (35 years).

The workforce

At the 1996 census, the recorded labour force for the Byron LGA comprised 11 395 people.

The labour force increased by 25% in the period 1991 to 1996 but the labour force participation rate declined from 54.3% to 53.1%.

Byron LGA recorded the second highest unemployment rate in the Upper North East study area in 1996, having a rate of 19.2% compared with 8.82% for New South Wales. Almost a quarter of those in the labour force and over 15 years (2184 people) were unemployed. Over half those looking for work were from the 25 to 44 year age group (57.79%) and over 60% were from the 20 to 54 year group. In the period 1991 to 1996, unemployment grew in all age sectors, except the 55 years and over group. There was a 5.7% increase in the unemployed population in the Byron LGA for the period 1991 to 1996. The 1996 census showed 184 people aged over 65 years in the workforce.

Those aged 15 to 19 years recorded the highest unemployment rate by age group (26.0%). This compared favourably with the 1991 unemployment rate for the group (30.5%)

The 1996 census confirmed Byron LGA's popularity as a tourist destination and as a service centre, with 16% of the workforce in the retail trade, 10.1% in the accommodation, cafe and restaurant business, and 10.2% in health and community services. Of the workforce aged 15 to 19 years, 44% were employed in the retail trade and 14.9% in the accommodation, cafe and restaurant business. This was 29.4% more than were employed in the retail trade in the 20 to 54 year age group and 32.5% more than in the 55 years and over group.

The business services sector grew by 51.6% in the period 1991 to 1996, adding 315 positions to the workforce. A 39.1% increase in the wholesale and retail trade added a further 516 positions over the same period and a 26.0% increase in manufacturing added 165 positions.

In 1996 697 people (7.57% of the workforce) were recorded as working in the agriculture, forestry and fishing industries in the Byron LGA, compared with 709 in 1991 (9.6% of the workforce). This was a decline of 1.7% over the 1991 to 1996 intercensal period. Over two-thirds of these employees were male, and over half were aged 35 to 54 years.

Major areas of employment were spread over four sectors — professionals, associate professionals, tradespersons and related workers, and elementary clerical, sales and service workers, with professionals and clerks and service workers comprising over 10% of those employed.

The 1996 census showed a quarter of males in the LGA held qualifications in engineering. Females held qualifications primarily in business and the humanities.

The median weekly individual income ($225) and median household income ($454 per week) were lower than those for New South Wales and around average for the Upper North East study area.

Education

The 1996 census showed 69% of those attending primary schools and 81% of those attending secondary schools attended government schools in the Byron LGA. Primary schooling had the largest participation level of all sectors. Only 4.5% of people attended post secondary education including TAFE, university and tertiary institutions and other educational institutions. This compared with 6.8% in New South Wales in the same period, and 4.2% in 1991. The proportion of people not attending educational institutions decreased from 72.1% in 1991 to 68.9% in 1996. The 1996 census showed 32% of the Byron LGA population left school at 15 years or younger and over half (53.13%) had left by age 16 years.

Health

The 1996 census showed that Byron LGA had the lowest birth rate in the Upper North East study area (1.90 births per 1000) and a higher rate than in New South Wales (1.82 births per 1000).

In 1996 191 deaths were recorded, around ‘average’ for the Upper North East study area. The death rate of 6.4 deaths per 1000 is equivalent to the rate recorded for Maclean LGA, and close to the New South Wales rate of 6.6 deaths per 1000.

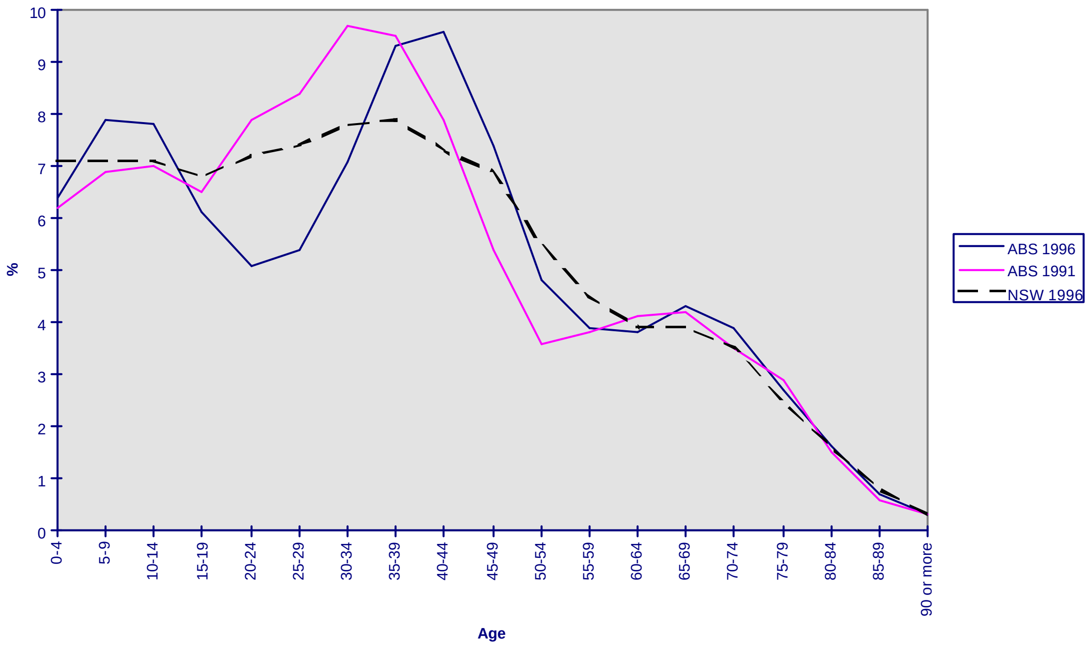
The NSW Department of Health figures show that 5860 people were admitted to hospital in 1995–96, giving an admissions rate of 220 admissions per 1000 compared with 289 admissions per 1000 for New South Wales. The highest admissions rates were for people aged 60 + (37%). In this same period, the major reason for hospital admissions related to diseases of the digestive system (12.9%), diseases of the circulatory system (9.2%) and accidents, poisoning and violence (8.7%)

Housing

Over 75% of homes in the LGA in 1996 were separate houses, with 610 new residences constructed between 1991 and 1996. The proportion of flats and apartments decreased, with only eight new constructions in this same period. The median household size in 1996 was 2.6 people.

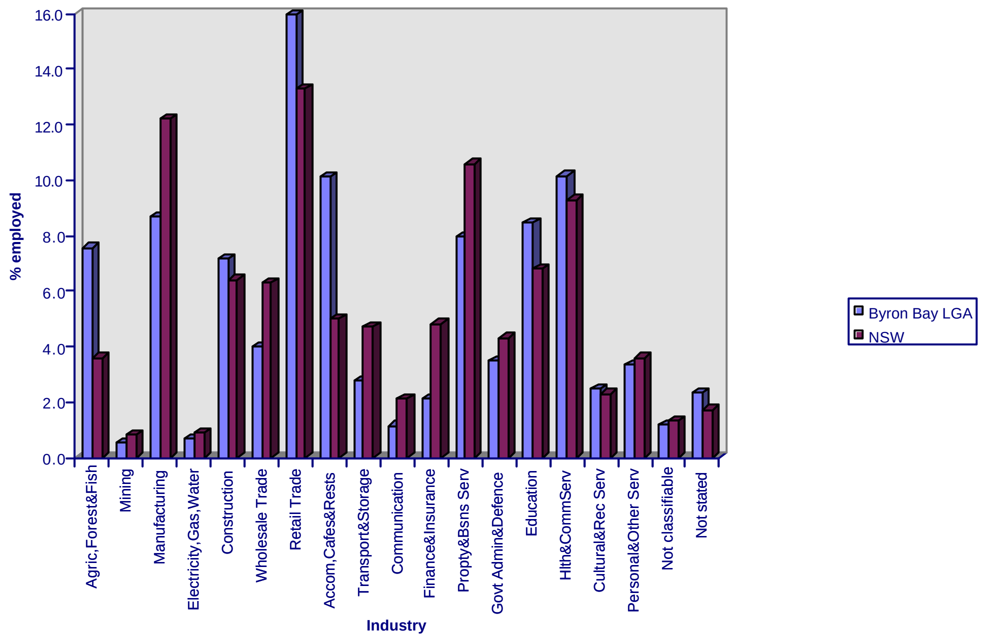
The 1996 census showed over 4265 (47%) of homes are fully owned. A further 1761 dwellings were being purchased. The median monthly mortgage rate for 1996 was $736 per month, sixth highest in the Upper North East study area. Median weekly rent was $147, highest in the Upper North East study area, $5 per week higher than the New South Wales median.

Figure 3: Byron Bay LGA – age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 4: Byron Bay LGA – employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Casino LGA

The Casino LGA occupies 91 square kilometres and is located in the Northern Rivers Region of the New South Wales Upper North East study area. The LGA has a subtropical climate with mild winters and hot humid summers. The area, particularly that around the major urban settlement, Casino, is prone to flooding in summer and autumn.

The LGA is know as the 'Beef Capital' and this is reflected in the major industries in the area which include meat processing, hide processing, smallgoods processing and frozen food processing and distribution. The Casino sale yards recorded the second highest throughput of cattle in New South Wales in 1997.

The township of Casino is a rural service centre for the area surrounding it, including Bruton, Gays Hill, Irvington, Nammoona, Oakey Creek, Roseneath, The Bend, and Wooroowoolgan. The township covers about 7% of the area of the LGA. The remainder is grazing land with small areas of orchards and cropping.

Most of the roads in the area are sealed and the town has railway, bus and airport facilities. Public transport facilities are available in the town of Casino but there are limited facilities apart from the school bus service, in rural areas and this provides a constraint to full use of the services offered in Casino township.

Population

The 1995 census showed the Casino LGA had a population of 10 774 people and was eighth largest LGA in the Upper North East study area. The largest settlement in the LGA was Casino township, which had a population of 9990 people.

The high number of older people recorded at the 1996 census was reflected in the median age of the Casino LGA (36 years). The New South Wales median age was 34 years. Average household size was 2.6 people, around average for the Upper North East region. The population of the Casino LGA was predominantly Australian-born (93.11%), English speaking (96.3%) and Catholic.

In 1996, 5.85% of the Casino LGA population identified as being Aboriginal and/or Torres Strait Islanders, an increase since the 1991 census in which 3.7% of the population were identified as belonging to this group.

In 1996 23.61% of the population were aged under 15 years and 30.6% were under 20 years of age. The number of young people of Aboriginal and/or Torres Strait Islander descent increased by one-third in the five years between 1991 and 1996.

In 1996 20.87% of the population were aged over 60 years. Both rates were at the low edge of the range for the Upper North East, higher than the New South Wales rates of 21.2% and 12.6% and a very slight increase on proportions recorded in the 1991 census.

The Casino Council *State of the environment report 1995–96* showed that annual population growth in Casino township averaged around 1% from 1961. The NSW Department of Urban Affairs and Planning predicted the population of Casino LGA would continue to increase, rising to 13 000 by 2021.

The workforce

The 1996 census showed that 3767 people were employed in the Casino LGA and of these only 153 (4.06%) were employed in the agriculture, forestry and fishing industries. This was the lowest proportional and actual employment in this category in the study area. This was also an increase from the 1991 census which showed 149 (4%) working in the industry in this LGA. The major area of employment over the intercensal period was manufacturing (especially that related to the beef industry) with almost a quarter of the population working in this industry.

People working as labourers and related workers comprised the largest proportion of the workforce.

Major employers in the LGA are the:

- Northern Co-Operative meat company (NORCO) and its subsidiary tanning plant;
- saleyards complex;
- NSW Forestry Office and local sawmills;
- Memorial Hospital;
- State Rail Authority; and
- Mariani Meats.

The unemployment rate dropped in the five years from 1991 to 1996, falling from 16.29% to 12.2%. Unemployment was focused on those aged 20 to 44 years. The 1996 census showed those in the 15 to 18 year age groups had an unemployment rate of 23.4%, although this had fallen from 1991 (28.1%). These figures affected the workforce remaining in the town and the maintenance of a skilled labour force.

In the 1996 census 77 people over the age of 65 years (3.42% of the labour force) were shown still in the workforce.

Median individual income for the Casino LGA in 1996 was $250 per week and median household income was $475 per week. These rates were much lower than the New South Wales median incomes of $298 for individuals and $652 for households and were around average for the Upper North East study area.

Health

The 1995–96 demographic figures from the Australian Bureau of Statistics showed that Casino LGA had the second highest standardised death rate in the study area with a rate of 7.3 per 1000; a much higher rate than is found in New South Wales (6.6 deaths per 1000).

Casino LGA had a birth rate of 2.39 per 1000, the fifth highest in the Upper North East region.

It also had a rate of hospital in-patient episodes almost double that of New South Wales, having 507.4 admissions per 1000 compared with the New South Wales rate of 281.6 per 1000 and a rate 154.8 admissions higher than the next highest rate in the Upper North East study area. Major causes of hospital admission were diseases of the circulatory, respiratory and digestive systems.

The Casino Council (1997) highlighted concerns relating to the range of services available to special groups such as the aged, youth and Aboriginals and Torres Strait islanders, particularly specialist services in health, human services and employment. Concerns were also been expressed regarding the range and depth of services for the disabled and their carers, particularly those residing in rural areas of the LGA. Child and family counselling, health education, assessment and support services for the disabled and respite care and community care for the elderly were defined as priority areas for development.

Transport to community services and facilities were identified as a major problem, particularly in relation to the travel distances to these services and the reliance on private transport due to unavailability of public transport services in rural areas.

Education

In 1996, 182 people attended preschool, 1136 attended primary school and 743 attended secondary school with over 60% attending government educational institutions. Four hundred people (3.71%) attended post-secondary education

Casino LGA had a low school retention rate. In 1996, 68.93% of the Casino LGA population recorded they had left school aged 16 years or under.

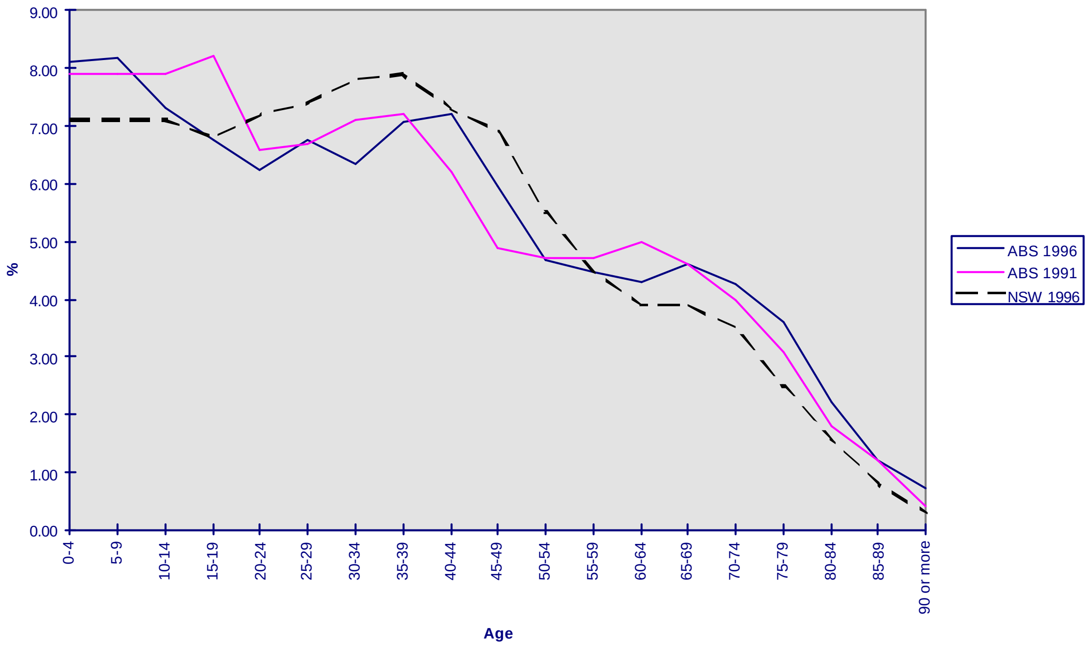
Tertiary qualifications were held by only 280 people within the LGA in 1996, with business and administration and engineering being the most ‘popular’ categories of qualification.

Housing

The 1996 census showed over half the Casino LGA population lived in fully owned separate houses. Casino Council figures showed the number of new dwellings constructed in the period 1995 to 1997 declined from 32 in 1995 to 17 in 1997.

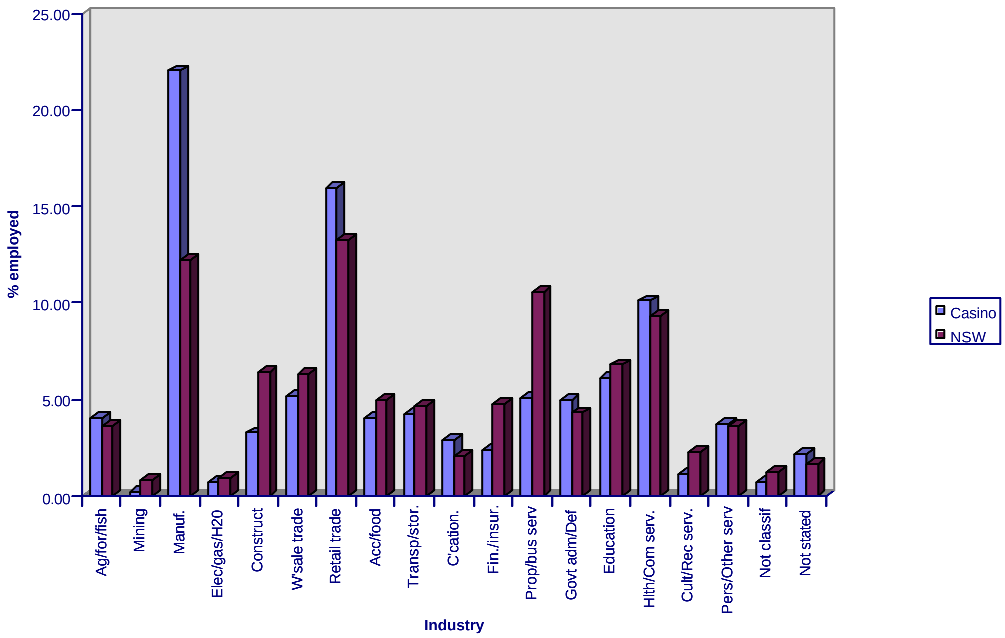
The LGAs 1996 median monthly mortgage rate ($655) and median weekly rent ($95) were considerably lower than those for New South Wales and on the lower end of the range for the Upper North East region. Couples with children were the major household occupancy group.

Figure 5: Casino LGA – age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 6: Casino LGA – employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Coffs Harbour LGA

Coffs Harbour LGA is the fourth largest in New South Wales and second largest in the Upper North East study area. The Coffs Harbour LGA covers 960 square kilometres and enjoys a subtropical climate with mild winters and warm to hot summers. It extends from the eastern side of the Great Dividing Range to the coast, including the river valleys and steeper areas of the Eastern Dorrigo Plateau. The LGA experiences relatively high rainfall of over 1700 mm per annum and coastal flooding is a problem in some of the lower lying areas.

About 50% of the LGA is forested with the remainder comprising agricultural land, the city of Coffs Harbour and numerous other villages. Banana plantations are a significant component of the agricultural base with beef and dairy grazing also featured. Tourism has also become an important industry.

The LGA is split by the Pacific highway which is a major transport link between Sydney and Brisbane. The highway allows the area to profit as a major tourist and freight service centre which is complemented by a rail link and a regional airport.

Availability of public transport services has been noted by the Coffs Harbour City Council as having a limiting effect on development of the LGAs economy and access to and utilisation of community services.

Population

The 1996 census showed Coffs Harbour LGA had a population of 58 337 people.

In the 1996 census, 85% of the LGAs population noted they were Australian-born compared with a rate of 72.8% for New South Wales. English speakers comprise 93.1% of the population. Anglicanism is the predominant religion. The township of Woolgoolga was noted by the Coffs Harbour City Council as having a significant Sikh population. Only 4.4% of the Coffs Harbour population identified as being born in a non-English speaking country.

The number of people identifying as Aboriginal and/or Torres Strait Islanders in this LGA increased at a higher rate than that of New South Wales between the 1991 and 1996 censuses, an increase of 50.6% compared with New South Wales's rate of 44.9%. At the 1996 census 2.4% of the population identified as being Aboriginal and/or Torres Strait Islander.

In the census period 1986 to 1991, population in the Coffs Harbour LGA increased by 8764 people. In the period 1991 to 1996, the population increased from 51 510 people to 58 337 people (an increase of 6827 people). Population growth in the area has been consistently higher than the North Coast region (including Hastings, Ballina and Byron Bay LGAs) over the past 10 years.

The LGA has an ageing population. The median age of the LGA in 1996 was 36 years with 15.3% of the population aged 65 and over. This compared with the New South Wales median of 34 years and 12.7% of the population aged 65 and over. In the area, 63% of the population were under 45 years and 12% were aged between 15 and 24 years. Growth in the number of people aged 40 to 49 years and 65 years or more has been high with growth of 79.3% and 65.1% respectively for these groups in the period 1986 to 1996.

Population projections by the New South Wales Premier's Department for the period 1996 to 2016 suggest that the population of the Coffs Harbour LGA will increase by 25.22%. The greatest increases are projected in the 65 to 74 year age group (49.97%) followed closely by increases in the 75 + age group (39.14%) and the 45 to 64 year age group (34.2%).

Coffs Harbour LGA experiences a considerable increase in population during the summer peak holiday period. The Coffs Harbour City Council noted in its community services plan that in 1996 91% of the population lived in the coastal strip between Woolgoolga and Sawtell including the city of Coffs Harbour. In the remainder of the area, settlement was relatively sparse. Of visitors to the Coffs Harbour township area 46% are relatives, friends or visitors of local residents.

The workforce

In the 1996 census 16.8% of the population of Coffs Harbour LGA (4069 people) were listed as being unemployed. This is an improvement on the unemployment rate of 18.7% recorded in the 1991 census. A significant proportion of the population was noted by the Coffs Harbour City Council as being underemployed and/or on a pension or benefit. People aged 15 to 19 were recorded as having the highest unemployment rate of all age groups over 15 years, with a rate of 26.7% in 1996.

Businesses in the LGA were heavily dependent on the seasonal tourist trade with the tourism industry being one of the largest employers in the area. The orientation towards tourism was reflected in the predominant industry of the area, retailing, which provided 19.3% of the employment. In 1996 other important industries included accommodation, cafes and restaurants (8.9%), health and community services (9.9%), property and business services (8.0%) and manufacturing (8.0%). Agriculture, forestry and fishing provided only 5.3% of employment. There was a decrease of 41 positions in this sector since 1991. The 1996 census showed occupations within the area reflect the area's role as a tourism hub and service centre.

The greatest increase by sector in the period 1986 to 1996 was shown by the recreation and personal services sector, which increased by 131%. Other industry sectors showing a large increase included mining (68% increase), wholesale retail trade (44%), community services (58%) and finance and business services (69%). Agriculture, forestry and fishing decreased employment by 7% over the same period.

The Australian Bureau of Statistics found the dominant occupational group at the 1996 census was that of intermediate clerical sales and service workers (16.32%), closely followed by professionals (14.69%) and tradespersons and related workers (13.25%). Most people employed (53.42%) were aged 35 to 54 years.

In 1996 the median weekly income was $228 for individuals and $473 for households compared with $298 for individuals and $652 for households in New South Wales. There are also more households (63.2%) earning $120 to $699 per week ($6260 to $36 464 per annum) than there are in New South Wales (46.6%).

Lack of public transport was recognised by the Coffs Harbour Council (1998) as a major impediment to seeking and retaining work in the area and to accessing services, training and support.

Health

The Coffs Harbour LGA is well served by doctors, dentists and public and community health services. The LGA has both private and public hospitals.

The major causes of death in the LGA are diseases of the circulatory system and cancer. Despite having an ageing population, the level of hospital admissions for those aged 30 years and older was lower than the New South Wales rate. However, the admissions rate for 0–4 years age group was almost double that of New South Wales. All other admissions were at a similar rate to that of New South Wales. The death rate in the Coffs Harbour LGA in 1995 was 5.5 per 1000 and the birth rate was 2.04 per 1000. These were around average for the Upper North East region.

Centrelink figures record there were 3103 people in the Coffs Harbour LGA receiving disability or carer's pensions in January 1998.

Education

The Coffs Harbour LGA includes the Coffs Harbour Education Campus at Coffs Harbour which includes a university, TAFE and senior college. The 1996 census showed the area has higher rates of attendance at preschool, primary, infants and secondary schools but lower rates of attendance at TAFE institutions, university and other academic institutions than shown in New South Wales.

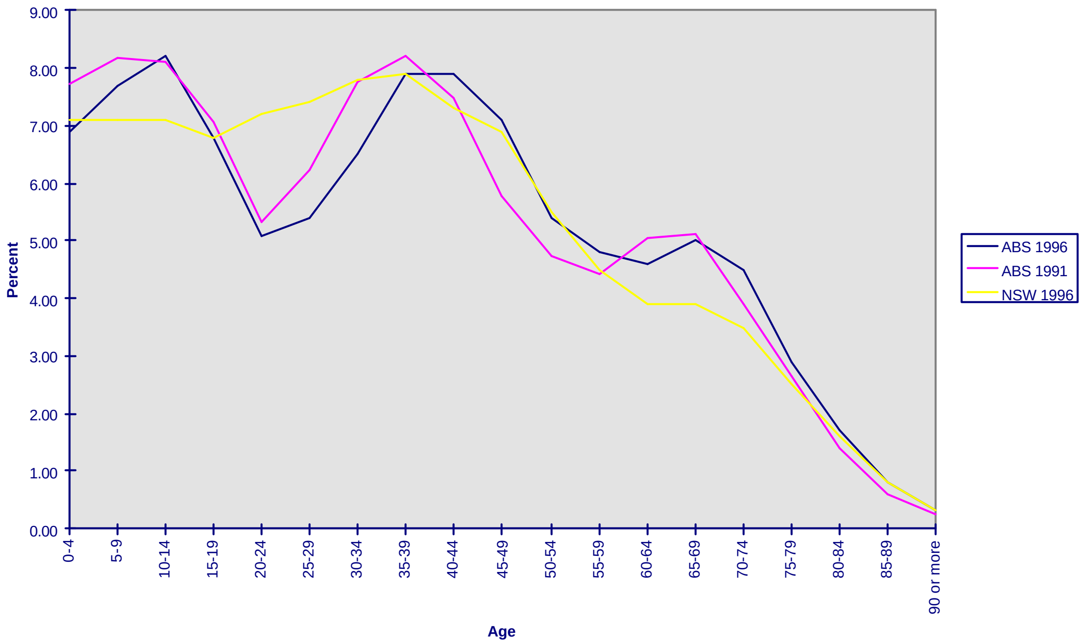
The 1996 census showed 40.52% of the population aged 15 years and over held qualifications; 39% of those qualified held skilled or basic vocational qualifications in engineering (18.96%) and business and administration (15.6%).

Housing

The number of occupied private dwellings increased by 18.1% in the period 1991 to 1996 and the number of unoccupied dwellings decreased by 3%. In 1996 67% of people lived in a separate house; 42.7% of households owned the house they lived in, slightly lower than the New South Wales rate of 43.3%.

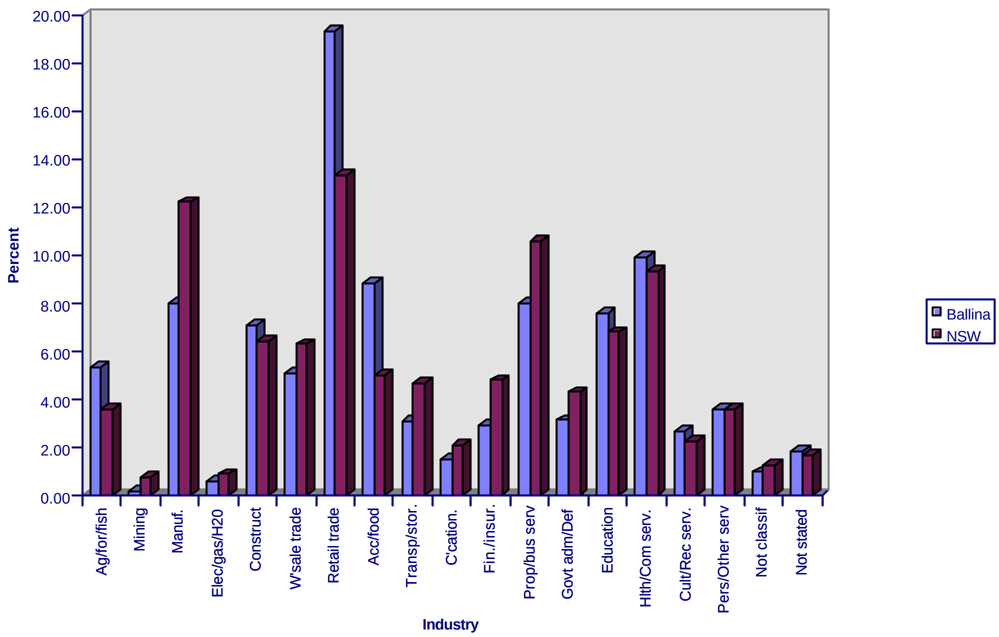
Median monthly mortgage payments in the Coffs Harbour LGA in 1996 were $752, compared with $906 for New South Wales. Median weekly rentals were also lower than New South Wales, being $129 compared with $142 for New South Wales.

Figure 7 : Coffs Harbour LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 8: Coffs Harbour LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Copmanhurst LGA

Copmanhurst LGA covers 3162 square kilometres of the Upper North East study area in a predominantly rural region bordered by the Clarence River and the Gibraltar Range.

The Copmanhurst LGA has a subtropical climate and a distinct summer wet season with average annual rainfall of around 1000mm. Large areas of the LGA are subject to flooding.

Major urban centres within the LGA are Junction Hill, Copmanhurst and Baryugil. Junction Hill is only 5 km north of Grafton and is a rapidly expanding satellite centre.

Industry in the Copmanhurst LGA is mostly rural-based. Major employers listed by the Copmanhurst Shire Council in their *State of the environment report 1996/97* include Big River Timbers (timber processing), Boral Timbers, Koppers Logs, and a NSW Fisheries Research Station. Other industries in the area include sugar cane farming, dairying, beef, timber production and light industries. A number of quarries operate in the area. Tourism is focused on outdoor activities, with tennis, soccer and athletics being regional drawcards focused around the newly developed Barnier Park Sports Complex.

There are eleven State forests in the LGA and two nature reserves. The LGA includes the World Heritage listed Washpool National Park.

The Copmanhurst Shire Council's *State of the environment report 1996/97* noted that many of the people work and/or use facilities at Grafton, while residents in the northern part of the shire shop and use facilities at Casino.

Population

Copmanhurst LGA had a population of 3968 people in 1996, an increase of 11.8% since 1986 and the same rate of growth experienced in New South Wales over the period.

At the 1996 census 90.8% of the population recorded were Australian-born (compared with 72.8% in New South Wales), and 95.8% spoke English only. Anglican was the dominant religion identified in the 1996 census. Only 1.9% of the population were from a non-English speaking background.

The largest population group recorded in both the 1996 and 1991 censuses was that aged 10 to 14 years (9.3%). The greatest population change between 1991 and 1996 in the LGA was experienced in the 40 to 49 year age group which increased by 76.8%, followed by the population aged 65 or more which increased by 63.9%.

Copmanhurst LGA had a distinct outflow of young adults (aged 15 to 29) between 1991 and 1996 as shown in figure 9 (34.2%). Compared to New South Wales, Copmanhurst LGA had a higher proportion of people aged under 15 years, 25.4% compared with 15.7% for New South Wales. The LGA also had an ageing population, although this level was slightly lower than experienced in New South Wales and more of the aged were living longer than in 1991. Copmanhurst LGA had the third lowest proportion of people over 60 years in the Upper North East study area.

Copmanhurst LGA had a large proportion of Aboriginals and/or Torres Strait Islanders in its population in 1996. At the 1996 census, 157 people (3.96%) identified as being Aboriginal and/or Torres Strait Islanders, an increase of 0.9% from the 1991 census. This compared with a 1996 figure of 1.7% for New South Wales.

The NSW Premier's Department has projected the population of Copmanhurst LGA will decrease to 3884 people by 2016. The Department predicts 33.49% of this population will be aged 45 to 64 years and only 19.15% will be aged under 15 years. This may have serious implications for the establishment of aged care services and maintenance of a long-term rate-paying population base.

The workforce

In 1996, the Copmanhurst LGA had a labour force of 1699 people and a workforce participation rate of 57.5%.

The unemployment rate declined by 2.15% in the period 1991 to 1996, from 18.3% to 16.2%. At the same time the number of unemployed aged 20 to 54 decreased by 25, and for those aged 55 and over unemployment decreased by seven. The number of people not in the labour force and aged 55 and over increased by 27.5% in the intercensal period, reflecting the ageing of the community and possibly an increase in the number who had given up seeking employment. This group made up almost half the population not in the labour force.

Agriculture, forestry and fishing made the major sector of employment in 1996, employing 17.7% of the population (254 people). A further 12.7% were employed in the retail trade and 10.9 % in the manufacturing industry, much of which is timber oriented. Employment in agriculture, forestry and fishing remained stable over the period 1991 to 1996, there being a decrease of only 0.1% in this time. In both the 1991 and 1996 censuses, people aged 35 to 54 years comprised over half this workforce.

The Copmanhurst Shire Council position paper [undated] noted that the micro economic reforms had had a major impact on the area generally, with a contraction of levels of employment in State Government departments, State Rail and Northpower. The closure of the Grafton Tooheys Brewery was estimated to have resulted in the loss of 42 jobs in the LGA.

The largest occupational group of employed people in 1996 consisted of managers and administrators (17.3%), followed by intermediate clerical and sales people (15.9%) and professionals (14.5%). Tradespersons and labourers comprised 10.3% and 10.1% respectively.

Median weekly individual income in 1996 was $215 and median weekly household income was $490. This was lower than in New South Wales with $298 and $652, respectively.

Education

The 1996 census showed 30.4% of people in the Copmanhurst LGA were attending educational institutions.

The largest group of these people attending educational institutions attended primary schools (12.2%), with a further 8.0% attending secondary schools. These levels were close to the 1991 rates (12.4% and 9.0% respectively) and higher than rates recorded for New South Wales for the same period (9.5% and 7.0%).

The Copmanhurst Shire Council position paper [undated] showed that primary age schooling is provided at Baryulgil and Copmanhurst, with high school and TAFE standard education being provided in Grafton and Casino.

Copmanhurst LGA recorded a fairly low rate of participation in post-compulsory education at both the 1991 and 1996 censuses, recording levels of 4.0% in 1996 and 4.3% in 1991 compared with 6.8% in New South Wales. This is not atypical for the Upper North East study region.

The LGA also recorded a low level of student retention, with 42.09% of the 1996 population having left school aged 15 years or less (compared with 44% in 1991).

Only 27% of the population over 15 years surveyed in 1996 held a qualification of some kind. The most common qualification held (27.14%) was a 'skilled vocational' qualification. In 1996 340 people (31.7%) held qualifications at associate diploma, undergraduate diploma, bachelor degree, postgraduate diploma or higher degree level. This was a 20.1% increase on the number holding these qualifications in 1991. Engineering, business and administration and education were the most popular fields of qualification.

Health

ABS population census figures for 1996 show the Copmanhurst LGA had a birth rate which was 'average' for the Upper North East study area, with 2.62 births per 1000 (compared with 1.82 per 1000 in New South Wales) and 49 births in 1996.

It had the lowest standardised death rate in the study area, having 4.7 deaths per 1000 compared with 6.6 per 1000 in New South Wales. In 1996 23 people died in the LGA

The NSW Department of Health found that in 1995–96, Copmanhurst LGA had a hospital admission rate around two-thirds that of New South Wales (174 per 1000 compared with 289 per 1000 in New South Wales). The highest rate of admissions was of people aged 75+ (403 admissions per 1000), with high rates also recorded for people aged 0 to 4 years, 25 to 29 years and 55 to 59 years. The largest proportion of hospital admissions were related to diseases of the digestive system (13.1%) and accidents, poisoning and violence (10.0%)

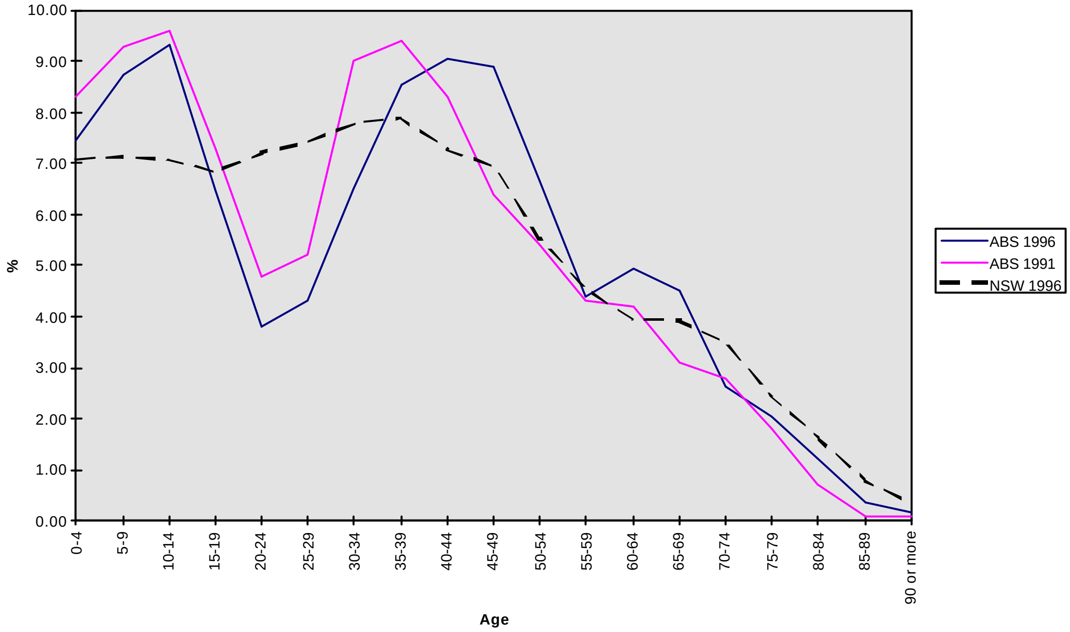
Housing

Copmanhurst LGA had a fairly stable population according to the 1996 census, with only 37.2% of the population having changed address in the 1991 to 1996 intercensal period.

In 1996 86.5% of the Copmanhurst LGA population lived in separate houses. Home ownership levels of 58.7% were higher than in New South Wales (43.3%), but the proportion of residences being rented or purchased (33.7%) was less than two-thirds that of New South Wales (51.9%). Families with children comprised around one-third (39.3%) of the households in the LGA compared with New South Wales (40.95%).

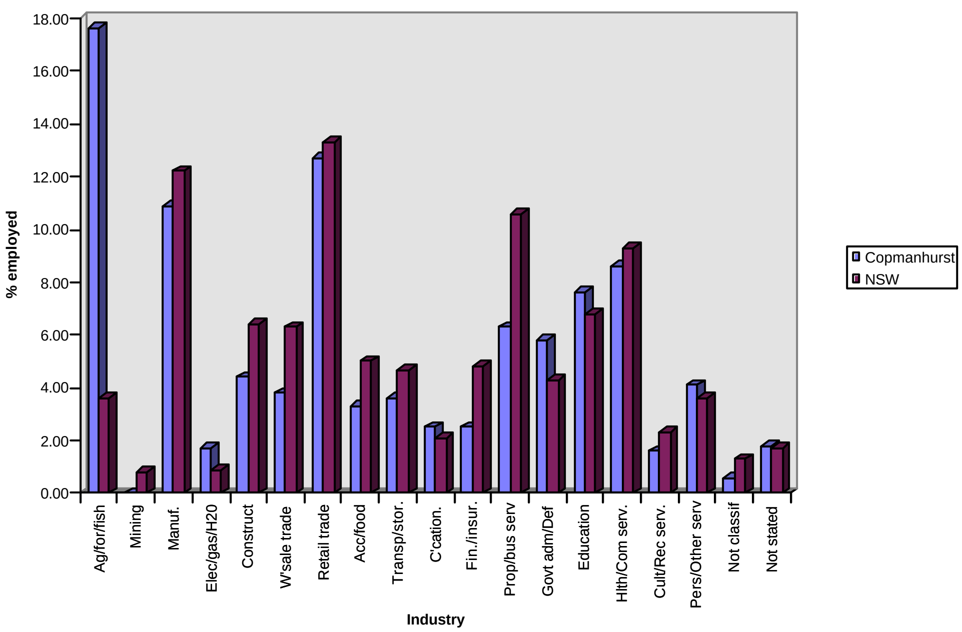
The median monthly mortgage in the LGA in 1996 was $672 (compared to $906 in New South Wales), around average for the Upper North East study area. Median weekly rent was $83 compared with $142 in New South Wales. and was third lowest in the study area.

Figure 9: Copmanhurst LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 10: Copmanhurst LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile*, 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Glen Innes LGA

Glen Innes LGA is in the northern reaches of the Upper North East study area in what is commonly known as the New England area of New South Wales. At the intersection of the New England highway and the Gwydir highway, the LGA covers an area of 67 square kilometres and has as its major urban centre the town of Glen Innes. The LGA falls within the boundaries of the Severn LGA,

Like other parts of the New England area, Glen Innes LGA has a temperate climate with mild summers and cold winters — sometimes including snow falls.

Primarily an agricultural area, the Glen Innes LGA has a range of industries concentrating on the rural and agricultural sector, sapphire mining and tourism focused on outdoor pursuits and use of the nearby Washpool and Gibraltar National Parks. It is a service centre for outlying rural holdings.

Population

The population of Glen Innes LGA at the 1996 census was recorded as 6101 people, 33 fewer than were recorded at the 1991 census.

In 1996 91.05% of the population was Australian-born and over 96% spoke English only. Anglicans were the dominant religious group in the LGA. Aboriginals and/or Torres Strait Islanders comprised 7.12% of the population at the 1996 census, 4.92% more than recorded at the 1991 census.

Figure 11 shows the Glen Innes LGA population is ageing, with a shift to an older population occurring across the board in the 1991 to 1996 intercensal period. There was a decrease of 147 young people aged 5 to 34 years in this period with an exaggeration of the previous out-migration of people aged 15 to 29 years, possibly to seek educational and employment opportunities. There was an increase of 80 people in the 50 to 59 year age group in this same period. The median age for the LGA is 37 years, same median as the Richmond River LGA and equal sixth highest in the Upper North East LGA.

The workforce

At the 1996 census, the labour force participation rate was recorded as 40.09%, and 277 people were registered as unemployed, an unemployment rate of 11.3%. This rate was shared with Tenterfield and was the lowest rate in the Upper North East study area, but still higher than the New South Wales rate of 8.82%.

The profile of Glen Innes as a service centre was reinforced by the 1996 census employment figures (figure 12). The major industry in the region, the retail trade, employed 384 people (17.8% of the employed people) in 1996 — a decrease of 4.7% since the 1991 census. Other major employers were health and community services (12.02%), education (7.78%) and government administration and defence (7.4%). The dominance of these industries paralleled the pattern of employment established at the 1991 census. There was a loss of 10 jobs in agriculture, forestry and fishing (0.4%) in the period 1991 to 1996.

Intermediate clerical, sales and service workers comprised the largest segment of the workforce in 1996 and 1991. In the same period there was an increase in the number of professionals, managers and administrators and para-professionals, and a decrease in labourers and tradespersons.

In 1996, 53 people aged 65 and over (2.43%) were in the workforce and employed.

Median weekly individual income for the Glen Innes LGA at the 1996 census was $242 and median household income was $437. Median individual income was the highest for all LGAs in the Upper North East study area but lower than the New South Wales median of $298. Median household income of $437 was the fourth lowest for the study area and much lower than the New South Wales median of $652.

Education

The 1996 census of population and housing showed that 27.65% of the population (1687 people) were enrolled at educational institutions. Of these, the largest category (37.22%) was those attended primary school. Only 228 (13.5%) were undertaking post-compulsory education and 273 people (4.47%) were recorded as having tertiary qualifications. Engineering, business, administration and health were the three most prominent fields of qualification recorded in both the 1991 and 1996 census.

The 1996 census showed 27 people in the LGA had never attended school and 3045 people (64.9%) had left school at age 16 years or under, an increase of 23.1% from 1991 census records.

Health

Australian Bureau of Statistics 1996 demographic statistics showed Glen Innes had 80 births and a total birth rate of 2.20 births per 1000, a rate that was about average for the Upper North East study area, and 0.38% higher than that recorded in New South Wales in the same period.

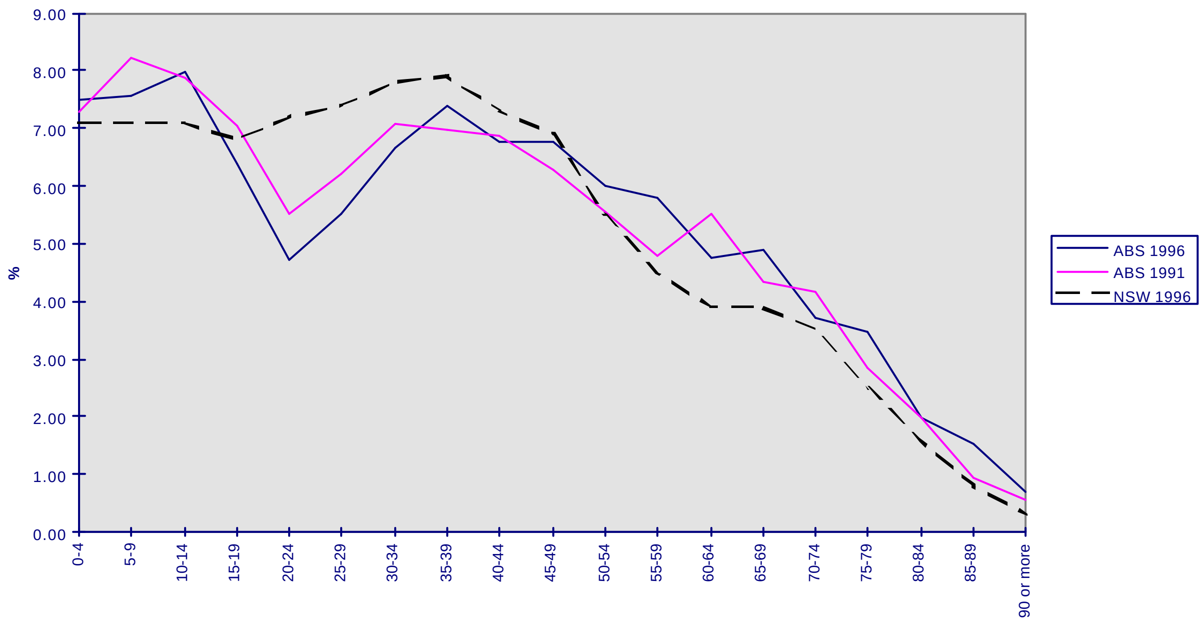
The standardised death rate of 7.5 deaths per 1000 (75 deaths) in the LGA was highest in the study area, reflecting the ageing population trend and the high median age of the population.

Housing

Separate houses were identified as the most popular occupied dwelling type at both the 1991 and 1996 censuses with an increase of 91 residences of this type during the intercensal period. In 1996 85.8% of residences were of this type. Flats, units or apartments in a one or two storey block were the next most popular dwelling type.

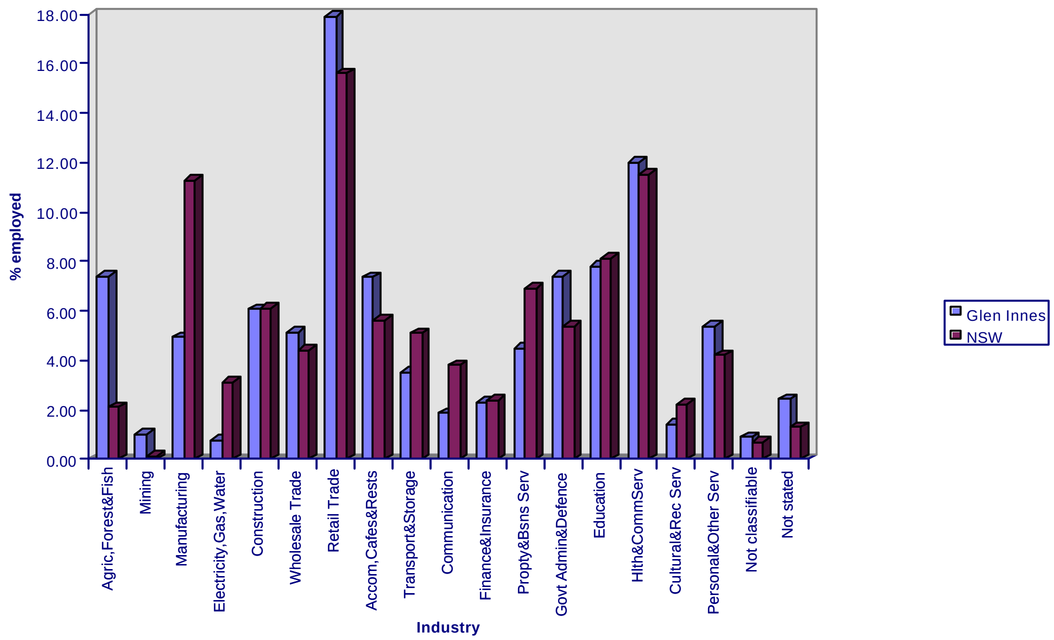
Most (644) separate houses were occupied by couples with children and over 48% of dwellings were fully owned in 1996. Average household size in the LGA was 2.5 people per dwelling in 1996. In 1996 30.6% of mortgages paid were in the range $400 to $599 per month. Rents in the LGA are, in most cases (57.14%), in the range $0–99 per week. This is lower than the New South Wales median monthly mortgage of $906 and median weekly rent of $142.

Figure 11: Glen Innes LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 12 Glen Innes LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile*, 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Grafton LGA

Grafton LGA is located on the northern coastal plain of New South Wales, around 350 km south of Brisbane, and within the Clarence Valley. It has an area of 83 square kilometres. The major urban centre within the LGA is Grafton, which lies on and is divided by the Clarence River.

The region has a moderate temperature and is a rich farming district. It is a service area to neighbouring LGAs such as Ulmarra, Maclean, Nymboida and Copmanhurst.

The LGA includes a wide range of industries including Boral Timbers, Gilbertson Abattoirs, State Rail Authority, Humes Concrete Products, Manildra/NSW Sugar Milling Coop and the Department of Education.

Population

At the 1996 census, the population of the Grafton LGA was 17 100, making it the sixth most populated LGA in the Upper North East study area. This was a decrease from 1991 when the population recorded was 17 123 people.

The population of the Grafton LGA was predominantly Australian-born, English speaking and Anglican. Only 4.1% of the population were born overseas and only 1.07% spoke a language other than English; 22.7% of the population was aged under 15 years.

The median age for people in Grafton LGA in 1996 was 35 years — higher than the New South Wales median age of 34 but equal second lowest median in the Upper North East study area with the Kyogle and Casino LGAs.

The largest group in the 1991 census was the 10 to 14 year age group, comprising 8.2% of the population. The largest age group recorded in the 1996 census consisted of people aged 5 to 9 years (7.9%) followed by people aged 35 to 39 years (7.6%). Together they made up 15.5% of the population.

The age structure of the Grafton LGA remained fairly steady over the period 1991 to 1996. The loss of people of post-compulsory school age continued and extended to the 25 to 29 year age group. This suggests an out-migration of population either for education or employment reasons.

Like other LGAs in the Upper North East study area, Grafton LGA has had an ageing population. Those aged 65 years and over made up a significant proportion of the population with 2853 people (16.67%) counted in the 1996 census and 2613 people (15.3%) in the 1991 census. Compared with New South Wales, the Grafton LGA had a higher proportion of people aged less than 15 years but a much lower proportion in the 20 to 39 year age bracket.

People identifying as Aboriginal and/or Torres Strait Islanders comprised 3.7% of the 1996 Grafton LGA census population; an increase of 1.4% over the 1991 figure of 2.3%. This is more than double the proportion of people identifying as Aboriginal and/or Torres Strait Islanders in New South Wales in the 1996 census (1.7% of the population). Growth in this category in the intercensal period in New South Wales was only 0.5% from 1.2% in 1991.

In the period 1986 to 1996 the Grafton LGA experienced growth of 2.8%, less than growth of 11.8% in New South Wales.

The NSW Premier's Department has forecasted the population will decrease to 15 805 people by the year 2016. The Department's figures suggest there will be a large increase in the number of people aged 45 to 74 over this period and a decline in those under 45 years.

The workforce

The labour force comprised 40.8% of the population. Labour force statistics may be skewed by the high non-response to the labour force participation. The unemployment rate in all age groups is 4.5% higher than for New South Wales for the same period; 929 people (13.3% of the labour force) were identified as being unemployed at the 1996 census.

Median weekly income for individuals in the LGA in 1996 was $231 compared with $298 for New South Wales — equal to the Casino LGA median. Median household income was $474 compared with $652 for New South Wales and was fourth highest for the Upper North East study area. The 1996 census showed 711 people earned negative or nil income and a further 725 earned less than $80 per week. These groups comprised 10.86% of people aged 15 years and over.

The major industry of employment in 1996 was retailing which employed 19.1% of those in the labour force. Manufacturing, health and community services, and education were also important areas of employment, having 10.8%, 10.5% and 7.4% of the workforce respectively. Three hundred and four people (61.7%) aged 15 to 19 years worked in the retail trade (a 35.2% increase over the period 1991 to 1996). Of note were the loss of 92 jobs in the transport and storage sector, 37 in manufacturing and 35 in electricity gas and water in the period 1991 to 1996. Agriculture, forestry and fishing industries employed 2.3% of the workforce (142 people) in 1996.

The 1996 census showed the largest group of people in the Grafton LGA were employed in the intermediate clerical and sales area (18.4%). Professionals comprised 13.6% of those employed. Tradespersons comprised 12.9% of the working population (1111 people); most of these aged 20 to 54 years.

Education

At the time of the 1996 census 29.6% of the Grafton LGA population were attending educational institutions compared to 29.5% in 1991; 44.27% of those attended primary schools and 30.89% attended secondary schools. Only 3.43% of the group attended tertiary education with 57.45% of these students being female compared with 53.39% of the New South Wales tertiary students.

Figures for 1997 from the Australian Bureau of Statistics show that primary and secondary school enrolments fell between 1994 and 1996 and that there was a slight shift from the government secondary sector to the secondary non-government sector. In 1997, Aboriginals made up 4.8% of the primary school sector.

The 1996 census showed Grafton LGA had fewer people attending post-compulsory education (3.9%) than in New South Wales (6.8%) in 1996. Of people over 15 years, 13 595 (41%) held post-secondary qualifications of some form: 1249 held a tertiary qualifications (higher degree, postgraduate diploma, bachelor degree, undergraduate diploma or associate diploma). The highest proportion of qualifications (15.4%) were held in the field of engineering followed closely by business and administration (13.8%) and health (11.8%). Qualifications in agriculture and related fields were held by only 1.28% of the population, an increase of 0.88% since the 1991 census.

At the 1996 census 64.4% of people were shown to have left school by age 16 years, and this might have affected the propensity of this group to enter into further post-school education.

Health

Demographic data provided by the Australian Bureau of Statistics showed that in 1996, the LGA recorded 228 births, a decrease of 43 births since 1994. This equated to a 1996 birth rate of 2.12 per 1000, 0.3% higher than that recorded in New South Wales in the same period.

Deaths increased by 11 between 1994 and 1996, bringing the 1996 figure to 200. Grafton LGA equalled the Guyra LGA in having the second highest death rate per 1000 people for the Upper North East study area, with 7.4 deaths per 1000. The major causes of death in the period 1995–96 were diseases of the digestive system (12.7%) and of the circulatory system (9.4%).

Grafton LGA had a hospital admissions rate of 334.8 admissions per 1000 – fifth highest in the study area. In 1995–96, the Grafton LGA had a hospital admissions rate for people aged 0 to 4 years 2.1 times greater than that of New South Wales and higher rates than New South Wales for all age groups to 39 years.

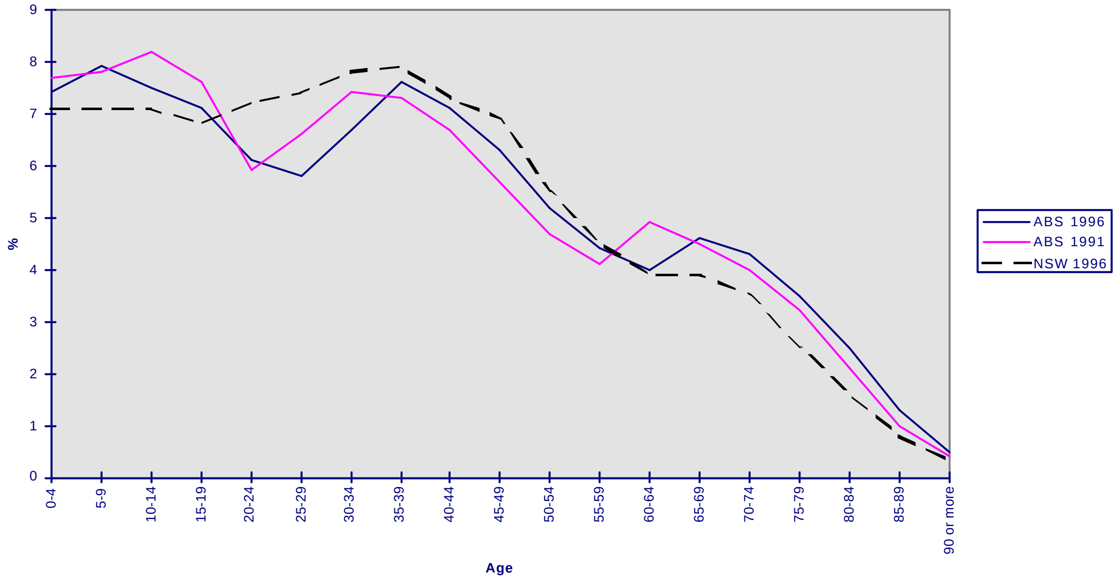
Housing

Like other areas in the Upper North East, the Grafton LGA has relatively low median monthly mortgage rates compared with those of New South Wales. The rate of $670 per month is lower than $906 per month for New South Wales and is about average for the Upper North East area.

Median weekly rents were also much lower than those in New South Wales, and Grafton LGA was ranked sixth lowest out of seventeen LGAs in the Upper North East study area. The median weekly rent for the LGA was $117 compared to $142 for New South Wales.

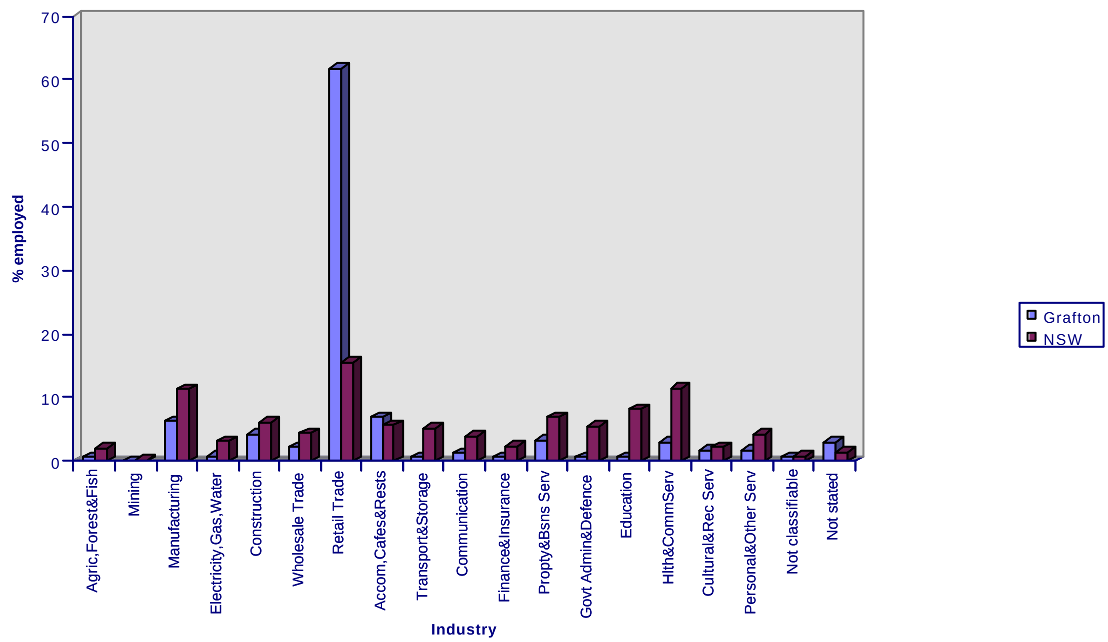
In 1996, 80.3% of the population in Grafton LGA lived in separate houses with an occupancy rate of only 2.73 people per dwelling, lower than the New South Wales rate of 2.93 people per household. At the same time, 45.5% of homes were owned — a rate 2.2% higher than found in New South Wales. Fewer had homes that were mortgaged, and 12.4% of the population lived in a flat, unit or apartment compared with 17.2% in New South Wales. There was a 25% increase in unoccupied dwellings in the period 1991 to 1996. In the same period, New South Wales experienced an increase of only 10.8%.

Figure 13: Grafton LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 14: Grafton LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Guyra LGA

Guyra LGA covers 4400 square kilometres in the heart of the New England Tablelands of New South Wales. The area includes the Cathedral Rock National Park, the Guy Fawkes River National Park and the Little Llangothlin Nature Reserve.

Major urban centres in the LGA include Guyra and Tingha. The New England highway links Guyra LGA to other areas of New England. There is no airport in the LGA but coach and rail services are available.

Guyra LGA has had a diverse industrial base which has included sawmilling, grazing, diamond, tin and gold mining, pet food production, alpaca raising and aquaculture, angora rabbit fibre production and potato production. The town's main industry, an abattoir, closed in 1996. Tourism focused on outdoor pursuits, historic car rallying and markets is being actively promoted.

Population

The 1996 census showed Guyra LGA had a population of 4262 people, 454 (9.6%) fewer than were recorded at the 1991 census.

Guyra LGA had the highest proportion of Australian-born people of all LGAs in the Upper North East study area in 1996 (94.09%) and the highest proportion of people identifying as Aboriginals and/or Torres Strait Islanders (7.76%). The main religion in Guyra was Anglican. Only 0.5% of the population (19 people) speak a language other than English, three-quarters of these speaking Greek or French.

In 1996 23.25% of the population were aged under 15 years, a decrease from 25.41%, the population recorded in 1991. This was higher than the 1996 under 15 years population for New South Wales (21.2%).

The change in the median age of the LGA from 32 years in 1991 to 36 years in 1996 reflected the rapidly increasing proportion of senior members in the community. While this median was about average for the study area, it was higher than the New South Wales 1996 median of 34 years.

In 1996 18.7% of the population were aged over 60 years, about average for the study area. The age structure chart for the LGA shows that over the period 1991 to 1996, there was a large drop in the number of young people in the community and a very slight increase in the number of older people. However, the general downward trend in age structure was not compensated for by a shift in population as groups aged. The sharp decline in people aged 20 to 34 and 40 to 44 suggests outward mobility due to decline in job prospects in the LGA.

The workforce

In 1996 1559 people were employed in the Guyra LGA and 289 people were unemployed.

The LGAs 1996 census unemployment rate of 15.7% was about average for the Upper North East study area. Unemployment increased in the intercensal period by 3.8% but unemployment in Guyra township is likely to have increased dramatically after the census, due to the closure of the Guyra Abattoir. Comparison between 1991 and 1996 census figures shows the greatest increase in unemployment occurred in people aged 35 to 54 years.

Agriculture, forestry and fishing were the dominant employers in both 1991 and 1996, providing over one-third of employment in the LGA. Most of the people (77.47%) working in this sector in 1996 were aged 35 and over. Other important industries for employment in 1996 were manufacturing (9.3%), the retail trade (10.26%), health and community services (8.4%) and education (6.41%). Almost a third of the 1996 population in the Guyra LGA (29.6%) were classified as managers and administrators. Labourers and related workers comprised the second largest group (15.8%).

The 1996 census showed median individual income in the LGA was $229, and median household income was $446, lower than in New South Wales which had $298 and $652 respectively. These figures were average for the Upper North East study area.

Education

In 1996 42.68% of the population had left school aged 15 years or less.

The 1996 census showed 26.19% of the population in Guyra LGA were attending educational institutions. The largest proportion of these people attended primary schools (10.76%), with a further 7.01% attending secondary schools. The 1991 census showed these proportions were 11.6% and 6.4% of the total population respectively.

The 1996 census showed there were 135 people in Guyra LGA with tertiary qualifications. Over 35.7% of those with qualifications in 1991 and 1996 held skilled or basic vocational qualifications. The commonest qualifications were in business and administration, engineering or agriculture and related fields.

There was a 7.49% decline in attendance at post-compulsory educational institutions in the intercensal period, from 12.87% attendance in 1991 to 5.38% attendance in 1996.

Health

ABS demographic figures for 1996 showed Guyra LGA had the third highest birth rate in the Upper North East study area, having 2.52 births per 1000 compared with 1.82 per 1000 for New South Wales.

ABS figures also showed Guyra LGA shared equal second highest ranked indirect standardised death rate with Grafton and Severn LGAs, having 7.4 deaths per 1000 in 1996 (compared with 6.6 per 1000 for New South Wales).

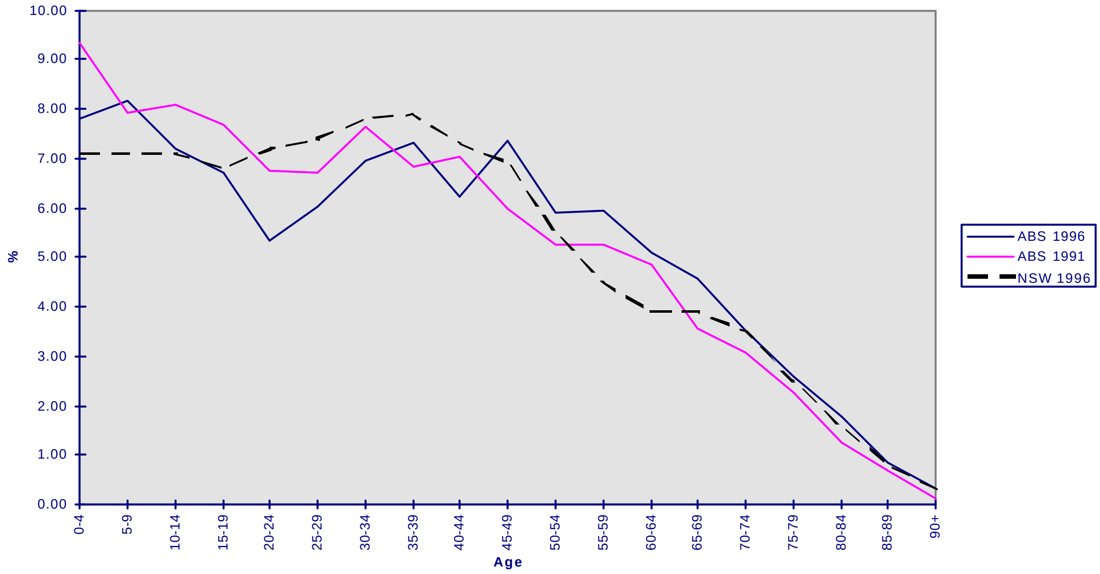
Housing

The average household size in Guyra LGA in 1996 was 2.7 people. Guyra LGA had a fairly stable population according to the 1996 census, with only 29.8% of the population having changed address in the 1991 to 1996 intercensal period.

In 1996 92.65% of the Guyra LGA population lived in separate houses. Home ownership levels of 45.29% were higher than in New South Wales (43.3%), and the proportion of residences being rented or purchased (30.23%) was much less than that of New South Wales (51.9%). Couples with dependent children comprised the largest category of households.

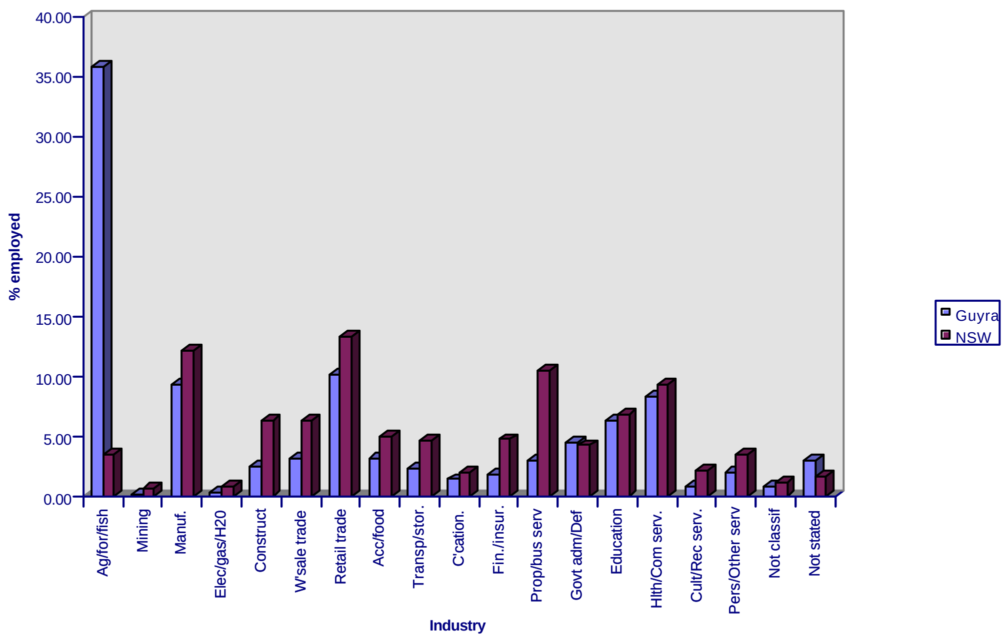
Median monthly mortgage for the LGA in 1996 was between $400 and $599, compared with $906 in New South Wales. Median weekly rent was between $0 and $99 compared with $142 in New South Wales.

Figure 15: Guyra LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 16: Guyra LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile*, 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Kyogle LGA

The Kyogle LGA occupies 3584 square kilometres in the State's Richmond/Tweed district, and is 198 km south of Brisbane. It has a subtropical climate and an average rainfall of over 1100 mm.

It is known for its rural setting and is home to some of the State's larger rainforests. The area includes the McPherson, Tweed and Richmond Ranges. One of the earlier industries was cedar cutting, but dairying, forestry production and nature-based tourism are the mainstays of the local economy now. Tourism based on nature-based events, outdoor recreation and ecotourism are a developing industry.

The area has direct links to the Pacific highway and is served by rail to Brisbane and Sydney.

Population

The population of Kyogle LGA recorded at the 1996 census was 9714 people. This was an increase of only six people since 1991 but an increase of 504 since 1986 (5.5% over the period 1986 to 1996). This rate of growth was almost half that of New South Wales, which recorded a population increase of 11.8% over the same period.

Only 48.7% of the Kyogle population are female and almost 20% of these are aged 5 to 14 years. In 1996 27.3% of the LGAs population was aged under 15 years and 16.98% of the population was over 60 years of age. While these rates are almost equal to those in New South Wales for people over 60 years population (16.5%), it has a younger population than that found in New South Wales (21.3%). Kyogle has the second largest proportion of people under 15 years of all LGAs in the Upper North East study area. The median age in the Kyogle LGA is 35 years for both males and females.

At the 1996 census, Aboriginals and/or Torres Strait Islanders comprised 4.15% of the population — a marginal increase on the 1991 population which was 4% of the Kyogle LGA community. In the period 1991 to 1996, the proportion of males in the Aboriginals and/or Torres Strait Islander population has increased from 51.03% of the population to 53.36% of the population.

In 1996 88.9% of the population were Australian-born (compared with 72.8% in New South Wales) and 95.2% spoke English only. Those from a non-English speaking background made up only 3% of the population. The most common language other than English spoken in the LGA is German, which is used by 0.8% of the population. The dominant religion in the area is Anglican.

The greatest degree of demographic change over the period 1986 to 1996 was shown in the 40 to 49 year age group, which increased by 57.9%, an increase of 556 people and 22.4% higher than recorded for New South Wales. Kyogle LGA had a smaller increase in the over 65 years group, having an increase of 22%, 6.2% less than was recorded in New South Wales. There was an out-migration of 24.9% of people aged 20 to 29 year age group (compared with an increase of 0.9% in New South Wales). This may have serious repercussions on the demographic structure of future generations in the LGA.

The NSW Premier's Department predicts the population of the Kyogle LGA will increase to 8916 people by 2016. The largest groups of the population are expected to continue to be those covering people aged 25 to 64 years, but the number of young people (15 to 44 years) will decline.

Workforce

In 1996 54% of people over 15 years were in the labour force. The unemployment rate for the LGA was 15%, with the highest rate of unemployment being for those aged 15 to 19 years. In 1996, this group had an unemployment rate of 27.4%, 9.3% higher than for the same group in New South Wales. The group aged 55 years and over had a much lower unemployment rate than that found in New South Wales, having 3.8% unemployment compared with 7.4% in New South Wales.

The 1996 census showed agriculture, forestry and fishing was the major category of employment in the Kyogle LGA, with 23.2% of the population (757 people) working in this sector; 35.4% of these people were aged 55 and over. Second and third ranking employers were manufacturing with 12.1% of the workforce, and the retail trade with 10.1% of the workforce. In the period 1991 to 1996, there was a 64.5% increase in employment in the construction industry (69 positions), a 50.4% increase in business services (61 positions) and a 35.7% increase in manufacturing (104 positions). Declines were noted in agriculture, forestry and fishing (9.4%), transport and storage (2.1%), communication (3.7%), and government, administration and defence (6.9%).

The highest proportional representation of any occupational group in 1996 was by managers and administrators who comprised 22 % of those employed: 48% of those aged 55 and over were in this group. People aged 15 to 19 figured highly in the manual and labouring occupations with 35.3% of people employed as labourers and related occupations and 16.5% as tradespersons.

Health

ABS demographic figures show Kyogle had an average rate of hospital in-patient admissions for the study area in the period 1995–96 with 352.6 admissions per 1000 population. Within age categories, Kyogle can be seen to have some high figures. Kyogle had almost double the number of admissions of people aged under 15 compared with New South Wales, most of these being for people 0 to 4 years. Kyogle had higher admissions than New South Wales for all ages to 35 years, and almost double the rate of admissions of people aged 50 to 59 years. It also had a hospital admissions rate over 300 more than that for New South Wales for people aged 75 +.

The major causes of hospitalisation were diseases of the digestive system, diseases of the respiratory system and accidents, poisoning and violence.

Education

Only 26.7% of the population were attending an educational institution of some kind at the time of the 1996 census. Kyogle LGA had a low level of post-compulsory educational attendance with only 4% attendance compared with the New South Wales rate of 6.8%. The larger post-compulsory schooling attendance was by females (56.4%).

NSW Department of Education and Training figures showed that over the period 1994 to 1997, primary school enrolments fell by 100 students and secondary school enrolments rose by 11 students. Aboriginal enrolments comprised 9.8% of primary school enrolments and 8.4% of secondary school enrolments in 1997. The number of students who were identified as having languages other than English rose from 7 in 1994 to 36 in 1997.

The 1991 and 1996 censuses also showed the LGA had a low but improving school retention rate, with 44.1% of its population leaving school aged 15 years or under in 1991 and 41.18% leaving in 1996.

Housing

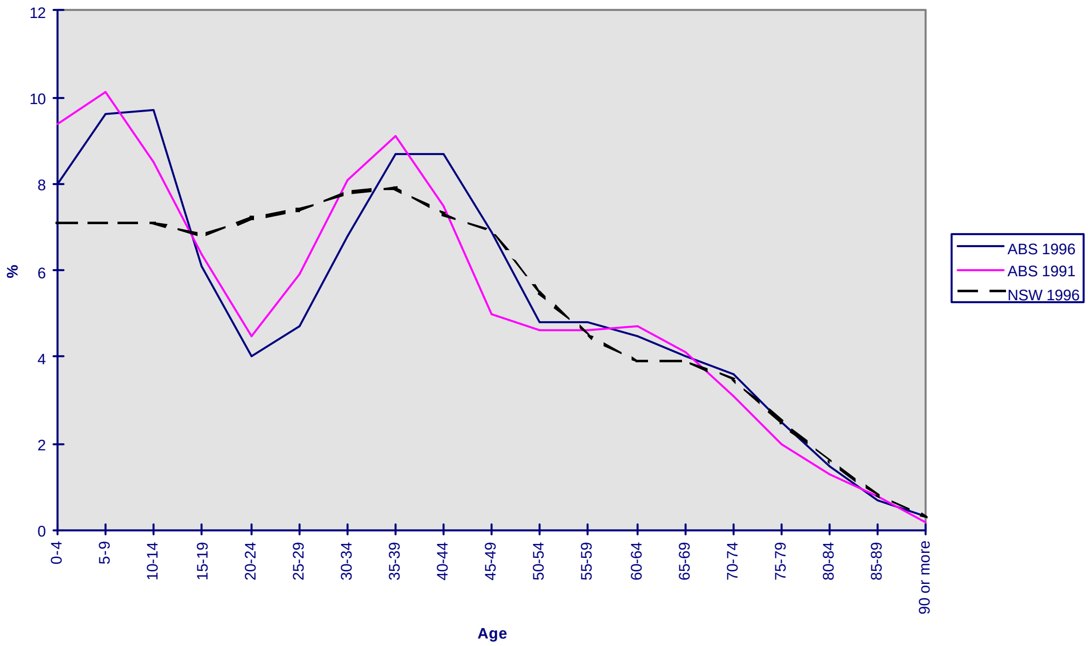
Kyogle LGA has a low level of mobility with over 62% of the population remaining at the same address through the period 1991 to 1996.

Couples with children formed the predominant household type in the Kyogle LGA with 36.5% of households surveyed by the 1996 census. Ninety-one per cent of the population lived in separate houses and the LGA had a household occupancy ratio of 2.77 compared to New South Wales, which has a ratio of 2.93. The bulk (54.8%) of the population owned their home, 17.6% were renting a home and 18.3% were paying a mortgage.

The median monthly mortgage rate for Kyogle LGA was $601 in 1996 compared with $906 for New South Wales. Median weekly rent was $78 compared with $142 in New South Wales.

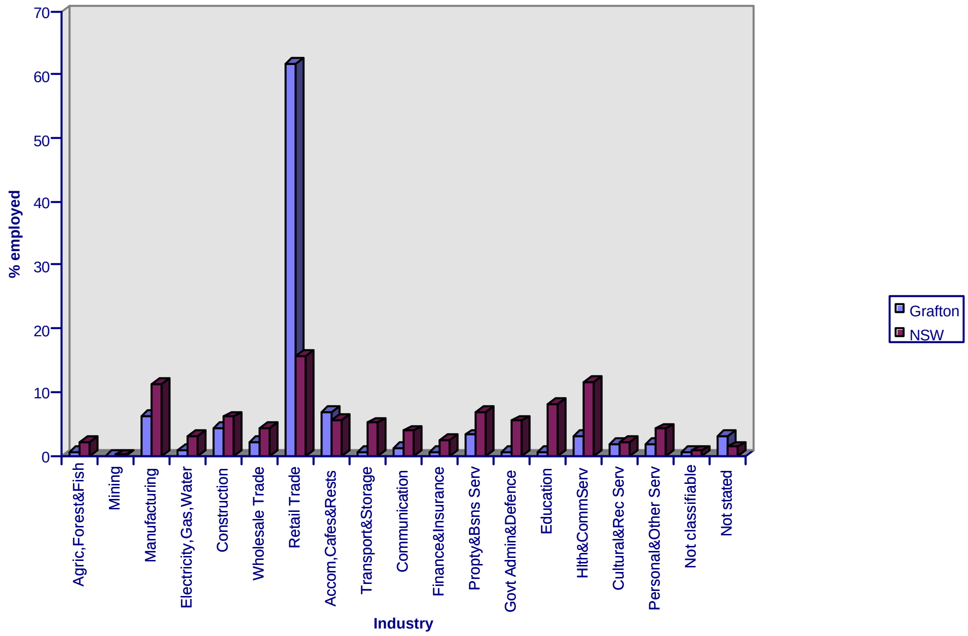
There was a 31% increase in unoccupied dwellings in the period 1991 to 1996.

Figure 17: Kyogle LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 18: Kyogle LGA —employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Lismore LGA

Lismore LGA is towards the northern end of the Upper North East study area and occupies about 1288 square kilometres. The area has a subtropical climate with mild to warm temperatures all year around. It receives high rainfall at times and is subject to flooding in low-lying areas on a quite frequent basis. A number of national parks and World Heritage listed areas are located within the LGA.

The main township, Lismore, is the regional capital of the North Coast region for education, law, medical and government services and has a diverse population and a broad cultural and economic base.

Historically the area was a cedar cutting and shipping area focused on the Richmond River. Sugar cane growing was introduced in the 1870s. The region's continuing prosperity is based on its function as a service centre and on dairying, beef production, pig farming, macadamia nut and tropical fruit growing industries. It also has a diverse manufacturing and commercial base including medicinal herb production, teatree plantations and bush food farming. More than 120 firms employing approximately 1500 people operate within the LGA. Tourism is a growth area within the region.

The LGA has a well-developed infrastructure including an airport, coach, road and rail connections and a well-developed communications infrastructure.

Population

The 1996 census showed a population of 42 954 people in the Lismore LGA, making it the third largest LGA in the upper North East study area.

It also showed the population of the Lismore LGA was predominantly Australian-born (88%), Catholic and English speaking. Only 3.7% of the population came from a non-English speaking background. Italian was the dominant language spoken after English, being spoken by 1.17% of the population.

The median age of the Lismore LGA population recorded in 1996 (33 years) was lower than the New South Wales median (34) and higher than it was in 1991 (31 years). While the LGA had an average proportion of people aged under 15 years for the Upper North East study area (22.92%), it also had the second lowest proportion of people over 60 years in the study area — a factor contributing to its low median age.

Population in the Lismore LGA increased by 5902 people (15.9%) in the period 1986 to 1996 compared with an 11.8% increase over the same period in New South Wales.

Most of this increase was in the 65 years and over group which increased by 23.0%, and the 40 to 49 year age group which increased by 69.2% — almost double the rate experienced in New South Wales by the same age group (35.5%). Only the 60 to 64 year age group declined in this period (-3.6%).

People identifying as Aboriginals and/or Torres Strait Islanders comprised 1.9% of the population at the 1991 census, increasing to 2.5% at the 1996 census.

The population in Lismore LGA is projected by the NSW Premier's Department's Statistics Workshop to reach 47 745 by 2016 with 52% of the population then being aged 25 to 64 years. A decline is expected in the number of people aged 5 to 44 years and an increase of almost one-third is expected in people aged 65 to 74 years. This may affect the type and focus of services provided in future.

The workforce

There was an increase of 8% in the number of people employed in all age groups in the period 1991 to 1996. The unemployment rate decreased in the same period, being 17.2% in 1991 and 14.1% in 1996 in 1996.

The highest rate of unemployment in 1996 was experienced by the 15 to 19 year age group who had an unemployment rate of 25.8% in 1996 — a fall from the 1991 rate of 33.9%. The 55 and over age group experienced the greatest decrease in unemployment (38.9%) in the intercensal period. Lismore LGA population was recorded as having a workforce participation rate of 57.5% in 1996.

The 1996 census found the median weekly income for individuals in Lismore LGA was $236 and the median household income was $511.

Reflecting its status as a service and business centre for the surrounding coastal and rural areas, Lismore LGA's primary employing industry in 1996 was the wholesale and retail trade. The wholesale and retail trade employed over half the 15 to 19 year age group (57.6%) and comprised 21.9% of the total employment in the LGA, a slight increase from the 21.0% recorded in the 1991 census. Health and community services (14.2%) and education (10.0%) were the other major employment sectors in 1996.

Agriculture, forestry and fishing industries employed 8.0% of the workforce in 1996, an increase of 0.7% (211 positions) from 1991 recorded employment. Agriculture, forestry and fishing industry employees are ageing. The majority of people employed in agriculture, forestry and fishing industries in 1991 were aged 35 to 54 years. By 1996, the major age group recorded in the census in this industry was those aged 55 and over.

In 1996 17.6% of those employed in Lismore LGA were professionals, followed closely by 15.6% in intermediate clerical and sales and 12.1% who were tradespersons. This was a change from 1991 when tradespersons made the second largest employment group (14.1%) and labourers and related workers the third largest occupational group, comprised 13.2% of the population. This would suggest a downturn in the building industry or light industry in the period

Education

In the 1996 census 12 868 people in the Lismore LGA (29.96%) were recorded as attending an educational institution.

Primary school students were the largest group attending school (35% of those attending education). The 1996 census showed there was a greater proportion of primary and secondary age students attending school in Lismore LGA than in New South Wales and almost double the proportion attending university or other tertiary institutions (6.7% compared with 3.3%). In 1996 31.8% of students attended post-compulsory education, most these being female. The location of Southern Cross University in Lismore contributes to this high number of tertiary students.

The 1996 census showed that 43% (18 089) of people in the LGA over 15 years left school aged 16 years or under; 87 people never attended school.

In 1991, 62.5% of the population were not qualified and 12.7% held a higher degree, postgraduate diploma, bachelor degree or undergraduate diploma. Engineering was the qualification of 17.3% of those aged 15 years or more, with business and administration qualifications held by 14.2%. The same areas of qualification remained most important in the 1996 census. Those with engineering qualifications comprised 15.4% of the population, and business and administration qualifications were held by 16%.

Health

Lismore LGA had 576 births in 1996 and a birth rate of 1.94 per 1000, second lowest in the Upper North East study area.

There were 331 deaths in 1996 giving the area a standardised death rate of 6.6 deaths per 1000. The major causes of death recorded by the NSW Department of Health for 1995–96 were diseases of the digestive system (10.3%) followed by complications of pregnancy or birth (8.7%) and accidents, poisoning or violence (8.7%).

The NSW Department of Health recorded 11 660 admissions to hospital for the Lismore LGA in 1995–96. With a hospital admissions rate of 267.7 per 1000, Lismore LGA had a low rate compared with other LGAs in the study area. Most admissions were of people aged over 65, but Lismore had an admissions rate almost double that for New South Wales for the age category 0 to 4 years (376 per 1000 compared with 198 per 1000).

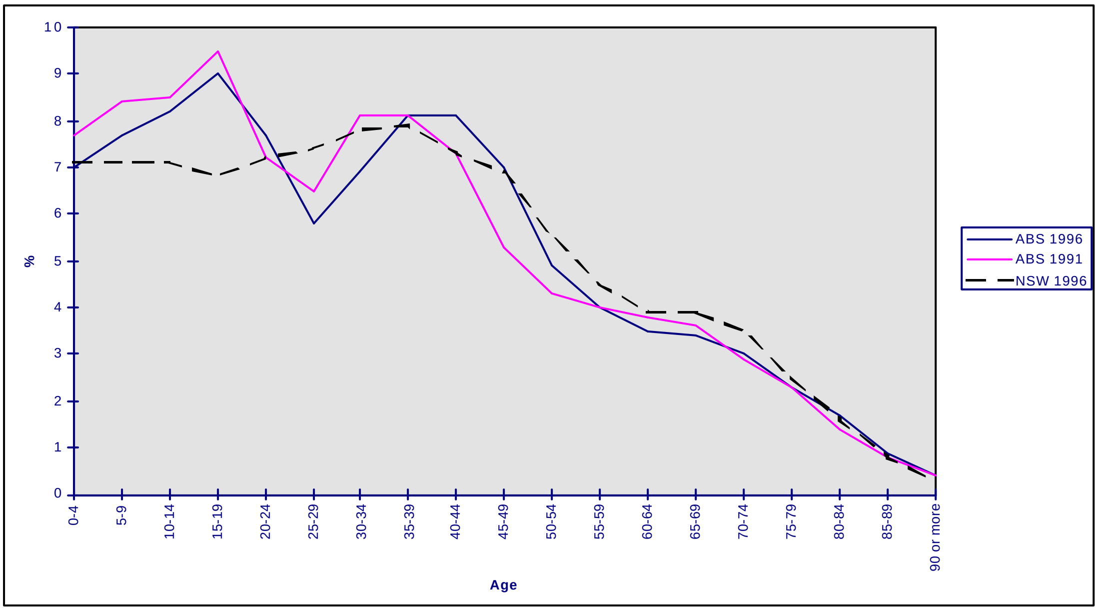
Housing

The 1996 census showed Lismore LGA had a fairly mobile population. Just under half the population of Lismore LGA (46.6%) stated that they had lived at a different address in 1991. There was an increase of 34.7% in the number of unoccupied dwellings recorded between 1991 and 1996 censuses. The occupancy ratio for the Lismore LGA is 2.85 compared with 2.93 for New South Wales.

In 1996, most dwellings in the Lismore LGA (80.7%) were separate houses but this majority was reduced by 2.8% from 1991. In 1996 42.6% of dwellings were owned, compared with 43.3% in New South Wales and 45% in 1991. There was a slight fall of 0.7% in the number of houses being purchased from 1991 to 1996. In 1996 the proportion of houses being purchased was 23.2%.

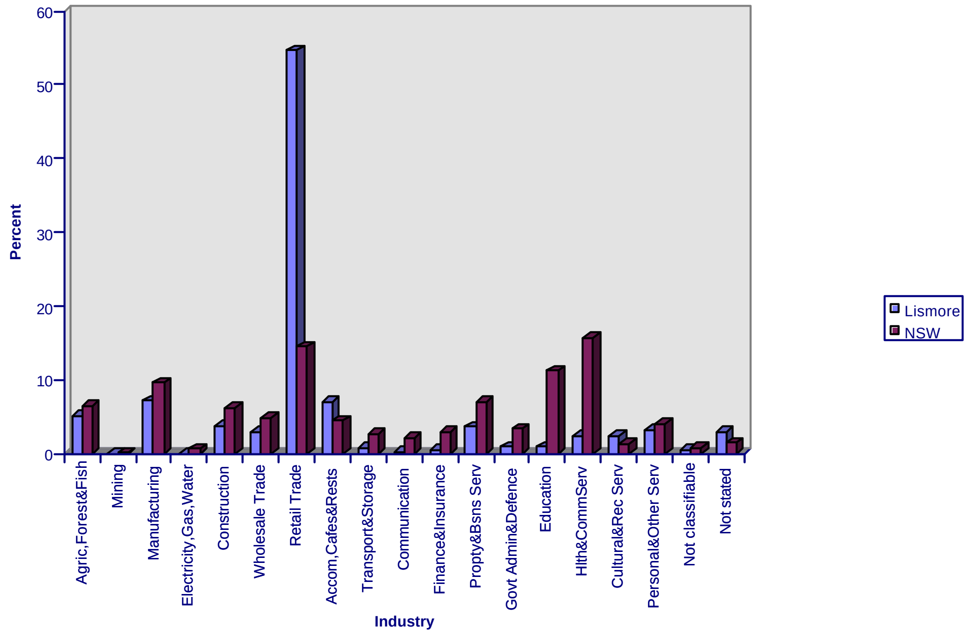
The median monthly mortgage rate for Lismore LGA in 1996 was $742 compared with $906 for New South Wales and was fourth highest mortgage rate for the Upper North East study area. The median weekly rent was $127 compared with $142 in New South Wales.

Figure 19: Lismore LGA – age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 20: Lismore LGA – employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile*, 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Maclean LGA

Maclean LGA covers 1048 square kilometres. Mean annual rainfall averages range from 1000 to 2000 mm and the area has a subtropical climate.

Most residents of the LGA live in the three main towns of Yamba, Maclean and Iluka. Other townships include Wooloweyah, Lawrence, Gulmarrad, Brooms Head, Harwood Island, and Angourie. Less than one-third of the LGA residents live outside a town or village.

Cattle grazing and sugar cane growing are the main land users in the LGA, but other industries include sugar refining, fishing, extraction of sand, soil and gravel, and tourism.

Close to three quarters of the LGA is held as freehold land. State forests, national parks and nature reserves each occupy about the same area of land and together occupy almost a quarter of the LGA. National parks are a dominant feature along the coastline. Six State forests are located within the Maclean Shire. The Gibberagee State Forest comprises about half the State forest area in the LGA. The Grafton management area proposed forestry operations environmental impact statement (1994) showed parts of most of the State forests in the Maclean LGA were classified as unloggable. National Parks and Wildlife Service 1995 figures show plantations were only found on 32 hectares of land.

Population

At the 1996 census 15 987 people were recorded in the Maclean LGA. This was 2023 more than were recorded at the 1991 census.

In the LGA, 88.6% of the population were Australian-born and the major religion in the area was Anglican. 89.79% of people over five years spoke English only. Just 2.5% of the population came from a non-English speaking background.

People identifying as Aboriginal or Torres Strait Islanders comprised only 2.9% of the population, an increase of 0.3% from 1991.

In 1996, only 19.78% of the Maclean LGA were aged 15 years or under, the lowest proportion of youth in all LGAs in the study area and 1.42% fewer than recorded in New South Wales. Maclean LGA had the highest proportion of people over 60 years in the Upper North East study area, having 30.27% of its population in this age category. This was almost double the proportion in this age group in New South Wales. These age group extremes contributed to Maclean having the highest median age of all LGAs in the UNE study area. The 1996 median of 44 is three years higher than the 1991 median of 41 years.

There was a 33% increase in population over the period 1986 to 1996. Most of this increase was a 58.4% increase in people aged 40 to 49 years. This was much higher than an increase of 35.5% for the same period in New South Wales. Only the 20 to 29 year age category declined in this period. This decline was 9.9% of the age group — 118 people.

The NSW Premier's Department has projected the population of the Maclean LGA will increase to 22 402 by 2016 with the largest age group expected to be people aged 45 to 64 years (29.67%) and with 55.8% of the population aged over 45 years.

The workforce

The labour force recorded at the 1996 census was 5485 people, 42.75% of people aged 15 years and over; 18.2% of the population were not in the labour force. The period 1991 to 1986 saw a decline in the workforce participation rate from 44.1% in 1991 to 42.8% in 1996. This may have been contributed to by the ageing population and the low number of younger people in the LGA.

The unemployment rate in the Maclean LGA in 1996 (17.5%) was third highest in the Upper North East study area. Unemployment declined by 3% from the 1991 recorded rate and fell in all age categories.

The main industry of employment in 1996 was the retail trade, which employed 15% of the employed people, and 49.8% of people aged 15 to 19 years. Manufacturing employed 10.3%; a decline from 15.6% in 1991. Agriculture, forestry and fishing employed 12.8% of the working population in 1996. 25.6% of workers aged 55 and over were employed in agriculture, forestry and fishing.

The 1991 census showed 17% of the working population were employed as managers. By 1996, this had fallen to 11.3% of the population due in part to an increase in the proportion of professionals and associate professionals. Labourers and related workers declined by 6.4% in the same period.

Median individual income for the Maclean LGA in 1996 was $198 per week, fourth lowest in the Upper North East study area and $100 per week lower than the New South Wales median. Median household income of $422 per week was also lower than New South Wales and was second lowest in the study area.

Education

At the time of the 1996 census 75.3% of the Maclean LGA population were not attending an educational institution, compared with only 69.5% in New South Wales.

Maclean LGA had a lower overall participation in education than New South Wales at all educational levels and a generally lower participation than in 1991. Of those attending educational institutions, the largest group (9.4%) attended primary school. Only 3.1% attended post-compulsory education compared with 6.8% in New South Wales. The 1996 census showed 570 people in the LGA held tertiary qualifications, the largest proportions of these being in engineering (21.55%) and business and administration (12.28%).

The 1996 census showed that 69% of the population left school aged 16 years or less, a slight decrease from the 1991 recorded level of 70.9%.

Health

ABS demographic figures show that in 1996 the Maclean LGA had 168 births and a total birth rate of 2.35 births per 1000, average for the Upper North East study area and higher than the New South Wales rate of 1.82 births per 1000. The figures also show there were 175 deaths, a standardised death rate of 6.4 deaths per 1000, sixth lowest in the study area and lower than the New South Wales rate of 6.6 deaths per 1000.

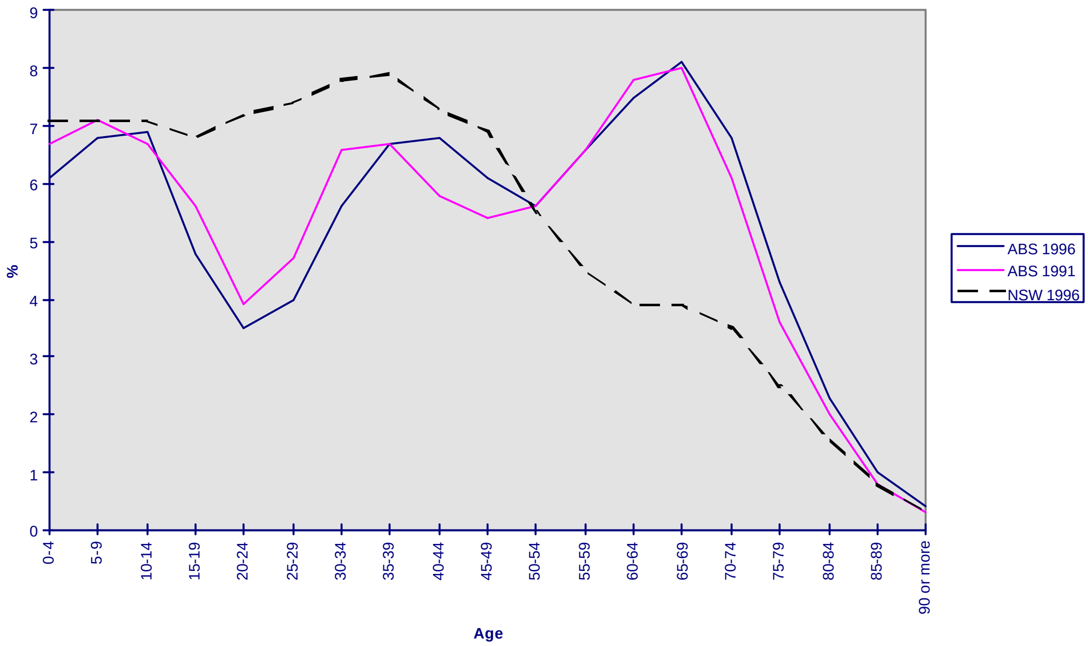
NSW Department of Health figures show Maclean had a rate of hospital admissions 10% higher than New South Wales in 1995–96. The largest groups admitted were aged 0 to 4 years and over 60 years, but in the over 60s group, the admissions rate was still lower than that for New South Wales. The primary reasons for hospital admission were diseases of the digestive system (12.4%), diseases of the circulatory system (10.6%) and accidents, poisoning and violence (8.1%).

Housing

Of those aged over 15, 45.3% lived at a different address in 1991. The Maclean Shire Council's *State of the environment report 1996* reported that between 1976 and 1991, the number of people moving to the LGA increased. The Council predicted that from 1996 to 2011, the number of people who move to the LGA will be about 400 to 590 per annum.

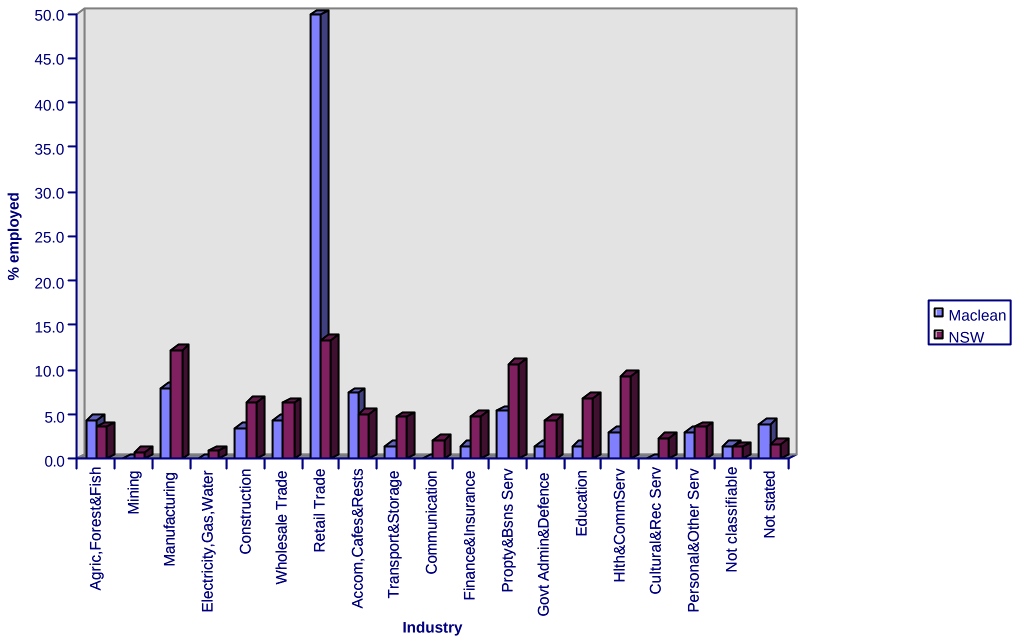
The 1996 census showed 3286 (56.4%) of homes in the LGA were owned compared with 43.3% of homes in New South Wales; 921 (15.8%) were being purchased. The most popular dwelling type (74.8%) was separate houses. The second most popular dwelling types, comprising 11% of dwellings, were 'other dwellings' which included caravans, cabins, houseboats, improvised homes and other non-standard dwellings. The largest category of households comprised couples with children (33%).

Figure 21: Maclean LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 22: Maclean LGA — employment by industry 1996



Source: *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Nymboida LGA

Nymboida LGA covers 512 square kilometres to the west and southwest of Grafton. The LGA is bounded by the Great Dividing Range to the west, the Clarence River to the north, the City of Grafton to the east and the Hernani District to the south.

The LGA has a subtropical climate with a distinct wet season and an annual rainfall between 960 mm and 1500mm.

The main urban centres in the LGA are Waterview Heights and Coutts Crossing. The LGA is served by bus and is accessible via the Gwydir highway and Armidale Road.

Industries in the Nymboida LGA include timber harvesting and plantations, grazing, agriculture and tourism. The LGA has an international standard wild water canoeing and rafting course, which is a focal point for much of the tourism. Proximity to the Guy Fawkes River, and the Washpool, Cathedral Rock and New England National Parks, is promoted as part of the focus for outdoor recreational and ecotourism activities.

The Dorrigo Farm Forestry Project is located within the LGA and State Forests have purchased land at Dundurrabin to establish plantation forestry.

Population

The Nymboida Shire Council's *State of the environment report 1995–96* noted that the Nymboida LGA was one of the fastest growing areas in the New South Wales North Coast area. The 1996 census showed Nymboida LGA had a population of 4354 people compared with 3989 people in 1991, a growth of 9.15% over five years. The LGA grew by 43.5% in the period 1986 to 1991.

The 1996 census showed the population of Nymboida LGA was predominantly Australian-born (90.17%) and English speaking (96.69%); most were of Anglican faith. Only 2.3% of the population were from a non-English speaking background.

People identifying as Aboriginal and/or Torres Strait Islanders comprised 2.3% of the population at the 1996 census, the second lowest proportion in the Upper North East study area but slightly higher than the proportion for New South Wales (1.7%).

The 1996 census showed that in Nymboida LGA 27.6% of the population was aged 15 years or under – the highest proportion of all LGAs in the Upper North East study area. This was a 1.1% decline from the 1991 population aged under 15 years (28.7%) but was a higher proportion than the 1996 population in New South Wales (21.3%).

Nymboida had the lowest proportion of people aged 60 years and over (13.25%) in the study area in 1996. This was a much lower proportion than found in New South Wales in 1996 (16.5%), and a 2.75% increase on the 1991 census population. The Nymboida LGA population aged 60 to 64 increased by 101.1% in the period 1986 to 1996, compared with a decrease of 6.3% for the same period in New South Wales. This large increase was repeated in the category of people aged 65 years and over which grew by 76.4% in the same period, compared with a growth of about one-third (28.2%) of that in New South Wales. The only age group which decreased in number over the 1986 to 1996 period was that of people aged 20 to 29 years (-22.4%).

Like many other LGAs in the Upper North East study area, Nymboida LGA had a pronounced outflow of people aged 15 to 25 years in the period 1986 to 1996, possibly to seek educational or employment opportunities.

Along with Casino LGA, Grafton LGA and Kyogle LGA, Nymboida LGA shares the second lowest median age (35). This compares with the New South Wales median of 34 years and reflects the low number of senior citizens in the populace.

The NSW Premier's Department (1998) has projected the population of the Nymboida LGA will increase by 19.49% to 5203 people by 2016. It is expected that 27% of the population in 2016 will be aged 45 to 64 years and a further 21.4% will be aged 25 to 44. The number of people aged 65 and over is expected to almost treble in this period.

The workforce

In 1996 1521 people were employed in the Nymboida LGA and 323 people were unemployed.

The LGA's 1996 census unemployment rate of 17.5% was third highest for the Upper North East study area and a decrease from the 1991 unemployment rate of 21.2%. In 1996, the LGA had a workforce participation rate of 42.26%.

The 1991 census data shows the agriculture, forestry and fishing industry was the major employment sector (18.4%); in 1996 the wholesale and retail trade was the largest employer (18.5%). In 1991, community services were second largest employer with 17.8% of employment. Agriculture, forestry and fishing formed the second largest employer in 1996.

In 1996, the majority (66%) of people aged 15 to 19 years worked in the wholesale/retail trade; 42.3% of people aged 55 and over and 14.5% of people aged 20 to 54 years worked in the agriculture, forestry and fishing sector. There was a 2.4% increase in employment in this sector between 1991 and 1996. There were declines in employment in the manufacturing sector (-1.3%), electricity, gas and water (-5.9%) and transport and storage (-6.8%).

Comparison of occupational groups between the 1991 and 1996 censuses shows that while there was a dominance of managers in both years, this had reduced from 19.5% in 1991 to 17.5% in 1996 and the number of professionals, clerical officers and para-professionals had slightly increased.

The 1996 census showed Nymboida LGA median weekly income for individuals in 1996 ($192) was the lowest in the Upper North East study area and 50% less than the New South Wales median ($298). Median household income was $463 compared with $652 in New South Wales for the same period. This was sixth lowest median household income in the LGA.

Education

The 1996 census showed 69.5% of the Nymboida LGA population were not attending educational institutions. The largest category of those at educational institutions (9.5%) attended primary school, while a further 7.0% attended secondary school.

The census showed 197 people in the LGA held tertiary qualifications and 175 (4.0%) were attending post-compulsory educational institutions. Vocational qualifications were held by 40.28% of those with qualifications, the major areas of qualification being engineering

(20.35%), business and administration (12.7%), and health (11.42%), the same primary areas of qualification featured in the 1991 census. Of the 1996 census population, 41.19% left school aged 15 years or less, a slight decline from 41.6% of the population in 1991.

Health

ABS population and housing statistics for 1996 showed there were 48 births and 16 deaths in the Nymboida LGA. The LGA had an average birth rate for the Upper North East study area (2.35 per 1000) and a higher rate than New South Wales (1.82 per 1000). Nymboida LGA had the third lowest standardised death rate in the study area (5.9 per 1000) and a lower rate than New South Wales (6.6 per 1000).

NSW Department of Health figures show that in 1995–96, Nymboida LGA had a lower rate of hospital admissions than in New South Wales (152 per 1000 compared with 289 per 1000). It had almost 505 more admissions of people aged 0 to 4 years, 50% less aged 50 to 54, around half the admissions of people aged 10 to 14, 40 to 44 and 55 to 59, and about a third of the admissions of people aged 75+.

The major reasons for hospital admission were diseases of the digestive system (15.3%), complications of pregnancy and birth (11.1%) and accidents, poisoning and violence (9.2%).

Housing

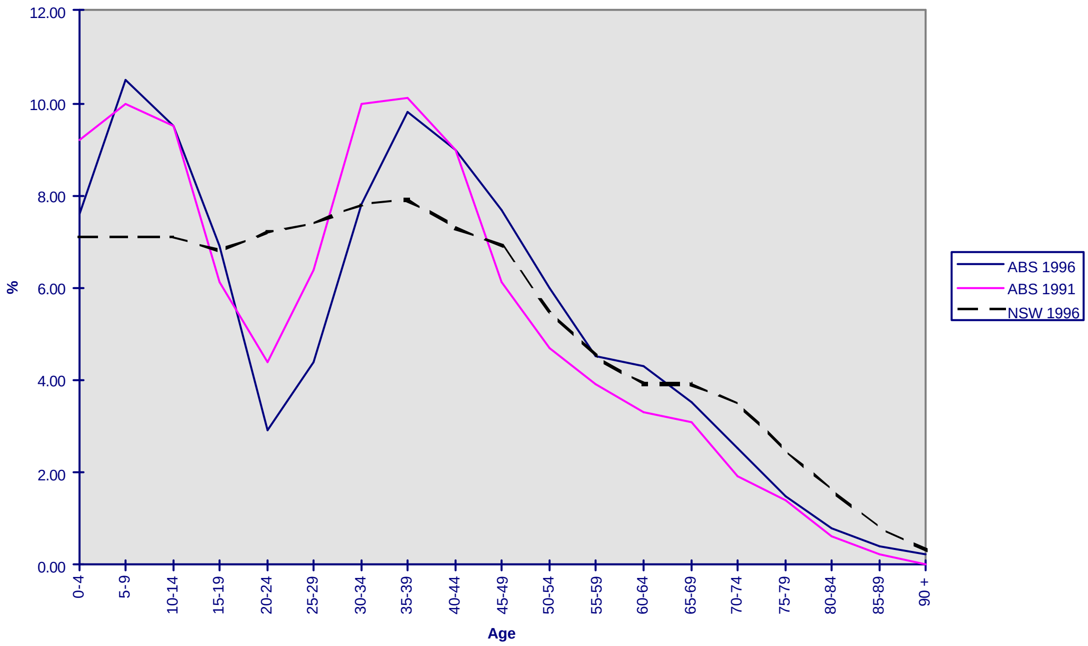
Nymboida LGA had the third lowest median monthly mortgage rate in the Upper North East study area in 1996 ($640), compared with $906 in New South Wales. It had the second lowest median weekly rent in the study area ($81) compared with $142 in New South Wales.

The 1996 census showed 91.2% of the dwellings in the LGA were separate houses and there were no flats, units or apartments. 10.6% of the houses were unoccupied at the time of the census, a 15% increase over the period 1991 to 1996 and much higher than the increase in New South Wales (9.4%). The LGA has a dwelling occupancy ratio equal to that in New South Wales (2.93); 4.7% of the population live in caravans or cabins.

The total number of dwellings increased by 17.5% from 1991 compared with the New South Wales increase of only 9.6%. The ABS reported there were 30 new dwelling approvals in the LGA in 1997.

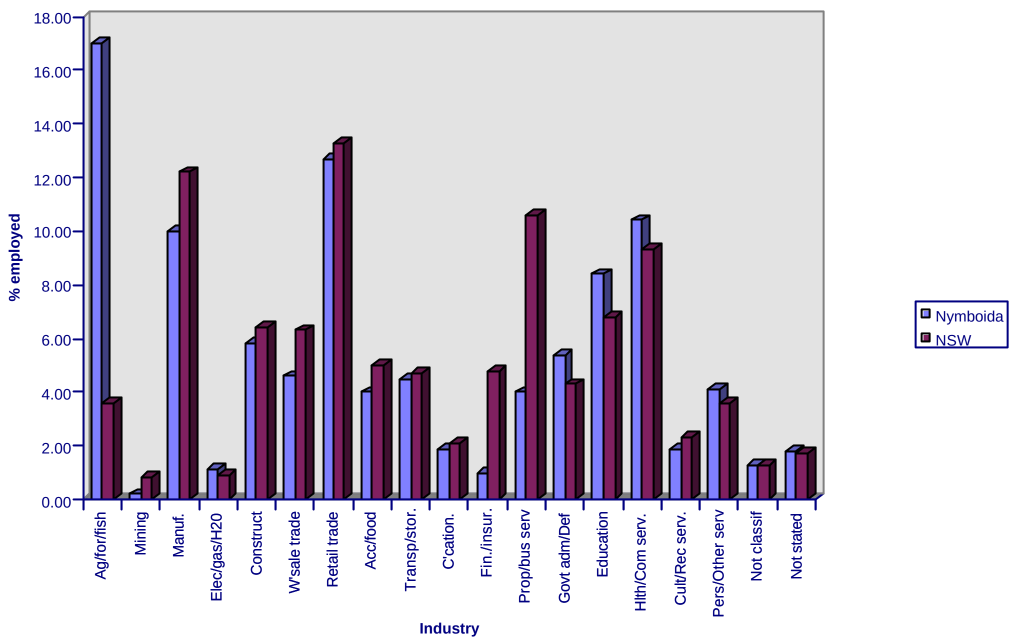
In 1996 55.4% of Nymboida households occupied a dwelling that was fully owned, compared with 43.3% in New South Wales. A further 26.8% of dwellings were being purchased. Nymboida LGA had less than half the proportion of people renting than in New South Wales in 1996 (12.7% compared with 28.8% in New South Wales) The largest category of households is that of couples with children.

Figure 23: Nymboida LGA – age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 24: Nymboida LGA — employment by industry 1996



Source: *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Richmond River LGA

Richmond River LGA covers an area of 2513 square kilometres in the centre of the Upper North East study area. The LGA extends from the coast inland to the foothills of the Great Dividing Range.

The LGA has five main urban centres — Evans Head, Coraki, Broadwater, Woodburn and Rappville. Richmond River LGA is linked to the Pacific and Bruxner highways and is served by the Evans Head airport.

Dairying and cedar cutting dominated the early activities of the LGA, but today much of the area is rural, with beef cattle raising predominating. Tourism is focused around beach and outdoor activities and use of the Broadwater, Bundjalung and Bungawalbin Nature Reserves.

Population

The 1996 census showed the Richmond River LGA had a population of 10 059 people, a 31.0% increase over the period 1986 to 1996 and a growth 19.2% higher than experienced in New South Wales over the same period.

In 1996 90.17% of the population were Australian-born (compared with 72.8% in New South Wales), and 95.8% spoke English only. The dominant religion in the LGA was Anglican; 2.4% of the population came from a non-English speaking background.

People identifying as Aboriginals and/or Torres Strait Islanders comprised 2.5% of the 1991 population and rose to 2.7% of the population in 1996.

The age structure table for the Richmond River LGA (figure 25) shows a forward shift in population over most age groups over the period 1991 to 1996.

The largest population group recorded at the 1996 and 1991 census was that of people aged 5 to 9 years (8.7% and 8.3% respectively). People aged under 15 years comprised 24.39% of the population in 1996, fifth highest proportion for this age group in LGAs in the Upper North East study region. People over 60 years comprised 21.32% of the population, third highest rate for the study area. This high proportion of mature citizens was reflected in the 1996 median age (37 years), the same age median recorded in Glen Innes LGA and an upward shift from the 1991 median of 35 years.

The greatest population change between 1986 and 1996 in the LGA was experienced in the 40 to 49 year age group which increased by 66.6%, almost double the increase of that age group in New South Wales (35.5%). The 5 to 9 year age group (47.2%) and 35 to 39 year age group (46.2%) both increased by 50% over the same period. The 5 to 9 year age group increased 5.6 times faster than New South Wales. The 35 to 39 year age group grew at 3.8 times the rate of the same group in New South Wales and the 0 to 4 year age group, which increased by 16.1 % between 1986 and 1996, grew at 3.4 times the New South Wales rate.

Richmond River LGA has a generally higher proportion of its population under 15 years and over 60 years than New South Wales, but also has a much lower proportion of young adults. This has serious implications for population stability and maintenance of a rate-paying population base.

The NSW Premier's Department has predicted the population of Richmond River LGA will rise to 13 614 people by 2016 with over 23% of its population aged 25 to 44 and over 27% aged 45 to 64. No age groups are forecast to decline.

The workforce

The 1996 census showed the labour force comprised 38.28% of the population.

There was a 4.0% decline in the rate of unemployment between 1991 and 1996, but at the same time, the workforce participation rate declined by 1.4%. In this period, employment opportunities for people aged 20 years and over generally improved. The number employed in the 20 to 54 year age category increased by 277 (12.2%) and employment of people aged 55 and over increased by 125 (32.3%).

Agriculture, forestry and fishing provided the major employment group in 1996, employing 18.3% of the workforce. Employment in this industry was spread fairly evenly over people aged 20 to 54 and 55 and over. Only 9.3% of employed 15 to 19 year olds worked in this sector. The 1996 census showed positions were lost in the mining (13 positions) and electricity, gas and water industries (10 positions).

The largest groups of people employed in 1996 were those employed as managers and administrators (17.3%), tradespersons (13.0%) and labourers and related workers (13.4%).

The median weekly individual income in 1996 was $207 and median weekly household income was $453. This was lower than $298 and $652 in New South Wales.

Education

In 1996 27.9% of the Richmond River LGA population attended an educational institution.

The largest category of those attending educational institutions attended primary schools (11.9%), with a further 6.6% attending secondary schools. This was only a slight change from 1991 when the proportions were 11.2% and 6.5% respectively, but 2.4% higher attendance at primary schools than found in New South Wales in 1996.

Richmond Rivers LGA recorded a low level of student retention. The 1996 census showed 46.25% of the population left school aged 15 years or under, a decline from 50.6% recorded in the 1991 census.

Participation in post-compulsory education in the LGA was fairly low at both the 1991 and 1996 censuses, and declined over the intercensal period from 4.4% in 1991 to 3.1% in 1996. The New South Wales 1996 participation rate was 6.8%. This low level of participation was typical of most areas of the Upper North East study region.

The 1991 census showed 68.2% of the population did not hold post-school qualifications and those that did mostly held their qualifications at the skilled or basic vocational level (13.7%). By 1996, the proportion not holding qualifications had risen to 73.9%; most of the qualifications held were still vocationally oriented (10.71%).

The most popular fields of qualification at both censuses were shown to be engineering, business and administration, and health.

Health

The major causes of death in the Richmond River LGA in 1995–96 were defined by the NSW Department of Health as being diseases of the digestive system (11.1%), diseases of the respiratory system (9.8%) and accidents, poisoning and violence (9.1%). Richmond River LGA had a higher rate of hospital admissions in 1995–96 than New South Wales, having 320 admissions per 1000 compared with 289 per 1000 in New South Wales. The highest rate of admissions was of people aged 75+ (978 per 1000 compared with 777 per 1000 in New South Wales), with high rates also recorded for people aged 0 to 4 years (446 per 1000 compared to 198 per 1000 in New South Wales).

The ABS census of population and housing figures for 1996 show the Richmond Rivers LGA had an average birth rate for the Upper North East study area with a rate of 2.25 per 1000, and 120 births.

Richmond River LGA had the fourth lowest standardised death rate in the study area, having a rate of 6.0 per 1000 compared with 6.6 per 1000 in New South Wales. In 1996 54 people died in the LGA.

Housing

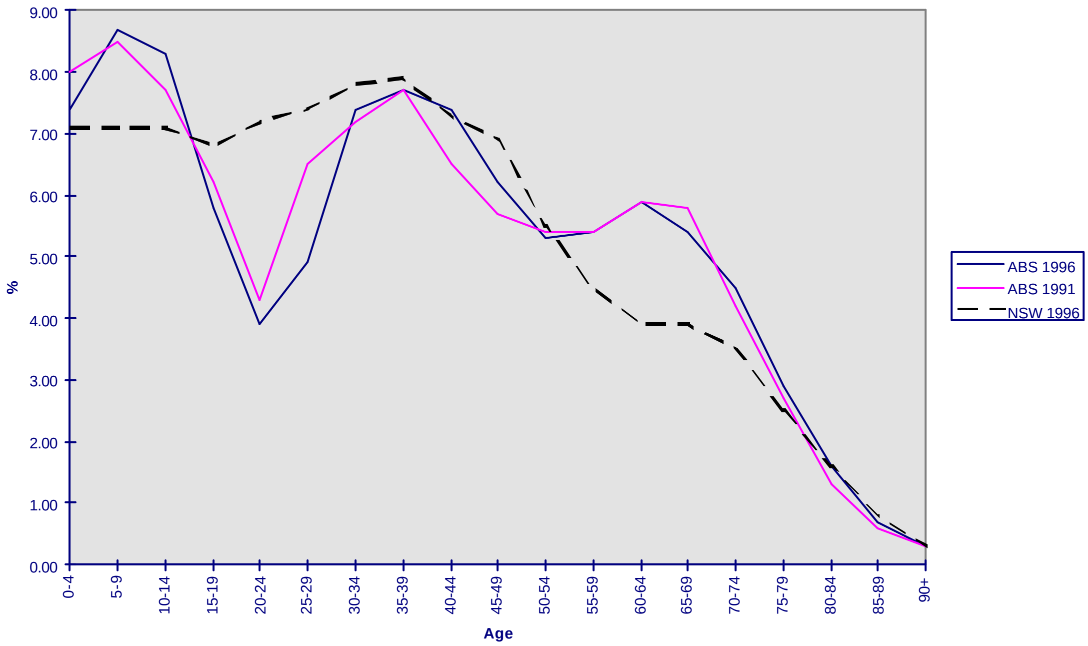
Richmond River LGA has a quite mobile population. At the 1996 census 43.8% of the population indicated that they had resided at a different address at the previous census.

Families with children comprised 36.7% of the households in the LGA and there was an occupancy ratio for the LGA of 2.7 people per residence. There was a 31.3% increase in unoccupied dwellings between 1991 and 196 compared with an increase of only 10.8% in New South Wales.

The 1996 census showed 77.25% of the Richmond River LGA population lived in separate houses. Home ownership levels of 50.5% were higher than in New South Wales (43.3%) and the proportion of residences being rented or being purchased (43%) was less than that of New South Wales (51.9%).

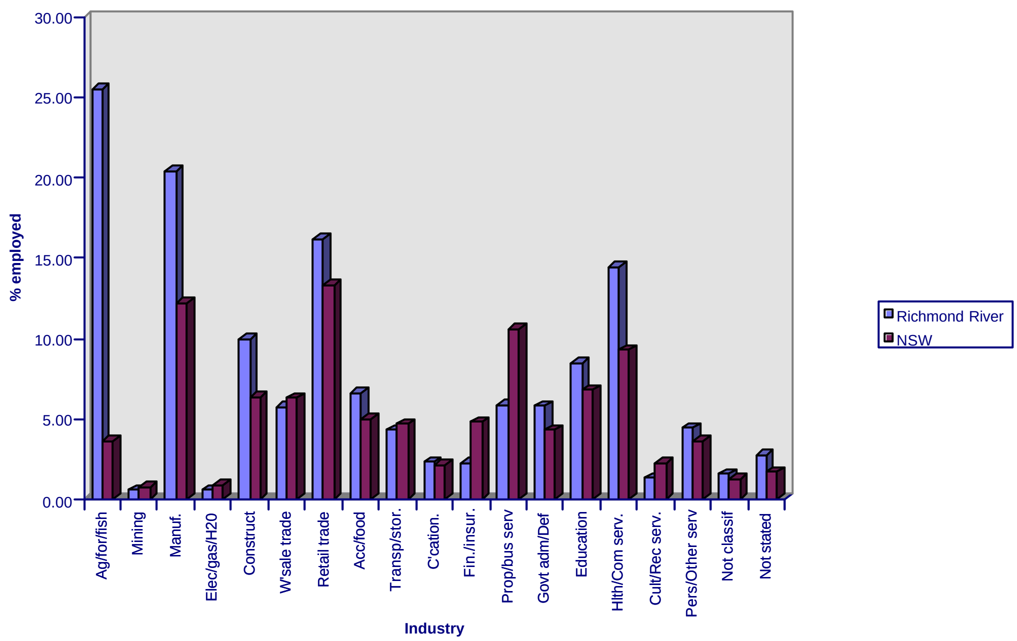
The median monthly mortgage rate in the LGA in 1996 was $691 and the median weekly rent was $111. Both rates were about average for the study area but lower than the median mortgage ($906) and the median weekly rent ($142) for New South Wales in 1996.

Figure 25: Richmond River LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 26: Richmond River LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Severn LGA

The Severn LGA covers 5569 square kilometres at the northern end of the New England tablelands. The LGA straddles the Great Dividing Range and encompasses the upper reaches of the Gwydir, Macintyre and Clarence River catchments.

Urban centres within the Severn LGA include the villages of Red Range, Emmaville, Deepwater and Torrington.

The Severn LGA is an important rural producer. In 1996, the gross value of agriculture to the LGA was $40 171 000. Major industries include sheep and cattle grazing, timber production, pasture production and limited mining.

Tourism is a developing industry and focuses on bushwalking, fishing, fossicking and horse riding. The nearby Gibraltar Range National Park, Nymboida National Park and Washpool National Park are developing as focuses for tourist activities.

Population

The 1996 census recorded the Severn LGA having a population of 2915 people, a decrease of 208 people since the 1991 census. Most of the population was Anglican, Australian-born (90.18%) and English speaking (85%).

The 1996 census showed 56 people in the LGA identified as Aboriginal and/or Torres Strait Islander (1.92% of the population). This was exactly the same number recorded in the 1991 census.

The median age in the Severn LGA in 1996 was 38 years, fourth oldest median in the Upper North East study area. This increased from a median of 35 years recorded in the 1991 census.

In 1996, 22.5% of the population were aged under 15 years and 18.94% were aged over 60 years. The ageing population was reflected in a general forward shift of the population curve from people aged 45 onwards (figure 27). There was a dramatic out-migration of people aged 15 to 30 years shown in both the 1996 and 1991 censuses. This may have important ramifications for future planning of services and facilities and maintenance of a rate-paying population base.

The workforce

The 1996 census found that 172 people (12.7% of the workforce) were recorded as being unemployed. The Severn LGA had a workforce participation rate of 44.63% and 1129 people 15 years and over in the workforce.

Over half those employed in the Severn LGA in 1996 and 1991 (54.5%) worked in the agriculture, forestry and fishing industries. Health and community services was the next largest category in 1996, employing 7.3% of the population.

The most common occupation classified was managers and administrators. This group comprised 44.3% of the 1996 census working population and 47% of the 1991 census working population. Labourers and related workers were the other large occupational group and comprised 10.8% in 1996, a fall from 16.5% in 1991. This could explain in part the reason for the out-migration of younger people from the LGA.

The median weekly individual income for the LGA in 1996 was between $160 and $199. The median weekly household income was between $300 and $499. In 1996 207 people over the age of 15 years (9.17%) recorded a negative or nil income.

Education

Severn LGA is typified by low levels of educational qualification. In 1996 1364 people (60.3%) left school aged 16 years or under, and eight people had never attended school.

The 1996 census showed 69.3% of those in the Severn LGA were not attending educational institutions in 1996. The largest group of those attending went to primary school (10.65%). Only 3.46% of the population were enrolled in tertiary institutions or TAFE colleges, a decline from 4% attendance recorded at the 1991 census and much lower than the New South Wales rate of 6.2%.

At the 1991 census, 220 people were recorded as having an associate diploma, undergraduate diploma, bachelor degree, postgraduate diploma or higher degree. This number had increased by only 10 by 1996. The most common qualifications (19.7%) identified in the 1996 census were held at skilled vocational level. Agriculture and related fields were the primary area of qualification (12.7%) at both the 1991 and 1996 censuses.

Health

Severn LGA had 44 births in 1996 and a birth rate of 3.05 per 1000, the highest in the Upper North East study area. In the same period it had 26 deaths and a standardised death rate of 7.4 per 1000, second highest rate in the study area (shared with Grafton LGA and Guyra LGA).

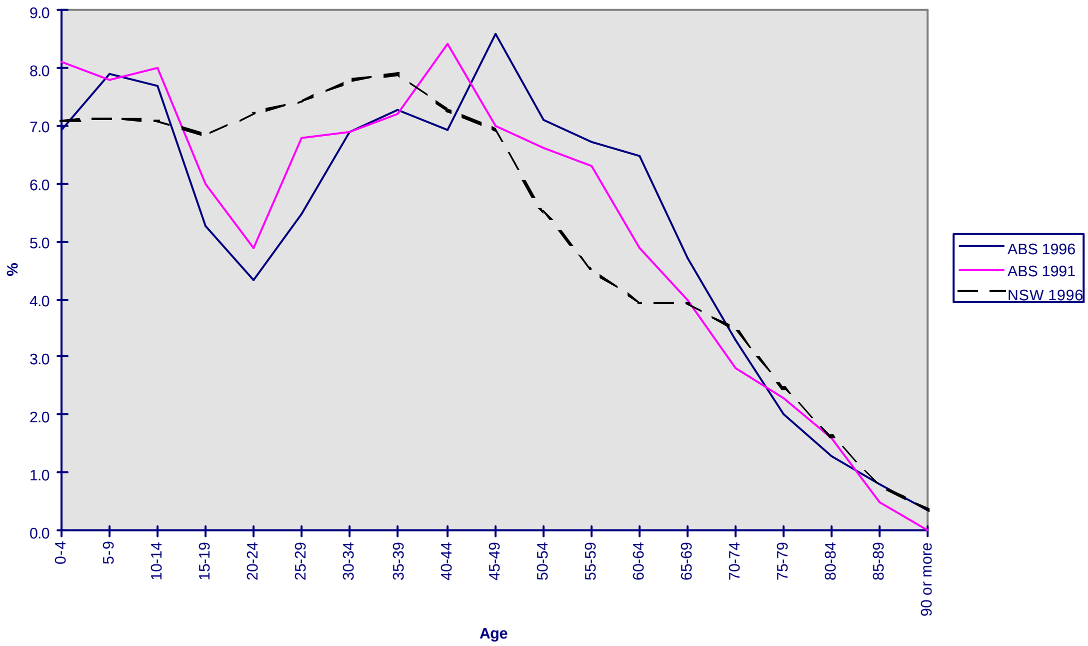
Housing

The population of the Severn LGA has become more settled. In the 1991 census, 33.1% of the Severn LGA had lived at a different address in the previous five years. In the 1996 census, this had reduced to 27.14% of the population.

The 1996 census showed 94.21% of the population lived in a separate house and no one lived in flats, units or apartments. This compared with 93.8% of the population in separate houses in 1991. Couples with dependent children made up the largest category of households.

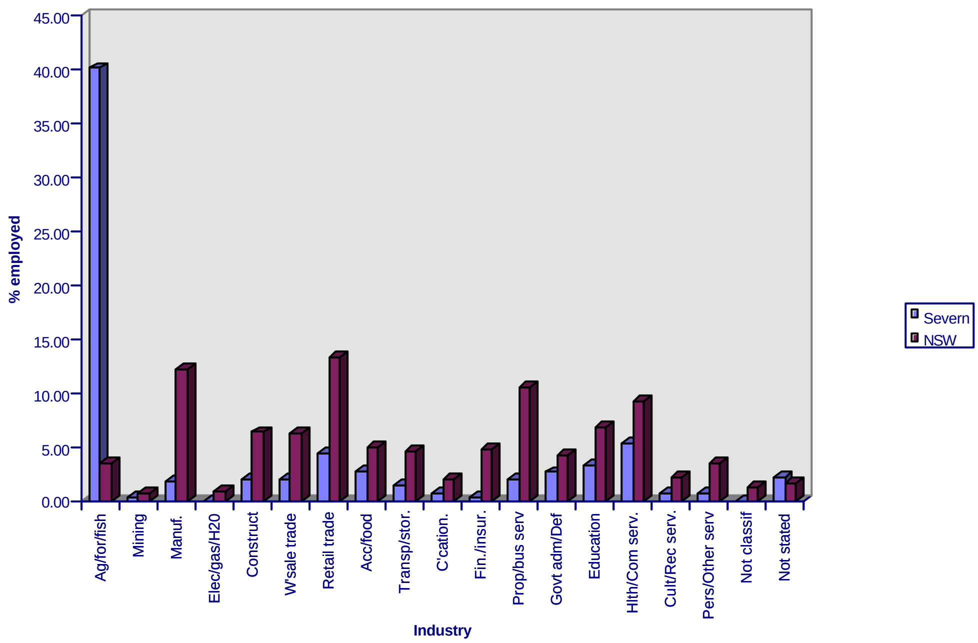
The 1996 census showed 13.0% of dwellings were being purchased, with most monthly housing loan repayments being between $400 and $599. In 1996 89.2% of rent paid was within the range $0–99 per week. In 1997, nine residential dwelling approvals were made.

Figure 27: Severn LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 28: Severn LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Tenterfield LGA

The Tenterfield LGA is located at the northern end of the New England Highlands on the Great Dividing Range. The LGA covers 7170 square kilometres.

The area is characterised by warm summers, cool to cold winters and a predominantly summer rainfall pattern. Frosts are frequent in winter and can be severe with snow falls occurring around every five years. Very few areas of the shire are subject to flooding.

The major centre of population in the LGA is the town of Tenterfield, which sits at the junction of the New England and Bruxner highways. Other urban centres within the LGA include the centres of Drake, Jennings, Legume, Liston and Urbenville. Towns in the lower slopes of the LGA tend to be more topographically similar to lands in the adjoining Kyogle and Copmanhurst LGAs and people in these areas generally use Kyogle, Woodenbong and Casino as their service centres rather than Tenterfield.

Cattle and sheep production are the primary industries of the area, although cedar getting and gold, tin and sapphire mining were also important industries in the past. The area has a young wine industry and is also suited to orchard fruit growing.

The area is famous for having been the seat of Federation and the home of Sir Henry Parkes. It was also the home of the first Premier of New South Wales, Sir Stuart Donaldson and a Premier of Queensland, Mr R.R. Mackenzie.

Major events in the area include the New England Sheep Dog Trials, an Autumn Colour Celebration, the Federation Festival, a Gem Festival and a Spring Wine Festival.

There are ten State forests in the LGA and around 60.5% of the area has native tree cover. A significant amount of the original native vegetation on freehold land has been disturbed since settlement of the area. The Tenterfield Council’s *1997 State of the environment report* noted that the LGA’s forests are on predominantly granite soils of moderate to low site quality. There are limited areas of soils suitable to sustain intensive timber production. Hardwood logs have formed the major timber product for local conversion with small quantities of timber cut for sleepers and miscellaneous production. NSW State Forests have estimated the value of forestry to the shire could be as much as $20 million per annum without giving value to non-timber usage of the forests. Fifty per cent of the State forest areas are held under occupation permit or Crown lease for grazing purposes and provide significant winter grazing for beef cattle production. All State forest areas are utilised by commercial apiarists for honey production.

Population

At the 1996 census Tenterfield LGA was recorded as having 6529 people, 66 fewer than were recorded at the 1991 census.

Tenterfield LGA was predominantly Anglican and had a median age of 39, considerably older than the New South Wales median of 34 years. This was reflected in the high proportion of people aged over 60 years (20.61%) but was balanced to some degree by the fairly high proportion of people under 15 years (21.75%).

In the 1996 census 86.6% of the population were listed as being Australian-born with most of the population being English speakers.

In the 1996 census 300 people (4.78% of the population) identified as being Aboriginals and/or Torres Strait Islanders. This was an average rate for the Upper North East study area.

Workforce

At the 1996 census, the Tenterfield LGA was recorded as having an unemployment rate of 11.3% (296 people) — the same rate recorded in Glen Innes LGA and one of the lower rates in the Upper North East Study area. This was lower than the New South Wales unemployment rate of 8.8% and lower than the unemployment rate of 13.6% recorded in the 1991 census. The workforce participation rate for the LGA in 1996 was 40.04%.

Managers and administrators comprised almost a quarter of the workforce, most of these being 35 years and over. Employment was fairly evenly spread over professionals, associate professionals, tradespersons and related workers, intermediate clerical sales and service workers, and intermediate production and transport workers.

The 1996 census showed that of people over 15 years having a qualification, the largest numbers had the occupational classification of engineering (16.75%). Business and administration (10.29%), health (11.6%) and education (8.85%) are the other major occupational groups. At the 1996 census 123 people over 65 years (5.32%) were still registered as being in the workforce.

Median individual weekly income for people aged 15 years and above in 1996 was $160 to $199. Median weekly household income was $300 to $499. Almost 8% of the population had a negative or nil income, most of these being between the ages of 35 and 54.

Education

In 1996, the LGA was well served by educational facilities, having a government primary and secondary school and a Catholic primary school in Tenterfield township, and primary schools in Drake, Wallangarra and Mingoola.

There was very little change in the range or number of people attending educational institutions in the Tenterfield LGA in the period 1991 to 1996. The rise in the number of people not attending educational institutions probably reflects the increase in older people in the LGA.

The Tenterfield LGA was typified by early school leaving with the 1996 census showing 27.2% of people left school aged 15 years and 20.8% left at age 16. Only 15.9% of people in the Tenterfield LGA have post-school qualifications, a decrease since 1991 when the qualified population reached 19%.

Health

Tenterfield LGA recorded 79 births in 1996 and had a birth rate of 2.27 births per 1000, seventh lowest in the Upper North East study area.

In the same year 69 deaths were recorded. Tenterfield had a death rate of 7.4 per 1000 at the 1996 census, equal second highest in the study region with the LGAs of Grafton, Guyra and Severn, but with the highest median age of these three.

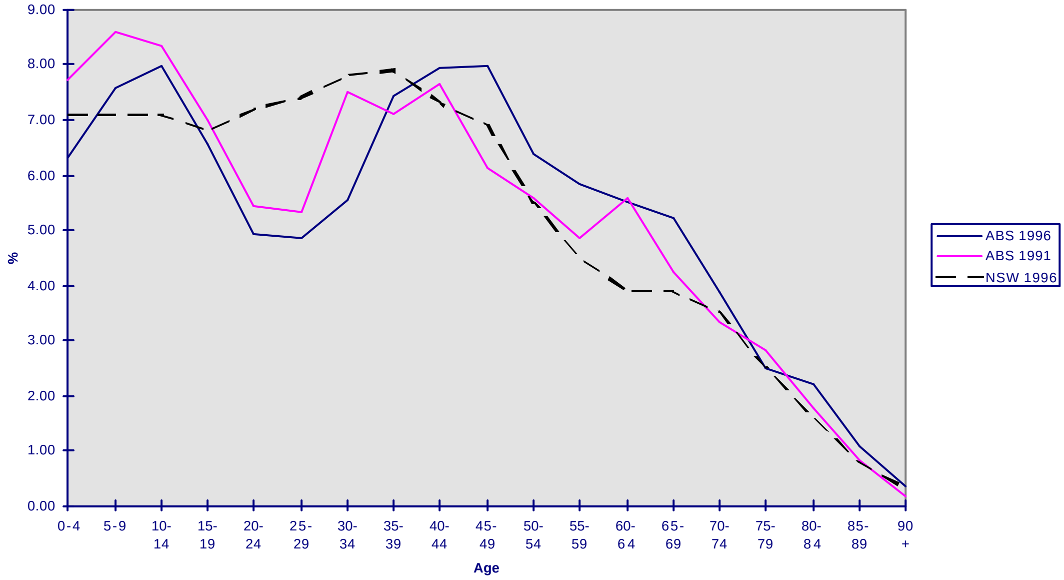
Housing

The 1996 census showed 50% of the adult residents in the Tenterfield LGA owned a separate home with almost equal proportions purchasing their homes or renting. Ninety-two per cent of the population resided in separate homes. Monthly housing loan repayments were shown in the 1996 census to be mostly between $200 and $799 per month, with a majority paying between $400 and $599 each month; 67% of people paying rent paid between $0 and $99 per week. Average household size is 2.5 people.

The 1996 census showed Tenterfield to be a fairly stable population, with only 32% of people having lived at a different address in 1991.

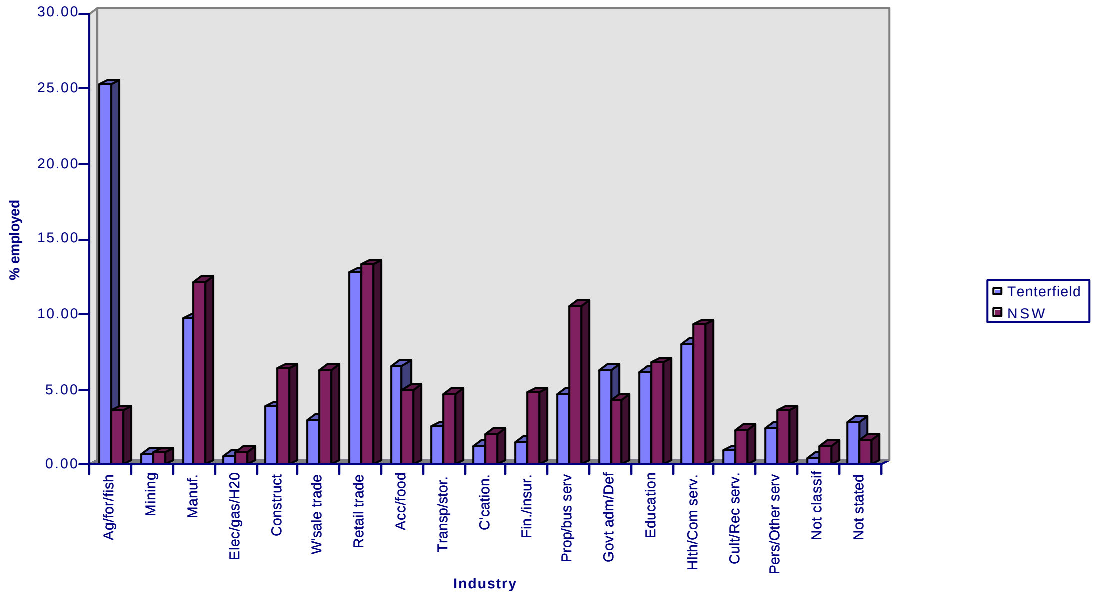
At the 1996 census almost 17% of homes were unoccupied private dwellings. A surprisingly large number of homes (6.7%) were listed as being caravans, cabins, improvised homes (such as tents or sleep-outs) or houses or flats attached to shops.

Figure 29: Tenterfield LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 30: Tenterfield LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Tweed LGA

Tweed LGA is at the far north limit of the Upper North East study area, abutting the Queensland border. It covers an area of 1307 square kilometres and lies mostly within the circle formed by an extinct volcano now centred by Mt Warning.

The LGA is in a subtropical zone with warm weather for most of the year. Despite there being a distinct wet season in the summer months, rain falls on average 156 days per year. Much of the lower LGA floods at regular intervals.

Major urban centres in the LGA include Tweed Heads, Murwillumbah, Bogangar, Pottsville Beach, Hastings Point, Burringbar, Tumbulgum, Tyalgum Pottsville and Uki.

The LGA is connected to the Pacific highway and the coast road, but road quality and safety are constrained by the rugged geography of the area.

The major industry in the area is tourism, focused on the multitude of good beaches and the close proximity to the Gold Coast. There is also an important rural economy in the LGA that includes prawning, oyster catching and sea fishing, sugar cane growing, beef and dairy cattle grazing and banana, avocado, macadamia nut and tropical fruit cropping industries. Hobby farms are a growing trend.

Population

There were 66 865 people recorded in the Tweed LGA in the 1996 census; an increase of almost 11 000 people (11.8%) in the 1991 to 1996 intercensal period (this base population can be enlarged by up to 30% each year during peak holiday periods).

In the 1996 census, 82.3% of the population were listed as Australian-born and 94% spoke English only. The most popular religion listed was Anglican. The Murwillumbah district within the LGA has a recognisable ethnic group, the Punjabi-speaking Sikh community, of around 200 people.

In the 1996 census 1461 people identified as being Aboriginal and/or Torres Strait Islanders, compared with 980 in the 1991 census. This was an increase of 49% over the five year intercensal period.

The largest population groups within the LGA in 1996 were those under 15 years and people between 65 and 69 years. In the period 1986 to 1996, the Tweed LGA recorded an across the board growth well above that of New South Wales in all age groups except 20 to 29 year olds. The greatest growth between 1991 and 1996 was 94.4% reported in the group aged 65 or more. Significant growth in the size of age groups over 60 years (3500 people) is reflected in the growth of the median age from 37 years in 1991 to 40 years in 1996.

The Tweed Shire Council's *State of the environment report*, released in 1996, noted that population growth of the Tweed LGA is dominated by the Tweed Heads District and the Tweed Coast which are developing as retirement centres. The growth of shops, services and sporting facilities has enhanced the growth in these areas.

The NSW Premier's Department predicts the population of the Tweed LGA will almost double by 2016, rising to 101 364 people. The largest group within the population is expected to be aged 45 to 64 years.

The workforce

The 1996 census showed the workforce participation rate was 46.7%, a 6.3% decrease from 1991. The labour force was listed as 24 768 people, 46.7% of the LGA's people aged 15 years and over.

The rate of unemployment for the LGA decreased in the period 1991 to 1996, from 17.8% to 15.7%, close to the average rate for the Upper North East study area (15.2%) but higher than the New South Wales rate of 8.82%. The number not in the labour force increased in all age categories during the intercensal period, but the least growth (25.9%) occurred in those aged 55 and over.

Tweed LGA's importance as a service and tourism centre is reflected in its major areas of employment. The 1996 census showed the wholesale/retail trade was the dominant industry in the LGA (20.8%), followed closely by health and community services (10.3%), and accommodation, cafes and restaurants (9.6%). The wholesale/retail trade increased by 17.5% over the intercensal period. Business services had an increase of 503 jobs, the largest increase in job numbers for all sectors in 1996.

The number employed in agriculture, forestry and fishing in 1996 was 1428 people (6.84% of the workforce), a 3.2% decrease from 1991. This sector was the largest employer of people aged 55 and over in the LGA (15.6%). While there was an increase in the employment of 15 to 19 year olds in this sector between 1991 and 1996 (15 positions), employment in all other age categories fell.

The largest group of people employed in the Tweed LGA worked as intermediate clerical, sales and service workers (15.6%) in 1996. Tradespersons and related workers comprised the second largest group (14.3%).

The 1996 census showed income in the Tweed LGA was low, with nearly 70% of the population earning less than $399 per week as individuals, compared with 54.2% in New South Wales. The median weekly income for individuals in 1996 was $220 compared with $298 for New South Wales. More than one-fifth of the population earned between $80 and $100 per week; 4.7% earned negative or nil income in the same period.

Median household income was two-thirds of that in New South Wales, being $445 per week compared with $652 for New South Wales. This was fifth lowest in the study area.

Education

Attendance at all types of educational institutions was below the New South Wales average in 1996, with the number not attending educational institutions (73.4%) higher than the New South Wales average of 69.5%.

There was an increase of 0.3% in the number of students attending non-government schools in the intercensal period in primary schools and 0.9% in secondary schools.

People in the Tweed LGA tend to have left school earlier than in other areas of the State. The 1996 census showed 66.5% of the population aged 15 years or over left school aged 15 years or less. About a third of the population has qualifications, but only 25% hold qualifications at tertiary level (as a higher degree, bachelor degree, undergraduate diploma or associate diploma). This was an increase from 1991 when only 17.48% held qualifications at this level.

The major qualifications listed in the 1996 census for the LGA were engineering (19.55%), business and administration (12.45%) and architecture and building (9.32%). These were also the three most popular qualifications shown in the 1991 census.

Health

The 1996 demographic figures from the Australian Bureau of Statistics showed there were 340 births in the Tweed LGA in 1996 and that the area had a birth rate of 2.21 per 1000 — an average rate for the Upper North East study area.

Deaths accounted for 169 people in the same period, giving the area a standardised death rate of 6.3 deaths per 1000. This is the fifth lowest death rate in the study area.

NSW Department of Health figures for 1995–96 show Tweed LGA had a lower rate of hospital admissions (177 admissions per 1000) than New South Wales (289 per 1000). This was one of the lowest rates in the study area. The rate of admission for people aged 0 to 4, 20 to 24, and 65 and over was greater than the rate for other age groups. Major reasons for hospital admissions were diseases of the digestive system, diseases of the circulatory system and complications of pregnancy or birth.

Housing

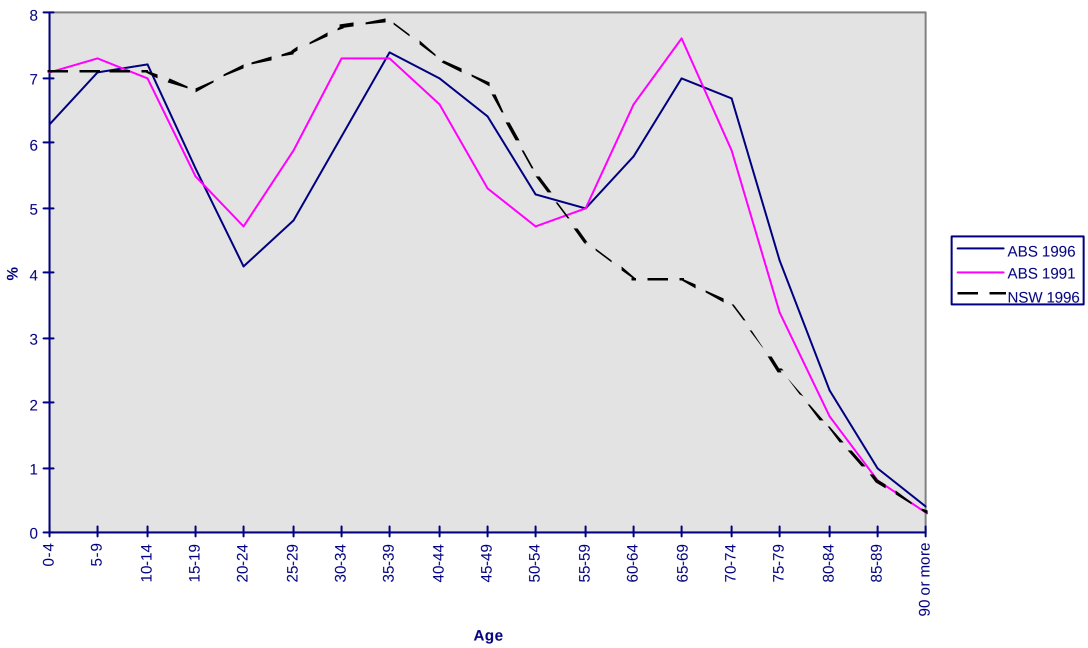
The 1996 census showed the occupancy ratio for the LGA in 1996 was 2.46 people per dwelling. In 1996 61.1% of dwellings were separate houses, with most dwellings in the LGA occupied by couples with children. Half of the population resided at a different address in 1991.

In 1996 19.4% of the dwellings in the LGA were unoccupied compared with 9.6% in New South Wales.

Tweed LGA had a higher level of home ownership than New South Wales in 1996, having 49.1% home ownership compared with 43.3% for New South Wales. However, it had 4.1% fewer houses being purchased than New South Wales.

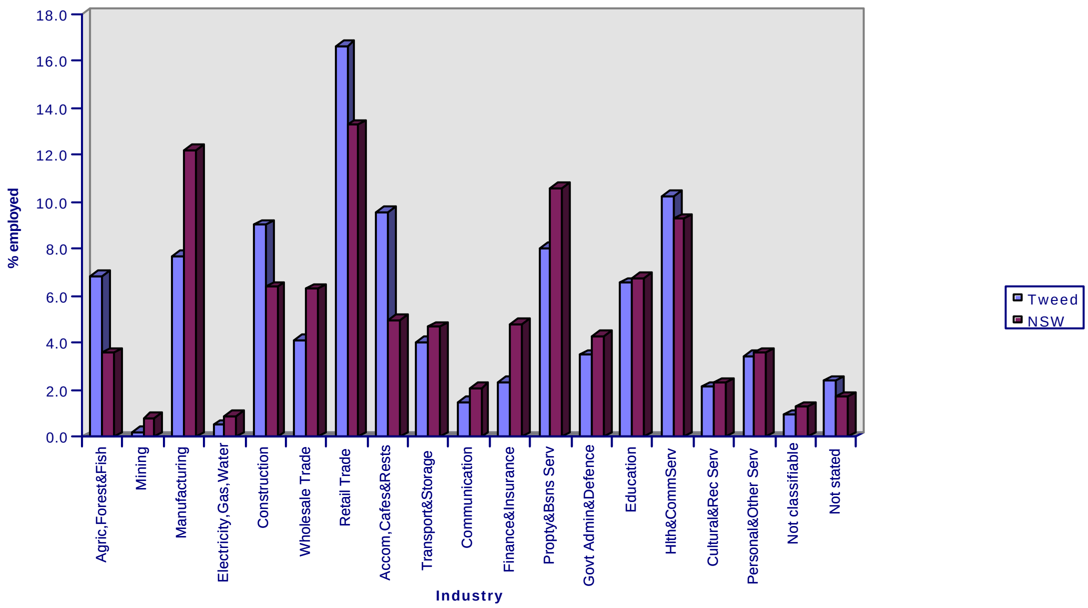
Housing loan repayments were generally at a lower rate than in New South Wales in 1996, with the median monthly mortgage being $787 compared with $906 for New South Wales. Rents were also lower than in New South Wales, with the LGA having a median weekly rent of $136 compared with $142 per week for New South Wales in 1996.

Figure 31: Tweed LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile*, 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 32 : Tweed LGA — employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile*, 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Ulmarra LGA

Ulmarra LGA covers 1680 square kilometres in the lower reaches of the Upper North East study area, 40 kilometres from Coffs Harbour. Urban centres within the LGA include Corindi Beach, Wooli, Ulmarra, Red Rock, Glenreagh and Tucabia. Ulmarra village is classified by the National Trust.

The eastern coastline of the LGA is protected by the Solitary Islands Marine Reserve and supports a diversity of marine life. The Yuraygir National Park is also within the LGA. The area has a subtropical climate with a mean rainfall of 104 mm.

Major industries in the LGA include dairying, grazing, timber culture, fishing and tourism focused on outdoor activities and 'bush tucker' walks. The major commercial centre for the area is Grafton.

The LGA is serviced by an airport and the North Coast railway. There are road links to the Pacific highway, Gwydir highway and Armidale road.

Population

The 1996 census showed Ulmarra LGA had 6147 people, the majority being Anglican and 89.3% being Australian-born; 88.9% of the population spoke English only.

In the 1996 census 2.75% of the population identified as being Aboriginal and/or Torres Strait Islanders, an increase from 1.8% recorded in 1991. Aboriginal and/or Torres Strait Islanders comprised 1.7% of the New South Wales population.

Ulmarra LGA had a median age of 36 years in 1996, compared with a median of 33 years recorded at the 1991 census and 34 years for New South Wales.

While this shift of the median ages showed the population was ageing, Ulmarra LGA had a relatively young population in comparison with other LGAs in the Upper North East study area. At the 1996 census, it had 26.19% of its population under 15 years (third highest in the study area) and 18.02% over 60 years (sixth lowest in the study area). This compared with 21.2% under 15 years and 12.60% over 60 years in New South Wales. Those aged 5 to 9 years (592 people) and 10 to 14 years (541 people) comprised around a sixth of the population. The population profile showed a dip in the 20 to 29 year age group.

The NSW Premier's Department forecast a steady rise in population in the LGA to 7503 people by 2016, including a decline in people aged 5 to 14 years and 25 to 44 years, and a trebling of the population aged 75 and over.

The workforce

Ulmarra LGA had the highest unemployment rate of all LGAs in the Upper North East study area in 1996, with a rate of 20.7% (486 people). This was 11.9% higher than recorded in New South Wales at the same time. Over one-third of the population over 15 years surveyed was not in the labour force (34.58%).

The major industries of employment in Ulmarra LGA in 1996 were agriculture, forestry and fishing (15.6% or 290 people), closely followed by the retail trade (15.3%). Together, these industries employed over a quarter of the LGA's population.

The agriculture, forestry and fishing sector was the largest employer of people aged 55 and over (32.7% of this group), and retailing employed 45.5% of those aged 15 to 19 years (but only 14.1% of those in the 20 to 54 year age group). This focus on retailing may have implications for unemployment rates in future years if the population is forecast to decline and current employment is based on youth salary rates. Workers aged 35 to 44 years comprised 32.08% of the workforce of 1866 people in 1996.

No one occupational category dominated the workforce in Ulmarra LGA in 1996, but management and administration, professionals, tradespersons and related workers, and intermediate clerical, sales and production workers were all important occupational categories.

The 1996 census showed median weekly individual income for workers in the LGA was over $100 less than recorded in New South Wales. Median individual income was $193 for individuals compared with $298 in New South Wales. Median household income for the same period was $421 compared with $652 in New South Wales.

Education

There were five primary schools in the LGA in 1996, situated at Ulmarra, Tucabia, Wooli, Corindi Beach and Glenreagh. The Ulmarra Shire surrounds Grafton which had both State and private high schools to Year 12.

The 1996 census figures showed Ulmarra LGA did not have a highly educated population. Almost half the 1996 population (2141) left school aged 15 years or under and only 29.2%

attended an educational institution. In 1996 12.4% of people attending educational institutions attended primary/infants schools compared with 11.6% in 1991. The New South Wales rate for the same sector was 9.5%.

In 1996, 205 people (5.17%) were listed as having tertiary qualifications. Skilled vocational qualifications comprised a third of qualifications held in the LGA in 1996, the largest numbers of these qualifications being in the fields of engineering (22.54%) and business and administration (12.38%). Only 2.3% attended tertiary institutions in 1991 (university, TAFE or other tertiary institutions) compared with 3.25% in 1996.

Health

Ulmarra LGA had the second highest birth rate in the Upper North East study area (2.67 per 1000), and had 83 births in the LGA in 1996. The LGA had a standardised death rate of 6.5 per 1000 in 1996, about average for the study area. There were 40 deaths in the LGA in 1996.

The most common reasons for hospital admission in 1996 were diseases of the digestive system (12.6%), diseases of the circulatory system (9.3%) and complications of pregnancy and birth (9.3%). Ulmarra LGA had a hospital admissions rate almost the same as that of New South Wales, having 256 people admitted per 1000 compared with 289 per 1000 in New South Wales. However, within this group, Ulmarra had significantly more admissions than New South Wales in the 0 to 4 years, 20 to 24 years and 25 to 29 years age categories, but fewer in all age categories above this.

Housing

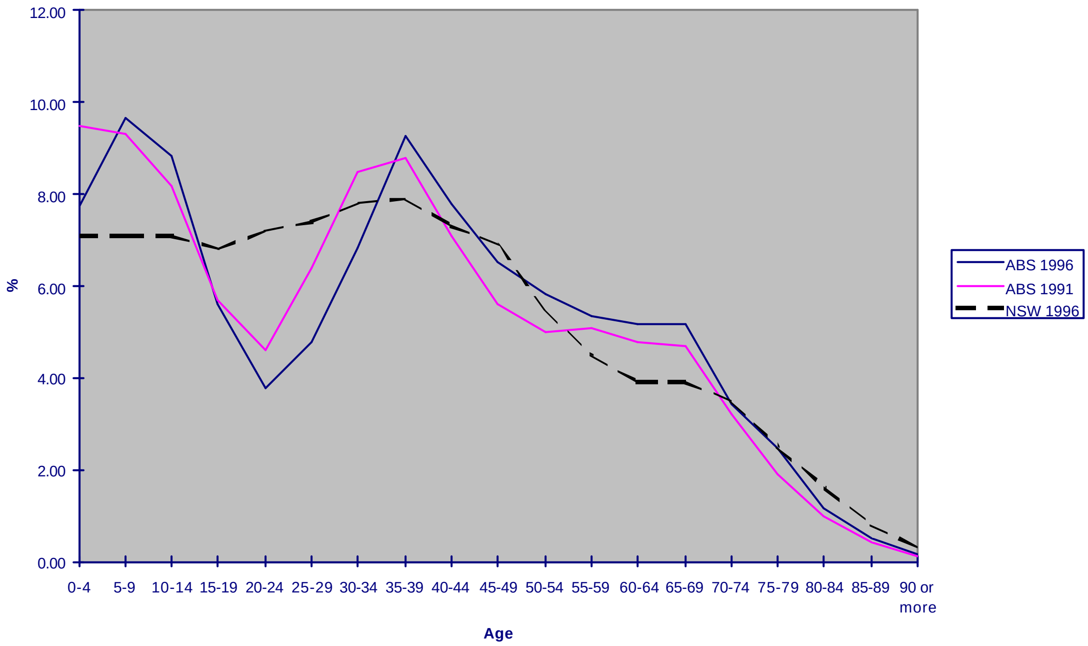
The population of Ulmarra LGA was moderately mobile according to the 1996 census. At this time, 37.74% of the population had lived at a different address five years ago.

In 1996, 55.5% of dwellings in the LGA were owned, compared to only 43.3% of dwellings in New South Wales. Fully owned separate houses were the most common dwellings according to the 1996 census, comprising 38.5% of the dwellings in the LGA. Fully owned caravans, cabins or houseboats (8.6%) were a popular alternative to the standard separate house. At the 1996 census 616 (21.5%) dwellings were listed as being unoccupied, an increase of 18.7% from 1991 compared with an increase in New South Wales of only 10.8% over the same period.

‘Couple families’ with children comprised over half the households in residence on census night 1996. The average household size in 1996 was 2.7 people.

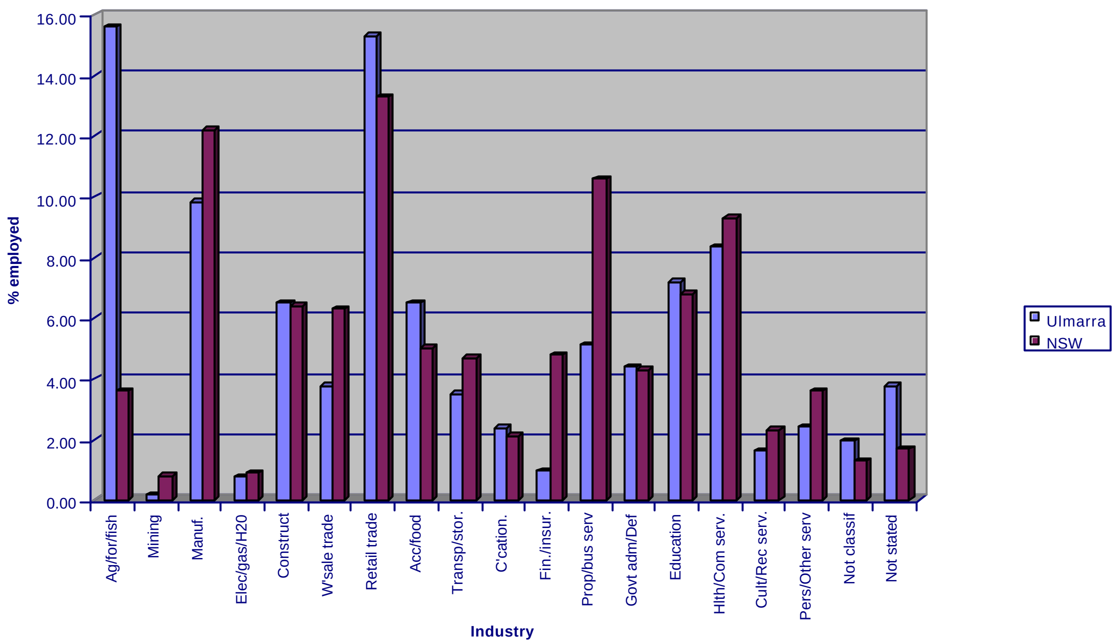
Residents of Ulmarra LGA in 1996 were recorded as paying the lowest median monthly mortgage in the study area ($600), and a median weekly rent of $96 — fifth lowest in the study area.

Figure 33: Ulmarra LGA — age structure



Sources: ABS *Census of population and housing. Basic community profile,* 1991 and 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

Figure 34 : Ulmarra LGA – employment by industry 1996



Sources: ABS *Census of population and housing. Basic community profile,* 1996 and *Socio-economic profile of the North Coast of New South Wales* NSW Premier's Department, 1998.

5 SOCIAL VALUES OF FORESTS

Community case studies

Detailed case studies of twelve communities are presented here as part of a social values project undertaken in the Upper North East New South Wales CRA Region

Case study area — Byron Bay

History of settlement

Byron Bay on the far north coast of New South Wales is the most easterly point in Australia. Cape Byron, as it was once called, was given its name by Captain Cook in 1770 who described it as a tolerable high point of land. The Aboriginal name for Byron Bay was Cavanba.

In 1835 an escaped prisoner, Richard Craig, who was living with an Aboriginal tribe in the area, reported huge stands of cedar and other valuable timber. The first industry around Byron Bay was primarily timber getting with cedar cutters camping on the banks of the rivers and working their way into the surrounding forest. As the timber resources were depleted squatters moved in, further clearing the land. In 1862 the selectors arrived who were able to purchase freehold land. Although farming was growing in importance the timber industry still dominated the local economy. However, in 1878 gold was found in payable quantities and there was intensive mining of the beaches surrounding Byron Bay.

Lobbying by the Progress Association, formed in the 1880s, resulted in the construction of a jetty which began Byron Bay's most prosperous period, primarily trading in timber. Due to many shipwrecks in the area, a lighthouse was built and commenced operations in 1901. Fishing became an important industry in the early 1900s with ten fishing boats operating from the jetty and in the early 1920s a fish canning factory was opened. A new jetty was built in 1928 but was severely damaged in a storm in 1954, which also destroyed twenty six fishing boats (source: Department of Public Works NSW Coastal Engineering Branch (November 1978) *Byron Bay–Hastings Point Erosion Study,* Report no. PWD 78026).

Population

In 1996, the population of Byron Bay was 6130, a significant increase on 1991 when the population was 5007 (ABS 1991, 1996). Byron Bay had an annual growth rate of 6.4% between 1986 and 1996 (*A summary socio-economic profile, north coast of New South Wales,* 1998). The median age of the population in 1996 was 34 years and in 1991 was 33 years.

Byron Bay selected characteristics

	Male	Female	Total
Total population	3034	3096	6130
Aged 15 years and over	2523	2613	5136
Aboriginal	27	20	47
Torres Strait Islander	8	7	15
Both Aboriginal and Torres Strait Islander	4	0	4
Australian-born	2204	2267	4471
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, USA	292	287	579
Other country	144	157	301
Total	436	444	880
Speaks English only and aged five years and over	2376	2422	4798
Speaks language other than English and aged five years and over	126	122	248
Australian citizen	2433	2495	4928
Australian citizen aged 18 years and over	1832	1946	3778
Unemployed	339	227	566
Employed	1107	986	2093
In the labour force	1446	1213	2659
Not in the labour force	733	1045	1778
Unemployment rate	23.4%	18.7%	21.3%
Enumerated in private dwellings	2516	2555	5071
Enumerated in non-private dwellings	518	541	1059
Persons enumerated in same address five years ago	997	1033	2030
Persons enumerated in different address five years ago	1454	1481	2935
Overseas visitors	203	245	448

Source: ABS 1996

Major industries in the township of Byron Bay

In 1996 the major industries in the Byron Bay township were accommodation, cafes and restaurants (28%) and retail trade (27.9%). Other major industries included property and business services (17.8%), health and community services (17.25%) and manufacturing (16.8%) (ABS 1996). These figures are indicative of the thriving tourism industry Byron Bay is renowned for. Estimates of tourist visits in the Byron Bay LGA show an increase of 5.54% from the financial year 1994–95 to 1995–96 and a corresponding increase in tourist spending of 4.27% (Tourism NSW). In 1996 the unemployment rate was 21.3% (ABS).

Industry by employment in the local government area (LGA)

Industry by employment figures in the Byron Bay local government area show that there is there is less dependence on accommodation, cafes and restaurants (10.1%), and a higher reliance on retail trades (16%) than occurs in Byron Bay township. There are also variations in property and business services (8%), health and community services (10.2%), and manufacturing (8.7%) (ABS 1996). These figures suggest that there is less direct dependence on tourism, although there may be flow-on effects from tourism in the Byron Bay township.

The following table summarises and compares the industry by employment in the Byron Bay township and in the Byron Bay LGA.

Industry	Total % Byron Bay township	Total % Byron LGA
Agriculture, forestry, fishing	2.71	7.6
Mining	0	0.5
Manufacturing	9.62	8.7
Electricity, gas, water	0.38	.7
Construction	5.30	7.2
Wholesale trade	3.43	4
Retail trade	16.00	16
Accommodation, cafes & restaurants	16.05	10.1
Transport & storage	2.95	2.8
Communication services	1.24	1.1
Finance & insurance	2.90	2
Property & business services	10.14	8
Government administration & defence	4.00	3.5
Education	6.28	8.5
Health & community services	9.86	10.1
Cultural & recreational services	3.09	2.5
Personal & other services	4.24	3.3
Not classifiable	0.52	1.2
Not stated	1.28	2.3

Source: ABS 1996

Income

The median individual income of people in the Byron Bay township is $200 to $299 per week and the median household income is $300 to $499 per week. High income earners (over $50 000 per year) make up 3% of the population. About 50% of people earn between $120 and $399 per week (ABS 1996).

Community infrastructure

Health

Byron Bay has a district hospital offering a comprehensive set of clinical services — emergency, medical/surgical, diagnostic and maternity/child services. It also has a Community Health centre which is staffed by a social worker, drug and alcohol counsellor, health promotions officer, community nurses and speech, occupational and physiotherapists. Specialist children's services include an early childhood nurse, psychologist, speech therapist, occupational therapist and physiotherapist. Community Health also has a needle exchange and a toy library. There are 16 general medical practitioners in the town.

Education

Byron Bay has a State primary school which in 1997 had an enrolment of 547 pupils, and employed 18 teaching staff and 2.5 ancillary staff. It also has a Catholic primary school with 237 pupils enrolled, 11.3 teaching staff and 1.3 ancillary. In 1997, 823 students were enrolled in the high school. School enrolments have remained relatively stable, except at the high school which has had an increase of approximately 100 students from 1993 to 1997. Byron Bay also has a K-10 Steiner School with 240 students. The town has two preschools and three child care centres.

Housing

Home ownership has decreased since 1991 from 38.7% to 36.3% in 1996. The rate of houses being purchased has also dropped from 14.8% in 1991 to 13.2% in 1996. Between 1991 and 1996 the percentage of population renting has increased from 39.5% to 43.6%. In 1996 approximately 70% of the population paid between $100 and $300 a week rent with approximately 20% more paying between $100 and $200 a week (ABS 1996).

Communications

The Byron Bay community is served by two local newspapers, *The Byron Shire Echo* and the *Byron Shire News* and a regional newspaper, *The Northern Star.* It also has a community radio station, Bay FM.

Community services

Byron Bay has the following community service projects: a youth centre and three youth welfare projects, five preschools and childcare centres, a community centre, a disability employment service, an emergency and youth accommodation service, and a housing support worker. For elderly people there are three aged care facilities, a home modification service and respite care, and the Tweed/Byron/Ballina Community Transport project (Northern Rivers Social and Community Services Directory 1998).

Annual events

Annual events in the town include the Blues Festival which is held during the Easter long weekend and draws 10 000 people into the town, and the New Year's Eve celebrations.

Outcomes of Byron Bay community workshop

(Held: Tuesday, 17 June 1997)

Significant events

The significant events identified by the community included the increase in population and its altered nature, and the change from an industrial base to a tourism-based town and the issues which have arisen from this change.

Date	Event
1980–present	Population doubled
1980 onwards	Release of Crown land for private residences
	Town changed from industrial base to tourism base
	Increased pressure on infrastructure
1983	Meat works closed
1985	Goonengerry forest purchased by State Forests
1987	The first green council. Now a united shire. Last ten years been political swings from right to the left. Now in the middle
1989	Destaffing of the lighthouse
mid-1990s	Change in population make up. Has become younger and often transient
mid-1990s	Locals that had been here a long time got into property speculation
mid-1990s	Club Med debate. Polarised the town
1991	Arts factory closed down
1991	Annual blues festival started. An influx of 10 000 people at Easter
1993	Byron Shire office built in Byron. Main building still in Mullumbimby
1993	New Year's Eve celebrations got out of hand. Media reports were bad. Despite the storm no-one was hurt
1994	Native Title claim over Byron Bay. Land at the lighthouse handed back 1997
1994–95	Conflict in the shire — the Wards issue
Last four years	Huge increase in tourism services to hinterland, e.g. forest tours, backpacker tours

How did the community manage these events?

Positive event — Club Med debate

- Club Med wanted to upgrade resort. There was huge community response which stopped it from going ahead.

- 200 business people turned up.
- The Chamber of Commerce voted against it.
- The social impact had not been taken into account. The infrastructure was not adequate and there was a lack of money to develop it. There were also concerns about the impact it would have on the community because of its size and the numbers of people it would bring in.
- A strong lobby group was formed called the Byron Business for the Future. It is now involved in court cases with the Council.
- The matter went to court and the project was eventually stopped as a result of findings of an environmental impact statement.
- Newcomers to town are more passionate about not letting things change than older residents.

Negative event — closure of the Arts Factory

- State Government regulation regarding noise and liquor licensing closed it down.
- The closure stemmed from complaints from a few people, although there were some policing problems.
- It was a real Arts Factory, with great events and community involvement, and some of the best music in the world.
- People mourned, but there was no real action taken. There seemed to be nothing the community could do. Letters to the editor (of the paper) did not help.
- Spelt the end of a source of drugs, sex and rock and roll.
- Now Byron has backpackers, movies and restaurants.

Community feelings about Byron Bay

The community reported mixed feelings. While some people were excited about the diverse nature of the population and the natural beauty of the area, others were concerned at the change of lifestyle which had occurred with expansion and the development of the tourism industry. Others reported a lack of community cohesion and sense of direction for the future. The box below details the participants' comments.

- I love the community passion, but I think it is finely balanced and that makes me fearful.
- It's a diverse and very understanding population. I feel passionate about it.
- Diversity creates a cosmopolitan feel, coffee shops, entertainment etc.
- Changes everyday but the ocean is always the same, and that's what I love about it.
- It's a paradox. Tolerant and diverse and conservative. They don't all mesh — but all operate.
- Passionate about my community and the biodiversity, particularly flora and fauna (marine and the hinterland).
- Very ambivalent. Byron has not worked out what it actually is — tourism, development etc. There is an identity crisis.
- Excited about its diversity, but sad about lack of vision in the community, and the lack of leadership.
- It has gone from a certain pace to a fast land. Trying to put too many people in the area. It has a serene beauty, but not in the main street.
- I used to be able to walk down town and know everybody, but now I don't know anyone. It is one of the most beautiful places around.
- There is a lack of respect for traffic laws.
- For me coming from a city, it's the ability to be involved.
- I love the place and want to see the community operating as a community.
- If it wasn't for the ocean you could napalm the place without loss.

Visions for Byron Bay

Workshop participants identified a number of visions for Byron Bay. They included regeneration and maintenance of the natural beauty of the area and its biodiversity. Tourism was perceived to have the potential to meet both economic and ecological goals if managed in an environmentally sustainable manner. Limits to growth were proposed, and measures to reduce the impact of increased traffic flows and minimise the presence and effects of illicit drugs trade. The box below details the participants' comments

- To have more effective leadership.
- No State forest logging in wildlife sanctuaries.
- A sustainable tourism economy based on cultural and natural environment. Also use of resources in a way that ensures sustainable reserves.
- A system where tolls are imposed on all vehicles. Restoration of the railway and conversion to a bicycle town.
- A limit to the growth.
- More music and culture.
- Preserve the pristine loveliness of the area.
- A balance between economy and ecology.
- Make the quarry into a Byron Bay botanical garden.
- Rehabilitation, regeneration of the area so that it could be even better.
- Reduce the number of illicit drugs available to young people in the area.
- Appropriate funding for community services such as a detoxification unit.
- All people see the community as a whole and act cooperatively.
- Be able to swim and eat fish in the three estuaries in the shire.
- A population cap which allows for natural growth.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

There were two main beliefs attached to this scenario. A large number of people thought that this would improve the quality of the water in the catchment areas, although an equal number believed that it would result in increased costs in timber building materials. Generally, it was thought that if the deferred areas remained available for conservation and other uses, there would be an increase in ecotourism activities and an incentive to develop alternatives to the use of timber. At the same time it was also considered that there was a potential for negative effects from increased tourism activities.

The table below details the participants' comments which have been charted to correspond with the way they were ranked.

Positive impacts	Negative impacts
▪ Improve the water quality of Rocky Creek Dam and Wilson River	▪ Increase in cost of timber building materials
▪ Pressure to create plantations	
▪ Increase in passive recreation activities such as bushwalking, bird watching and backpacking	
▪ Will encourage use of alternative house building material such as concrete and straw	
▪ Decrease in community conflict and police intervention	
▪ Amelioration of greenhouse emissions	▪ Impact on roads from increased tourism
▪ Increase tourism potential. Spread visitations across more sites and areas	▪ Potential for tenfold increase in tourism & increased impact in forests
▪ Spiritual nourishment from visiting forests	
▪ Encourage brick-making industry	
▪ Intergenerational equity improved	
▪ Increased educational opportunities	

▪	▪ Reduced fire management regimes —may increase risks to private property

Deferred areas remain available for the timber industry and other uses

Most thought that this would lead to a loss of biodiversity, reduce intergenerational equity, negatively affect the health of forest communities, and decrease ecotourism opportunities and jobs. Others believed that this could mean more jobs in the timber industry, and result in increased access roads in State forest for tourist-based activities.

The table below details the participants' comments which have been charted to reflect participants' ranking.

Positive impacts	Negative impacts
	▪ Loss to community of biodiversity ▪ Effects on health associated with dust off roads from logging trucks ▪ Less opportunity for future generations. Intergenerational equity reduced ▪ Conflict over roads. Road safety for students and maintenance of roads for school buses ▪ Reduced water quality ▪ Reduction in ecotourism business opportunities and jobs
▪ Jobs available in the timber industry	▪ Increased costs in road maintenance being paid for by the shire
▪ Increased access roads for tourism in State forests	▪ Decrease in ecotourism values

Issues and strategies

Participants in the workshop identified a number of issues and strategies in relation to the scenarios.

Issue	Strategy
Reserve management	Meaningful community management with 'real' not consultative power
Apiary	Plant flora specifically for honey production
Small family mills	Remove monopoly of Boral, and value-adding
Plantations	More tax incentives
Waste	Penalties for wastage. No chip mill at Grafton
Increased visitation of forests	Reserve areas rather than national parks
	Encourage hemp for paper
Building materials	Ban shingles as roofing material

Case study area — Casino

History of settlement

The town of Casino in northern New South Wales is bisected by the Richmond River and forms part of the Upper Richmond floodplain. Shipping played a vital role in the development of the area. The main river was formerly navigable for vessels under 204 tonnes as far as Casino, the launching place for timber cut in the ranges. Timber was the town's main industry until the breaking up of the big squatter stations and the development of dairying

Casino was located on the only overland track, which was the mail route from the Clarence to Ipswich and Brisbane. It was originally named Crossing Place because the river was fordable by dray there. Casino was the main settlement on the Richmond River and the meeting place of the Land and Police Courts. A Clerk of Petty Sessions was appointed in 1856, even before a survey for the town had been made. Casino also had the first school on the river opened in 1856 and in 1871 it started the first newspaper, the *Richmond River Express,* still in existence today. It became a municipality in 1880.

Primarily Casino was the squatter's town with the first squatters arriving in the 1840s. The main station was owned by Clark Irving, a wealthy financier, who in 1859 was elected as the first member for the Clarence District. He named his holding Tomki, or Dumki, the Aboriginal word for greedy.

Population

In 1996, the population of Casino was 9990 (ABS 1996). This is less than in 1991 when the population was recorded as 10 856. Between 1996 and 1986 the population declined by -0.8% (*A summary socio-economic profile, north coast of New South Wales*, 1998). The recent lower population figures probably reflect a downturn in employment in the town. Casino has a significant Aboriginal population of 6.14%, well above the State average of 1.7% (ABS 1996).

The median age of the population in the town is 35 years, a slight increase on 1991 when the median age was 33 years.

Casino selected characteristics

	Male	**Female**	**Total**
Total population	4803	5817	9990
Aged 15 years and over	3603	4033	7636
Aboriginal	280	300	580
Torres Strait Islander	9	11	20
Both Aboriginal and Torres Strait Islander	6	7	13
Australian-born	4472	4820	9292
Born overseas:			
Canada, Ireland, NZ, South Africa, UK and USA	122	113	235
Other country	70	84	154
Total	192	197	389
Speaks English only and aged five years and over	4232	4858	8817
Speaks language other than English and aged five years and over	55	76	131
Australian citizen	4629	4975	9604
Australian citizen aged 18 years and over	3287	3642	6929
Unemployed	290	195	485
Employed	1994	1404	3398
In the labour force	2284	1599	3883
Not in the labour force	1270	2379	3649
Unemployment rate	12.7%	12.2%	12.5%
Enumerated in private dwellings	4666	5029	9695
Enumerated in non private dwellings	137	158	295
Persons enumerated in same address five years ago	2471	2672	5143
Persons enumerated in different address five years ago	1755	1956	3711
Overseas visitor	5	6	11

Source: ABS 1996

Major industries in the township of Casino

In 1996 the major industries in the Casino township included manufacturing (22.95%), retail and wholesale trade (21.09%) and health and community services (11.16%). The primary sector, agriculture, forestry, fishing and mining account for 3.62% of the employment in the town. However, taking account of the manufacturing sector's dependence on primary industry, more than one job in four is based on the natural resources of the region.

The traditional industries of beef cattle, dairying, and timber continue to be the main contributors to the economy of the town. With over 600 employees, the Northern Cooperative Meat Company is Casino's largest industry. It also operates a large subsidiary tanning plant. In 1996 the NORCO Cooperative smallgoods factory closed, incurring a loss of many jobs in Casino. Currently NORCO employs about 51 staff. The saleyards complex owned by the Council is one of the largest cattle selling centres in the State. There is a district NSW Forestry Office, and several small milling operations. Other major employers include the Memorial Hospital, the State Railway Authority and Mariani Meats.

About 33 manufacturers operate in Casino, the majority of which are small operations employing less than 10 people. About 20% of employees work in government at some level, a proportion very close to the State average (Casino Council, *State of the environment report 1995–1996*).

In 1996 the unemployment rate in Casino was 12.7% for males and 12.2% for females.

Industry by employment in the LGA

Industry by employment figures in the Casino local government area show a high correlation between industry by employment figures compared with the township. This is primarily because Casino is the only town in the LGA.

Estimates of tourist visits in the Casino LGA show a decrease of 4.2% from the financial year 1994–95 to 1995–96 and a corresponding decrease in tourist spending of 12.5% (Tourism NSW).

The following table summarises and compares the industry by employment in the Casino township and in the Casino LGA

Industry	**Total % Casino township**	**Total % Casino LGA**
Agriculture, forestry, fishing	3.62	4.06
Mining	0.09	0.19
Manufacturing	22.95	22.01
Electricity, gas, water	0.77	0.77
Construction	3.30	3.27
Wholesale trade	4.77	5.18
Retail trade	16.32	15.93
Accommodation, cafes & restaurants	4.27	4.04
Transport & storage	4.04	4.25
Communication services	3.15	2.90
Finance & insurance	2.27	2.42
Property & business services	5.10	5.07
Government administration & defence	4.95	5.02
Education	5.86	6.08
Health & community services	11.16	10.10
Cultural & recreational services	0.94	1.17
Personal & other services	3.71	3.72
Not classifiable	0.62	0.74
Not stated	2.12	2.15
Total		100

Source: ABS 1996

Income

In 1996 approximately 60% of the population of Casino earned between $120 and $499 per week and the median household income per week was $300 to $499. High income earners (over $50 000 per annum) made up less than 1% of the population (ABS 1996).

Community infrastructure

Health

Casino has a district hospital offering the following services — emergency, intermediate medical/surgical, and low risk pediatric and obstetric units. Casino's Community Health centre is staffed by three social workers, a child and family psychologist, a drug and alcohol counselor, a health promotions officer, community nurses, a farm safety officer, an early childhood nurse, a dietician and podiatrist, a mental health nurse, psychologist, speech pathologist and occupational therapists and physiotherapists. Community Health also has a children's outreach health project, aged day care and dental service, an Aboriginal health education program and an Aboriginal sexual health worker. There are six general medical practitioners in the town.

Education

Casino has two State primary schools and a State high school, all of which qualify for Disadvantaged Schools Program funding. This funding is for schools which have a large proportion of students from low socioeconomic backgrounds. One primary school had an enrolment of 658 in 1997, with 22 teachers and 2.9 ancillary staff. Since 1993 it has lost 50 students. The other primary school had 390 enrolments, 13 teachers and 1.5 ancillary staff. It increased its school population by 25 between 1993 and 1997. The high school had 728 enrolled in 1997, 238 students less than in 1993.

Casino also has a Catholic high school and a primary and infants schools. In 1997, the high school had 437 pupils enrolled, 31 teachers and four ancillary staff employed. The high school has increased its enrolments by 162 since 1992. The primary school had 427 enrolments in 1997, 18.5 teachers and 2.3 ancillary staff and has increased its numbers by 73 since 1992. The infants school had 67 enrolled, 4.2 teachers and one ancillary staff employed. Enrolments have decreased at this school by 15 since 1992.

Casino has two preschools, one of which includes an Early Intervention Centre and two child care centres.

Housing

Home ownership in Casino has slightly decreased in the five years between 1991 (46.6%) and 1996 (45%) by 1.6%. Houses being purchased 1991 (20.70%) and 1996 (19.5%) also declined by 1.2%. There has been a corresponding rise in rented accommodation from 29.12% in 1991 to 31.47% in 1996. In 1996, 53% of the households paid between $160 and $499 a week rent (ABS).

Communications

Casino is served by the local newspaper, the *Richmond River Express* and regionally by the *Northern Star* newspaper. It also has a community radio station, COW FM.

Community services

Casino has a wide range of community services including eight for children, four for youth, six health related, 25 sporting, four Aboriginal, ten service clubs; five for aged, four artistic/cultural, three disabilities; and a Chamber of Commerce.

A needs analysis by Casino Council highlights concerns in relation to community service provision. Some specific areas of concern relate to employment, counselling and support, access to cultural facilities, information about services, especially for children and youth. With an increase in numbers of families, children and youth of Aboriginal descent of by one third in the past five years there is a high priority for provision of community services for these groups. There is also significant concern for the needs of disabled people and their carers and similarly for aged care.

Although the town provides a range of services for the rural hinterland, inevitably specialist services in human services, health, employment and a range of related activities can only be provided at a distance (Casino Council Community Profile, 24 September, 1997).

Annual events

Casino’s biggest event each year is the Beef Week festival held in May and sponsored by the council and local businesses. Primex, a primary industry exhibition, is another major event which attracts many people to the town. Casino also has its agricultural show in October and camp draft in July.

Outcomes of Casino community workshop

(Held: 26 June, 1997)

Significant events

The significant events identified by the community included the loss of services, industry and jobs in the town; and acknowledgement of how the town pulls together with its annual events.

Date	Event
1980	Development of the teatree industry. Brought a lot of money into the town
1980	New hospital opened
1981	First Beef Week — an annual event
1987	Linen service went to Lismore
1987	First Primex — an annual event
1988	Bicentennial celebrations — Bob Hawke came
1989	Duncan’s sawmill burnt down
1990–96	Recession nationwide
1991–95	Drought and floods affected the beef industry and that had a flow-on effect to the town
1994	Closure of the rail depot
1997	NORCO moved most of its operations to Lismore
Last seven years	Restructuring of the health system. Loss of hospital beds — from 124 to 72
Last 10 years	Closure of the forests affected the town

Community feelings about Casino

The community reported mixed feelings. Many commented on the friendliness, community spirit and cohesion evident in the community whilst others were concerned about a general local apathy towards the decline in the industry and lack of employment. The box below details the participants’ comments.

- I love it, it’s home, it’s given me all I need. I know everyone.
- Don’t live here, although I use the commercial centre. Happy in my own smaller social environment.
- All my life here, but won’t retire here. The community knows little about the timber industry, and people ignorant or apathetic about industry issues.

- Worked here four years and have found it a good little town, but I prefer to live on the coast. I wouldn't like to live here.
- Caring town — some apathy to industries but people find it hard to separate facts from dross. Elderly friend collapsed and went to hospital. Got many offers of help.
- Most friendly town I've lived in, caring and lots of support for community services.
- Small enough to know everyone, big enough to get what you need, and to be viable. Named as friendliest town in New South Wales. Non judgmental town, racial harmony, working class, egalitarian, equal in ups and downs.
- Love it. People know what is happening, and are supportive. For young people there are not many things to do. Good recreation facilities, but people are looking for services etc that they see in ads.
- People are judgmental, apathetic and racist, but I still love it. Solutions are out there for the problems, but there's not enough community feeling.
- Live out of town (Sextonville). Struggling, population falling, aging. Too many things on to attend all of them, a good rural area.
- Upset to see so many businesses and government bodies leaving. Want to see people working together to generate activity, businesses etc — see it booming.
- Quite like the size of town. No overt racial problems but some beneath the surface. A bit closed to newcomers, bit of apathy. Suffers from its proximity to the coast and Lismore.
- Good place to live, but absence of things for children have forced us out. Only work keeps me here
- Casino portrayed as poor cousin of Lismore.
- Offers traditional wholesome rural lifestyle. Everyone knows each other, cares.

Visions for Casino

Workshop participants identified a number of visions for Casino. They included the need for development and maintenance of local industry, good service provision, and good communication and transport links. The box below details the participants' comments

- Safety for kids, good medical and school facilities, and good information technology facilities. Better transport facilities, so people can hop in a plane and go anywhere.
- A boutique town. Not too big, don't want to lose its caring character.
- Must progress, keep moving to keep pace with other communities. Need industry etc. to bring people to area and keep kids here. We have the railway and airport to help this to happen.
- More creative natural environment.
- Stability in government decision-making affecting rural communities in New South Wales — not just Newcastle, Sydney and Wollongong .
- People in rural community with jobs, graziers enjoying prosperity, and thus providing cascading benefits to the community.
- Nice looking, quaint town. Enhanced by a treescape.
- Pacific highway through Casino instead of through coast towns.
- Maintain and build on existing industries.
- Improved facilities for travellers, e.g. toilet, park.
- Smaller more diverse industries.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

The overwhelming view of the participants was that loss of jobs and income to the local community would result from this scenario and that the timber resource would soon be gone. People were also concerned that it would lead to an increase in imported timber from countries where there is less control of harvesting. At the same time it was seen that it could lead to an increase in tourism and that more plantations would result.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Timber resource gone in a couple of years ▪ Loss of jobs ▪ Import timber from other countries with less controls e.g. from rainforests ▪ Loss of investment in mills. Threatened with possible bankruptcy, loss of income, closure
▪ Increased tourism ▪ Increased pressure to plant plantations	
	▪ Loss of timber industry processors, leads to lack of investment in plantations ▪ Hard to get the species to fill contracts ▪ Less weed control management ▪ Flow on to other businesses ▪ Small private property miller pushed out ▪ Pressure on private property. Serious resource problem surrounding Casino ▪ Promote drug cropping bringing undesirables ▪ Access to forests will be restricted leading to loss of tourism and recreational uses

Deferred areas remain available for the timber industry and other uses

Most thought that this would lead to an increase in investment in industry, creating jobs. They also thought people would become better educated about forests and that the forests would be better managed.

The following table details the participants' comments, which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Businesses will invest and expand, so creating jobs ▪ Create industry jobs in forest management — weeds, thinning ▪ More education about forests ▪ Multiple use and access to forest creates ownership and care. Otherwise there will be resentment ▪ Managed forests are healthy forests ▪ Better fire control	

Issues and strategies

The workshop participants identified a number of issues and strategies in relation to the scenarios.

Issues	Strategies
Balanced education on forestry	Less political interference in industry, bow less to the 'green' movement Multiple use forests, available to industry and conservation Utilise the residue in the forests Better management of forests, thinning, weed clearing etc., and planting 'better' trees More links between high schools, State forests and the industry
Culture of the forestry	Generate a culture of the forests comparable to overseas e.g. have a timber week
Better management forests	Sustainable management of forest areas
New possibilities within the industry	Adopt the eco-production model for coastal forests and develop as a management practice

Case study area — Coffs Harbour

History of settlement

Coffs Harbour is located on the New South Wales coast 510 kilometres north of Sydney and 427 kilometres south of Brisbane. The Coffs Harbour City local government area covers about 954 square kilometres and is characterised by coastal urban development, large areas of State forest predominantly west of the coastal range, and sparsely populated rural areas. In the LGA of Coffs Harbour, 43% of the area is State forest and 2% national parks. The coastal range, which is part of the Great Dividing Range, is less than one kilometre from the Coffs Harbour coastline in some places. As a result the narrow coastal plain has no major river system (*State of the environment report*, 1996)

Coffs Harbour was named after John Korff who originally had the harbour named Korffs Harbour. The name was changed by the surveyor when the land around the harbour was reserved in 1861. The first settlers were bullock drivers who, on their way through the area, saw its potential and stayed. The land was cleared principally for agriculture, but the main source of income was cedar getting.

In 1890 timber remained the main source of income, but the lack of a jetty made the export of hardwoods difficult. After a jetty was built in 1892 timber cutters flocked to the district and sawmills were soon erected. When the timber industry was at its height, records show that up to 449 ships a year called at Coffs Harbour and loaded 15 million super feet of timber. By 1930s the industry had collapsed through lack of timber.

In 1880 six families, principally cedar getters, selected land in Coffs Harbour. Settlement was a continuous process from 1885 and by 1891 the population had grown to 179. The village was planned in 1887 and revised ten years later, although its location was a mile away from the harbour. In 1995 the first school was built but it was some time before the High Street land was settled. In 1905 the Bank of New South Wales was set up in the local store and the first two-storey shop was built in 1908.

By 1920 over a thousand tourists had visited the area (*The history of Coffs Harbour,* Coffs Harbour Historical Society).

Population

In 1996 the population of Coffs Harbour was 22 177, an increase of 8.4% from 1991 when the population was 20 315. The LGA has an estimated growth rate of 2% per year (Coffs Harbour City Council *1987–98 management plan*). The median age of the population in the city in

1996 was 38 years, an increase on 1991 when the median age was 36 years, 3.2% of the population were Aboriginal and/or Torres Strait Islanders (ABS 1996).

Coffs Harbour selected characteristics

	Male	Female	Total
Total population	10 768	11 409	22 177
Aged 15 years and over	8727	9313	18 040
Aboriginal	319	358	677
Torres Strait Islander	7	8	15
Both Aboriginal and Torres Strait Islander	9	11	20
Australian-born	9220	9725	18 945
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	668	769	1,437
Other country	447	440	887
Total	1115	1209	2324
Speaks English only and aged five years and over	9434	9964	19 398
Speaks language other than English and aged five years and over	328	338	666
Australian citizen	9984	10 559	20 543
Australian citizen aged 18 years and over	7624	8134	15 758
Unemployed	917	595	1512
Employed	4423	3635	8058
In the labour force	5340	4230	9570
Not in the labour force	3165	4871	8036
Unemployment rate	17.2%	14.1%	15.8%
Enumerated in private dwellings	10 076	10 713	20 789
Enumerated in non private dwellings	692	696	1388
Persons enumerated in same address five years ago	4493	4829	9322
Persons enumerated in different address five years ago	5170	5479	10 649
Overseas visitor	58	64	122

Source: ABS 1996

Major industries in the city of Coffs Harbour

In 1996 the major industries in Coffs Harbour included tourism, primary production, manufacturing, government, commercial and retail.

Coffs Harbour's primary industry consisted of banana production, dairying, beef cattle, fishing, forestry, exotic fruits, flowers and poultry.

There are over 168 manufacturing establishments in Coffs Harbour with a wide diversity of product including metal fabrication, furniture, fibreglass products, steel, rope and cable, and agricultural machinery. The average turnover of manufacture in Coffs Harbour was $1.93 million.

In 1996 Coffs Harbour had 31 fishing trawlers, catching 533 tonnes of fish annually and grossing $5.5 million (Coffs Harbour Visitors and Convention Bureau).

Tourism is also a major industry with Coffs Harbour offering a wide range of styles of accommodation. In 1997 the following numbers and types of accommodation establishments were recorded: three hotel/motel, 58 motels, five hotels, 27 caravan parks, seven farmstay, four hostels, 28 serviced apartments, six guest houses, 12 bed and breakfasts, five cabins, five cottages, four lodges, eight resorts, and 11 units (Tourism Business Information Fact Sheet, Tourism NSW).

The unemployment rate in Coffs Harbour in 1996 was 15.8% (ABS).

Industry by employment in the local government area (LGA)

Industry by employment figures in the Coffs Harbour local government area for 1996 showed that almost 25% of the population were employed in wholesale or retail trade. The next highest employers were the health and community services industry at almost 10% and accommodation, cafes and restaurants at about 9%. These statistics reflect Coffs Harbour's status as the commercial centre for the area as well as the focus for the growing tourist industry in the region.

Estimates of tourist visits in the Coffs Harbour LGA showed an increase of 2.22% from the financial year 1994–95 to 1995–96 and a corresponding increase in tourist spending of 3% (Tourism NSW). Close to half (46%) the tourists to the area were relatives, visitors or friends of local residents.

The following table summarises and compares the industry by employment in the city of Coffs Harbour and in the Coffs Harbour LGA.

Industry	**Total %Coffs Harbour**	**Total %Coffs Harbour LGA**
Agriculture, forestry, fishing	2.84	5.33
Mining	0.24	0.22
Manufacturing	7.3	8.00
Electricity, gas, water	0.74	0.64
Construction	6.32	7.11
Wholesale trade	5.10	5.12
Retail trade	22.04	19.32
Accommodation, cafes & restaurants	9.67	8.87
Transport & storage	3.02	3.12
Communication services	1.59	1.52
Finance & insurance	3.41	2.90
Property & business services	8.76	8.03
Government administration & defence	3.78	3.15
Education	5.86	7.62
Health & community services	9.40	9.88
Cultural & recreational services	3.00	2.69
Personal & other services	3.97	3.60
Not classifiable	1.00	.99
Not stated	2.00	1.86

Source: ABS 1996

Income

Approximately 45% of the population earned between $120 and $299 per week, spread evenly across this range. High income earners (over $50 000 per annum) make up 2.24% of the population. The median weekly individual income was $200 to $299 and the median weekly household income was $300 to $499 (ABS 1996).

Community infrastructure

Health

Coffs Harbour has a base hospital and a private hospital, 50 general practitioners and 27 specialists. Primary health care has a range of services including various counselors and therapists, health promotions, children's services, drug and alcohol and palliative care, as well as a variety of other services. Aged care facilities in Coffs Harbour include a range of support services, three nursing homes and three hostels. Aboriginal health is supported by a liaison officer, education officer and a sexual health educator. Coffs Harbour also has an early childhood centre, women’s health centre, a dental clinic, a mental health team and a family support service.

Education

Coffs Harbour has a wide range of educational facilities to choose from including two tertiary, university and TAFE, five State high schools and three private high schools, 18 State primary schools and six private primary schools, and 13 kindergarten and preschools (Coffs Harbour Visitors and Convention Bureau). One primary school in Coffs Harbour qualifies for Disadvantaged Schools Program funding. State primary school enrolments in Coffs Harbour LGA were 5073 in 1997, high school enrolments were 4214. Non-government school enrolments were 1634 for primary and 1620 for secondary schools in 1997.

In 1995 the Coffs Harbour Education Campus was established which brings together a secondary college for Years 11 and 12 and a TAFE and university institution on one site. High school enrolments at this campus were 333 in 1997, with 12 teaching staff and 1.6 ancillary staff employed.

Housing

Home ownership in Coffs Harbour decreased by approximately 1% between 1991 (39.7%) and 1996 (38.63%). In the same period houses being purchased decreased by 1.68% to 16.35%. A corresponding rise of 1.6% was seen in the renting population from 36.96% in 1991 to 38.56% in 1996. In 1996 62.09% of the population paid between $100 and $199 rent per week (ABS).

Communications

The Coffs Harbour community is served by two newspapers, the *North Coast News* and *Independent News,* seven radio stations including a regional ABC, two commercial and two local FM stations, and three commercial television stations with local coverage.

Community services

Coffs Harbour has an extensive range of community services including 17 aged accommodation, three crisis accommodation, 19 support for self- care, three public legal services, two community transport, 17 disabilities support, 15 youth services, 12 children’s specialist support, three Aboriginal support, two non-English speaking background support, and four women’s support.

Annual events

Annual events in the town include Coffs Harbour Sail Week sponsored by Volvo, a racing event, the Ansett Sprint, and the annual Holiday Coast Festival.

Outcomes of Coffs Harbour community workshop

(Held: 2 June 1997)

Significant events

The significant events identified by the community included the huge increase in population, a lack of infrastructure and pressure on the environment, the move from traditional industries of primary production and processing to tourism which has resulted in a loss of skills, traditions and employment opportunities, and concern about relying on tourism which is seen as insecure seasonal employment using many part-time and seasonal workers.

Date	Event
Late 70s–early 80s	Huge increase in population. Coffs Harbour previously considered as a small fishing village. 2.5 families a day moving to Coffs Harbour. Unemployment levels reached 14%. A change from a country town lifestyle to that of a regional centre. Increase not planned for by Council. Infrastructure was not adequate to cope with increased population, and there were major problems with the sewerage and the water supply
1975–90	Changed emphasis in the town. Moved from banana and timber oriented industries. Previously there were 10–12 timber mills in the region. All the small family timber mills went. A large proportion of the people in Coffs worked in the timber industry. A number of people faced ruin. Millers left the region and set up in Papua New Guinea. Coffs as a timber, engineering, and processing centre bought intellectuals and professionals into the town. Subsequently, there has been a loss of a link with the past
1984–90	Construction of resorts. Tourism changed how people viewed the town. It created opportunities for new jobs, for example at the marina. There was a significant increase in big buildings. There were also differences of opinion and some conflict as to whether and how Coffs Harbour should be developed as a tourist destination
1986	Taylor's Mill and the Ply Mill closed, taking employment to Grafton
1987	Coffs Harbour was declared a city. A mall was constructed, there were changes in shopping patterns, and the traffic flow of the town increased and has never been the same since
1990	Upgrade of the Pacific highway. Benefitted Coffs Harbour as it is midway between Brisbane and Sydney
1990	Opening of the golf club. There has been some community concern at the number of Japanese tourists visiting. This is mostly by those who do not want to see Coffs Harbour develop too much as a tourist destination
1990s	Downturn in the banana industry. Formerly producing about a third of the total banana production. Now most bananas produced in Queensland. Mechanisation has had the biggest influence on the downturn
1990s	Definite slump in tourism. However the decline in the timber and banana industries has had the biggest socioeconomic impact
1990s	Small business affected by the establishment of the big super-centres
1990s	Development of Boambee
1993	District hospital became a base hospital
1993	Southern Cross University campus established (three tiered education system catering for Years 11–12 — TAFE and university. The campus has changed the dynamics of the town. It has contributed to the economy and brings in more intellectuals and young people. It has been recognised internationally
1995	Water shortage and rationing. Regional scheme to join with the Clarence Valley and develop a scheme to take us into the 20th century
1996–97	DSS & CES services reduced. Head office moved to Tweed Heads over the last eighteen months
1996–97	Jetty restoration and foreshore development
1996	The Carnivale. Involved the Arts Council, actors and a combined festival committee
1996	Loss of town hall, and a loss of the Rock Eisteddfod
1996	Camp Creative (an annual event). Gone to Grafton 1997
1996	Severe floods. Homes and businesses severely affected. Some are still rebuilding. There have been discussions about improving the draining problems
1997	Holiday Coast Festival. Starts 11 November
1997	Completion of the restoration of Coffs Harbour jetty and foreshores
1997	Plans to develop 'City Hill'. Includes art gallery, library and Council chambers

How did the community manage these events?

Positive event 1— rise in tourism infrastructure

- Tourism brings business and services and cash flow into Coffs Harbour, but it can also bring instability, because it is mostly seasonal. It is also an insecure industry. For example it is badly affected by a wet Christmas. It mainly employs part-time and unskilled workers, so it is difficult to build a career in tourism. Tourism professionals are mostly from out of town, local people do not get the jobs.

- There has been an increase in community services, but local contractors have had to wait for their money.
- It has created jobs at the university, and students can get tourism qualifications there.
- It has meant that there are opportunities for locals. There is now a diversity of lifestyle and recreation opportunities.

Positive event 2 — Look-At-Me-Now Headlands dispute

- A debate about the outpouring of sewage into the ocean. It was a very divisive issue which took an Act of Parliament to resolve. It was brought about by a lack of poor planning by local government, and a lack of infrastructure.
- The community took action with blockades and protests. The residents of Emerald Beach established a central committee. They held community fundraisers, barbeques, parties etc. and at the same time, from working together, gained a sense of community. The council responded with an order for an EPA to be carried out.

Negative event — loss of timber mills

- There was a reduction in availability of resource for the timber industry from the forests, and private property was not considered as a potential resource area. As a result Coffs lost $5 million in direct income. There has been a flow-on effect to other industries.
- Over 20 years the region has lost more than it now has. With the loss of the mills unemployment came. Before that we had full employment. Coffs Harbour was the cradle of timber, a timber town with lots of innovation and export potential.
- People lost a lot of money, many retired, and children didn't follow in fathers' footsteps. Timber workers have been the hardest workers in the community. There has been a loss of tangible links with the past.
- It also meant a loss of sawmilling skills, including saw maintenance skills.

Community feelings about Coffs Harbour

The community reported that the huge increase in population has led to loss of community cohesion, identity and links with the past and an increase in unemployment and social problems in the city. The table below details the participants' comments.

- Good place for children to grow up. A bit too 'laid back'.
- Not a very friendly town compared to rural towns out west. It used to have a country atmosphere. Now the population is mostly transient. This might be because of the development of tourism.
- It was a beaut place 20 years ago. Now the traffic is a hassle. I like the hinterland best. The main benefit of living here is that it is healthy.
- Coffs Harbour was close knit, but with changes and population increases it has changed. I still love Coffs Harbour — you make the best of it.
- Great place to live. The increased growth has been too rapid and adds to social problems. There is not enough planning done by Council to cope with huge population increases. We badly need more services. Services for senior citizens are very inadequate.
- There are four distinct communities within Coffs. This should be worked on so that it becomes more cohesive. There are also communities within communities, and there are few attempts to break down the ethnic and socioeconomic barriers. Primarily Coffs is very conservative. It is a poor community generally, with many living on very low incomes.
- Too conservative — powerful minority groups influence the decision makers.
- Love my small village. I wouldn't live in Coffs Harbour. It's 'garish'. I use the back streets.
- Community is divided by issues that have not been handled very well. It takes a lot of getting over. But there are lots of great people and natural beauty.
- Love the area (beaches, hills and forests) but there is not much friendliness. People come here from the cities. Businesses find it hard to get people with the necessary skills. I'm missing cultural

activities — the concerts etc.

- There is a real lack of infrastructure. There is a rapidly growing aged population and a need to implement infrastructure for them.
- Everybody used to know everybody. It is different now. The traffic is a problem. That's changed; we used to pull log trucks onto the highway easily.
- Compared to Sydney, I talk to everybody in the street.
- See the university as the future.
- Wonderful environment and climate, but there is no cultural link to past and no culture. Traffic flow detriment to 'feel'. Should have more amenities for its size.
- Need industry for unemployed people. There are better shopping, health and education services here than there used to be. It's a good place to live. With better planning it would be better still. There are problems because of the increase in population and the high unemployment levels.

Visions for Coffs Harbour

Workshop participants identified a number of visions for Coffs Harbour. They included population increases to be well planned for, care to be taken in maintaining the environment and physical beauty of the area, and the generation of small businesses that increase employment opportunities and diversity of industries. The box below details the participants' comments.

- Natural environment maintained, and amenities to enjoy it with improved cultural activities.
- Sparkling clear sea water, surrounded by green hills. Ribbons of vegetation following creeks. State Government environmental policies implemented during development.
- Planned population growth, a big city done properly.
- No more development for its own sake.
- Environmentally sound and controlled, managed, development.
- Medium to light industry, small business to generate employment.
- Council attracts small business to the community.
- Find increased education and employment opportunities.
- Join forces and unite as a community, a role for both the youth and senior citizens in the community.
- New educated youth from the university stay and establish industry in the local community.
- Future planning
- Cultural interchange to be encouraged.
- Tourist holiday town — maintain beauty of the township with managed sustainable development.
- Environmentally friendly, and sporting and recreational opportunities.
- A community that has a heart. No groups need to change, but there needs to be an acceptance of one another.
- Tourism industry to encourage low-key tourist operators.
- Broader economic base to diversify industries.
- Recognition of equity issues.
- As much biodiversity in the future as now.
- A highway bypass.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Many supported the idea that it was important to provide more recreational areas and natural heritage for future generations and that this scenario would enable the timber industry to be more creative in its use of timber, and would encourage an increase in farm forestry. Others were concerned about the loss of jobs in the industry and the flow-on effect to other industries and that either scenario will cause major division in the community.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ More recreational areas for future generations	
	▪ Loss of timber resource will cost more jobs and have an adverse effect on the community
▪ We'll be stewards for future generations — a natural heritage developed and maintained	
	▪ Impact on retail, engineering, manufacturing, purchase of goods and services (sourced Dorrigo and Thora)
▪ More emphasis on farm forestry	
	▪ Increased costs for personnel to manage reserves. Who will pay?
	▪ Will divide the community more
	▪ Imported timber and transfer the social costs from one country to another
	▪ Small timber-dependent villages become ghost towns
	▪ Flow-on effects will be bad for other industries, and will mean more job losses
	▪ Loss of skills, sawmilling skills and other industry-related skills
▪ Timber industry/communities become more creative	
▪ Increased biodiversity	
	▪ The range of uses of forests narrowed in the area
	▪ Negative effect on the balance of trade
▪ Increased tourism/ecotourism	▪ Not enough resources for other uses, or management of reserved areas
▪ More jobs. More National Parks and Wildlife Service personnel	
▪ Better water supply and quality. Better neighbour relations with Grafton	
▪ Increased pressure on reafforestation	▪ Increased conflict
▪ Reserves must attract management dollars	▪ Forest industries will be affected — a decrease in employment
▪ 4WD operators gain access may increase industry	▪ 4WD operators lose access means a decrease in jobs/industry
▪ Increase in community 'non-use' values	

Deferred areas remain available for the timber industry and other uses

Most believed that this would lead to more jobs in the forest industry and the sustainability of small towns. They also believed that there would be less reliance on imports and more on the maintenance of our own sustainable industry as well as income from a more dependable, non seasonal source.

The following table details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ State Forest personnel would be maintained — State Forests are self funding	
▪ Decrease imports and manage our own resources to be sustainable	
▪ More resources — more jobs	
▪ Continued sustainability of small towns	
▪ Have a non-seasonal income — dependable and sustainable	
	▪ A lot of conflict between conservation groups and the timber industry
▪ Sawmilling industry would feel secure enough to invest again	
	▪ Opening up areas is delaying the inevitable. It would only be a short term solution
	▪ Continued misuse of timber resources e.g. woodchipping
▪ Improved balance of trade	▪ Both of the above scenarios would cause further division in the community
▪ Flow-on effects to the retail sector	▪ Diminished biodiversity

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. These included improvement to the timber industry, strategies to address community conflict over the timber industry and strategies to address unemployment through forests.

Issue	Strategy
Provide ongoing resource security to encourage investment	Increase recovery rates on sawlogs
	Better efficiency for increasing recovery rates
	Encourage farm forestry — ensure integrity of the programs
	Look at Canadian logging operations for a model for improving operations
Community conflict	Policies and community consultation/involvement in National Parks and Wildlife Service management to reduce community conflict
	Greater degree of community education by both parties — to educate on forest management and biodiversity
	Hold community workshops
Unemployment	Re-employment schemes
	Assistance to develop other tourist avenues e.g. 4WD

Case study area — Coutts Crossing

History of settlement

Coutts Crossing is located 18 kilometres south of Grafton on the Orara River and on the main road from Grafton to Armidale. Coutts Crossing is in the Nymboida Shire.

The first store was opened in 1888 and it wasn’t till the 1960s that the descendents of the original McIntosh family sold the land on which the store now stands. In 1911 the Coutts Crossing Coronation Hall was built. The school opened in 1913, and in 1916 the first Red Cross branch was established.

By 1950 Coutts Crossing had 13 houses in the hamlet, but it wasn’t till the 1970s when new subdivisions went ahead that Coutts Crossing began to grow. Although the expansion of the village brought many newcomers, there are still a good many pioneer families both in the village and surrounding rural properties. Recent development of the village includes a tavern built in 1978, a sewerage system in 1983, and numerous sporting facilities auspiced by Coutts Crossing Recreation Incorporated (*Coutts Crossing — the village,* Betty McDonald and Pat Fletcher, n.d.).

Population

In 1996, the population of Coutts Crossing was 510. The population in 1991 was lower at 446. The median age of the population in the town was 32 years. Approximately 2.5% of the population was Aboriginal (ABS 1996).

Coutts Crossing selected characteristics

	Male	Female	Total
Total population	248	262	510
Aged 15 years and over	180	181	361
Aboriginal	5	8	13
Torres Strait Islander	0	0	0
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	227	231	458
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	10	15	25
Other country	5	3	8
Total	15	18	33
Speaks English only and aged five years and over	218	228	446
Speaks language other than English and aged five years and over	3	3	6
Australian citizen	235	240	475
Australian citizen aged 18 years and over	157	148	305
Unemployed	17	11	28
Employed	106	77	183
In the labour force	123	88	211
Not in the labour force	54	89	143
Unemployment rate	13.8%	12.5%	13.3%
Enumerated in private dwellings	248	262	510
Enumerated in non private dwellings	0	0	0
Persons enumerated in same address five years ago	115	129	244
Persons enumerated in different address five years ago	107	102	209
Overseas visitor	3	3	6

Source: ABS 1996

Major industries in village of Coutts Crossing

Coutts Crossing acts as a service town to the local residents. It has a general store/post office, a tavern and a service station. Industry by employment figures show that service industries are the main employers of the residents of Coutts Crossing, with wholesale and retail trade employing 23.6%, transport and storage 13.1%, and accommodation, and cafes and restaurants 9.95%. Community infrastructure industries such as health and community services and education employ 15.7% and personal and other services employ 7.9%. By contrast to the main industries in the shire, agriculture only employed 1.6% of the residents of Coutts Crossing. As Coutts Crossing is only 18 kilometres from Grafton, most residents are employed in the township of Grafton. The unemployment rate was 13.3% (ABS 1996).

Industry by employment in the LGA

The main industries within the shire are agriculture, forestry and tourism. Beef cattle is the dominant agricultural industry. Other agricultural activities include potato cropping, dairying, poultry farming, market gardens, orchards and beekeeping. State forests cover approximately 39% of the shire and there are a number of small sawmills.

Tourism in the shire continues to grow. There are three caravan parks, two motels and two camping grounds in the shire. Popular tourism activities include white water rafting, water-skiing, ecotourism, farmstays, gliding, canoeing, horse riding, fishing, gold panning, bush walking and camping (Nymboida Shire Council, 1996).

The following table summarises and compares industry by employment in the Coutts Crossing township and in the Nymboida LGA.

Industry	Total % Coutts Crossing	Total % Nymboida LGA
Agriculture, forestry, fishing	1.57	16.96
Mining	0	0.20
Manufacturing	7.33	10.00
Electricity, gas, water	1.57	1.06
Construction	4.19	5.83
Wholesale trade	8.38	4.57
Retail trade	15.18	12.66
Accommodation, cafes & restaurants	9.95	3.98
Transport & storage	13.09	4.51
Communication services	3.14	1.92
Finance & insurance	4.71	0.99
Property & business services	4.18	4.04
Government administration & defence	1.57	5.37
Education	7.33	8.45
Health & community services	8.38	10.04
Cultural & recreational services	1.57	1.85
Personal & other services	7.85	4.1
Not classifiable	0	1.33
Not stated	0	1.79
Total	100	100

Source: ABS 1996

Income

Approximately 50% of the population earned between $159 and $599 per week, spread relatively evenly across this range (ABS 1996). High income earners (those who earn over $50 000 per annum) make up less than 1% of the population, approximately the same figure as the 1991 census. The median weekly individual income was $200 to $299 and the median weekly household income was $500 to $699 (ABS 1996).

Community infrastructure

Health

Residents of Coutts Crossing use Grafton for their health services.

Education

Coutts Crossing has a preschool and a public school (K–6) which in 1997 had an enrolment of 166 pupils, six teaching and one ancillary staff employed. From the period 1993 to 1997 there was a drop of ten students enrolled at the public school. Older students are bussed to Grafton for their high school education.

Housing

Home ownership increased since 1991 from 43.3% to 47.4% in 1996 (ABS). In 1996, 34.29% of houses were being purchased, a decrease of 19.71% from 1991 when 54% were being purchased. The numbers of households renting increased by 11.84% from 1991 to 13.14% in 1996. In 1996 76.92% of rental households in Coutts Crossing paid $100 to $199 per week rent (ABS). Local council rates increased by 7.5% from 1996–97 to 1997–98.

Communications

The *Daily Examiner* from Grafton covers news items from Coutts Crossing. The general store has a post office agency.

Voluntary sector

Coutts Crossing has numerous sporting groups, a historical society, a hall and park committee, a children's playgroup, a bush fire brigade and State Emergency Service, and a Tidy Towns committee.

Community services

Coutts Crossing residents access community services in Grafton.

Outcomes of Coutts Crossing community workshop

(Held: 24 June 1997)

Significant events

The significant events identified by the community included the large population increase, the development of some basic services from government and community actions, and a bush regeneration program. The other major significant event for the community was the downturn in the beef industry followed by drought and loss of grazing permits in forests, which had a flow-on to employment opportunities in Grafton.

Date	Event
1973–78	Downturn in beef industry. Farmers have struggled since. Owners are no longer employed full-time on their farms.
1978	The tavern was built
1979	The cricket pitch was made
Early 1980–90s	Properties have been sold and new subdivisions have been created
1980–1985	The school expanded. New classrooms were built to accommodate the growth. Numbers of students peaked in 1993, but there has been a steady decline since. People who have moved out were not connected with the timber industry, but were affected by downsizing in other industries. This has led to bigger properties and land bought for subdivisions
1983	The tennis courts were built
1984	Installation of the sewerage system. This was a significant and progressive step for a small town. It means that 95% of waste is now pumped onto the golf course
1987	The squash courts were built
1990	The preschool was opened
1990	The SES and bushfire brigade amalgamated
1995	The general store was enlarged
1997	New croquet green was created
last ten years	With increasing development, Coutts Crossing moved from being a little bushland village. This has meant a loss of biodiversity. But in 1985 a period of bush regeneration on the Orara River began. Native trees were planted and seeds were collected

How did the community manage these events?

Positive event — high growth rate

- It just happened, and happened during a time of real downturns in the beef and timber industries. There have been flow-ons from the impacts that have happened in Grafton. People had to leave, and some came here. In 1997, Nymboida Shire council has the highest growth rates in the State, and there is very high unemployment.
- Everything was very badly planned. We needed water, then septic tanks, and then a sewerage system. But this was good because it brought the town together for fundraising to get facilities.
- The community raised most of the money to provide infrastructure to meet the needs of a growing town. They have obtained sport and recreational grants, an Isolated Areas Assistance grant, and private land has been donated. This was good because it brought the community together. Every organisation in town contributed. It was a very cooperative effort by a (then) very small community.
- People have volunteered their labour. Diverse groups provide different types of input. A management committee manages the sporting facilities. A conservation group develops and manages activities to increase/improve biodiversity. Biodiversity is a new issue, and there is still some conflict around it, but the community is achieving a lot.
- Coutts Crossing is dependent on Grafton and Grafton is dependent on Coutts Crossing. The growth rate is slowing because the impetus to the initial spurt was cheaper land. Rates are too high now.
- New people usually come here because they have a friend or relative in the town. Others come for the lifestyle or the facilities.
- In 1996 we came second in the Tidy Towns award. This was made possible through all the work people in community groups did.

Negative event 1 — loss of biodiversity

- There has been a gradual destruction of biodiversity with the way that Coutts has been and is being developed. There were lots of trees and wildlife here, but after 1985 they were greatly reduced. It doesn't have to happen like this. There are ways to combine the best of development which maintains the biodiversity. There is a marvelous natural beauty in this area, we need to look after it. Regeneration groups have been very active in this regard.

- There has been lots of conflict over this issue. It has all been verbal though. The conflict hasn't been handled very well; there are stubborn people on both sides.

Negative event 2 — downturn in the beef industry

- This has been a huge problem. It has sent a lot of graziers to the wall and as well as businesses in Grafton who have depended on the graziers to make a living. Of the 70% of Clarence Valley graziers in debt some owe up to $1.5 million. (The average debt is $300 000+). After five years of drought, many have needed assistance from the Drought Relief Program.
- An 8.1% increase in rates is being sought as well as an increase in charges, and if the environmental and road levies go ahead there will be further charges [these did not go ahead]. Rates have already increased by 26% and people have big problems paying them.
- The village pays for the downturn, the infrastructure goes.
- There has been a loss of land because of the loss of forest grazing leases. In the school, of the 129 families, 11 nominated farming/grazing as their primary income. In 1998 there will be one extra classroom at the school.
- Some farmers have tried to diversify and create homestays to survive. Others are subdividing and hobby farms and subdivisions are being created. Still other families leave the area. Some people still own the land, but don't work it.

Community feelings about Coutts Crossing

The community reported on the wonderful village lifestyle and strong feelings of connection between the community's residents. Some commented that they are gradually drifting away but still felt they could rely on each other.

The box below details the participants' comments.

- Love it. It's comfortable. I love the lifestyle. I'm happy here.
- I've been here for 15 years. I call it home.
- I don't live here but as a school principal, I believe that children are really lucky to live here. Life goes on positively despite the conflicts. The lifestyle and the facilities are excellent, and this is reflected in the students' and parents' attitudes.
- One of the better places to live in the Clarence Valley because of the position and the progressive attitude.
- It's home. It's more comfortable than where I work. It's home. I can't see myself shifting.
- My family growing up has led me to mixing in different circles and therefore gradually drifting, growing away.
- My main connection with Coutts is through the store and post office etc. Still, I feel very much a local even though I'm a US immigrant. It feels like a village but also a subdivision of Grafton.
- I was president of the P&C. I've worked in this town. But I'm not involved in the community very much any more. But if something happens, the community pulls together.
- I've grown away from the town in the last four to five years since my kids have gone. I work somewhere else and I socialise somewhere else too. But the town has been very good to me and my family in the past.
- It's home. My ancestors lived on the north coast. I've lived in Grafton but I find it sterile compared to Coutts. I'm ostracised because of my environmental views. But I recognise the unity that happens in times of crisis. I'm here to stay, but I would like to be more accepted.

Visions for Coutts Crossing

Workshop participants identified a number of visions for Coutts Crossing. There was a range of diverging opinion on Coutts Crossing's future which included a village in recession due to rising costs of living there, lack of opportunity for growth, the need for employment opportunities in Grafton, development of ecotourism, and a necessity to look after the environment.

- Its been a young family village. It's now become too expensive to live here. We'll see a decline in school numbers, in the growth rate, and there'll be lots of houses for sale.
- Develop adventure-based tourism and ecotourism that will improve employment opportunities for youth. Develop biodiversity. Keep rural sustainable jobs.
- Young couples not coming to town due to the cost of living.
- Has to plateau out. Originally council put a 1200 cap on the population figures.
- Impossible to survive any more on one income.
- Can't see any real difference from now.
- No great land boom likely. Whole country is in a recession.
- Surrounds to grow so that we become more than a village.
- Beef industry to pick up.
- Protect the natural environment.
- Work available in Grafton which will enable us to live here.
- Coutts as a bushland village which coexists with native species.
- Employment for people in Grafton in small diverse industries.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Some positives for this scenario were an increase in plantations and potential for ecotourism as a source of jobs. Others were concerned that the result would be a loss of income and employment and the subsequent break-up of families.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ There will be an increase in plantations. The biodiversity of forests will be maintained and improved. Potential for the development of ecotourism and therefore a source of jobs in the area	
▪ Better management of the natural beauty of the area	▪ Break-up families and reduce viability of farms
	▪ Loss of rateable income because of the loss of forest grazing leases. Will result in heavier burdens for others in the community and the shire (increased rates)
	▪ Loss of employment
	▪ Fencing costs to graziers following loss of forest grazing leases
	▪ A big negative impact on Grafton which will have a flow-on effect to Coutts Crossing

Deferred areas remain available for the timber industry and other uses

Most had positive reactions to this scenario, commenting on the economic spin-off to the community through the timber industry.

The following table details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ There will be an economic spin-off to the community with ongoing timber industry activities	

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios.

Issue	Strategy
Loss of rates from farms	Councils compensate for loss of land
Loss of employment — industry jobs	Other employment e.g. value adding, plantations
Pressure on farm units from the loss of grazing leases & the break up of families because of this	Recognise the potential for the coexistence of grazing and conservation values Conduct studies for options for the coexistence of the apparently conflicting values Maintain existing leases Provide a longer lead time before cutting out leases Acknowledge that leasehold land is ultimately public land, and that this will ultimately be returned for the broader public use Acknowledge the hardship that people on farms are facing
The continuing viability of Coutts Crossing	Selective logging, grazing and conservation values incorporated
Fire management	Seek community agreement on procedures to ensure that this is done effectively
Lack of integrated planning to help regenerate the bush and maintain biodiversity	More consultation with community, more workshops, and structural adjustment assistance
Impacts on Grafton	Bring back services that have gone Develop other opportunities for employment Work on value adding options Develop plantations for the timber industry

Case study area — Dorrigo

History of settlement

The town of Dorrigo is located within the Bellingen Shire on the Dorrigo Plateau, on the mid-north coast of New South Wales. It is some 500 kilometres north of Sydney and midway between Coffs Harbour on the north coast and Armidale in the New England region.

Before European settlement the area was occupied by the Kumbangerie people whose area extended north of Woolgoolga, west of Dorrigo and south of the Nambucca Valley.

In the late 1850s cedar became a rich source of income and drays of sawn logs were hauled to Armidale. In the late 1880s the road to the coast was opened and in the early 1920s the railway to Glenreagh was opened. By the late 1890s Dorrigo was made up of a few cottages, a store, a post office, bank, police station, two hotels, a coffee palace and a couple of lodging houses.

Timber getters were mostly interested in softwoods — rosewood, silky oak, cedar, carrabean, ash, marble wood and many others. Coachwood, hoop pine and antarctic beech were also greatly sought after. Clearing of the scrub began in 1861 and settlement of this country really commenced in the late 1800s when smaller holdings were taken up for farming. More land was cleared for dairy cattle and crops were planted. News of the productivity of these farms spread and in 1906 subdivisions were opened for selection.

After the First World War more farms were available for soldier settlers and dairying became a major industry, as it is to this day. Timber production played a large part in the economy until recently when it has gone into decline (Dorrigo Historical Society 1996; *Dorrigo beyond and toward 2000, economic and employment plan*).

Population

In 1996 the population of Dorrigo was 1013 (ABS 1996), a decrease of 11.75% from 1991 when the population was 1132. Dorrigo's annual growth rate between 1986 and 1996 was 0.75% (*A summary socio-economic profile, north coast of New South Wales,* 1998). The median age of the population was 38 years, two years higher than in 1991.

Dorrigo selected characteristics

	Male	Female	Total
Total population	508	505	1013
Aged 15 years and over	376	400	776
Aboriginal	5	9	14
Torres Strait Islander	0	0	0
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	464	442	906
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	18	29	47
Other country	12	15	27
Total	30	44	74
Speaks English only and aged five years and over	452	443	895
Speaks language other than English and aged five years and over	15	15	30
Australian citizen	492	481	973
Australian citizen aged 18 years and over	342	357	699
Unemployed	29	22	51
Employed	207	147	354
In the labour force	236	169	405
Not in the labour force	134	223	357
Unemployment rate	12.3%	13.0%	12.6%
Enumerated in private dwellings	491	490	981
Enumerated in non private dwellings	17	15	32
Persons enumerated in same address five years ago	281	274	555
Persons enumerated in different address five years ago	179	175	354
Overseas visitor	0	0	0

Source: ABS 1996

Major industries in the township of Dorrigo

In 1996 the major industries in the Dorrigo township included manufacturing (15.5%), accommodation, cafes and restaurants (11.63%), agriculture, forestry and fishing (11%), retail trade (10.8%), education (7.5%) and health and community services (7%). Given manufacturing's reliance on primary industry, more than a quarter of the town's population was reliant on the natural resources of the region. Logging and the forest industry provided 12% of all primary sector employment in 1991, while sawmilling activity provided 33% of the manufacturing sector employment.

The existing small business base of Dorrigo provided employment opportunities for many and an essential range of goods and services to the residents of the plateau. Retail trade and accommodation and food outlets, which comprise many of the small businesses in Dorrigo, provide employment for almost 22.5% of the population. The other major employers, education and health and community services, form an important part of the community's infrastructure.

The *Dorrigo beyond and towards 2000, economic and employment plan* found that Dorrigo was ideally suited to developing its potential for ecotourism.

One of the major tourism opportunities for Dorrigo is the Rain Forest Centre located two kilometres east of Dorrigo. In 1994–95 it attracted approximately 160 000 visitors.

This plan suggests that certain priorities must be addressed to enhance the capacity of Dorrigo to recognise its economic and employment potential from tourism. The priorities are more community cohesion and focus, better customer service, opening of the Steam Railway Museum, improvement of the main streets, development of theme for the area, and a campaign on the value of tourism to Dorrigo.

Tourist accommodation in Dorrigo includes four bed and breakfasts, three motels, a caravan park with cabins, three farmstays and two hotels.

Industry by employment in the LGA

Industry	Total % Dorrigo township	Total % Bellingen LGA
Agriculture, forestry, fishing	11.08	13.3
Mining	0.83	0
Manufacturing	15.51	12.3
Electricity, gas, water	2.49	0.9
Construction	3.88	6.1
Wholesale trade	5.82	3.6
Retail trade	10.80	12.6
Accommodation, cafes & restaurants	11.63	7.0
Transport & storage	3.32	2.7
Communication services	2.77	1.6
Finance & insurance	2.49	1.5
Property & business services	4.43	6.0
Government administration & defence	2.49	3.9
Education	7.48	9.4
Health & community services	7.2	11.2
Cultural & recreational services	2.77	2.3
Personal & other services	2.49	2.5
Not classifiable	.83	1.1
Not stated	1.66	2.1

Source: ABS 1996

Industry by employment figures in the Bellingen LGA showed that the four major employers were agriculture, forestry, and fishing (13.3%), retail trade (12.6%), manufacturing (12.3%), and health and community services (11.2%). These are similar to industry by employment figures for the town of Dorrigo.

The following table summarises and compares the industry by employment in the Dorrigo township and in the Bellingen LGA.

Income

Approximately 46% of the population earn between $120 and $299 per week, with the largest proportion of the group earning between $120 and $159 per week (ABS 1996). High income earners (over $50 000 per annum) make up approximately 2.5% of the population, an increase on 1991 when 1.6% were high income earners. The median individual weekly wage in 1996 was $200 to $299 and the median weekly household income is $300 to $499 (ABS 1996).

Community infrastructure

Health

Dorrigo has two full-time and one part-time general medical practitioners. It has a hospital, a community mental health service and a primary health care centre. The Mid North Coast Area Health Service has planned the conversion of the Dorrigo hospital to a multi-purpose service at a cost of $2.3 million. For more specialised medical services most of the town's residents use the extensive medical services at Coffs Harbour.

Education

Dorrigo has a State primary, State high school and a Catholic primary school. The Catholic primary school has an enrolment of 68 pupils, with 5.5 staff employed. Enrolments at the school have remained stable between 1992 and 1997.

Dorrigo primary school had an enrolment of 246 students in 1997, employing nine teaching and 1.2 ancillary staff. The school population has decreased by 57 students since 1993. Dorrigo high school had an enrolment of 289, an increase of 65 students between 1993 and 1997.

Housing

Home ownership has decreased since 1991 from 51.77% to 45.23% in 1996 (ABS 1991, 1996). Houses being purchased have also decreased since 1991 from 17.26% to 14.63% in 1996. Houses being rented have remained stable at 26% (ABS).

Communications

Dorrigo is served by a weekly local newspaper, the *Dorrigo Gazette* and also by a complimentary regional paper from Coffs Harbour, *The Advocate.*

Annual events

Annual events in the town include an art exhibition in April, a woodcraft exhibition and open garden display in October, and the agricultural show in November.

Outcomes of Dorrigo community workshop

(Held: 3 June 1997)

Significant events

The significant events identified by the community included a decline in local businesses and government services, the Chaelundi blockade, the planting of trees in the main street, the development of some new businesses and tourism opportunities.

Date	Event
1980s	Shop and post office at Bostobrick closed down
1981	Bostobrick mill burnt down and rebuilt
1984	Lookout Motel established
1975–97	Relocation of steam railway to Dorrigo
1986	Railway line reopened (temporarily)
1986	Abattoir closed. A history of opening & closing, with people laid off for renovations/licence changed hands
1986	World Heritage declaration introduced
1989	Closure of the Court house
1989	Mitchell’s mill expanded
1990s	Chaelundi disputes — old growth decision led to Chaelundi blockades
1991–92	‘Wastebusters’ won Australia Day Award
1991	Rainforest Centre was built
1991	Trees in the main street dispute — divided the community
1993	New indoor sports centre was opened
1993	Brigg’s Mill burnt down
1993	Maternity ward closed
1993	Mitchell’s mill bought a chipper
1993	Misty’s restaurant opened
1993	Motor registry closed down
1994	Chaelundi fires
1994	Railway line closed — Andrew Fraser, local member, put a up successful bill to Parliament to make the closure of the railway legal
1994	White’s quarry opened
1994	The library and tourist information centre were opened
1994	Works at Dangar Falls
1994	State Forests NSW began a ‘joint venture’
1994	Greening Australia office opened
1994	New water supply for Dorrigo
1995	A multipurpose centre approved rather than a hospital
1995	Downsizing of the cattle industry — particularly during the last 18 months
1995	Bottling of spring water started
1995	Forests locked up
1995	Westpac closed
1995	Community town hall
1995	Davis’ store closed
1995	Naming of Waterfall Way
1995	St Vincent de Paul store moved to the main street
1996	Beginning of downturn in beef industry
1996	Milk depot closed
1996	Opening of a new grocery store
1996	North Dorrigo restaurant opened
1996	Bushfood industry — Dorrigo Peppertree started
1996	New public toilets
1997	Telstra downsized its operations
1997	NRE depot closed
1997	State forest restructure — six positions gone

How the community managed two of these events

Positive event 1— Railway museum

- 20 years ago whole town behind railway — railway unions held things up.
- Government and State Rail also held it up.
- Railway still wants $320 000 for the line.
- People lost interest. The time frame has been too long.
- Community became factionalised. In 1989 members of the museum committee split into two groups.

- Some wanted the line to start in Dorrigo and others in Glenreagh.
- Has recently had renewed interest — not as much as before. The dispute has lasted too long.

Positive event 2 — Rainforest Centre

- Increased visitors, put Dorrigo on the map.
- 30 people employed by NPWS.
- It won State awards.
- People stay at the motel and want to stay & see it.
- Need balance between NPWS & timber industry.
- Motel can accommodate a couple of coach tours for a couple of days.
- Need to encourage visitors to stay longer.
- A need for centre to work better with businesses and the township.

Negative event 1— Chaelundi dispute

- Had a forest management plan to work old growth forests until 2012. Protests in forests were followed by Government decision to get out of old growth forests, and move into regrowth areas and harvest at a sustainable rate. IAP then reduced 58 000 cubic metres sawlog quota to 14 000 cubic metres. Likely to decrease to 4000 cubic metres at end of 1997.
- A close-knit self-help community self-destructed — split friends & community.
- Forest Protection Society had big meetings (over 800 attended including outsiders).
- School children fighting — children told they were ‘murderers’.
- Conservationists targeted – ‘Best greenie — a dead greenie’.
- Outside influences affected the community.
- Neither Government helped.
- Groundswell of wider (outside Dorrigo) community on environmental issues.
- Community had difficulty talking about Chaelundi.
- Timber industries continuously had to compromise — no compromise from conservationists — no meeting in the middle.
- A lot of resentment — bitterness continues.
- People lost jobs, businesses lost money.
- Still nobody has helped the town — restructuring guidelines too narrow.

Negative event 2 — Chaelundi dispute

- The death of Dorrigo. It divided the community.
- The Bostobrick mill was blockaded.
- No positive answers from governments.
- Endangered Species legislation was enacted. It came as a bombshell, and orchestrated violent demonstrations. A lot of extra police were required.
- There was a lot of biased media coverage.
- Individuals were accused of attempted murder.

- People from outside the community were brought in.
- There was theft of property and a mess was left behind.
- The FPS was formed, and the wives of timber workers formed a group.
- Led to State Forests undertaking an environmental impact statement.
- Before the community worked together and saw the national park as theirs, now most don't want to support national parks.
- There was a big debate at the school for school children. It became very heated.
- There's more co-operation now with the greens.
- The issue is not resolved. We're still healing the rift, but it may widen if become reserved.

Community feelings about Dorrigo

The community reported very mixed feelings: some reported that the community spirit was still strong, others highlighted the problems and divisions that exist. Most were very concerned about Dorrigo's future and feel that the town is in decline and that there are no opportunities for young people.

The box below details the participants' comments.

- I love it because it's diverse. Had to work through problems, but it's getting there.
- Raised family here, good environment for my boys. Best place I've been.
- Lived here when I was young. Went away for 28 years — glad to be back.
- Productive sector suffering. Until it turns around the area is going downhill — values decrease.
- Great place — excellent resources — need more industry.
- One of the few places to come back to, people live off the land.
- Been here all my life, made a living but worried about the future.
- Great town until about ten years ago — gone downhill, no future.
- Dorrigo was the best place — but a bleak future.
- Threatened and disempowered.
- Feeling of disempowerment — got to the stage of what's the point of fighting.
- Great hope for Dorrigo — moved here to live and die here — train will come— the truth wins out.
- Of two minds. I've been here for 18 years. It's heaven on earth and has good old fashioned values.
- Worried about narrow-minded and racist attitudes and environmental degradation.
- I mourn for the old Dorrigo. I'm uneasy about the present, but optimistic about the future.
- Its heaven. I'm sad about what has happened, but I take heart. Dorrigo is still here.
- Worried about changing land use.
- Worried about lack of jobs for the youth.
- No future for youth. They're leaving and older people are coming in.
- Worried about the future. Farms are too small to make a living from.
- Fairly positive. New businesses do well. Worried about the drift in population. Need substantial industries to survive.
- Love it, but outsiders (professionals) come in and take jobs from locals. Community is divided. Needs industry.
- Worried. Vocational training happens in Coffs Harbour. Youths who want to finish school have to stay on, nothing else for them. It creates social problems.
- Introduction of EEO and OH&S has opened up positions in hospital and school, but half of these people live outside the town.
- Sad. No future here for me or my family.
- Great town, but have to travel more for services.
- Love it and my work with the aging community, strong bonded town.
- Too far away from Coffs Harbour to benefit, unlike Bellingen.
- Railway opening may have an impact on its future.

Visions for Dorrigo

Workshop participants identified a number of visions for Dorrigo. They included the development of sustainable industries for the town including timber, tourism, value adding and diversity of industry; development of educational, recreational and employment opportunities for youth; and a desire for the community to work together.

The box below details participants' comments

- To have a world class railway and museum.
- A sustainable timber industry.
- A little town on the mountain people want to visit.
- Sustainable industries e.g. bushfoods. Bioregionalism.
- Future for tourism.
- Community to manage its own future.
- World class Forest Heritage Centre and world class steam railway museum.
- If IDFAs become reserved Boral, hospital, and shops will close.
- Too much fighting spirit has died. We need to work together.
- Encourage new industries and development, specialty timbers, agricultural crops.
- Think globally.
- Find a 'niche' market.
- Introduce new products and value-adding by people in the industry now to produce premium products and services.
- A self-funded railway. The one that they are trying to get going now is not a local initiative. People are sick of it.
- Future for smaller mills and private land owners, and value adding.
- Should have lots of little projects going — need to diversify.
- Want the Australian Government to recognise the importance of primary industries.
- People to have increased education on farms with new input and direction.
- Educational, recreational & employment opportunities for youth to keep them in the town.
- TAFE outreach services for people on farms for multiskilling programs.
- McKenzie's shop open and trading.
- I want to see people in the empty houses.
- If railway comes we'd be on the map worldwide. Want more shops e.g. craft shops.
- Need lots of little projects, keep the diversity. Tourism isn't the answer.
- Timber for small mills. There's enough resource on private land to keep them going if run properly.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Some residents of Dorrigo saw this scenario as a recipe for economic disaster, other as an opportunity to add to the forest industry and environmental protection.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Economic disaster
	▪ Major fire hazard
	▪ Loss respect for government
▪ More scientific value in CAR system	▪ Cost of managing land increases
▪ Increased small mills	▪ Less petrol sold
	▪ Trades sector loss of disposable income
▪ Increase value-adding	▪ Reduced access for industry
▪ More emphasis on plantations	▪ Fencing more expensive for farmers
▪ Less greenhouse gas emissions	▪ Effect and loss of income for graziers
▪ More areas to grow 'dope'	▪ Loss of cultural heritage
▪ Happy green movement	▪ Loss of rural land rates, and this will mean that those remaining on the land will have to pay increased Rural Lands Protection rates
▪ Preservation of habitat	▪ Pastoral grazing leases won't pay local government rates (Nymboida lost 8% since Christmas)
▪ Less cattle for future — help for beef producers	▪ Loss of State Forest royalties
▪ Increased tourism	▪ Decline in community services
▪ Increased cultural heritage	▪ Flow-on to business houses

Deferred areas remain available for the timber industry and other uses

Some positive outcomes of this scenario were seen as the development of sustainable industry, employment and retention of services to the community. Others were concerned that it would lead to degradation of the environment and ongoing community conflict.

The following table details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Sustainable industry, sustainable services, sustainable economy	
▪ Keep production going	
▪ Increase in more permanent employment	
▪ Positive attitude for all local industry	
▪ School keeps its numbers & maintains choice of electives	
▪ Increased community confidence	▪ Ongoing conflict
▪ 40 000 cubic metre quota will be maintained in Dorrigo management area	
▪ Possible expansion of the mill	
▪ Long term sustainable industry	
▪ Young people might stay in the local community	
▪ Value-adding potential	
▪ People will use buses — company might buy new bus	▪ Greater erosion & sedimentation in rivers
▪ Be able to maintain community infrastructure	▪ More greenhouse emissions
▪ Flow-on to industries e.g. fuel	▪ Less value adding happening
	▪ Bad image for Dorrigo

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issues	Strategies
Logging of old growth forests. They alleviate green house gases	Consult communities before the decision, not after — like now
Need to preserve genetic integrity	National Parks assess all values
	National Parks charges and becomes self sufficient
	Act on scientific facts not emotions
Better species available for industry	Will mean better quality sawlogs
	More resources —plantations and industry in joint venture
	Rainforest/cabinet timbers grown in plantations
	Change of government policies
	Make more land available for industry
	Legislation regarding value adding quotas
	Selective thinning
	Woodchipping as a value-adding strategy

Case study area — Grafton

History of settlement

Grafton is situated on the north coastal plain of New South Wales, 660 kilometres north of Sydney, 320 kilometres south of Brisbane. The city itself is divided into north and south by the Clarence river. Grafton is a regional centre servicing the Clarence Valley hinterland

The siting of Grafton owes much to its being established as the head of navigation in the Clarence River during the 1830s, initially for the export of local timber from the region. The first sale of town blocks took place in 1851, and in 1858 69 inhabitants of Grafton and South Grafton petitioned for a municipality. The town was incorporated in 1859 and later, in 1885, it was proclaimed a city.

As the local and New England regions developed so to did Grafton's regional role, hence Grafton became one of the largest north coast towns for the next 130 years until the 1960s. Since the 1960s, population growth on the north coast has concentrated on coastal locations. Whilst these coastal communities have grown at faster rates in the last three decades, Grafton has retained its role as a regional centre servicing a larger, wider population. Grafton has continued to be the location for many State and Federal Government departmental offices.

Population

In 1996 the population of Grafton was 16 562 (ABS 1996). This level is similar to that of the 1986 ABS census when the population was recorded at 16 793. Between 1986 and 1996 Grafton had an annual growth rate of 0.17% (*A summary socio- economic profile, north coast of New South Wales, 1998*). The median age of the population in the town is 35 years. In comparison to the State average, Grafton had a higher proportion of its population in the 10–14 age group and the over 60 age group, with a significantly lower proportion in the 25–34 age group (Department of Urban Affairs and Planning, February 1996).

Grafton selected characteristics

	Male	Female	Total
Total population	8086	8476	16 562
Aged 15 years and over	6195	6630	12 825
Aboriginal	334	281	615
Torres Strait Islander	11	10	21
Both Aboriginal and Torres Strait Islander	4	4	8
Australian-born	7520	7854	15 374
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	212	221	433
Other country	125	120	245
Total	337	341	678
Speaks English only and aged five years and over	6989	7571	14 560
Speaks language other than English and aged five years and over	77	92	169
Australian citizen	7800	8178	15 978
Australian citizen aged 18 years and over	5622	5996	11 618
Unemployed	552	359	911
Employed	3307	2493	5800
In the labour force	3859	2852	6711
Not in the labour force	2006	3677	5683
Unemployment rate	14.3%	12.6%	13.6%
Enumerated in private dwellings	7516	8126	15 642
Enumerated in non private dwellings	570	350	920
Persons enumerated in same address five years ago	3947	4293	8240
Persons enumerated in different address five years ago	3042	3239	6281
Overseas visitor	5	10	15

Source: ABS 1996

Major industries in the township of Grafton

Grafton is the service centre for the Clarence Valley and as such is a retail centre for many more people than those living in the city itself. In 1996 it was estimated that Grafton had 36.8% of the population of the Clarence Valley but had 57.4% of the retail establishments within the valley. It provided 72.1% of the employment in the retail field and 79.5% of the wages paid to workers in the retail field.

The town is also a base for a variety of industries, both large and small scale. Some of these include several timber processing plants, an abattoirs, State Rail Authority, concrete production, Agricultural and Fisheries Research Station and Department of Education offices. Many industries in Grafton use locally produced items in their production processes and Grafton also provides a readily accessible market for the sale of produce (*Grafton City Council Management Plan, 1997–2000*).

Grafton City Council has adopted an objective to develop and support tourism initiatives and projects through financial and in-kind support of local festivals, the Clarence River Tourist Association and financial support for sister city relationships. It is estimated that in 1996–97 visitors to Grafton LGA spent $33 million, a reduction of 8.34% from 1994–95 when it was estimated that visitors spent $36 million in the local government area (Tourism NSW).

Industry by employment in the local government area

Industry by employment figures in the Grafton local government area closely correlate with those for Grafton township. These figures highlight Grafton's role as a regional service centre with the largest categories of people being those employed in manufacturing (about 10%), wholesale and retail trade (25%) and education and health and community services (20%).

The following table summarises and compares industry by employment in the Grafton township and in the Grafton LGA.

Industry	Total % Grafton township	Total % Grafton LGA
Agriculture, forestry, fishing	2.19	2.34
Mining	0.07	0.12
Manufacturing	10.79	10.76
Electricity, gas, water	2.86	2.79
Construction	5.67	5.96
Wholesale trade	4.33	4.24
Retail trade	19.19	19.13
Accommodation, cafes & restaurants	5.72	5.70
Transport & storage	4.96	4.92
Communication services	3.41	3.38
Finance & insurance	2.21	2.21
Property & business services	6.97	6.98
Government administration & defence	5.14	5.08
Education	7.36	7.38
Health & community services	10.59	10.48
Cultural & recreational services	2.17	2.13
Personal & other services	4.07	3.98
Not classifiable	0.77	0.76
Not stated	1.53	1.63
Total	100	100

Source: ABS 1996

Income

Approximately 42% of the population earned between $120 and $299 per week, with the largest proportion of this group earning between $120 and $159 per week (ABS 1996). High income earners (over $50 000 per annum) made up approximately 1.9% of the population, an increase on 1991 when 1.3% were high income earners. The median weekly wage in 1996 was $200 to $299 and the median weekly household income was $300 to $499.

Community infrastructure

Health

Grafton has 25 general medical practitioners and six specialist doctors (Mid North Coast Division of General Practice). It has a base hospital for general admissions which also provides an Aboriginal health service, dental clinic, early childhood centre, mental health service and many other community health services. The city is the administration centre for the Northern Rivers Health Service.

Education

Grafton has two Catholic and two State primary schools, a Catholic infants school, two State high schools and one Catholic high school. One of the State primary schools receives funding through the Disadvantaged Schools Program.

Enrolments at the Catholic primary schools remained stable between 1992 and 1997 with total enrolments at around 400 pupils. The Catholic infants school's enrolments were also stable at approximately 100. Enrolments at the Catholic high school were exactly the same in 1992 as in 1997 at 454.

The State primary schools enrolments were also stable with total enrolments of approximately 1430 in 1993 and 1997 and employing around 55 staff. The two State high schools had combined enrolments of 2197 in 1993 and 1077 in 1997 are these last two figures ok?.

Housing

Home ownership has remained stable in Grafton between 1991 and 1996 at approximately 40%, whereas homes being purchased during this period has decreased from 28.5% to 18.21%. Between 1991 and 1996, the percentage of population renting increased by 2% so that in 1996 29.3% were renting (ABS).

Communications

Grafton is served by a local newspaper, the *Daily Examiner*, and a regional newspaper, the *Northern Star*. The town also has a community radio station.

Community services

Grafton has a wide range of community services. These include disability services such as an enterprise service, support unit, residential service and self advocacy group; aged care services such as Aged Care Assessment Team, community worker, respite care, Telecross service and home modification scheme; Aboriginal services including an Aboriginal legal service, home care and medical service; accommodation services include a nursing home and villa for elderly people, a women’s refuge and a youth housing project (source: Northern Rivers Social Development Council Community Services Directory 1998).

Annual events

Annual events in the town include the Jacaranda Festival established in 1935, the Grafton Show, the July Racing Carnival estimated to attract around 6000, the Easter Jazz & Blues Festival and the Grafton Country Music Festival held for the first time in 1996. Other annual events feature the Clarence River and include the Bridge to Bridge Ski Race and Sailing Classic.

Outcomes of Grafton community workshop

(Held: 23 June 1997)

Significant events

The significant events identified by the community included the closure of many manufacturing industries, withdrawal of government services and the resulting social impacts, some development of new industries and services, and the community pulling together for its annual events and to provide services such as aged care facilities.

Date	Event
1981–82	Closure of Peters Ice-creamery
1982	Rainforest decision, declaration of national parks
Mid 1980s	Closure of the match factory
1986–97	Closure of Westpac, National and ANZ Bank branches in South Grafton
1989–97	Development of aged care facilities, hostel units built
1988	Grafton Regional Gallery
1988	Bicentennial year celebrations
Late 1980s	Woolworths opened in Duke Street Mall, Woolworths closed in Prince Street.
1990	Construction of sugar loading/storage facility and refinery at Maclean
Early 1990s	Upgrading of Grafton Jail
1992	Opening of Grafton tourist centre
1993	Closure of Besser roof tile plant
1993	Opening of Southern Cross University centre
1993	Opening of Macdonalds family restaurant
1994	Upgrading of Big River Timbers at Junction Hill. Some assistance from FISAP recently
1994	Privatisation of the post office
1995–96	Closure of the Rocla concrete sleeper plant
1996	The flood
Sep 1996	Interim Deferred Forest Areas declared, new national parks created
1996	Bob Carr's visit
1996	Upgrade of the Nymboida Canoe Centre ($2 million +)
1997	Hydrotherapy pool built
1997	Closure of Toohey's brewery
1997	Downsizing or closure of North Power, Telstra, railways, police force, banks
1997	South Grafton levy wall built
1997	Development of regional water supply scheme
Annually	Race week, held for 100 years
Annually	Grafton show
Annually	Jacaranda Festival, held for 64 years

How did the community manage these events?

Positive event 1—- aged care

- The community supplied money for aged care facilities such as Livingstone House. It was difficult to manage, so the Masons took it over.
- St. Catherine's Villa now takes public patients. It was originally set up for aged Sisters of Mercy.
- There are five or six aged care facilities now in Grafton. One commercial syndicate has set up an aged care facility. The facilities are diverse and widespread, and provide both hostel type accommodation and nursing-care accommodation.
- A lot of churches and small organisations raised money, and government funding has also been obtained.

Positive event 2 — July racing carnival

- The carnival started 130 years ago when the South Grafton racecourse was built. It's run by a voluntary management committee**.** Now all of the motels in Grafton are booked out.
- It is the no.1 country race meeting in the State (one winner went on to win the Melbourne Cup). It has a lot of prize money and attracts the top jockeys and the top horses.
- It brings 6000–7000 people, and millions of dollars, into Grafton. It generates employment. Everyone benefits.
- Toohey's have signed a new five year sponsorship deal.
- The local community all get involved. They have three half-day holidays. The community supports the event by attending and betting. Local retailers promote the event through window displays.

- There is multi-purpose centre for the carnival which is used by community organisations, and it is used for weddings etc.
- The land is used all year as a nine hole golf course.

Negative event 1 — amalgamation and closure of Northern Rivers Electricity

- Grafton had always been the Northern Rivers Electricity headquarters. The losses in 1996 were devastating. There were a lot of redundancies even for long term employees. There has been a loss of over 200 jobs so far.
- Loss of about $300 000 of postal revenue to the area.
- A negative flow-on effect to businesses such as vehicle servicing and equipment.
- A lot of stress in Grafton. People had to relocate to Port Macquarie and sell their house or take a redundancy. The community suffers from the State Government decision.
- A lot of community assets such as buildings were sold.
- There were few jobs available for those who stayed (especially not in timber or brewery industries).
- It has meant a loss of the quality of service.

Negative event 2 — downsizing of government agencies

- A lot of skilled/professional people left the area.
- A lot of jobs left Grafton.
- It had a big psychological impact. A lot of people felt the shame that goes with losing a job. If I had ever got the sack, my grandfather would have killed me.
- There was a social impact because families were broken up when brothers and sisters and other relatives had to move away to get employment.
- The local council got the Minister to come to Grafton to reconsider some proposed changes.
- The standard of living has gone down. Incomes have decreased. Unemployment has increased. Dependence on social security has increased.
- Real estate values have decreased.
- The schools have reduced enrolments.
- There has been a loss of political clout.
- Businesses have struggled or closed. Two have closed this week. Some run with reduced staff numbers.

Community feelings about Grafton

The box below details the participants' comments.

- Greatest place ever. I'm not moving. The people are great.
- Greatest place. I'm not leaving unless I am pushed out, even to the detriment of my business.
- No intention of leaving.
- Not leaving. This is the greatest place on earth.
- All of the above. But saddened by the forced reduction in standard of living.
- Diverse environment, future potential for a range of things.
- Sad but positive for the future. This is a great place. I'll work hard to turn this situation around. I've lived in four countries and four States. I choose to stay in Grafton.
- Positive, beautiful heritage. Great aged care. I have been offered numerous jobs in the south in higher positions but I won't leave Grafton.
- I enjoy the place. I'm not leaving.
- Grafton is changing for a positive future.
- I have lived here all my working life and stayed when I retired.
- Grafton is a great place to bring up kids, but it's difficult for them to find jobs.
- I will live here for ever. I have been here for 25 years so far. There is tremendous opportunity here for education, value-adding and tourism. It is a good place for children.
- I was born in Grafton I have lived in a lot of towns. Grafton is the best place to live. Grafton has had 30 years of knocks but the community bands together. It is great for bringing up kids.
- Grafton is wonderful for bringing up family but we'll have to leave, close our business and sell our house.
- I came here ten years ago to a Garden of Eden. I don't want the governments punishing people for their choices.
- I feel pretty good about the community otherwise I wouldn't be at the workshop.
- Generous, caring, supportive financially. It has a heart.
- I feel this community doesn't relish change.
- Good sporting and cultural activities, especially the sport for kids.
- It is a close knit, old fashioned, community. People know each other. I like the slower pace.
- It is safe and friendly here when compared to Sydney.
- I've been here for three years with young children. It has everything for kids... except job opportunities.
- Natural beauty is great. It is the ideal size for a town. It is big enough to offer everything but not too big.
- Grafton is the gateway to many natural assets. The traditional primary industry base is changing. Tourism will take time to catch up economically.
- I have been here 18 months. I like the rural atmosphere in the main street. Doesn't have the problems like bigger places such as Coffs Harbour and Lismore.
- Positive community. Despite different values, people are friendly and feel comfortable with each other.
- I've been here all my life and I wouldn't go anywhere else. Grafton has the best river in the region.

Visions for Grafton

Workshop participants identified a number of visions for Grafton. They included an increase in tourism and value adding industries. Some saw the timber industry as being vitally important, others saw the potential to develop the river as a major attraction to the town.

The box below details the participants' comments.

- Increased tourism.
- Sunday afternoon rowing on the river.
- I would like to see a viable industry come to town.
- I would like to see more tourism and value-adding.
- Maintenance of the diverse education base, and an expansion of courses.
- Grafton's time is yet to come. In say 15–20 years Grafton will be booming.
- Industries coming to Grafton. More local industries, businesses, craft and specialty industries.
- More smiles. Like it used to be 12 years ago when morale was higher. Now the town has drooped shoulders.
- I'd like to see Grafton as a major tourist attraction. At the moment it's not stable. I'd like more emphasis on Grafton's role as the first settlement in the region. Like to see a Timber Hall of Fame, restaurants and craft shops.
- Development of the best river in the world. An international rowing regatta on the river. World exposure through the electronic media. A Grafton on the Clarence idea.
- More industry and more use of the river. Develop the possibilities.
- Grafton will still be here. There will be plenty of jobs.
- I'd like to grow exotic trees and bring my grandson back and show him something that he can do for the rest of his life.
- Get back the industry we've lost. We need industry so there are jobs for the kids and we don't end up a quaint little town of 8000 people.
- Expansion of an industry which is based on natural resources. The timber industry employs over 1000 people in Grafton and if we were allowed to get more wood we could employ a hundred more.
- Grafton the hub of a timber industry. More dependence on plantations. Better partnership with State Forests.
- A north coast paper mill to provide jobs and help the economy.
- Could be a forced amalgamation of Clarence Valley Councils.
- New industries that are ecologically sustainable.
- More focus on Grafton's heritage values.
- Grafton successfully sold as the gateway to the mountains and the sea.
- Grafton as a resort area. More bed and breakfast accommodation.
- Ecotourism potential in Clarence Valley will create more employment.
- Promote Grafton and its history so people will make day trips from Coffs Harbour.
- Maintenance of area's biodiversity through sustainable ecosystems and forest management practices, in conjunction with higher employment.
- Maintenance of roads in closed forests to help with fire management, and also allow apiarists to continue to use the forest.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ 1030 jobs in Grafton timber industry will be lost. Add to that the 2.1 multiplier
▪ A true CAR reserve system	
	▪ Timber industry will face greatly reduced resources
	▪ Greater bushfire threat. Industry now pay for good roads that can be used by bush fire brigade
▪ Increased tourism	
	▪ Loss of small businesses that service the timber industry
	▪ Increased youth unemployment. Will lead to brain drain as high achievers leave town seeking other work. 41% leave the area before they are 16 years old
▪ More jobs in ecotourism	
▪ Protection of native flora and fauna. Will lead to better opportunities for increasing tourism	▪ The timber industry will lose diversity and quality of timber resource
▪ New recreation uses such as rafting	
	▪ Reduced access for beekeepers
▪ Improved water quality and the associated health benefits	▪ Increased cost of timber production. Therefore more reliance on exports or on steel which is more damaging environmentally
▪ Education of general public	▪ Loss of a potential area of employment for youth who are not academically inclined
▪ Encourage changes to land use e.g. plantations on grazing land	
▪ Incentive to educate young people	
▪ Community agreement will be achieved. The issue will be finally resolved	
▪ An increased natural resource available for enjoyment of all of the community	

Deferred areas remain available for the timber industry and other uses

Some saw that tourism potential would be increased while others thought that this scenario would decrease tourism opportunities. Other considerations were security for the timber industry, increased investment leading to growth of community health services and facilities, and the degradation of water quality and concerns about flooding.

The following table details the participants’ comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Some increase in tourism. Rafting based tourism can occur even if industry uses the forest	▪ Loss of tourism potential
▪ Increased visitors for fishing, painting, finding themselves	▪ Loss of water quality if logging occurs in catchment area
▪ Access maintained for forest-based industries	▪ More flood problems
▪ Resolution of the forest issue, and community consensus	▪ Loss of CAR reserve system possibilities leading to disharmony, and more protests
▪ Maintenance of infrastructure and services to Grafton	
▪ Stable economy and investment predictability	
▪ Increased community wealth generating more cultural and community facilities such as the art gallery	
▪ Increased employment through forest management, and flow-on employment to service industries supporting forest industries	

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issue	Strategy
Timber resource and diversity	Plantations. Staggered cuts so industry can cope with a more gradual change. Grow more timber on areas after logging operations, and intensely manage them to produce more timber per hectare
Youth unemployment	A paper mill in the area. Training in alternative industries such as tourism. Sell more overseas rather than importing it
Reduced access for apiarists	Explore the possibility of private land for keeping bees. More than half the local beekeepers rely on the forest. Continued access for beekeepers with road maintenance
Jobs losses in Grafton	Value-adding to increase profitability and employment
Bushfire	Allow grazing. Keep roads maintained which is unlikely in closed forests. Better fuel management. More resources for National Parks
Tourism	Joint ventures with the timber industry; a major upgrade of the airport; improve the infrastructure
Water quality	By closing off to cattle and logging we will have better water quality. Upgrade of the sewerage system. Grow more local trees — retain genetic integrity
Flood	Grow fast growing, local native trees. Will maintain the gene pool. More mature forest will hold more water and help stop the drought/flood cycle
Reduce conflict	Encourage people to abide by the law. People and governments also go along with the ‘umpire’s’ decision

Case study area — Guyra

History of settlement

Guyra is located on the New England Tablelands, midway between Sydney and Brisbane on the New England highway. At 1320 metres above sea level, Guyra is the highest town on the tablelands. The name Guyra is based on a local Aboriginal word Ru-en-gar, meaning ‘place where fish may be caught’ associated with Mother of Ducks lagoon on the outskirts of the town.

The first recorded white settler to the region was the explorer John Oxley who in 1818, at a time when the colony was desperate for additional grazing land, described the pasture lands as ‘the finest open country, or rather park, imaginable’. However, it was not until the early 1830s that settlement on the New England began in earnest. Stock was brought up from the Hunter Valley and the original stations of Walcha, Gostwyck and Saumarez were established.

In 1884 the Guyra railway station was opened and in March 1885 the village was proclaimed in the New South Wales Government Gazette. By 1890 Guyra had grown substantially with full postal, telegraphic and banking facilities, three hotels, three churches, a public school, a police station and a small sawmill. As it was located on the railway Guyra acted as a link to the markets and coastal cities for the outlying settlements.

Before white settlement Aboriginal people lived in the area, used the resources and managed the land for thousands of years. There are over 40 occupation sites recorded. Early records show that the Banbai people who occupied the lands were independent nations of people who spoke their own dialects and practiced unique cultural activities. The last recorded ceremonial activity in the area was at Black Mountain in the 1880s.

By 1893 the Banbai people were living on reserves. The Oba Reserve, north west of Guyra, covered 200 acres, increased by a further 215 acres in 1909 and eventually closed in 1927. The area is now freehold land and the Banbai people relocated to Guyra and Armidale. Many Aboriginal people also lived and worked on properties surrounding Guyra. In 1983 Guyra Local Aboriginal Land Council was established, with responsibility for a large area around Guyra. (Guyra Tourist and Business Guide).

Population

In 1996 the population of Guyra was 1801 (ABS 1996). This figure is a decrease from 1991 when the population was 1937 (ABS 1991). The median age of the population in 1996 was 34 years, an increase of three years on 1991 figures. Approximately 8.5% of the population is Aboriginal, well above the State average of 1.1%.

Guyra selected characteristics

	Male	Female	Total
Total population	926	875	1801
Aged 15 years and over	699	703	1,402
Aboriginal	81	72	1,153
Torres Strait Islander	0	0	0
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	889	837	1726
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	10	14	24
Other country	11	6	17
Total	21	20	41
Speaks English only and aged five years and over	824	796	1620
Speaks language other than English and aged five years and over	3	4	7
Australian citizen	901	854	1755
Australian citizen aged 18 years and over	633	644	1277
Unemployed	105	51	156
Employed	344	242	586
In the labour force	449	293	742
Not in the labour force	234	395	629
Unemployment rate	23.4%	17.4%	21.0%
Enumerated in private dwellings	886	843	1729
Enumerated in non private dwellings	40	32	72
Persons enumerated in same address five years ago	499	482	981
Persons enumerated in different address five years ago	326	312	638
Overseas visitor	3	3	6

Source: ABS 1996

Major industries

The four major employers of residents of Guyra were retail trade (15%), manufacturing (14%), agriculture (11%) and health and community services (11%). These figures reflect the town's role as a service centre for its rural community.

Tourist expenditure was up from an estimated $8 million in 1994–95 to $10 million in 1996–97 in the Guyra LGA. The number of tourist visits in 1994–95 was 37 000 and in 1996–97 46 000 (Tourism NSW).

Industry by employment in the LGA

Industry by employment figures in the Guyra LGA show that by far the largest employers are agriculture, forestry and fishing at 35.73%, followed by retail trade at 10.26% and manufacturing at 9.3%.

The major industries in the Guyra region include agriculture, livestock, aquaculture, potatoes, angora rabbit fibre production, recreation–tourism and manufacturing (*Guyra Tourist and Business Guide*, no date).

The unemployment rate for males in Guyra in 1996 was 23.4% and for females 17.4%, much higher than the unemployment rates for the LGA at 17.1% for males and 13.6% for females.

The following table summarises and compares the industry by employment in the Guyra township and in the Guyra LGA.

Industry	Total % Guyra township	Total % Guyra LGA
Agriculture, forestry, fishing	11.26	35.73
Mining	0.5	0.19
Manufacturing	13.74	9.3
Electricity, gas, water	0.99	0.32
Construction	3.64	2.63
Wholesale trade	4.8	3.21
Retail trade	15.23	10.26
Accommodation, cafes & restaurants	4.97	3.14
Transport & storage	3.97	2.37
Communication services	1.66	1.48
Finance & insurance	3.64	1.92
Property & business services	4.3	3.08
Government administration & defence	6.13	4.55
Education	5.13	6.41
Health & community services	11.09	8.4
Cultural & recreational services	0.99	0.90
Personal & other services	3.15	2.12
Not classifiable	1.82	0.90
Not stated	2.98	3.08

Source: ABS 1996

Income

The median weekly individual income in 1996 was $160 to $199 and the median weekly household income was $300 to $499. One per cent of the population are high income earners (over $50 000 per annum) (ABS 1996).

Community infrastructure

Health

Guyra has one general medical practitioner but due to the town's closeness to Armidale most residents are able to access a full range of medical facilities there including more than 30 general practitioners and 14 specialist doctors. Health services in Guyra include an Aboriginal medical service offering antenatal classes, a counselling service, a baby and paediatric clinic, substance abuse service, diabetic clinic, home visits, a women's group, children's playgroup and client transport program, community options, assistance for aged and disabled people to live at home, and Community Health offering services such as domiciliary nursing, immunisation clinic, early childhood clinic, foot care clinic, cancer support group, social worker, and diabetic educator, dietitian, hearing and vision screening, prenatal classes, mental health service, physiotherapy and occupational therapy by appointment. Guyra also has a complex of seven independent living units and a twenty-two bed hostel to cater for the aged.

Education

Guyra has a public central school, a Catholic school and a preschool. In 1997 the Catholic primary school had 85 enrolments, a substantial increase on 1992 when 58 students were enrolled. However, enrolments at the central school have almost halved over the period 1993 to 1997 from 426 to 231 enrolments.

Housing

Home ownership has remained stable between 1991 and 1996 at around 40%, whilst houses being purchased have dropped from 25.8% in 1991 to 19.76% in 1996. Numbers of households renting have also dropped from 26% in 1991 to 22.77% in 1996 (ABS 1996, 1991).

Communications

Guyra is served by *The Guyra Argus*, a community newspaper.

Community services

Guyra has numerous sporting and service clubs as well a two playgroups for under school age children, an occasional care centre and a neighbourhood centre. The neighbourhood centre provides daycare for frail, aged and disabled and acts as a referral agency.

Annual events

Annual events in the town include the Guyra Lamb and Potato Festival, the Guyra Grand Parade (historic racing car rally), the Guyra Rodeo and the Guyra Show. The Guyra Gun Club is one of the largest gun clubs in New South Wales and hosts numerous major competitions.

Outcomes of Guyra community workshop

(Held: 4 June 1997)

Significant events

Date	Event
1983	Closure of the abattoir
1985	Re-opening of the abattoir
1996	Final closure of the abattoir
1997	April — inaugural Grand Parade
1987	Opening of Kalora Homes (aged care)
1987	Lamb & Potato Festival started
1989	Railway closed
1989–90s	Downturn in rural commodities
1996	Commonwealth Bank closed
1982–95	Drought for ten years, then through until 1995
1996	Formation of Guyra Business Connection,
1996	Formation of the Guyra Enterprise Centre
1990	Dentist moved, replaced in 1995
1986	Sacking of the Hospital Board
1996	Railway station became a museum
1995–96	Garden Club established a large park
1995	Labor State Government
1996–97	Massive spread of national parks & wilderness
1995	Threat of Eastlink power line, a high voltage power link from Armidale to the Queensland border
1996	Big Armidale hailstorms — all tradesmen employed — builders/panelbeaters etc

How did the community manage these events ?

Positive event — Grand Parade

- A positive outlook with the town pulling together.
- Event initiated by the Mayor, and a community committee managed it.
- Community organisations were approached to be involved, all got behind it.
- Historical motor racing cars, not a race but a mini rally. People came from all over Australia.
- Five thousand tickets sold, although it was not primarily a fundraiser. Local stores sold provisions — bread, pies, soft drinks & 5000 steaks.

- Looking at doing it annually if approved.
- Couldn't have happened without Council & without community support and volunteers.

Negative event — closure of abattoir

- 140 jobs lost last time it closed.
- First abattoir to be signed up for enterprise agreements — a model.
- During 1992–96 it was closed for 50% of the time.
- Taken over by the Australian Meat Holdings (US company) who closed the lamb processing plant.
- Workers who lost their jobs had mostly young families. There was an increase in houses for sale.
- Some workers drive across to Inverell everyday to work in the abattoir there.
- Closed the laundromat immediately.
- Affected graziers — one less outlet made the community more determined.
- Related to drought, not enough cattle.
- Buildings moved to Aberdeen.
- There was no notice to the community or consultation, it closed overnight.
- Forced Guyra to look at itself and its future, and aim to diversify small business. The establishment of the Guyra Business Connection came as a direct result of the abattoir closing.

Community feelings about Guyra

The community reported on a cohesive community with a strong rural base. The box below details the participants' comments.

- Great little town.
- Still love our show — an active community event.
- Great community spirit.
- Like it, but there's nothing to do for the young.
- Armidale is too close. If you go there for one thing, you do everything there.
- Proud to be part of the community — very high community pride.
- Cohesive.
- Helps itself, Armidale is an asset.
- Space, room to move.
- Warm town — tourist signs welcome you.
- High quality farming produce (lambs, wool & cattle).
- Pulls together to maintain Kalora Hospital (have fund raisers).
- Small community — big heart.
- Proud of our show.
- We'll still make it work despite the government.

Visions for Guyra

Workshop participants identified a number of visions for Guyra. They included maintaining quality of life and creating employment opportunities in the town. The box below details the participants' comments.

- A satellite suburb to Armidale (has both positives and negatives).
- Sustainable, innovative, productive rural industries around Guyra.
- Prosper as a small town.

- Young people able to find good jobs in Guyra.
- 10 new businesses, employing ten people for ten years.
- Stay cohesive & strong to survive the huge challenges and what governments are taking.
- Spectacular landscape — and understand that potential.
- Untapped potential, people who have always lived here become complacent.
- Pastoral centre of the northern tablelands.
- Remain crime free and safe for children.
- Great tourism potential; working with National Parks, walking through wilderness, overcoming bias and rhetoric.
- Maintain the safe, high quality of life and natural beauty.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Some thought that if the areas were well managed it would assist in preserving species and may lead to increase of jobs through tourism. Most thought that there would be an increase in feral animals, that graziers' livelihoods would be affected and that recreation may be more damaging to the environment than graziers.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Increase in feral cats, dogs, pigs, foxes — affects graziers
▪ Depending on management, will preserve endangered species	▪ Affect graziers' livelihoods (wilderness on Crown leases)
	▪ Sawmills close & we would lose our Mayor & jobs
	▪ Negative impact by recreation users can be more detrimental than grazing
	▪ Takes areas out of policing jurisdiction e.g. cannabis
▪ Increased jobs in national parks to manage them	
▪ International tourist destination if we learn how to attract them	
	▪ Possible loss of real estate values
	▪ Increased costs to State for national parks management
▪ Possible increase in land value due to proximity to remnant vegetation	▪ Loss of access for older people and those less able — wilderness areas
	▪ Will it regenerate with native or exotic species ?
▪ Access to forests through walking, canoeing (wilderness)	
	▪ Do we really want tourists?
	▪ More community stress

Deferred areas remain available for the timber industry and other uses

The following table details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Lose small remaining areas of habitat
	▪ Loss of biodiversity
▪ Ability for families to make a living from firewood	

Case study area — Lismore

History of settlement

Lismore is the regional capital of the Northern Rivers region on the far north coast of New South Wales. It is located on the Wilson River 180 kilometres south of Brisbane and 860 kilometres north of Sydney.

The first inhabitants of the area were the Wiyabal, a tribe of the Bundjalung Aborigines whose area extended from the Logan River in Queensland almost to the Clarence River in New South Wales for at least 6000 years. Nimbin Rocks and other places in the Nightcap National Park are rich in evidence of Aboriginal ceremony, and a Bundjalung bora ring can be seen at Tucki.

In August 1828 Captain (later Admiral) Henry Rous, in the Royal Navy survey ship *Rainbow*, explored parts of the north coast and discovered and named the Richmond River.

Cedar getters were recorded here in 1842, and in 1844–45 William Wilson established a station on the Richmond River which he named Lismore after the isle of Lismore in Loch Linnhe, Scotland.

A port grew as the junction of the rivers provided a suitable turning point for the busy timber shipping trade, and in 1856 a village was gazetted on the site. By the 1870s Lismore had developed into a prosperous community with a sound economy based on timber and the newly introduced sugar cane growing. Lismore was proclaimed a municipality in 1879, and a city in 1946.

Population

In 1996 the population of Lismore city was 28 380, an increase of 1135 on 1991 when the population was recorded as 27 245 (ABS 1991,1996). Between 1986 and 1996 Lismore had an annual growth rate of 1.4% (*A summary socio-economic profile, north coast New South Wales, 1998*). The median age of the population was 32 years in 1996, an increase of one year from 1991.

There is a significant Aboriginal and Torres Strait Islander population of 3.3%, well above the national average of 1.1%.

Lismore selected characteristics

	Male	Female	Total
Total population	13 600	14 780	28 380
Aged 15 years and over	10 553	11 823	22 376
Aboriginal	416	467	8883
Torres Strait Islander	13	23	36
Both Aboriginal and Torres Strait Islander	11	7	18
Australian-born	12 071	13 144	25 215
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	564	608	1,172
Other country	497	473	970
Total	1061	1081	2142
Speaks English only and aged five years and over	11 760	12 924	24 684
Speaks language other than English and aged five years and over	499	445	944
Australian citizen	12 971	13 966	26 757
Australian citizen aged 18 years and over	9174	10 583	19 757
Unemployed	1.019	683	1,702
Employed	5584	4996	10 580
In the labour force	6603	5679	12 282
Not in the labour force	3713	5896	9609
Unemployment rate	15.4%	12.0%	13.9%
Enumerated in private dwellings	12 767	14 025	26 792
Enumerated in non private dwellings	833	755	1588
Persons enumerated in same address five years ago	5908	6530	12 438
Persons enumerated in different address five years ago	6227	6737	12 964
Overseas visitor	46	75	121

Source: ABS 1996

Major industries in the township of Lismore

The five major industries in the Lismore township are wholesale and retail trade, employing 19.54% of the population, health and community services (14.61%), education (9.48%), manufacturing (9.23%) and property and business services (7.38%) (ABS 1996).

Lismore's status as a local and regional service centre is reflected in the amount of people employed in these industries. Lismore has two major shopping centres, several neighbourhood shopping centres and a retail central business district. In 1997 the central business district received a $1.4 million mall-style upgrade and there are proposed additions to the shopping centres and neighbourhood retail outlets.

Lismore's Southern Cross University provides a range of courses for its 10 000 students specialising in tourism, naturopathy, subtropical forestry, contemporary music and coastal management education. It also attracts research and development funding in areas such as agriculture and natural medicine. Other education facilities are private and State high schools, primary and preschools, a TAFE college, a Conservatorium of the Arts and an Adult Community Education centre.

Lismore's 120 manufacturing firms have an annual turnover of $215 million and include food processing, engineering and timber value adding. Health care facilities include a base hospital and private hospital and several specialist medical centres. Professional services include medical, legal accounting, town planning and property development (Lismore City Council's Economic Development Unit, 1997).

Tourism is a potential growth area within the Lismore region and a $1.5 million upgrade of the airport has been approved to encourage further growth. The Economic Development Unit of Lismore City Council has targeted bed and breakfast accommodation, ecotourism and cultural tourism as potential areas for growth in the LGA. In 1997 Lismore had 477 rooms available for tourist accommodation and 1028 beds in a variety of settings including hotels, motels, caravan parks, bed and breakfast and guest houses. Estimates of visitor numbers to the Lismore LGA have decreased between 1994–95 from 302 000 to 270 000 in 1996–97. However, estimated tourist expenditure for the same period has increased by $1 million with 1996–97 estimates at $76 million (Tourism NSW).

In 1996 Lismore had an unemployment rate of 13.9% (ABS).

Industry by employment in the local government area

Industry by employment figures in the Lismore LGA show a close correlation with major industries in the city area. The major difference is that agriculture is a larger employer in the LGA. The traditional agricultural base in Lismore of dairying and beef is giving way to growth crops such as macadamia nuts and teatree production. Other crops include pecan nuts, avocados, stone fruit and bush food. Lismore's agriculture and manufacturing industries are closely linked.

The following table summarises and compares the industry by employment in the Lismore township and in the Lismore LGA.

Industry	Total % Lismore township	Total % Lismore LGA
Agriculture, forestry, fishing	2.62	7.97
Mining	0.12	0.15
Manufacturing	9.23	9.12
Electricity, gas, water	0.74	0.69
Construction	5.82	5.87
Wholesale trade	5.16	4.75
Retail trade	19.54	17.13
Accommodation, cafes & restaurants	5.24	4.70
Transport & storage	2.78	2.71
Communication services	2.30	1.99
Finance & insurance	3.05	2.65
Property & business services	7.38	6.86
Government administration & defence	3.18	3.13
Education	9.48	9.99
Health & community services	14.61	14.22
Cultural & recreational services	1.75	1.54
Personal & other services	4.41	3.84
Not classifiable	0.71	0.73
Not stated	1.87	1.95

Source: ABS 1996

Income

In 1996 the median weekly individual income was $200 to $299 and the median weekly household income was $500 to $699. High income earners (over $50 000 per annum) make up approximately 2% of the population (ABS 1996).

Community infrastructure

Health

Lismore is a regional health centre with a base hospital with 230 beds and a private hospital of 140 beds. The town has approximately 30 general medical practitioners and a range of specialist medical services. Lismore Base Hospital's services include emergency, blood bank, a cancer care unit, chest clinic, day surgical unit, dental clinic, outpatients, isolated patients scheme, pathology, renal dialysis unit, mental health clinic and inpatients service, sexual health service, aged care assessment team, anxiety management services, living skills centre, day care centre and a psychiatric hostel. Primary health care in Lismore is responsible for providing services such as aboriginal health, child and family health, community nursing, drug and alcohol, health promotions, methadone unit, HIV intervention, sexual assault and women's health. Lismore also has a branch of the Aids Council of New South Wales.

Lismore's private hospital has medical and surgical wards, a palliative care unit, post-natal unit, day surgery unit, high dependency unit, eye clinic, child care centre, rehabilitation unit, a nursing home, rehabilitation day centre, and specialist medical centre. It also provides community palliative care nursing, aged care services, social work and a range of other medical services.

Education

Lismore has five State primary schools; in 1997 these had a total enrolment of 1775 and employed about 70 staff. The enrolment figure is a slight decrease on 1993 when total enrolments in State primary schools were 1896. Enrolments for the two Catholic primary school totalled 861 in 1997, and they employed 46.3 staff. In 1992 Catholic primary schools had 772 pupils enrolled. Lismore also has three public high schools and one Catholic high school. In 1997, 2899 pupils were enrolled in the public high schools, a very similar number to those in 1993 when enrolments totalled 2850. In 1997 enrolments at the Catholic high school were 1368, and 145 staff were employed.

One of Lismore's primary schools and one high school receive funding through the Disadvantaged Schools Program, as does the special school for children with severe disabilities.

Lismore has a university with 10 000 students, and an Arts conservatorium which in 1997 had 94 full-time students and 150 part-time. The conservatorium employs 45 part-time teachers. Lismore also has a TAFE college and ten preschools and childcare centres.

Housing

Home ownership has decreased since 1991 from approximately 42% to 36% in 1996 (ABS 1996). Houses being purchased has also decreased from 1991 to 1996 from 24% to 21%. There has been a corresponding rise in rented housing between 1991 and 1996 from 30% to 34%. The median weekly rent in Lismore LGA in 1996 was $127 whilst the State median is $142 (ABS).

Communications

Lismore is served by local newspapers the *Northern Rivers Echo* and the *Koorie Mail,* and is also the headquarters for the regional newspaper, the *Northern Star.* Local radio stations include ABC radio, 2LM and Triple Z, commercial stations and a community radio station 2NCR-FM. Television stations located in Lismore are Prime, NBN and Ten.

Community services

Lismore has a wide range of community services. Some of those in 1997 were Aboriginal services, for example, a community legal centre, a women's refuge, employment programs and a regional and local lands council; aged services including 164 low care places, 265 high care places and 25 community care places (*1998 Summary socio-economic profile of the north coast of New South Wales*), several social clubs, a home and community care service, home maintenance and modification, Telecross and a community transport project; children's and family services such as playgroups, a toy library, early intervention program, parenting programs and genetic counselling; general counselling services including financial, gay and lesbian, relationship, Mensline, Lifeline and adoption; disability services such as advocacy, access committee, carers association, respite care, an information service, work and training, independent living services, deaf community association and a blind and vision impaired group; education including over 50s Learning Centre, Mature Workers Program; housing services for young people, women and low income earners; and numerous welfare assistance, sporting, social and cultural, environmental, support and self help groups, and service clubs (source: Lismore City Council, Community Services Directory).

Annual events

Annual events in the town include the Countrycarna festival, Lismore Gem Festival, Cedar Guitar Awards, the Lismore Folk Festival, a lantern festival and the North Coast National.

Outcomes of Lismore community workshop

(Held: 16 June 1997)

Significant events

Date	Event
Early 70s onwards	Decline in dairy industry. Decline in sawmills
1973	Discovery of dieback on the tablelands
1973	Aquarius festival — the arrival of the hippies at Nimbin
1974	Superphosphate subsidy removed
1974	Cream boat on the river stopped operating
1975	Ballina street linked Goonellabah to town centre
1976	Changes to local government boundaries, e.g. Terania & Gundurimba amalgamated with Lismore
1979	National Parks and Wildlife legislation
1979	Hurford’s sawmill was burnt down
1980–81	Protests/campaign Nightcap Range–Terania Creek
Early 80s	A building boom, population influx from Sydney, rural land subdivided, lots of hobby farms developed, and multiple occupancies became the ‘flavour of the day’
1982	Rainforest Decision
1983	The Big Scrub Environment Centre shopfront opened
1984	Lismore Square development, opened 1986
1985	Lismore unemployment levels twice the State average
1985	World Heritage listing of Nightcap National Park
1986	Rallies protesting against the rare earth plant
1988	NC pulp mill announcement
1988	Mother’s Day flood
Late 1980s	College of Advanced Education (CAE) moved from Keen Street to East Lismore, became the University of New England Northern Rivers in 1989. University in its own right, Southern Cross University, in 1994
1989	April Fool’s Day flood
1989	Sleeper carriages removed from Motor rail
1990	First women (three) on Lismore Shire Council
1990	ABC studio established
1990	Only traffic light removed, and roundabout development started
1991	Council moved out of city centre and into Goonellabah
1993	20 years since the Aquarius Festival
1993	TAFE moved out to Wollongbar
1993	Post office moved out of the main block
1993	NORPA established
1993 onwards	Downgrading/closure of government services (recentralised) DOCS, tax department, NorthPower, SkillShare, Ambulance, DEET Area office DSS, CES. 300 + public service jobs gone
1995	City farm opened. Employs people with disabilities

Date	Event
1995	Airport upgraded
1995	Train timetables changed, could no longer get on after work and get to Sydney by 9am. Motor rail went and was replaced by the XPT. Recently got some sleeper cars on the motor rail, but cheaper to fly
1996	Anti-gun rally
1996	Levy is a Lemon campaign
1996	First Lismore Folk Festival. Had a reconciliation theme
1996	Hemp for Paper rally
1996	Health system restructure
1996	Lismore bicentenary celebration
1997	Rally on racism
1997	Lions festival
1997	Decision to erect a one in ten year flood levy
Annually	Reclaim the Night and International Women's Day marches

How did the community manage these events?

Positive event 1 — Southern Cross University

- Highest level of Austudy nationally. More low income students from rural areas.
- Surplus of young casual labour.
- Seasonal population during the term times.
- High community acceptance as the uni. brought income and gave builders/suppliers jobs, and students provided cultural diversity.
- Students develop an attachment to Lismore and participate in the arts and voluntary work.
- Property managers do well, as do food and entertainment businesses.
- Improved cultural opportunities.
- Provides speakers and prominent people.
- Development of natural therapies, and conservation technology.

Positive event 2 — Lismore 50 years as city celebration

- Division of the community before the Festival; after the 'hippie invasion' there was quite a lot of polarisation.
- Organised by a community committee set up by the Council (service clubs, youth agencies, Council, Chamber of Commerce, Apex, *Northern Star* representatives).
- Brought together every group in community which was unusual in Lismore, people of opposing factions worked together, lots of good came out of it, arts etc., but there is still lots of division.
- Lismore doesn't have an annual festival, but there was lots of support for this event. Lots of people were involved, it was not political or issue-based, and everyone and anyone felt that they could have a say. Also people liked that fact that their city was 50 years old. Lismore used to be called the Queen of the North.
- People voluntarily put in time and money.
- About 50 000 people attended on the day.
- Represented the whole community (recognised the diversity).
- Celebrations brought people from other towns in the region.

Negative event 1 — population growth and increased unemployment

- Changes to agricultural land with development.

- De-regionalisation of services.
- Voluntary organisations have become very important.
- Inequities in funding.
- Problems with obtaining funding. Don't have metropolitan voting numbers.
- Recent gains in political power because it's a marginal seat.
- Rallies have been held nearly every week (1997), concerning cuts to Labour Market Programs and Austudy.
- More families reliant on pensions, but rents high.
- The district has amongst the highest number of schools in the State obtaining Disadvantaged Schools Program funding, although it still has a high TER average.
- Only one family refuge (six units) on the north coast.
- Lowest household income, low employment participation rate, change in agriculture and timber sectors. High number of single parents, and a high Aboriginal population.

Negative event 2 — decline in Government services

- CBD declined through relocation of CAE.
- There was a street blockade when DEET was decentralised. A number of demonstrations were held — mainly organised Council and DEET workers, families, friends and clients.
- People wrote letter campaigns and stacks of people turned up.
- Street meetings were held, and the Mayor urged people to attend.
- Taught people in Lismore that you can't rely on others to support you.
- Lismore starting to rely on the community to provide the infrastructure.
- High-powered union representatives active. Tried to get local government representatives on side — there was lots of lobbying.
- Change of government from Labour back to National could have been a factor.
- Showed the ineffectiveness of politicians, and a lack of awareness of the effects of the decisions by the bureaucracy. Usually a swinging seat can effect changes, but not this time.
- Seemed futile in the end.

Community feelings about Lismore

The community reported on a diverse and vibrant population, concerns about unemployment and lack of job opportunities, high community involvement, increase in Aboriginal population, and the split between alternatives and non-alternatives. The box below details the participants' comments.

- I love beauty of it and diversity of the people.
- Grateful for opportunities Lismore has provided.
- Highest gay and lesbian community outside Sydney.
- Beautiful and diverse. May be overrated but I am still here.
- Moved here but apprehensive about the 14% unemployment and disempowerment. Where are the opportunities for Lismore?
- Unique and progressive, came here because I saw it as a strong community pressing for social change.
- Most racist town I have lived in.
- A challenge for Lismore to reinvent itself, but there are not a lot of constructive ideas.

- Been here all my life and worked. It is a great place.
- Like the sporting opportunities. They're very strong, you can do anything.
- It bothers me the split between alternatives and non-alternatives There are always the same people at rallies. How do we reach and include non-active people in issues?
- Feel strongly enough to have bought a home and hope my job will continue long enough for me to pay it off. Easy to meet people and make friends.
- Ambivalent. There is a lot of potential here, but attitudes cause a lot of obstacles that prevent that potential being reached.
- Relieved to come home. Worrying issues though, feels like we're teetering on the edge. Need directions for change.
- Downtown streets at night worry me because of the youths on them.
- Not a strong opinion. Overall services depleted and retail diminished.
- Aboriginal people are starting to come in and mix and be accepted, some by their own choice.
- Lismore is very caring and supportive. People get involved.
- Gundurimba is established, and people from Cubawee were forced to come in here. Big population mix in Goonellebah. Others (Aboriginal people) from other towns are coming in. Now there is a breakup of a lot of communities. It's created a lot of factions around the area and a lot of worry.
- Despite government withdrawal still has great potential. I am happy to be here. I have roots in the area. Lismore has the potential to be a provincial city, but we still seem to rely too much on places like NORCO.
- A great community. Entertainment and relaxation enhance my lifestyle and there is less stress than in Sydney. But I know that those born here disagree.
- I feel safe compared to Sydney. You can be more open in yourself and don't need to be defensive. Lots of diversity provides the opportunity to explore more how I'd like to be.
- I love Lismore. I am glad I am not rotting away in Sydney. Proud to be a Councillor and part of a service to community. I appreciate it more than the locals, but if people do leave, they usually come back.
- Like it or I wouldn't stay, but find general population pretty apathetic, and the go ahead people are polarised. I'd like to see a balance. There are too many extremists. People need to get together a bit.
- Living in a small community gives more opportunities to contribute and be involved and to perhaps change things.
- A great diversity of kids. Vast majority are great kids by comparison to other areas, although teachers say they're terrible.
- I like Lismore but worry for younger people — the jobs just aren't there. I had four people working for me, now I've got two. If people had a bit more trust and enthusiasm and let it develop, we'd go places.
- Lismore still excites me after having been to many places. Has huge potential if the negativity is eliminated.

Visions for Lismore

Workshop participants identified a number of visions for Lismore. The box below details the participants' comments.

- Public transport capital of rural Australia.
- Increase in employment for Aboriginal people.
- A cultural centre. Provide a model for rural cultural identity.
- Doorway to massive international rainforest tourist destination.
- More industrialised and diversified. Ballina is going more ahead in this direction. The airport there makes a difference.
- Deregulation of airport will allow more competition and affect whole of aviation in this area.
- Green/clean image through recycling schemes etc., and build on that with agriculture which is chemical free.
- Justice and respect for Bunjalung people and blossoming of people to express this. It will benefit all of us.
- Create employment and become internally self sufficient, not relying on particular organisations. With more employment there will be less antisocial behaviour and people will have a higher self-esteem.
- Building industry bridges after disappearance of timber and dairy. A basis for the city to become economically viable. We don't have the population to become self-sustaining so we need industries.
- Export direct to Asia (cultural and agricultural products).
- People learn to live together and become one, like building bridges.
- Diversified industries. We have people with diverse skills. A broader base to rely on such as tourism, bushfoods, cottage industries etc. The challenge is to keep a community where people feel safe with changes.
- Lismore a sporting mecca for baseball, hockey, soccer etc. Like to see them develop as an industry rather than others that have not been developed.
- Lismore not develop too quickly, so that new ideas can be established to give people employment.
- Opportunities. For creative Aboriginal businesses, also timber, dairy and alternative industries e.g. the health industry and bush tucker.
- Environmentally sustainable principles, making use of conservation areas and beaches.
- Timber industry that is going strong — it is a part of our history.
- Increased dialogue between community groups.
- Value-adding in the timber industry.
- Comprehensive cannabis use (hemp for clothing, paper etc.).
- Appropriate housing for special needs groups, and for Aboriginal people

Reactions to forest use options

Deferred areas remain available for conservation and other uses

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Loss of employment in the mills
▪ Maintenance of genetic integrity for future needs such as medicines	
▪ Land use for future generations	
▪ Intergenerational legacy. Increased resource for future	
▪ Opportunities for increased new industries such as tourism	▪ Timber industry might leave town.
	▪ Social stresses caused by loss of jobs, loss of self-esteem, increased suicide rates, lack of employability
	▪ Families disrupted — both in the industry and support industries
▪ Preserve important Aboriginal areas	▪ Pressure on private forests for harvest

Positive impacts	Negative impacts
▪ Opportunities for retraining and reskilling	▪ Small retail businesses affected e.g. the corner shop
▪ Tourism leading to more cultural inputs	
▪ Acceptance that environmental movement has something to offer, acceptance of conservation and diversity values	▪ Lack of jobs for people with lower education leading to crime
▪ Less forest protests, less social disruption	
▪ Strong resource for environmental education and research	
▪ Increased tourism will bring economic advantages e.g. jobs	
▪ Establish non-timber materials, sugar cane, hemp, growth in jobs and small businesses	
▪ Improve catchment management for river and improve recreation	
▪ Increase in plantations will mean more forest cover, will lead to more carbon synchronisation, improve the environment and ensure ecosystem/biosphere survival	▪ Uncertainty causing lack of investment, confidence, spending and social consequences such as self esteem and family stress
▪ Opens way for development of economically sustainable industries, plantations and value-adding	
▪ Hasten pressure for plantations to be established	▪ Potential loss of grazing, apiary and firewood permits
▪ Social benefit from community knowing environment is cared for, biodiversity maintained. People will live in a healthy environment	▪ Potential increased population through servicing tourism industry. Strain on infrastructure and increase in traffic
▪ A level of certainty reached if decision agreed to by all stakeholders	▪ Increased tourism leading to rubbish in bush
	▪ Local timber not available. Lead to imports from unregulated forests.
	▪ Source of timber transferred to softwood
	▪ More community disputes
	▪ Adverse impacts on tourism

Deferred areas remain available for the timber industry and other uses

There were a number of responses to this scenario. Many recorded concern about media portrayal of the timber industry, a possible increase in community disputes and environmental issues. The positive aspects of this scenario were about maintaining present levels of jobs in forest industries, creating certainty, and flow-ons to associated industries.

Positive impacts	Negative impacts
	▪ Media portrayal of forest industry will affect perceptions
▪ Maintain present jobs in timber industry including haulage and suppliers	
▪ Retain mixes of timber products	▪ Opportunities lost for tourism jobs and income
	▪ Loss of faith in the future
▪ Certainty developed if agreed to by all stakeholders	▪ More community disputes
▪ One of the region's competitive advantages is timber	
▪ Maintain viable apiary industry. Will assist with agricultural pollination	▪ Potential for more forest protests if not a scientific process

	▪ Pollution and waste impact on recreation, health, and forest dynamics
	▪ Possible loss of sacred sites
	▪ Community division if decision not accepted
▪ Maintain fire fighting access roads & so community safety	▪ Community reliance on economically unsustainable industry
▪ Strong resource for education and research	▪ Reduction in amenities for people in forest areas
	▪ Reduction in water quality
	▪ Quality of life maintained
	▪ Loss of existence and recreational values
	▪ Foreign companies monopolise timber, so profits leave the region
▪ Investment confidence and increased spending	▪ Perceived loss of genetic diversity for medical uses
▪ Maintained access for recreation	
▪ Maintain existing timber jobs	▪ Strain on infrastructure through timber trucks on roads
▪ Maintain Aboriginal consultation in managing the land	

Issues and strategies

Issues	Strategies
Community conflict	Both conservation movement and the timber industry get together and work out a common agreement. Create community confidence through better communication Identify impacts clearly so that they can be addressed Community education on natural resource/lifestyle values
Unemployment	Retraining and re-education for displaced workers
Opportunity for those new industries e.g. plantations	Right to harvest plantations Government incentives to create other industries
Decreased biodiversity, and loss of tourism potential	Bring tourists to working forests to understand timber harvesting and production, e.g. follow British model More research before areas are harvested, and develop recovery plans for endangered species
Profits leaving the region	More niche market products. Buy Australian timber. Locally owned companies preferred Harvesting licences in the hands of local contractors instead of companies. Form a harvesting co-op
Pollution in the rivers and wastage	State Forests resource local organisations for ways to do this, and keep some of the royalties for this work Utilise the residue e.g. paper
Timber jobs	Maintain harvesting of forests. Employ more people in national parks
Disputes	Mediation, information, local-level meetings, with e.g. environmental groups and the Construction, Forestry, Mining and Energy Union A forest interpretation centre
Jobs and long-term wood supply	Plantation strategy

Case study area — Tenterfield

History of settlement

Tenterfield is situated on the Great Diving Range at the northern end of the New England Tablelands of New South Wales, at the junction of the New England and Bruxner highways.

The Jukembal were the first Australians to inhabit the Tenterfield district with their territory straddling the Great Dividing Range from near Glen Innes to Stanthorpe.

Tenterfield was gazetted a town in 1851 and the first sale of town lands was held in 1854. In 1871 a correspondent with the *Town and Country Journal* wrote that during the ten years before the population of Tenterfield had increased, several substantial buildings both public and private had been erected, agriculture had sprung up, and trade had increased.

The eastern slopes of the Great Dividing Range provide important timber producing areas of hardwood and some softwood. Several mills were established, the first being on Bolivia Station in the late 1860s. The first saws were driven by a water wheel, so the mills were located next to rivers. Unfortunately many of the first were swept away by floods. Early markets were strictly local with orders for bridge timber and gold dredges being common, most specifying tallowwood. Timber from a mill at Mt Speribo, owned by James Mangleson, was used in many public buildings in Tenterfield and Glen Innes (Halliday, K. 1988. *Call of the Highlands, the Tenterfield Story 1828-1988,* Tenterfield Shire Council).

Population

Tenterfield selected characteristics

	Male	Female	Total
Total population	1531	1674	3205
Aged 15 years and over	1213	1364	2577
Aboriginal	57	52	109
Torres Strait Islander	0	0	0
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	1372	1503	2875
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	47	53	100
Other country	36	37	73
Total	83	90	173
Speaks English only and aged five years and over	1350	1497	2847
Speaks language other than English and aged five years and over	29	21	50
Australian citizen	1449	1588	3037
Australian citizen aged 18 years and over	1062	1216	2278
Unemployed	69	37	106
Employed	647	471	1118
In the labour force	716	508	1224
Not in the labour force	451	808	1259
Unemployment rate	9.6%	7.3%	8.7%
Enumerated in private dwellings	1429	1592	3021
Enumerated in non private dwellings	102	82	184
Persons enumerated in same address five years ago	814	910	1724
Persons enumerated in different address five years ago	560	597	1157
Overseas visitor	16	14	30

Source: ABS 1996

In 1996 the population of Tenterfield was 3205, a slight decrease on 1991 census figures which show the population as 3310. Approximately 3.4% of the population in the town is recorded as Aboriginal. In 1996 the median age of the town's population was 40 years, whereas in 1991 the median age was 37 (ABS 1996).

Major industries in the town of Tenterfield

Tenterfield's role as a service centre for the area is shown by the industry by employment data (ABS 1996). In 1996 the major industries in the Tenterfield township included retail trade (18%), manufacturing (12%), accommodation, cafes and restaurants (10%), health and community services (10%), and government administration (9%). The unemployment rate in Tenterfield at the time of the 1996 census was 8.7%.

Tenterfield has a large number of well preserved historical sites that attract tourists to the town. These attractions, as well as Tenterfield's location on the junction of the New England and Bruxner highways, may account for the large number of accommodation facilities in the town. Tenterfield has six motels, three hotel/motels, three caravan parks and a youth hostel. The town has had a steady increase in tourist expenditure between 1994–95 ($14 million) and 1996–97 ($17 million). Estimates of tourist visits during the same period show an increase of 90 000 per year to 105 000 per year (Tourism NSW). Although these are LGA figures, Tenterfield is by far the largest town in the LGA, and it could be expected that most of this tourism would occur here.

Industry by employment in the LGA

The following table summarises and compares the industry by employment in the Tenterfield township and in the local government area.

Industry	Total % Tenterfield township	Total % Tenterfield LGA
Agriculture, forestry, fishing	6.88	25.25
Mining	0.27	0.78
Manufacturing	11.59	9.74
Electricity, gas, water	0.91	0.60
Construction	5.53	3.88
Wholesale trade	3.53	3.02
Retail trade	18.39	12.75
Accommodation, cafes & restaurants	10.14	6.59
Transport & storage	2.99	2.54
Communication services	1.63	1.25
Finance & insurance	1.72	1.55
Property & business services	4.89	4.70
Government administration & defence	8.60	6.29
Education	6.61	6.16
Health & community services	9.87	8.10
Cultural & recreational services	0.45	0.95
Personal & other services	3.71	2.50
Not classifiable	0.34	0.52
Not stated	1.72	2.84

Source: ABS 1996

Industry by employment figures in the Tenterfield LGA show that a quarter of the population is directly involved in primary industry, with the second and third largest employers being retail trade (12%) and manufacturing (8%). Given the link between primary industry and manufacturing, almost a third of the population are reliant on primary production for their livelihoods.

Income

In 1996 the median weekly individual income of Tenterfield residents was $200 to $299 and the median weekly household income was $300 to $499. Almost 2% of the population earned over $50 000 per annum (ABS 1996).

Community infrastructure

Health

The Tenterfield Health Service offers services including accident and emergency, aged care assessment, asthma advice, audiometry, blood bank, childbirth education classes, child and family health, community nursing, continence advice, counselling, diabetic advice, drug and alcohol counselling, health promotion, immunisation, mental health services, a needle and syringe exchange program, obstetrics/maternity, palliative care, physiotherapy, surgical procedures, and various support groups. Tenterfield has two general medical practitioners.

Education

Tenterfield has one Catholic and one public primary school, and a public high school. Enrolments at the public schools remained stable from the 1991 census to the 1996, whilst the Catholic school had a significant decline in enrolments. In 1997 the Catholic primary school had 109 pupils and employed 6.2 staff, whereas in 1993 the school had 152 pupils enrolled and employed 8.1 staff. The State primary had 327 pupils in 1997 and 330 in 1993. Tenterfield High School had 384 enrolments in 1997 and 379 in 1993.

Tenterfield also has a childcare centre.

Housing

Home ownership remained stable between 1991 and 1997 with approximately 52% of the houses being fully owned. The numbers of houses being purchased increased from 16% in 1991 to almost 18% in 1996, whilst houses being rented dropped from 27.36% to 25.67% during the same period (ABS).

Communications

Tenterfield has a local newspaper, the *Tenterfield Star*, which was established in 1870, and the Tenterfield and District Community FM radio station.

Community Services

Tenterfield Shire Council lists 84 community organisations and clubs. These range from ten service and 21 sporting clubs to a playgroup, Rural Youth, Guides and Scouts, Meals on Wheels, aged care units, a care centre and homecare for the elderly. the town also has a community centre, visitors association and numerous groups affiliated with churches and schools.

Annual events

Annual events in the town include the Highland Gathering and Federation Festival in October, the Oracles of the Bush Festival and the Tenterfield show, the New England Sheep Dog Trials, and the Australian Line Dancing Exhibition.

Outcomes of Tenterfield community workshop

(Held: 5 June 1997)

Significant events

The significant events identified by the community included closure or downgrading of public sector services and industry, a variety of stresses on rural industries, increase in tourism and local festivals, and the opening of the aged care facilities.

Date	Event
1980s	Decline in railway sleeper production
1980–81	Closure of the two meatworks
1986	Closure of the railway
1987	Closure of Drake Mt Carrington mine
1988	Opening of TAFE college
1988	Henry Parkes bicentenary celebrations
1988	Decline in rural commodity prices
1990	Opening of the tourism office
1991–97	Drought
1992	Opening of Millrace Aged Care centre
1992	Old growth moratorium & declaration of wilderness areas
1993	Major downgrade of the Forestry Office
1993	Closure of the RTA depot
1994	Commencement of Aboriginal tours
1993–95	Severe bushfires all through national parks and State forests. Huge amount of people and resources needed
1994	Highland gathering recommenced (every October)
1994	Forestry office went to Glen Innes
1995	Closure of the Drake Mill
1995	Opening of Wallangarra Meatworks (sheep only)
1995	SEP 46 introduced. Affected farmers and earthworks contractors
1995–	Downgrading of hospital. Health services amalgamated — came under control of Glen Innes
1995–	Establishment of orchards & vineyards. Now there are problems accessing the water supply
1996	Tenterfield Shire Council Electricity taken over by North Power. No compensation paid
1996	Oracles of the Bush festival. To become an annual event
1997	Downgrading of the State and Westpac Banks
1997	Review of Timbarra Gold Reserve
1997	Declaration of wilderness and national parks areas. Loss of grazing & logging licences, and access to fishing.
1997	Imminent closure of RP Board
1997	Tug-a-war team won all the Australian titles. Tenterfield ladies team also won
1997	Endangered species legislation. Affected agricultural industry
Last five years	End of the tobacco industry
	Tourism building up over time especially last five years. First tourism grant of $200 given 30 years ago

How did the community manage these events?

Positive event 1 — Millrace Aged Care Centre

- Started from a bequest in a will and a group of concerned citizens.
- Community raised $300 000+ in one year (graziers donated stock, money, donations, auctions, community fetes, raffles), raised by people on a voluntary basis in an amazingly short time.
- Millrace Aged Care Centre is still being given donations. Money is raised at a fete every year.
- The health department wanted to take it over for a multipurpose centre, but was stopped by lobbying by the committee and Council.
- Important. Otherwise old people would have to go to other towns such as Armidale.
- Shows the spirit of Tenterfield. The community are prepared to do something. The hospital was built the same way.

Positive event 2 — Oracles of the Bush

- Suggested by the Tenterfield Saddler.
- Local community took control, Council put up a seeding grant in 1996.
- Includes Australian literature, bush poetry.
- Ties in with Federation, a sense of history — Henry Parkes, Shearston, Peter Allen are all from Tenterfield.
- Gives the town an economic boost. Tenterfield has 1500 visitors a day plus repeat visits from overseas tourists. A lot of people want to stay over and see the area.
- It provides some jobs but not like industry e.g. the meatworks.
- Tourism helps but it won't save the town. We need the infrastructure back.

Negative event 1 — closure of the two meatworks

- Affected Stanthorpe/Wallangarra and Tenterfield.
- 900 people were employed at the meatworks. Wallangarra employed 500 people and Tenterfield employed 400 people. 50% of the workers shifted after the works closed.
- Private enterprise closures sent signals to other small business that there was no point in doing anything.
- Workers had had large disposable incomes.
- Tenterfield went from wealthy town to the highest unemployment rate in the State in two years.
- Shopkeepers were forced to give credit.
- Range of goods went down in stores. The hardware staff dropped from 16 to 6.
- Meatworks had been a backup in rural recessions.
- Working at the meatworks helped people going onto land.
- Closure created a lot of depression and stress in the community.
- Affected graziers wanting to sell their stock.
- Catholic school was reduced in size.
- Women were affected due to coping with the stress and having to go out to work.

Negative event 2 — withdrawal of public sector services

- We have lobbied and cried, and we've had regular public meetings, but Tenterfield is not a swinging seat. We're politically powerless.
- Invited Yeadon to come and talk to us to see what's happening, but he declined. Called people a 'bunch of hillbillies'.
- Had public meetings and lots of people participated. 1500 came after the forests were closed, and businesses shut their doors for two hours.
- Had a public meeting with 200 people after the threat of moving the Rural Lands Protection Board, but it doesn't look like we can change it. The decision is already made.
- With all the services leaving town, young families are leaving the area, and older people are moving in.
- State government has deliberately chosen areas that are politically powerless to attack.

Community feelings about Tenterfield

The community reported strong community values and spirit, concern about government decisions that have affected the community, and lack of employment and industry. The box below details the participants' comments.

- Chose it as a way of life. I came back because it's a nice, moral town with good family values.
- It's a nice place to live, but it has been tough through the drought.
- Love the place — not like Brisbane.
- Was better ten years ago. Deteriorated because of bad politicians.
- We need industries or we will become a ghost town.
- Wouldn't survive without community spirit.
- People are friendly & the climate is nice.
- Good honest town that deserves better from both governments.
- Wonderful place. Friendly, good community spirit, resilient despite government interference.
- Fairly positive apart from obvious divisions in all country towns.
- A strong community that has taken a lot of blows.
- Great town, but it can't put up with government rape and pillage much longer.
- Lived in other places, tremendous spirit here, tremendous potential.
- Comfortable, conservative, and traditional with a lot of history.
- Reasonably affordable, but not enough employment.
- It's my future and my children's future, but will there be anything for them?
- My grandfather came here 100 years ago. Tenterfield is resilient and resourceful despite government policies.
- Caring community, a positive community spirit.
- My past and future. I'm despondent about primary production now.
- I have faith in Tenterfield — it will change and adapt.
- I am fifth generation. Determined my kids will be the sixth.
- Good community, but we will have to fight hard.
- We want it to be our future.
- We came back, but there is a great deal of apathy.
- Hope we don't lose our spirit — and that we hang in there.
- Nice place, but there's no jobs for the young.

Visions for Tenterfield

Workshop participants identified a number of visions for Tenterfield. They included an increase in industries and businesses, improvements to rail and road links, more employment opportunities, reintroduction of local services, and improvements in the timber industry. The box below details the participants' comments.

- Population growth.
- Thriving town with increased employment.
- More tourism with history promoted.
- Improved agricultural practices & diversification e.g. small new farming ventures — rabbits, emus.
- Like to see gold mine operating (Timbarra).
- Improvement in small businesses, especially hands-on small businesses.
- Viable forest industry — private & government.
- Value-adding to products.
- Stimulus to business through improving Bruxner highway to the east and west, and upgrading Mt Lindsay road and linking Tenterfield to Beaudesert.
- Get rid of government regulations that impede us because Tenterfield is located on the border
- Tenterfield become a swinging seat.
- Promote national parks overseas & capitalise on them locally.
- Bring in large business e.g. transport/manufacturing.
- Reopen the rail link.
- Families & children not in despair. Decrease in the use of drugs.
- State government politicians visit & see what they have done.
- Government be required to take notice of social assessment as they do for environmental impact

studies.
- Government incentives to employ people.
- One-seventh of shire State forest and private forests — huge renewable resource we can base industries on if managed properly.
- Move to Sydney or Brisbane.
- Spend some of the $47 m set aside for plantations up here.
- Educate city kids about forestry.
- Sustainable forest industry without relying on tourism.
- Good and continuing aged care services.
- A local woodchip mill. It would employ 20 people.
- Pay farmers to keep down feral animals e.g. reintroduce the bounty.
- Support small business with less tax and more incentives.
- Bring kids to Tenterfield to our forests to see how well we look after them.
- Closures are worse than the drought.
- PR about rural people that they are already thinking and educated. Give local people credit for their knowledge.
- Adequate airport.
- Reintroduce local services.
- Guarantee continuity of grazing leases and recognise that graziers are improving the forests, not destroying them.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Most workshop participants were concerned that this scenario would lead to loss of employment in the timber industry with flow-ons to employment in other sectors of the community. They were also concerned about forest management practices in national parks. Others saw that there could be a potential increase in tourism.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ Virtually all timber jobs gone. Will mean increases in welfare payments
	▪ Local businesses will be affected
	▪ Increase in feral animals & decrease in native flora
	▪ Less income, less people, reduced health services when we need more
	▪ Schools will have less kids, less teachers— TAFE marginal
	▪ Loss of traditional lifestyle
	▪ Morale in bush depleted
	▪ No improvements on grazing leases because of uncertainty
▪ Potential increase in tourism	▪ Adverse impact on biodiversity
	▪ Loss of Pasture Protection & Shire rates
	▪ Loss of ratable land
	▪ Conversion of agricultural paddocks to timber to meet needs for hardwood
	▪ Loss of jobs
▪ Flow-on to retail sector	▪ Pressure on more sensitive areas
	▪ More damage to overseas forests
	▪ Less tradespersons
	▪ Loss of beekeeping areas
	▪ Drop in real estate prices
▪ Flow-on to services	▪ Less quality forests = less quality old growth
▪ People become creative	▪ Year 2010, timber shortage in Pacific rim. We won't benefit

Positive impacts	Negative impacts
	▪ Insufficient park rangers to maintain national parks properly ▪ Bushfire hazard ▪ Loss of grazing leases— leading to unviable farms ▪ More feral animals & noxious weeds ▪ Less community services ▪ Costs to adjoining land ▪ Less retail sectors
▪ Trees still growing for when we get them back for harvest	▪ Reduced access for recreation & tourism

Deferred areas remain available for the timber industry and other uses

This scenario was considered to give more employment opportunities in forests and flow-ons to the community, better forest management and access, and provide potential for value adding in the timber industry.

The following table details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Maintain beekeeping industry ▪ More local jobs ▪ Better employment & flow-ons ▪ Grazing — good for fire prevention and beneficial (for habitat) ▪ Road access maintained for fire breaks & control burns ▪ Available for public recreation & tourism ▪ Flow-on to retail sector ▪ Better viability for graziers ▪ Fire, feral animal and noxious weed management ▪ Potential for local value-adding because of security ▪ Flow-on to community services ▪ Keep families intact ▪ People feel good in Tenterfield about the process & that government has listened	
▪ Easy access for recreation	▪ Increase in weeds via vehicle access

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issue	Strategy
Who pays for reserve systems and management?	Government makes good decisions Take the ‘Or’ out. Have the environment *and* industry Better management of reserves Calculate costs before making decisions Look at alternative methods of generating incomes Government assist and compensate affected communities Ensure enough that there are enough rangers and infrastructure in national parks
Management of forests	Education about sustainable and renewable forest management
Vermin	Pay farmers to kill feral animals e.g. reintroduce bounty
Population. Need to keep our young families	Reintroduce local public services Attract young families to Tenterfield
Grazing leases	Guarantee continuity
Morale in the bush	Forests managed by community — recognise the local knowledge
Fire	Reduce hazard through animal impact (grazing). More training, more money Make gold mining pay a toll
Access to forests	Affordable access for beekeepers and everyone

Case study area — Pottsville

History of settlement

Pottsville is located on the far north coast of New South Wales in the area known as the Tweed Coast and within Tweed Shire.

As with much of the north coast, the area was first explored by Europeans in search of timber, particularly cedar, in the early 1800s. Development of the area did not occur until around 1915 when the first roads and bridges were built. Pottsville commenced as a seaside village after World War 1. It was originally called Lower Cudgera but took the name of Pottsville Beach from the first family to build in the area, Mr and Mrs A.S. Potts. Industry in the district was mainly dairying and by 1917 there were 56 dairy farms in the area.

Pottsville went ahead as a village with the discovery of mineral sands in the area in 1940. Mining companies bore most of the costs of building roads, bridges, and bringing water and electricity to the town. The first mining plant was built by a local cane farmer with the industry growing quickly and employing many locals in the plants which operated 24 hours a day, seven days a week.

The first post office/store was opened in Pottsville in 1940, the public school in 1944 and a butcher’s shop in 1947. A bus run from Pottsville to Tweed Heads commenced in the late 1940s.

With the availability of cheap land, Pottsville has had a steady influx of new residents since the 1980s.

Population

In 1996, the population of Pottsville was 1987 (ABS 1996), an increase of approximately 35% from 1991 when the population was 1289. Between 1986 and 1996 Pottsville had an annual growth rate of 22% (*A summary socio-economic profile, north coast New South Wales, 1998*).

Tweed Shire Council has identified Pottsville as a newly settled community, and possibly transient area, with a mixture of younger retired people and visitors in the population, as well as having a substantial number of new, younger families. The Council is currently preparing a Pottsville Development Strategy to plan for the rapidly growing population. The Council, through community consultation, has opted to retain the village atmosphere whilst allowing for a population of 5000 (*Tweed Shire Council Strategic Plan 2000+*).

The median age of the population in 1996 was 38 years, a slight increase on 1991 figures when the median age was 37 years and well above the median age for New South Wales which is 34 years.

Pottsville selected characteristics

	Male	Female	Total
Total population	979	1008	1987
Aged 15 years and over	745	782	1527
Aboriginal	8	6	114
Torres Strait Islander	7	5	12
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	844	863	1707
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	80	78	158
Other country	26	27	53
Total	106	105	211
Speaks English only and aged five years and over	864	900	1764
Speaks language other than English and aged five years and over	21	21	42
Australian citizen	925	938	1863
Australian citizen aged 18 years and over	667	700	1367
Unemployed	75	47	122
Employed	296	248	544
In the labour force	371	295	666
Not in the labour force	366	475	841
Unemployment rate	20.2%	15.9%	18.3%
Enumerated in private dwellings	968	1003	1971
Enumerated in non private dwellings	11	5	16
Persons enumerated in same address five years ago	331	356	687
Persons enumerated in different address five years ago	552	566	1118
Overseas visitor	3	6	9

Source: ABS 1996

Major industries in the township of Pottsville

Pottsville's rapid growth has meant the building industry is a major industry in the town. The town serves its residential population through provision of services, for example retail, and its location on the beach also means that the tourist industry is important to Pottsville.

In 1996 the major employment for residents of Pottsville township included wholesale and retail trade which combined represented more than 20%, construction (10%), health and community services (10%), accommodation, cafes and restaurants (9%), manufacturing (8%), and education (8%). Many of Pottsville's residents work in Tweed Heads.

Unemployment in Pottsville was 18.3% in 1996 (ABS).

Tweed Shire Council recognises the need to expand the Pottsville commercial centre. It will be investigating extending the commercial zone as part of integrated local area plan preparation for Pottsville. This will address zoning amendments and development control plans, a Pottsville centre bypass, community facilities provision, and urban environmental upgrading (*Tweed Shire Council, Strategic Plan 2000+*).

Tourist accommodation in the area includes two caravan parks and a motel and several rental units.

Industry by employment in the LGA

Industry by employment figures in the Tweed Shire LGA show that a fifth of the Tweed's population is engaged in either wholesale or retail trade. The second largest employer is health and community services (employing 10.25%) and the third largest is in the area of accommodation, cafes and restaurants, reflecting the Tweed Coast's status as a holiday destination. Property and business services are another large employer influenced by tourism. Tweed's agricultural produce, forestry and extractive resources also form an important part of the Tweed economy, as do manufacturing and construction. Tweed Shire Council is identifying opportunities for plantation forestry, including options and incentives to develop commercial woodlots on private and council owned land (*Tweed Shire Council Strategic Plan 2000+*).

The following table summarises and compares the industry by employment in the Pottsville township and in the Tweed Shire LGA.

Industry	Total % Pottsville township	Total % Tweed Shire LGA
Agriculture, forestry, fishing	3.98	6.84
Mining	0	0.24
Manufacturing	7.78	7.73
Electricity, gas, water	0	0.54
Construction	9.76	9.03
Wholesale trade	4.16	4.16
Retail trade	16.09	16.64
Accommodation, cafes & restaurants	9.40	9.56
Transport & storage	5.24	4.05
Communication services	3.07	1.49
Finance & insurance	0.54	2.35
Property & business services	8.32	8.08
Government administration & defence	4.16	3.50
Education	7.78	6.57
Health & community services	9.76	10.25
Cultural & recreational services	1.81	2.14
Personal & other services	5.24	3.47
Not classifiable	1.27	0.95
Not stated	1.63	2.40

Source: ABS 1996

Income

Approximately 50% of the population earn between $120 and $299 per week, with nearly half of these in the lower income bracket of $120 to $129 per week. High income earners (those earning over $50 000 per annum) make up just under 1% of the population. The median individual weekly income in Pottsville in 1996 was $160 to $199 and the median weekly household income was $300 to $499 (ABS 1996).

Community infrastructure

Health

Community Health visits Pottsville two mornings a week and services 50 clients.

Education

Pottsville has a State primary schools with an enrolment of 446 pupils in 1997 and employing approximately 16 staff. Enrolments at the school have increased by approximately 42% since 1993. High school students attend school in Murwillumbah. Pottsville has a preschool with approximately 50 children attending and a child care centre with an enrolment of 60 in 1997.

Housing

Home ownership in Pottsville has decreased by 6% between 1991 and 1996 when 40% of households were fully owned. In 1996, 24% of houses were being purchased and 24% were rented. The number of houses being purchased has decreased by 8% since 1991 and rental numbers have remained the same (ABS).

Communications

The Pottsville community is served by the free newspaper, the *Tweed Coastal Villages Local Rag.*

Community services

The Tweed Shire Council Community profile has identified a need for coordination of services in the Pottsville community. Generally Pottsville has a low number or community services. Those that exist include the Tweed Coast Community Care Centre, nine sporting groups, a progress association, and a dune care group.

Annual events

Pottsville’s major annual event is the fishing carnival.

Outcomes of Pottsville community workshop

(Held: 19 June 1997)

Significant events

The significant events identified by the community included the development of basic services in Pottsville, the influx of new residents, conflict over the development of the town, and development of agriculture in the area.

Date	Event
1960s	Bridge built over Cudgera Creek. Federal and State funded. Sand mining brought it about
1965	Power came on at Cudgera
1975	Sand mining finished. It brought electricity, water and roads. Before that the area was isolated
1980	Assignment to grow sugar cane in the Cudgera area. Been trying for 20 years to get it to happen. Finally got a sugar mill. Good for farmers, existing farmers able to diversify. Before that farms were becoming non-viable. Initially it was a pine area, and bullock teams went over the mountain. This was followed by beef production until the downturn, and now sugar cane has taken over
1980 onwards	Large influx of people. People leaving Adelaide, Melbourne and Sydney. Started to put pressure on the area — pressure on the town, pressure on farming
Early 80s	Pottsville Waters, Cabarita, Bogar Gardens developments. Major conflict arose about the sorts of development the locals wanted. Some wanted ‘open slather’, others wanted no development at all
1988–89	Huge increase in traffic on the coast road, with lots of coaches since it was sealed. Happened around the time of the Expo. People no longer had to go over the mountains

How did the community manage these events?

Positive event — assigning sugar cane to Pottsville

- It meant a lot of work to stop ponding. For those that could afford it, it paid off. About ten farmers bought in/changed over. A lot of land was involved.
- The cost of transforming grassland probably cost as much as it did to buy the land.
- The general population couldn’t care less about it, but for the Tweed Shire it has made a significant economic contribution to the area.
- Bananas would probably be better still.

Negative event — Development of three tiers of community

- An influx of people and traffic, a mix of people particularly elderly and unemployed. Pottsville does not have a large industry to attract income earners.
- In the early 1980s most of the people here were in the building industry. It was a boom time, then it died, and they pulled up stakes and left — they couldn’t survive. The degradation of reliable work hasn’t helped the community.
- Difficulty in obtaining a stable workforce for any developing industry. Clothing manufacturer didn’t survive because of this.
- Area has changed. New brick buildings ‘stuffed things up’.
- Old residents of the area who had lived with no power accepted the new people, and the facilities that development brought, but those who moved in the interim came for a traditional lifestyle and resented the changes.
- Still a growing population. The school has doubled in number in the last six years, now the primary school has 454 students and nine teachers. It used to have 60 children ten years ago.
- There is a relatively mobile population, perhaps because of the number of rental properties (60%). When things were going well, people came in and built/bought. They left with the economic downturn, and sold or rented out.
- The massive influx means that the infrastructure can’t cope. The school has opened three new classrooms in the last 12 months, but its capacity was exceeded by the time it they were finished.

Community feelings about Pottsville

The community reported on the community cohesiveness, welcoming atmosphere, concern about development, and the natural beauty. The box below details the participants' comments.

- I'm a newcomer. Find Pottsville very refreshing, different attitudes, not as much animosity to newcomers.
- I've never felt any animosity, perhaps because we've tried to communicate openly with the community.
- A remarkable community with a remarkable strength.
- The community pulls together to support the school. The support comes from people of all ages and backgrounds. I lost my purse, and someone picked it up and came to the school to give it to me.
- Born here. I accept the lifestyle. It suits people to have it mushrooming. I'm quite comfortable, and accept it as part of progress, but I regret that I no longer know my neighbours.
- I bought a block of land here recently because I like it.
- Originally came following my two daughters. Lovely area, I have no regrets.
- I love Pottsville or I would move on. I've probably caused some problems because I'm the local greenie. People don't know where I'm coming from, and that upsets me. But some people come up and tell me I'm doing the right thing. Cudgera is one of the nicest places around, the people are great.
- Feel a bit unhappy with the way it's going, but I love it, and can't think of a better place to live.
- A great place to bring up kids. Always someone there if you need it. I don't want to go anywhere else.
- I've lost touch a bit since by daughter left high school, but I like the fact that it's relatively unspoiled. The beaches are virtually untouched. The influx is okay as long as it stays a coastal village and keeps a separate identity.
- The community is pretty self-sufficient. It got the preschool happening.
- There are a lot of small community groups, but they haven't grown with the growth of the community. e.g. the hall committee has less members than originally. When the chips are down we've got a good community spirit, but otherwise people don't want to know about others' needs. The young people have to struggle to survive and don't have time to get involved.
- Love it. Moved out of Pottsville and into Cudgera because of the development. People take a pride in their community and pull together.

Visions for Pottsville

Workshop participants identified a number of visions for Pottsville, including the area remaining unspoilt and the retention of the village style community when development was occurring. The box below details the participants' comments.

- A bypass to take traffic out of the centre. Maybe it will happen when Burringbar Range gets developed.
- Council in charge of a broader vision.
- Development doesn't become all-consuming. I'd hate to see farms pulled up and made into house blocks, the farming area is aesthetically beautiful.
- Keep beaches accessible. Retain green space along them for people for all time. Keep our three estuaries as they are, and this environmental park.
- People attracted here (particularly interstate people) because it is different — relatively unspoiled. If we lose that, we can kiss it goodbye. Lots of people driving around the countryside are tourists.
- Maintain the green between villages, not a strip development.
- Land is zoned to carry through to the year 2030. The trick will be to let development happen and keep the spirit of the community — a village community.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

Some participants in the workshop believed this scenario would lead to increased tourism, encourage a diversity of industry and increase timber plantations. Others were concerned about the loss of employment in the timber industry, increased costs in managing national parks, and increased risk of fires in the forests.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Will encourage more people to use it. People on the coast find a park easier to access	
	▪ Loss of timber industry and other forest industry jobs
▪ More jobs available because of more plantations	
▪ Better farming practices	
▪ National Parks will have something to promote for tourism	▪ Increased fire hazard. Everything gets destroyed
▪ Will attract ecotourism and backpackers	▪ Increased management costs
▪ Tourism will lead to jobs as rangers, interpretation officers, labourers and also training with Labour Market Programs	▪ Cost to taxpayer through loss of private enterprise
▪ Attract more accommodation facilities	▪ Loss of lifestyle, people cut where they shouldn't because of a loss of access
▪ Push people to look towards other industries e.g. plantations, and private property forestry	
▪ Potentially more tourist facilities	

Deferred areas remain available for the timber industry and other uses

Some participants thought that this scenario would better enable the timber industry to contribute to the Australian economy and that it allowed for maintenance of current recreational use. Others were concerned about the possible loss of biodiversity with this scenario.

The following table details the participants' comments, which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ May lose biodiversity which happens with logging
▪ Allows industry to contribute to the Australian economy — the balance of trade	
▪ Maintains current recreational uses	
▪ Maintains the status quo	
▪ Less subsidy for the timber industry	

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issue	Strategy
Increased tourism potential	Add diversity to the hinterland
Loss of jobs	Retrain people in the timber industry
	Train people in reforestation, not over-train
	Create jobs for displaced workers in the reserve system

Case study area — Rappville

History of settlement

Rappville is located inland on the north coast of New South Wales, between Casino and Grafton in the Richmond River LGA. The area is situated on a floodplain and was first used by Europeans as a camping place on the route between the Clarence River and Tenterfield. In 1838 the grasslands were used for several months by a sheep drover from the northern tablelands. One of the first settlements was at Myrtle Creek in 1860 where 230 acres were selected and later sold to a Grafton family who established a hotel, general store and butchery.

By the end of the 1800s the area had well established farming, dairying and timber getting industries, but transport to markets was a problem, exacerbated by many high floods between 1887 and 1901. This situation was improved by the first goods train between Casino and Grafton which commenced in 1904, followed by a passenger train in 1905. The coming of the railway line began the real development of Rappville as a village. The area was surveyed in 1911 with Henry Rapp being given a choice of blocks. In this year he built the present day Commercial Hotel. In 1911 a new station was built and the town was named Rappville.

Rappville became a thriving town which supported a hotel, two butchers, a bakery, a general store, refreshment rooms, ice works, two produce stores and a branch of the Bank of New South Wales which also operated as a post office.

Beef was an important industry, while State forests and private land provided timber, much of it being ironbark. A sawmill was built in 1912 close to the hoop pine grown at Mt Pikapene State Forest and teatree also became an important industry in the district.

Population

In 1996 Rappville had a population of 113 (ABS 1996). This level is similar to that of the 1991 ABS census when the population was recorded as 109. The median age of the town was 26 years in 1996 and 36 years in 1991 (ABS 1991, 1996).

Rappville selected characteristics

	Male	Female	Total
Total population	55	58	113
Aged 15 years and over	41	36	77
Aboriginal	0	0	0
Torres Strait Islander	0	0	0
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	51	54	105
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	3	3	6
Other country	0	0	0
Total	3	3	6
Speaks English only and aged five years and over	48	51	99
Speaks language other than English and aged five years and over	0	0	0
Australian citizen	53	55	108
Australian citizen aged 18 years and over	39	30	69
Unemployed	10	5	15
Employed	18	9	27
In the labour force	28	14	42
Not in the labour force	13	21	34
Unemployment rate	35.7%	35.7%	35.7%
Enumerated in private dwellings	53	58	111
Enumerated in non private dwellings	3	0	3
Persons enumerated in same address five years ago	29	31	60
Persons enumerated in different address five years ago	19	20	39
Overseas visitor	0	0	0

Source: ABS 1996

Major industries in the township of Rappville

The village exists primarily as a service centre to the rural community. Local businesses include a hotel, a general store/take away food business and a sawmill.

Richmond River Shire Council is investigating ecotourism and farmstays as a way to attract tourists to the area. Council also plans to increase awareness of the cultural heritage of the village through promotion and assistance programs (*Management Plan, 1998–2001*).

Industry by employment in the LGA

Industry by employment figures in the Richmond River LGA show the five major employers are agriculture, forestry and fishing (18.29%), manufacturing (14.62%), retail trade (11.61%), health and community services (10.36%) and construction (7.18%). Many of the local people are reliant on Casino for employment. Primary production in the area is generally beef and timber with some smaller areas of soy bean production.

The unemployment rate in Rappville for both males and females in 1996 was 35.7%, much higher than the LGA where the male unemployment rate was 17.2% and the female 14.9%. Only 27 people in the village of Rappville are employed, one-third of these in primary industry, one-third in manufacturing and the rest in accommodation, cafes and restaurants and communications services.

The following table summarises and compares the industry by employment in the Rappville township and in the Richmond River LGA.

Industry	Total % Rappville township	Total % Richmond River LGA
Agriculture, forestry, fishing	33.33	18.29
Mining	0	0.43
Manufacturing	33.33	14.62
Electricity, gas, water	0	0.43
Construction	0	7.18
Wholesale trade	0	4.15
Retail trade	0	11.61
Accommodation, cafes & restaurants	22.22	4.74
Transport & storage	0	3.10
Communication services	11.11	1.67
Finance & insurance	0	1.64
Property & business services	0	4.24
Government administration & defence	0	4.18
Education	0	6.07
Health & community services	0	10.36
Cultural & recreational services	0	0.96
Personal & other services	0	3.19
Not classifiable	0	1.15
Not stated	0	1.98

Source: ABS 1996

Income

The median individual weekly income of Rappville residents in 1996 was $160 to $199 and the median household income was $500 to $699 per week (ABS 1996).

Community infrastructure

Health

Most residents of Rappville travel to Casino, as their nearest larger urban centre, for their medical needs including doctors, hospital and community health services. Lismore with its larger range of specialist medical and hospital services would also provide services to Rappville residents.

Education

Rappville has a State primary school with an enrolment of 26 in 1997 and employing 2.33 staff. The number of enrolments has increased slightly since 1993 when the school had 21 pupils. Rappville Primary School receives extra funding through the Disadvantaged Schools Program. Rappville's high school students are bussed to Casino for their secondary education. The village has a playgroup for preschool aged children.

Housing

Home ownership in Rappville has decreased between 1991 and 1996 from 57% to 46%. The number of houses being purchased during this period remained relatively stable at approximately 25% whilst the numbers of houses being rented decreased from 17% to 13.5% (ABS).

Community services

Rappville's community services include a tennis club, sports club, a school parents and citizens association, a hall committee and a playgroup.

Annual events

Annual events in the town include the cattle dog trials held in April each year, an endurance ride which starts and finishes at Rappville and the rural camp draft, one of the largest held in Australia.

Outcomes of Rappville community workshop

(Held: 25 June 1997)

Significant events

The significant events identified by the community included loss of industry to the village, increase in new residents, and social changes brought about by change in the rural industries and increasing mobility of residents.

Date	Event
From 1980	Considerable social change. Since 1906 the basis of the town was the timber industry and grazing. The dairy industry was here intermittently. Rappville is on the edge of the Rainbow Region. Blocks have been subdivided since 1972 and new people have moved in. Now there are 15 houses where there used to be one. New people don't gravitate to Rappville
Last 15 years	Graziers have had to subsidise income with teatrees or work in town
Last 15 years	The social life has died down. There used to be a dance at the hall every week and you rode your horse to them. Now people are more mobile. They go into town or the kids have left the area
Last 15 years	Two cattle yards nearby to Rappville have closed. The cattle are put on a truck to Casino now
Last ten years	The small mills have closed down. Only the specific purpose mills have survived
1984	Coombell and Wyan schools closed
1987	The sleeper yard closed. We lost a lost of railway/sleeper workers. The pub was thriving because they all used it. The pub is quieter now
1996	The Rappville store/take-away opened
	We are still here. We refuse to give in

How did the community manage these events?

Positive event — growth of town and new people

- People have changed the land use. Broadacre grazing is now subdivided to 100 acre blocks. Teatree industry has boomed.
- Teatree industry and Southern Cross University research has meant $millions around Rappville.
- Casino has got a lot of new business from Rappville area.
- The pub has changed owners and attracts people. However, the breathalyser makes it hard to use the pub. There used to be 30 cars outside the pub on Sundays but they have been policed off the road.
- The new people come from the city looking for cheap land. They don't have a lot of money. New people are often unemployed. They have school aged children.
- A children's group started up.
- The school has had a minor increase from the growth. There's a new bus service from Elliot's Road. Some of the new people send kids to Leeville.

Negative event — loss of income in the area; loss of grazing income

- We used to be able to make a living on 300 acres but now you can't make a living from 3000 acres. The cattle graziers in the area are struggling to survive on cattle alone. They've got jobs in town, at a mill or have grown teatrees.
- In the late 1980s we had high interest rates, then six years drought, then the cattle prices went down. People have subdivided or got other jobs to supplement their income.
- Very few young people stay. Many are university educated and will not come back to work the land. Some children have stayed but only for the teatree industry. There used to be large families on the farms.
- The store recently reopened and people are showing great support.
- Some farms are on drought relief.
- It is not a level playing field in beef industry. Globalisation has had an impact. The Japanese now own or have an interest in 50% of abattoirs and feedlots**.**
- Drought has gone but the prices are still low. People have diversified so that they don't only rely on beef.
- CBD businesses in nearby towns are also struggling.

Community feelings about Rappville

The community reported enjoyment of community support, concern about the possible locking up of forests, and changes in rural industries. The box below details the participants' comments.

- It is great where I live. There is a potential for becoming self sufficient with organic fruit and vegetables.
- Worried about changes. We used to rely on farming. The farmers are older now and few sons are carrying on farming. There are only two or three sons working farms in the area.
- Things happen slowly in Rappville. In Whiporie the young people are staying and doing okay. Trying to break even economically takes up most of the day.
- I love it. I came here three years ago with $5 in my pocket. I had just eaten two apples for dinner. I didn't know where I was going to sleep. People in this town have been fantastic. It's home.
- I feel at home here. I've lived in many towns. Rappville is good because you can really talk to the people. The people here will help you out. I want to help them if I can. Over the last few years we have got good people at the store and the post office. It is a good and close knit community.
- I have a good feeling about the town. It is a positive, caring community.
- It's a beautiful area, a diverse area.
- Concerned with the locking up of the forests, with the lack of grazing land if they are locked up. It could cause a decline in Rappville. I am concerned that new people won't have a reason to come to Rappville.
- I've lived in Liverpool and Cabramatta. Rappville is a peaceful and great place. It's sad that forests will be locked up. These blokes have worked the forest for hundreds of years and I resent some bloke in Canberra saying we can't work it.
- Rappville is mainly cattle and beef but it is diversifying.
- Rappville is part of a wider community. I encourage my elderly relatives to come to Rappville. It's got great services. I see Rappville as a suburb of Casino, and I see Casino as a suburb of Lismore.

Visions for Rappville

Workshop participants identified a number of visions for Rappville. They included more employment and industries particularly rural for the area, the retention of the village atmosphere, and a thriving timber industry. The box below details the participants' comments.

- More local jobs for the locals, so they don't have to commute.
- More businesses and industries in Rappville, but just enough to stay as a village.

- I'd like to see more of the old times back. My father used to play violin and horn at the old country dances. I'd like to take my kids along to enjoy that sort of thing. It would be great for the town.
- Id like to see the village survive and not too much subdivision.
- More income in Rappville so that it isn't as hard to fund things for the school.
- More diversity so that we are not driven by $$. A balance between timber and grazing e.g. permaculture. Greater farm diversity, sustainable.
- More honesty from governments. More trees grown and more cattle in the area.
- The urban people especially Canberra and Sydney should be more informed about timber industry. I'd like to see the forests go along as they are now.
- Less confrontation between groups like the Forest Protection Society and the greens. There should be integration not confrontation.
- The village surviving with emphasis on the rural aspect, with more diverse farms that we have now.
- A railway siding with logs carried by train to Coffs Harbour. Less trucks on the road. A merchandising system for the residue — thinnings and woodchips.
- More plantations.
- More assistance (FISAP) for innovative technology and practices so that Rappville prospers.
- Return to forests of what's been taken away so the area can continue its use of high quality timbers.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

The major impact identified was a loss of potential for transporting and marketing of timber. Some participants saw the development of a tourist industry as a result of this scenario as well as the protection of wildlife. Others were concerned about the loss of the timber industry to Rappville and about fire hazards and loss of income from land rates.

The table below details the participants' comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
	▪ No possibility of establishing a major centre for the transport and marketing of timber in Rappville
	▪ Increased fire hazard
▪ Improved protection of native flora and fauna	
▪ Tourism development, ecotourism	
	▪ Loss of rates to the shire
▪ Flow-on effect from tourism, benefit local businesses	▪ Loss of flood refuge for stock. Forests provide high areas for stock during flood
▪ More overseas visitors to the area	▪ Loss of Pastoral Protection fees to shire

Scenario 2 — Deferred areas remain available for timber and other industry uses

Positive impacts	Negative impacts
▪ More employment opportunities	
▪ More opportunity for private landowners to capitalise on improved infrastructure and have logs processed from their forests	
▪ Continued grazing, fewer fire problems. Better management of forests for multiple uses	
▪ Protection of the people's livelihoods	

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issue	Strategy
Misconceptions about forest disturbances, forest management	More education about forests and about forestry. Listen to those who have the practical knowledge of how to manage the land
Poor management of natural resources. An incredible waste	Methods that use all products from forests e.g. composting, value-adding. Maintain species diversity. Research on utilising wastage Multiple use reserves

Case study area — Woodenbong

History of settlement

Woodenbong is situated in the northern New South Wales border ranges, on the Summerland Way. It is surrounded by the Tooloom, Toonumbar, Mount Barney, Mount Lindsay, the Border Ranges and Main Range National Parks. The village is located within the Kyogle Shire.

The first inhabitants of Woodenbong were the Gidabal Tribe who traversed the areas of the Upper Clarence and Richmond Rivers. They called the area Widgen-bung from which the current name is derived. In 1908 the Aboriginal reserve Mulli Mulli Crescent was gazetted by the State Government. Initially the Aboriginal people were given 250 acres of land, but this was reduced to 126 acres, its present size, in 1937.

The first white inhabitants were cedar getters, coming from the south via the Clarence region, and squatters who came to the area via the northern tablelands. Woodenbong Station, the site of the present township, was established by an absentee squatter, Captain John Pike, in 1848. The other large holdings, Tooloom Station and Unumgar Station, were settled by Thomas Cootes (1842) and James Glennie (1846) respectively.

The village of Woodenbong was proclaimed in 1908 and in the same year the first town blocks were auctioned. By this time Woodenbong already had a police station, store, timber mill and post office as well as numerous temporary dwellings.

The timber industry has always been of central importance to Woodenbong’s well-being. The first mill was established in 1886 and set up specifically to cut cedar. The mill closed in 1892 due to a slump in timber production resulting from a general economic downturn. Although another small mill was established, most of the timber cut in the Woodenbong area from 1906 to 1929 was sent to Killarney in Queensland for milling. In 1929 a mill powered by steam was opened. It was sold to Lance Sly in 1933 who later relocated the mill to its present site in Woodenbong. This mill is still owned by the Sly family (Magee, B. 1987. *In the shadow of Mount Lindsay, the story of Woodenbong*).

Population

In 1996 the population of Woodenbong was 377 (ABS 1996), a slight increase on 1991 census when the population was recorded as 349. The median age of the population in 1996 was 34 years and in 1991 the median age was 31 years. Woodenbong has a significant Aboriginal and Torres Strait Islander population making up approximately 11%of the village total population.

Woodenbong selected characteristics

	Male	Female	Total
Total population	188	189	377
Aged 15 years and over	137	141	278
Aboriginal	21	18	39
Torres Strait Islander	3	0	3
Both Aboriginal and Torres Strait Islander	0	0	0
Australian-born	172	168	340
Born overseas:			
Canada, Ireland, NZ, South Africa, UK, and USA	7	10	17
Other country	4	5	9
Total	11	15	26
Speaks English only and aged five years and over	164	165	329
Speaks language other than English and aged five years and over	0	4	4
Australian citizen	181	181	362
Australian citizen aged 18 years and over	122	123	245
Unemployed	5	3	8
Employed	87	48	135
In the labour force	92	51	143
Not in the labour force	43	87	130
Unemployment rate	5.4%	5.9%	5.6%
Enumerated in private dwellings	183	189	372
Enumerated in non private dwellings	5	0	5
Persons enumerated in same address five years ago	97	98	195
Persons enumerated in different address five years ago	67	69	136
Overseas visitors	0	3	3

Source: ABS 1996

Major industries in the township of Woodenbong

Woodenbong principally serves as a service centre for the surrounding area. Community services such as schools and health facilities are major employers in the village, as is the timber mill. The main industries in the township are manufacturing (22%), education (20%), retail trade (12%), construction (11%) and health and community services (8%). Tourist accommodation includes the Woodenbong Hotel, one farmstay and two camping grounds.

Industry by employment in the local government area

Industry by employment figures in the Kyogle LGA show that the five major employers are agriculture, forestry and fishing (23%), manufacturing (12%), retail trade (10%), health and community services (10%) and education (10%). Local primary production is based on dairying, beef cattle and timber. Manufacturing in the area is closely tied to primary production by value adding. It could therefore be said that more than one-third of jobs are based on the natural resources on the region.

The following table summarises and compares the industry by employment in the Woodenbong township and in the Kyogle LGA.

Industry	Total % Woodenbong township	Total % Kyogle LGA
Agriculture, forestry, fishing	6.02	23.23
Mining	0	0.09
Manufacturing	21.80	12.12
Electricity, gas, water	0	0.68
Construction	10.53	5.4
Wholesale trade	2.26	3.8
Retail trade	12.03	10.12
Accommodation, cafes & restaurants	2.26	2.98
Transport & storage	3.01	2.88
Communication services	0	1.6
Finance & insurance	2.26	1.5
Property & business services	4.51	4.08
Government administration & defence	2.26	5.00
Education	20.3	9.57
Health & community services	8.27	9.63
Cultural & recreational services	0	1.20
Personal & other services	4.51	2.15
Not classifiable	0	0.86
Not stated	0	3.10

Source: ABS 1996

Income

The median weekly individual income was $200 to $299, whilst the median weekly household income was $300 to $499. High income earners, that is those earning over $50 000 per year, made up almost 3% of the population (ABS 1996).

Community infrastructure

Health

The Northern Rivers Area Health Service offers a range of health services to the Woodenbong community through its multi-purpose service located in Urbenville, 17 kilometres away. These services include emergency care, hospital and respite care with a visiting medical officer and nursing staff. Community nurses visit Woodenbong and primary health services such as drug and alcohol counselling, early childhood nurse and a mental health nurse also visit by appointment.

Education

Woodenbong has a central school which had 218 enrolments in 1997 and employed nine staff. School enrolments have declined by 39 since 1993 when 257 pupils were enrolled. The school is assisted by extra funding through the Disadvantaged Schools Program. Aboriginal students at the school are supported by a full-time Aboriginal education aide. The school is also a centre of excellence for agriculture.

Woodenbong has a preschool which accommodates 20 children (State Forests of NSW, *Environmental Impact Statement*, volume A, 1995).

Housing

Home ownership in 1996 was 45%, those being purchased 18%, and 30% of houses were rented. The numbers have remained relatively stable since 1991 with a slight increase in those being rented (28%) and a decrease in those being purchased (23%), whilst those fully owned had a slight increase of approximately 2.5% (ABS).

Communications

The Woodenbong community is served by the free *Kyogle Newspaper* which has columns set aside for Woodenbong news.

Community services

Woodenbong's community services include an outreach preschool, an Aboriginal lands council, a youth club and a public hall committee and progress association. A library service is available in the form of a deposit station. Other community services focus on sport and include a golf and tennis club, a sports centre and rodeo and showground committees.

Annual events

Annual events in the town include the rodeo, show and picnic fun day.

Outcomes of Woodenbong community workshop

(Held: 18 June 1997)

Significant events

The significant events identified by the community included the celebration of many community events, closure or downsizing of services, changes in the timber industry, and changing demographics of the village.

Date	Event
1952	Annual rodeo
1986	Village festival in Urbenville
1986	First Annual Yowie Ball
1991	Annual show started
1991	Tennis club established. (Revived since the establishment of the multi-purpose centre)
1991–97	Movies held in the summer months in the Town Hall. Run by volunteers
1992–97	Drought and rural crisis
1993	Sports centre built at the school
1993	Marginalising of Woodenbong and Urbenville with the development of new electoral boundaries
1993	Telstra downsizing and withdrawal of Telecom workers
1995	Improved road access to Kyogle
1995	Closure of the National Bank
1995	Opening of value-adding plant at Woodenbong
1996–97	Establishment of Tooloom & Richmond Range National Parks. Went hand-in-hand with guarantee of wood supply agreements for value-adding
1995	Opening of the multipurpose centre at Urbenville
1996	15 extra jobs at Ford Timbers from opening the value-adding plant
1996	Opening of the multi-purpose centre at Urbenville
1997	Garage closed at Urbenville
Last four years	Closure of small businesses — chemist, butcher, saddler, greengrocer
Last ten years	Tourist ventures started, but people come through the township and don't spend any money. Farms have been bought by State Forests and plantations have been established
Last 15 years	Steady decline in student numbers Years 7–12. In 1982 there were 180 students. By 1997 there were 110

How did the community manage these events ?

Positive event — opening of the Sports Centre

- There were already established sporting groups but nowhere to play basketball. Lorraine Bryant, a school teacher who was keen on basketball, discussed the possibility of getting a grant from Department of Education. She lobbied government for the grant.
- The Youth Club raised $35 000 over a period of years towards the costs.
- The community had a working bee to clear the site. This was managed through the school. Total value of the centre is now around $500 000.
- The engine drivers of the community did a lot of work. It is a spectacular building, has a sprung wooden floor, and is quite an advanced building for this community. The community is very proud of it.
- New sports activities were started. The youth club uses it and it has created more opportunities for inter-school sport and other competitions with other schools and communities. It has opened up more opportunities for students to interact with and compete against students from other schools.

Negative event — trouble getting people to relocate to Woodenbong

- Closure of businesses has made it difficult for older people to access services. They have to send prescriptions out by bus to get filled, and they have to use credit cards for medications. People go to Kyogle to shop and do all their shopping there. A butcher has set up a delivery service to deliver meat to households which is good, but it also means that there is no opportunity for locals to set up a butcher's again. Money leaves the town and none comes in.
- The decision making process is done too far away and by people who have no understanding of the local issues. Woodenbong needs confidence to address its future. We need security so that there are jobs at the mill, and so the school won't lose a teacher etc. We need investments, and we need to know there is a future in the town.
- There have been enormous changes in the age of the population. Woodenbong used to have lots of dairy farmers. Now people on properties are getting older, properties are getting bigger, but young people are not taking them on.
- Decisions are being made by people who have no idea. We're too remote to have any sort of influence. The town is starting to get a depressed rural feel about it. People don't want to buy, and its very hard to encourage people to relocate here.

Community feelings about Woodenbong

The community reported on good community spirit, lack of social problems, concern about the future of Woodenbong, and loss of services and businesses. The box below details the participant's comments.

- Just moved back here — love and see the potential here, and feel that there is a need to encourage it.
- Last few years morale has been down, but it's not too bad.
- Don't see a future here — our jobs have been taken over from contractors way down south and New Zealand.
- State Forests have deserted us.
- Friendliest town in New South Wales.
- Good to live here. It's central to coast and inland. I could move my business and do better, but I don't want to desert the community.
- I'd like to see Woodenbong develop tourism and develop arts and crafts.
- There's room for improvement to develop tourism. Its a friendly place.
- Always lived here and I'm fairly fond of it.
- I was born here. It's very safe and excellent for bringing up children. The schools are excellent. Woodenbong is in a great position. We're only two hours from anywhere you'd want to go to. I don't want to leave.
- Safe place to live and bring up kids.
- Love it here. Been here since 1988. I've seen a lot of things go down, but people have hung on and been supported by the community.
- I like the area. I have invested and will keep on investing. Everyone here is on a first name basis.
- Good community spirit. I like going to school here, but I don't see future jobs.
- More opportunity for the youth of the town.
- It's a model community. There are no serious drug problems. We pull together. Woodenbong has a good community spirit. I want to stay here. There are opportunities here, but we need to get a base. Forest and farming blended together would be good, but forest decisions are a problem.
- Tremendous natural environment, clean, no pollution, welcoming and very friendly.

Visions for Woodenbong

Workshop participants identified a number of visions for Woodenbong. Some participants saw tourism related to the timber industry as an answer to Woodenbong's economic problems. Others wanted better national park facilities and improvements in the timber industry for example value adding. The box below details the participants' comments

- Bring stability and money through into Woodenbong from work of artists in the area.
- Tourism infrastructure — like motels.
- Tourist facility at mill.
- Tourism in national parks— bush cabins, bushwalks, riding trails.
- The timber industry working with tourism.
- Management of forests for timber and conservation combined so that they work together.
- Relaxed regulations for bed and breakfast so that there are incentives to set them up.
- Woodwork facility like carriage rebuilding at Ballarat.
- School with good education and strong numbers — say 200 in primary school and 200 in secondary school.
- Money for roads to bring tourists who spend money in the area.
- National Parks get money to develop facilities in the park to increase public access.
- Ways to get tourists to spend money e.g. national park camping area.
- Multifaceted timber processing area including wood carving, forest tours, and packages for tourists.
- Sawdust for local potting mix industry.
- National parks shopfront with Aboriginal and non-Aboriginal workers.
- Get businesses back in town.

Reactions to forest use options

Deferred areas remain available for conservation and other uses

The major concerns related to loss of employment and a general decline in the community. Some hoped that extra local jobs would be created in national parks, but most thought that this scenario would lead to a general loss of employment and services in the community. Management of forests and the potential to overlog the remaining harvestable areas was another important issue raised in this scenario.

The table below details the participants’ comments which have been charted to reflect the way they were prioritized.

Positive impacts	Negative impacts
	▪ Big loss of jobs ▪ A slow painful death of the community, and it won’t be noticed quickly enough to stop it
▪ Could mean more local jobs if there was an increase in staff in National Parks for tourism and to maintain roads, and control fires, feral animals and weeds	▪ It will mean devastation for businesses
	▪ Empty houses will result in cheap rent to people less acceptable to community. Could mean increased social problems like Ravenshoe ▪ Loss of environmentally friendly building material
▪ Funds forthcoming from State revenue, not industry	▪ Economic vacuum for 20–30 years until tourism kicks in. People will leave, school numbers will go down even more, and we’ll lose our policeman and ambulance driver ▪ Loss of army training and loss to the local economy ▪ Burden on remaining areas available for harvesting. They are already overlogged because of lack of resources. This is bad for the forests ▪ Students will have to travel for education as school downgraded, and we’ll lose both teachers and subjects ▪ Influx of derelicts who want to grow hash as a cash crop ▪ There’s already enough bush for recreation ▪ The Aboriginal community loses access to bush tucker ▪ A town dependent on social security
▪ None	▪ Burden on firefighting and State Emergency Service volunteers ▪ Green areas on the map have already been logged and we shouldn’t return. It’s so devastating for the timber industry

Deferred areas remain available for the timber industry and other uses

The following table details the participants’ comments which have been charted to reflect the way they were prioritised.

Positive impacts	Negative impacts
▪ Allows opportunities for new businesses based on forest industries e.g. service industries ▪ Increase investment in the area because of increased confidence ▪ Potential for skills development and multi-skilling for young people and Aboriginal people ▪ Confidence in town. The fog will lift	

▪ Will help with the national balance of payments. Importing results in massive losses to the nation	
▪ Timber is an environmentally friendly product. Increase consciousness of this with education. Wood is the best there is. Don’t use chemicals	
▪ People at Muli-Muli community support timber harvesting. It will mean that some of their needs are met	
▪ Management of the forests will be better because of the income generated through the levy on timber products that the industry pays to State Forests	
▪ Roads will be rejuvenated and maintained for recreational access	
▪ Better feral animal and weed control	▪ With decreasing pressure on need to fill quotas, possible degradation of forests
▪ Will help maintain a competitive timber industry	▪ More traffic pressure on local roads. It’s already a poor system
▪ Victory for common sense. Will show that the powers that be have woken up	▪ Possible influx of greens, tripods and a lot of conflict. The possibility of a forest blockade

Issues and strategies

The participants in the workshop identified a number of issues and strategies in relation to the scenarios. They are recorded below.

Issues	**Strategies**
More jobs in conservation	More national parks jobs for Woodenbong & Urbenville, and a shopfront to employ Aboriginal people
Tenure	Open national park tenure for harvest under certain guidelines where not required for CAR reserve system
Roads & infrastructure	State forests and national parks pay rates
Buying land for State forest plantations	Replant non-productive State forest land instead of buying private land
Forest management	More stakeholder input to ensure better outcomes for all. All one tenure, all national parks multi-purpose, forests with harvest plans
Feral animals & weeds	More control strategies & better management of national parks

Surveys of occupational communities

Survey collection methods have been described previously in 'Methodology'. Data has been aggregated here to provide for confidentiality provisions. However the information collected from occupational communities will be used to inform more detailed impact assessments.

Mills

The sawmill industry in the North East CRA region is very diverse and complex, ranging from an integrated operation which employs 105 persons to one or two person operations. It is dispersed throughout the North East New South Wales region, but there are concentrations around particular urban centres, the highest in the region being around Grafton.

The full spectrum includes green mills, green and processing mills, and processing plants. A number of operations draw their resource solely from State Forests NSW, others from both State Forests and private property, and others from private property only.

Of those mills that were surveyed, 585 workers responded to surveys. Forty-eight per cent of these were employed in hardwood mills that received quota from public forests.

The remaining fifty-two per cent were employed in hardwood and softwood processing plants that drew their resource from either green sawn mills, State Forest softwood plantations or private property. These employees are less likely to be directly affected by changes to forested land tenure.

Mill workers — hardwood quota mills

Over 88% of hardwood mill workers surveyed were male. Mill workers' ages ranged between 15 and 67 years with over 45% aged between 30 and 45 years; 3.9% of respondents identified as Aboriginal and/or Torres Strait Islanders.

Fifty per cent have completed Year 10 at school, 22% have completed a TAFE certificate course, and 4% have completed a degree or diploma.

The following table locates mill workers who work in hardwood mills which obtain quota from State forests within communities. As may be seen, most live in Grafton although they are also concentrated in other urban centres including Coffs Harbour, Kyogle, Dorrigo and Woodenbong

Almost 40% of hardwood mill workers have been in their current job for five years or more. Over 10% have been in their current job for more than 20 years.

Quota mill workers by residence

Town	Respondents %	Town	Respondents %
Grafton	30.9	Walcha	2.2
Coffs Harbour	9.7	Murwillumbah	2.0
Kyogle	8.7	Coutts Crossing	1.7
Dorrigo	6.3	Tenterfield	1.5
Woodenbong	6.0	Glen Innes	1.5
Macksville	4.6	Other	11.6
Casino	4.3	Unknown	0.8
Lismore	3.8		
Urbenville	3.6	Total	99.2

There was a high correlation between those who had been working in those mills for less than two years and those who had been working in the timber industry for the same amount of time. Over 40% of all workers had been working in the timber industry itself for longer than ten years. Over one-third of the workers have a partner or spouse employed in the industry and 28% have other family members employed in the timber industry in the Upper North East study area.

Over 47% of mill workers have dependent children who attend local schools and most also have other family ties to the local area.

The largest category of hardwood mill workers are those who rent their homes (41%). Twenty-three per cent own their house outright. Eleven per cent of mill workers have had to move one or more times between towns to stay employed in the timber industry.

The annual income for most mill workers (63%) is between $12 000 and $25 000 before tax. Combined household income for the largest category of mill workers (33.9%) is between $12 001 and $25 000 per annum, suggesting either multiple low income workers or single worker households.

Mill workers — softwood mills

Over seventy per cent of softwood mill employees interviewed were male, with the age range of interviewees extending from 17 to 62 years. Nobody identified as being an Aboriginal and/or Torres Strait Islander.

Sixty-six per cent of softwood mill workers earned between $12 001 and $25 000 per annum before tax. A further 25% earned between $25 001 and $40 000. The largest category of households (41%) had a combined annual income of between $25 001 and $40 000.

Softwood mill workers interviewed have worked in their current job for between one and 26 years with 32% of this group in their current job for five or more years. Around 58% of mill workers have been in the timber industry for five years or more.

Forty-one per cent of softwood mill workers partners and spouses are employed in the timber industry with 40% of interviewees identifying up to three family members employed in the timber industry in the Upper North East study area. Fifty-four per cent of those surveyed indicated they have dependent children attending local schools.

Mill workers — mills operating with timber from private properties

Mill workers in mills dealing with timber from private properties were predominantly young males (96.7%). The range in age of respondents was 19 to 65 years with most aged between

23 and 42 years. No mill worker in this category (private property resource) identified as being Aboriginal and/or Torres Strait Islander.

Grafton and Coffs Harbour were the most popular places of residence with one-third of mill workers living in these towns. Twenty-six per cent of mill workers have had to move between towns in order to maintain employment in the timber industry, some moving up to 12 times.

Over 54% of private property mill workers indicated they have dependent children attending local schools.

Forty-four per cent of the private property mill workers have worked in their current job for between five and 45 years. Mill workers indicated that they had spent between one and 55 years working in the timber industry, with around 78% indicating they have worked in the industry for six years or more.

Mill workers indicated they had between one and eight family members employed in the timber industry in the Upper North East, with 16.4% indicating they had a partner or spouse employed in the industry.

The annual income of this group before tax was generally between $12 001 and $25 000. Over 53% of mill workers said their combined annual household income was between $25 001 and $40 000.

Contractors/haulers

Ninety five per cent of contractors interviewed were male, none of whom identified as being Aboriginal and/or Torres Strait Islander. Their ages ranged from 19 to 67 years with 60% aged between 40 and 50 years. The mean age for contractors is 42 years.

Contractors with children have between one and five children — the majority having only one. Forty-five per cent have dependent children attending local schools.

Contractors live in two main centres — Grafton (20%) and Urbenville (15%). The remainder are fairly evenly distributed over the study area. Forty per cent have lived in their place of residence for ten years or more. Fifty per cent of contractors own their home outright with a further 30% paying off a mortgage.

The following table identifies the business location of contractors who responded to the surveys and their employment numbers in 1998.

	Number employed			
Location	<10	10–30	>40	Total
Avocado Hts	2			2
Casino	7			7
Crosmaglen		14		14
Grafton	1	13	47	61
Mallanganee	1			1
Ocean shores	4			4
Rappville	5			5
Tabulum	1			1
Tenterfield	4			4
Townsend	7			7
Uki	4			4
Urbenville/Woodenbong	10	11		21
Woolgoolga	4			4
Yorklea	2			2
Total	52	38	47	137

Family ties are strong, with 75% of contractors noting that their families live in their town of residence. Contractors have identified between one and 25 relatives living in their local area, with these families having lived in the local area between four and 150 years.

Thirty per cent of the contractors noted they had moved township to keep employment in the timber industry. Half the contractors surveyed said they worked away from home for significant periods. Fifty-five per cent have worked in an industry other than the timber industry.

Members of the largest group of contractors (30%) have a combined household income of $25 001 to $40 000, followed by a slightly smaller group earning between $40 001 and $60 000 (25%). Seventy-five per cent of contractors have a partner or spouse also employed in the timber industry, mostly in a clerical or administrative position.

On average, contractors surveyed had worked for 11 years in their current jobs and around 25 years in the timber industry.

Sixty per cent of contractors supplied to four or less mills in 1996, 40% supplying to two or three mills.

Contractor employees (bush crew)

The survey group was predominantly male with ages ranging from 19 years to 58 years, and an average age of 39 years. Three per cent of workers identified as Aboriginal and/or Torres Strait Islanders.

Most contractors' employees (14.7%) lived in Grafton with other concentrations in Woodenbong, Casino, Walcha and Tenterfield. The rest were fairly evenly distributed throughout the region. Connections to the region are strong with most having lived in the same community for more than ten years. Over three-quarters of the workers either own their own house or are paying it off.

More than half of all workers have school age children who attend local schools.

Workers indicated a low level of educational attainment; for over 75% their highest qualification was Year 10 education or lower.

Annual incomes are mostly between $25 001 and $40 000. Over 61% of workers had a combined annual household income of $25 001 to $40 000, suggesting that most households had either two low incomes or a single income.

Sixty-five per cent of those surveyed had been working in their current job for five years or more, with an average duration of eight years. Eighty-two per cent indicated they had been in the timber industry for five years or more, with some indicating employment of up to 43 years in the industry.

There were strong connections to the timber industry with the majority (83%) employed in the industry for more than five years, and almost seventy per cent for more than ten years. However, twenty per cent of these workers have had to move from one town to another to remain in employment.

State management agencies

State Forests

Two hundred and twenty-two people were employed by State Forests in 1997. Of these, one hundred and fifty one responded to surveys.

State Forests respondents ranged in age between 21 and 64 years. Over 40% of State Forests workers are aged between 40 and 50 years. Of these, 3.2% identified as Aboriginal and/or Torres Strait Islanders. In contrast to direct timber occupational groups, 21% of State Forests respondents were women.

State Forests workers are in general well educated, with 43.7% having a degree or diploma. A further 24% have a Year 10 certificate.

Fifty-eight per cent of State Forests workers surveyed have worked for the organisation for ten years or less. Over half have a partner or spouse also employed in the industry. Eighty-nine of the 158 respondents reported having dependent children.

The majority (54.4%) earned between $25 001 and $40 000 per annum before tax. Over 39% had a combined household income of between $40 001 and $60 000.

The largest group of respondents live in Coffs Harbour (19%) with other concentrations in Grafton (15%), Dorrigo (10%), Casino (10%) and Urbenville (6%). The remainder are widely dispersed throughout the region. One-quarter of respondents in this group rent their homes. Thirty per cent own their homes outright.

National Parks and Wildlife Service

The total population of those employed by the National Parks and Wildlife Service was not available for survey, but 71 workers responded to surveys.

Workers in the National Parks and Wildlife Service are predominantly male, and over thirty years of age. Respondents ages ranged from 23 to 62 years. None of the respondents identified as being Aboriginal and/or Torres Strait Islander.

Forty-four per cent of respondents hold either a degree or diploma.

Forty-six per cent of the National Parks and Wildlife Service employees surveyed have worked in their current jobs for more than five years. Over half have a partner or spouse also employed in forest-related industry. Fifty-eight per cent of those responding had dependent children.

Of the sample obtained, 11% of workers live in both Dorrigo and Armidale and 10% live in Grafton and in Alstonville. Port Macquarie, Lismore and Glen Innes are also major domiciles. The remainder of residences are distributed widely throughout the region.

National Parks workers are employed at Grafton (18%), Alstonville (16%), Dorrigo (13%), Armidale (13%), and Port Macquarie (9%). The remainder are employed in other areas throughout the region.

Forty-seven per cent earn between $25 001 and $40 000 before tax. A further 44% earn between $40 001 and $60 000 before tax. Combined household income also covers two income ranges. Thirty-seven per cent of households had a combined household income of $25 001 to $40 000. A further 35% of households had a combined income of between $40 001 and $60 000, suggesting there were a number of single income households in the survey group.

A quarter of those surveyed own their own home, but the largest category (45%) is those paying off a mortgage.

Other forest users

Beekeepers

Ninety-eight surveys were mailed to beekeepers who held a total of 989 sites. Fifty-three businesses responded.

Beekeepers who access the forests in the UNE region live as far to the north as Brisbane and as far south as Warwick. Their employees are also widely dispersed with some travelling as far as Beenleigh, Warwick. There are no significant concentrations in any particular urban centre.

Respondents indicated they spend on average around 79% of their time in beekeeping activities with over 56% of their enterprise relying on State forests. Twenty-eight of these employ one person, and a further twelve employ two people.

Occupational permits

Two hundred and twenty-three surveys were mailed to those with grazing leases with State Forests. Of these 70 responded.

Respondents indicated they spend between 5% and 100% per cent of their work time using forests for grazing activities, with 53% indicating they spend all their time in this activity. The largest group (28.6%) indicated their enterprise relied 100% on use of State forests. Eight respondents indicated their enterprise relies on private native forest for between 10 and 40% of their work. Private land is used by less than 35% of respondents, with their enterprises relying on access to the land for between 15% and 100% of their work. Only one respondent used public pine plantations. Private native species plantations were used by only three respondents — all using the land for less than 10% of their activities.

Employment in this sector tends to be moderate, with 20% indicating they have one employee and a further 19% indicating they had two employees. The remainder have between no and six employees. More than half the employees are employed full-time.

Grafton, Tenterfield, Woodenbong and Casino are the most common places of residence of respondents.

Tourist operators

Twenty per cent of the 641 businesses which were sent surveys responded. Of these 1.6% identified as Aboriginal and/or Torres Strait Islander. Almost half of all respondents had lived in the town for less than five years.

The following table identifies the type of business and the percentage of respondents for these activities.

Type of activity	Respondents %
Hotels, motels, lodges, guest houses, farmstays or bed and breakfasts	45
Holiday flats, units or houses	16.0
Outdoor tours	19.0
Caravan parks	11.0
Tourist attractions	7.6
Cafes and restaurants	7.0
Transport	6.0
Shops and galleries	5.3
Other (undisclosed)	14.0

Of those who responded to surveys, 17 businesses did not answer the question *'How many people do you employ?'* The remaining 112 employed a total of 397 full-time, 123 part-time and 338 casual workers.

The combined household income for the largest group of these (30%) was between $25 000 and $40 000 per annum, although 25% earned between $40 000 and $60 000 per annum.

Owners/managers were asked if their business was dependent on the forests, to what degree, and which ones they were. The response to the level of dependency was so small as not to allow estimates to be made. The lack of specificity also makes analysis of levels of dependency on particular forests impossible. For example eleven people said Dorrigo, and another two said Wild Cattle Creek, so thirteen operations identified the forests around Dorrigo as being important for their business. However, as they did not identify whether they meant national park, State forests or a combination of both, it is impossible to conclude anything other than that there is a concentration of forest-related tourism activity in the Dorrigo area.

The largest group of tourism operators (31%) consist of those who have lived in the study area for between three and five years.

The following table records frequency of response (open ended, multiple response) to forest areas in the region.

Forest area named	No. respondents
Border Ranges National Park	5
Wild Cattle Creek	2
Dorrigo	11
Friday Creek area	1
New England National Park	1
Moonee Reserve	1
Bruxner Park (Reserve)	3
Byron	2
Boambee Reserve	1
Bunjalung National Park	2
Nightcap National Park	1
Boonoo Boonoo National Park	1
Wedding Bells State Forest	1
Morgo St Reserve	1
Richmond Range State Forest	1
Platypus Flat	1
Bellingen	1
Whian Whian State Forest	4
Broken Head Reserve	1
Mt Nullum	1
Mt Warning	5
Victoria Park (Reserve)	1
Washpool National Park	1
Gibraltar Range National Park	1
Yuragir National Park	2
Pretty Gully Reserve	1
Bald Rock National Park	1
Girard State Forest	1
Lighthouse Reserve (Byron Bay)	1
Rotary Park (Reserve)	1
Never Never Reserve	1
Sara River	1
Total	44

Recent changes in the timber industry

In the period July 1996–July 1997 particularly, there have been increasing numbers of sawmills accessing resource from private property even when these mills have a State forest quota or allocation. This has been necessary to fulfil shortfalls in timber supplies.

A number of sawmills that have had quotas for salvage have found that the larger mills' recovery rate has increased and have found it less viable to rely on the salvage quotas, and have moved onto private property in the short or long term.

As the resource has become scarce, some mills have accessed timber from the Lower North East CRA region to obtain a particular species necessary for their operations.

In May 1998 two sawmills closed, Boral's Bonalbo mill at Sandilands (which had employed 19 people) and Sly Brothers at Woodburn. Sly Brothers' contract harvest operation was retained.

In June 1998, Hurfords Timber and Building company at Lismore extended its operations with a new $6 million value added plant at Tuncester near Lismore. The first two stages of the operations involved a new timber processing line, new kilns and other machinery. A proposed stage three is a state-of-the art plant that would take the total cost of the project to more than $10 million. The upgrade signalled a major shift in Hurfords products away from hardwood house frames to a higher percentage of top grade products with particular emphasis on furniture and joinery grade products. The project was assisted with a $1 million grant from the Forest Industry Structural Adjustment Package, and includes a commitment to employ an additional nineteen people.

Community attitudes

Introduction and aims

The central aim of this report is to present and analyse the results of a community attitudes survey that focused upon forest uses and values. The survey was conducted as part of the current Regional Forest Agreement being negotiated in New South Wales. Five separate reports were commissioned, one for each of the four key comprehensive regional assessment (CRA) regions, and a final report summarising trends throughout the State. Three thousand randomly selected households were targeted to participate in the telephone survey, with a minimum of 380 phone calls to each CRA region. This report details the responses from participants in the Upper North East CRA region.

The main aims of the survey were to assess social values relating to forest use and to provide the data in a form that could be geographically referenced and entered into a GIS program. The following five key subject areas were explored:

- demographic attributes of the respondents;
- employment details of the respondents;
- respondents' opinions towards social and environmental issues;
- respondents' current personal uses and desired future uses of forested land;
- the values respondents invest in forested land.

Multiple use forestry

Australia, along with most western nations, is progressively developing into what has become known as a post-industrial society. Both the economy and levels of employment have become increasingly dependent upon growth in the information and service industries, with a corresponding decline in the relative reliance upon primary sector employment and income. Most people live in urban areas and have become removed from the needs and practices of primary producers. It is predominantly from within these urban centres that new attitudes and appreciations of Australian landscapes and environments have been developed (see Bolton 1992).

This growing interest in conservation has put tremendous pressure on some primary producers, leading to well publicised and often colourful conflicts between resource managers and environmentalists. The public has become interested in environmental matters and it has been well documented that environmental concerns and policies have been vital in influencing the result of at least one Federal election (see Bean et al. 1990). The move away from purely utilitarian perspectives of nature to more romantic and symbolic appreciations of nature has had tremendous impacts upon the forestry industry. Forests now need to be managed to satisfy the symbolic values society invests in forested land as well as their more obvious commercial value. Multiple-use forest management needs to incorporate social, environmental and economic considerations if it is going to continue to satisfy and serve the Australian population (see Koch and Kennedy 1991). This report aims to investigate how the people of the Upper North East perceive and value these three primary areas of forest management.

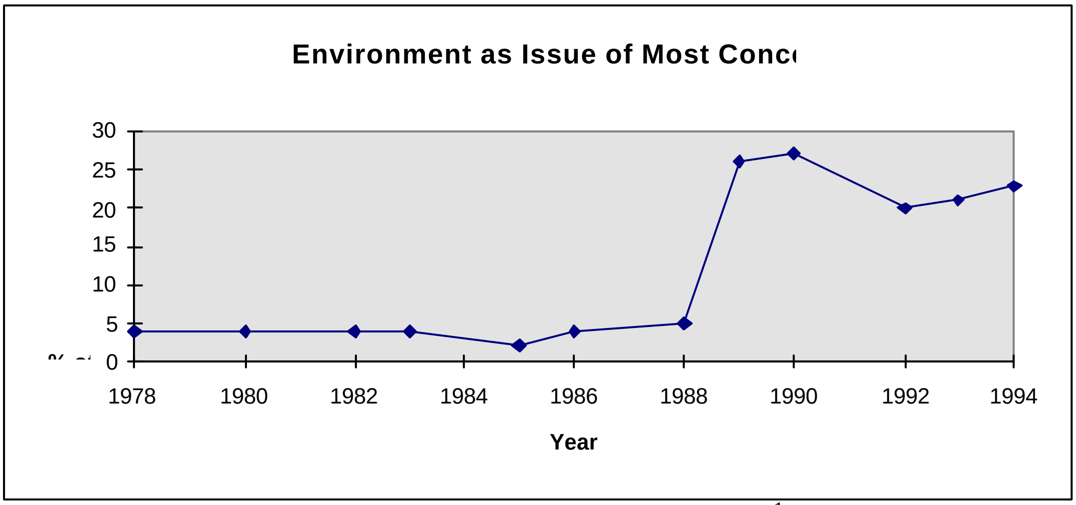
Related surveys

The popular rise of environmental interest in the wider community has attracted the attention of politicians and academics, and resulted in a number of environment-oriented surveys. Whilst these surveys invariably concentrate upon different dimensions of people's attitudes towards the environment, making comparison difficult, there are normally two sections that may be compared and are useful for this report. These sections are the overall ranking of economic, social and environmental values, and the structure of people's environmental concern.

Ranking social, economic and environmental values

A standard question in past surveys has been to ask people to indicate from a list of issues which issues they are most concerned about. The environment forms a single category and is contrasted with competing economic and social values. Figure 1 shows the results of national surveys investigating the importance of environmental values. Slight changes in wording occurred after the 1986 survey but cannot be attributed to the rapid upsurge of concern from 1989 onwards. It is more likely that the massive media coverage given to global issues such as the greenhouse effect and the ozone 'hole' during this period raised the profile of the environment as an important issue amongst the community (Crook and Pakulski 1995, Bell 1994). Whilst media attention has dropped since then, public interest and concern for environmental issues has not. What figure 1 shows is that almost 25% of Australian people believe that environmental issues are of more concern than other purely social or economic issues, symbolising the rise in importance of environmental values. However it should be noted that traditional concerns like health, education and employment still tend attract more responses than the environment.

Figure 1



Adapted from: Crook and Pakulski 1995 and EPA 1994[1]

---

[1] 1994 figure derived from NSW population only. 1975-86 question was about the problem of most concern, 1988-94 question was about the most important issue the government should do something about.

Structure of environmental concern

Researchers have tried to establish the structure of community concern. Two methods have been used; the first is a closed format question that asks respondents to indicate from a set list which environmental issues they are most concerned about. Table 1 shows national trends found through this type of surveying which identifies issues regarding forests to be of equal importance as greenhouse/ozone type issues, being second only to pollution as the community's main concern. It should be noted that comparing surveys in this way is problematic due to changes in wording and research techniques.

Table 1: Primary environmental concern (percentage of respondents)

Environmental issue	AES[2] 1990	ANOP[3] 1991	AES[2] 1993	ANOP[3] 1993
Pollution	40	51	38	56
Industrial waste	10	8	9	12
Greenhouse/ozone	19	10	16	9
Forest related issues	*10*	*19*	*12*	*19*
Wildlife destruction	5	n/a	7	n/a
Land degradation	9	8	7	12

Alternatively, surveys can allow respondents to make more than one choice, indicating whether respondents were concerned about the issue at all, rather than having to establish which is the most important issue (see table 2). Again forest issues ranked highly, being ranked as the second most important issue in a national 1992 poll.

Table 2: Multiple environmental concerns

Issue	ABS National 1992[4]
Air pollution	40
Forest related issues	*33*
Ocean pollution	32
Freshwater pollution	30
Ozone	29
Industrial waste	21
Loss of species	19
Greenhouse	17
Land degradation	15

Forests rank highly in the structure of people's environmental concerns. The following community attitudes survey results will be analysed within this context.

[2] AES - Australian Electoral Studies - source Crook and Pakulski 1995
[3] ANOP - Australian National Opinion Polls - source Lothian 1994
[4] ABS - Australian Bureau of Statistics - source Lothian 1994

Demographic characteristics of sample

Introduction

The demographic section of the questionnaire investigated general characteristics of the group being interviewed and was contrasted with 1991 census material for the postcode delineated Upper North East CRA region. This allows judgements to be made about the extent to which the Upper North East sample represents the Upper North East CRA region.

Demographic distribution of sample group

Table 3 summarises the results of the key demographic questions.

Table 3: Key demographic variables (sample profile, N = 112)

	Frequency[5]	Percentage[6]		Frequency	Percentage
Gender			Children		
Male	54	49.5	Yes	84	76.4
Female	55	50.5	No	26	23.6
Gender			Children		
Male	54	49.5	Yes	84	76.4
Female	55	50.5	No	26	23.6
35–44	20	18	Aboriginal or Torres Strait Islander identity		
45–54	22	19.8	Yes	3	2.7
55–64	11	9.9	No	108	97.3
65+	23	20.7			

Gender

A high response rate was found from both females and males, accurately reflecting 1991 census figures for the region (males 49.7%, females 50.3%).

Age of respondents

The age profile of the Upper North East sample adequately reflects 1991 census data although there is an over-representation of people in the 45–55 years age bracket. Apart from the 55–64 age bracket the three highest categories of respondents were those aged between 25 and 34, 35 and 44 and those over 65 years of age, reflecting the census distributions.

[5] Frequencies do not necessarily add up to 112 due to incomplete values in some responses.
[6] All percentages given in this report are valid percentages.

Figure 2

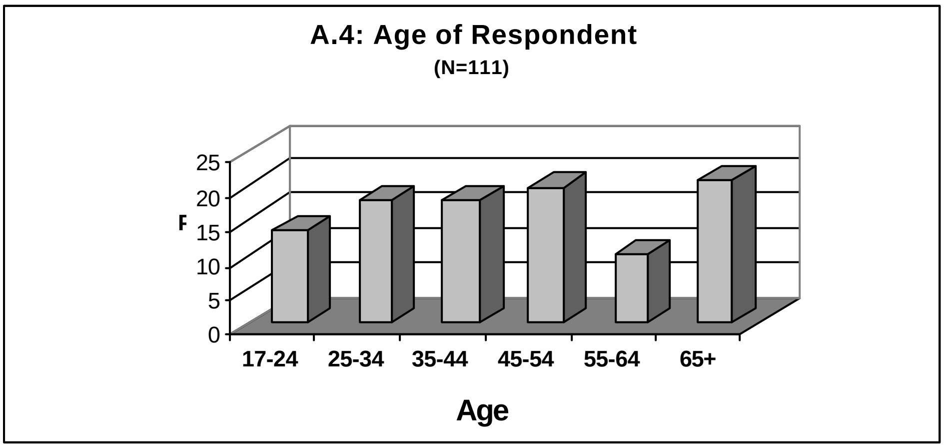


Table 4: Comparison of age between 1991 census data of the Upper North East Region and Upper North East CRA sample[7] (N = 111)

Age in years	1991 census	Upper North East CRA sample (N = 117)
17–24	9.3	13.5
25–34	13.8	18
35–44	15.2	18
45–54	10.3	19.8
55–64	9.9	9.9
65+	15	20.7

Parents

As Table 3 shows, of the respondents surveyed 76.4% of the sample were parents. This variable could potentially affect people's opinions on subjects involving intergenerational equity.

Language spoken at home

Ninety seven per cent of the respondents indicated that they spoke English at home, whilst only one person (0.09%) indicated that he or she spoke other languages at home. This is lower than census figures of 2.8%, and reveals a potential problem with telephone interviewing methods.

Aboriginal and Torres Strait Islander status

Three people (2.7%) identified themselves as Aborigines or Torres Strait Islanders, showing a slightly higher representation than in census data (1.9%).

[7] Census data includes whole UNE CRA population whilst report data represents only those over 16 years of age.

Proximity to forest issues

Figure 3 indicates the sample's responses to three key questions gauging their proximity and awareness of key issues relating to forests, such as their concern for, and awareness of, environmental/conservation issues represented by their membership of or subscription to environmental/conservation groups; their awareness of forest-related industries represented by their employment in forest-related industries; and their concern for, and awareness of, labour related issues represented by their membership of a trade union.

Figure 3

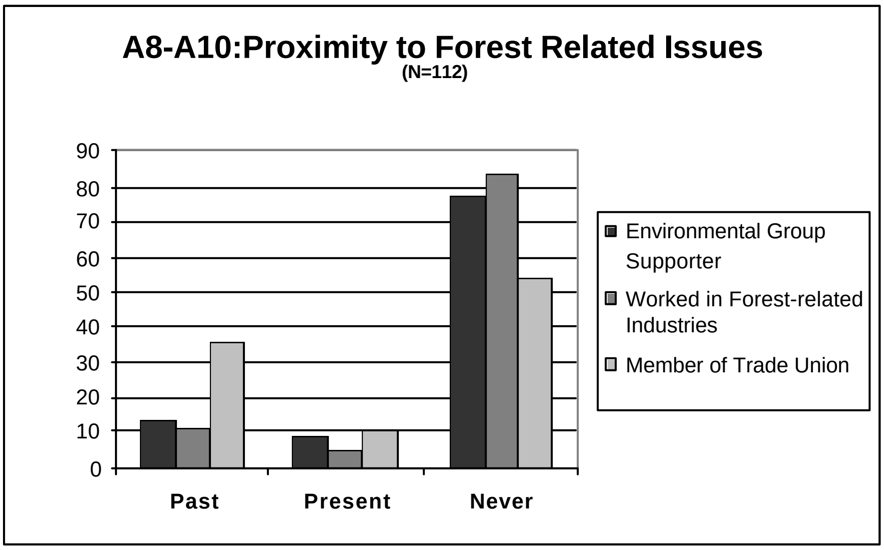


Table 5: Proximity to forest-related issues (N = 112)

	Past		Present		Never	
		%		%		%
Member of or subscriber to environmental or conservation group	15	13.4	10	8.9	87	77.7
Worker in forest-related industries	13	11.6	6	5.4	93	83
Member of a trade union	40	35.7	12	10.7	60	53.6

The data presented in table 5 and figure 3 indicate that 77.7% of respondents have never been members or subscribers to environmental or conservation groups, with 22.3% of people reporting that they have been (13.4%) or are presently (8.9%) members or subscribers to environmental or conservation groups.

Eighty three per cent of people reported that they have never been employed in forest-related industries, with 17% of people in the Upper North East CRA region reporting that they had been (11.6%) or are presently (5.4%) employed in forest-related industries. No specification was supplied about the term 'forest-related industries' with positive respondents potentially being employed in the economic, social or conservation sides of these industries.

Fifty four per cent of respondents reported that they have never been a member of a trade union. Forty six per cent have been (35.7%) or are presently (10.7%) members of a trade union.

Education and employment

Introduction

Respondents were asked about the level of education they attained, their income level, and their occupation. The level of education was compared to 1991 census data.

Level of schooling

Figure 4 and table 6 indicate the responses to a question regarding the highest level of schooling attained by each respondent. Seventy three per cent of respondents had either attained the Year 10 school certificate (or equivalent) or higher, with the remainder of the respondents achieving lower levels of schooling.

Figure 4

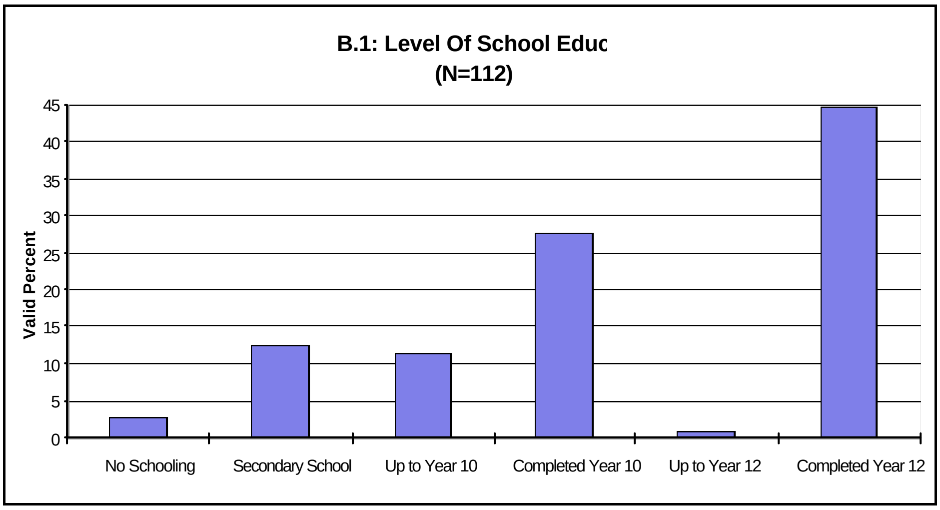


Table 6: Level of school education (N = 112)

	Frequency	Percentage
No schooling	3	2.7
Secondary school	14	12.5
Up to Year 10	13	11.6
Completed Year 10	31	27.7
Up to Year 12	1	.9
Completed Year 12	50	44.6

Tertiary education and other qualifications

Respondents were asked about other tertiary, trade and industry qualifications they had attained;, the frequencies and percentages are given in table 7. Figure 5 shows the responses, indicating 22.4% of all respondents had not attained any formal qualifications other than schooling. This is substantially lower than 1991 census figures for the same region, that indicated 63.3% of the population had no formal qualifications after schooling. Census data also revealed that only 10.1% of the Upper North East population had university qualifications whereas in the sample group 29.6% had university degrees or diplomas. This indicates that our sample is biased towards the more educated segments of the community with a disproportionate amount of less educated people declining to be interviewed.[8]

Figure 5

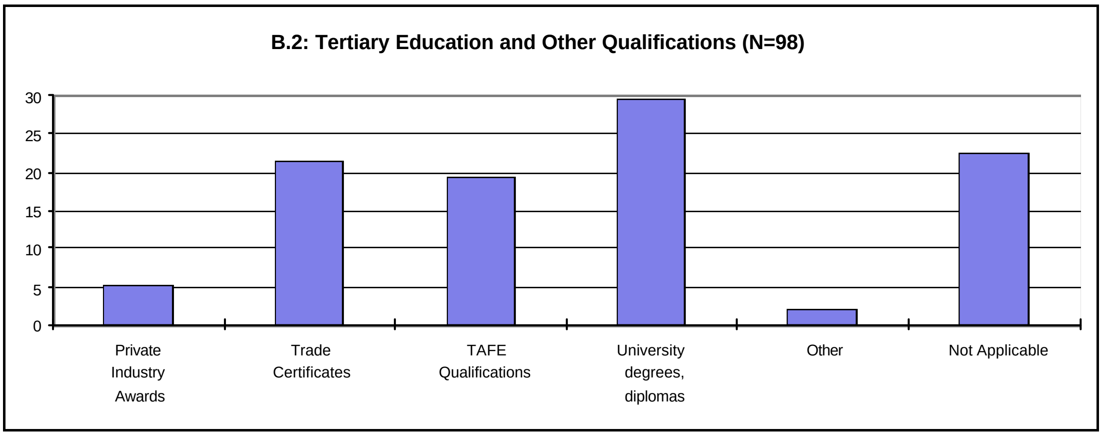


Table 7: Tertiary education and other qualifications (N = 98)

	Frequency	Percentage
Private industry awards	5	5.1
Trade certificates	21	21.4
TAFE qualifications	19	19.4
University degrees, diplomas	29	29.6
Other	2	2
Not applicable	22	22.4

Employment and occupations

A high percentage of respondents who participated in the survey (46%) were not currently employed. Of the 46% who were unemployed, 19% were 65 years or over. This reflects 1991 census data that shows 44.2% of the Upper North East CRA region are not currently within the labour force, and a further 17% of the labour force are currently unemployed. (see figure 6).

[8] It should be noted that 12.5% of people did not answer the question.

Figure 6

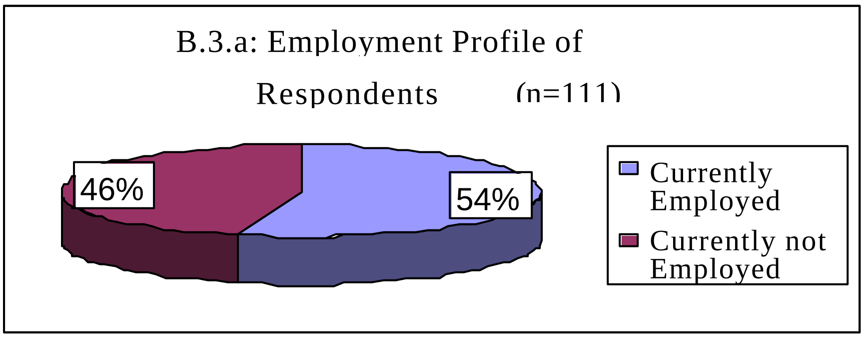


Table 8 and figure 7 show the distribution of employed people according to the Australian Bureau of Statistics occupation categories[9]. A high percentage of people surveyed fall into the occupation category of 'professional' (21.7%) which is significantly higher than the 1991 New South Wales average (12.9%). Labourers and machine operators (3.3%, New South Wales 19.1%) and clerks (6.7%, New South Wales 15.7%) were significantly under-represented.

The debate about the effect of socioeconomic status and educational levels upon people's environmental attitudes has led to little consensus amongst researchers (see for example Papadakis 1993, Cotgrove and Duff 1981). However it is possible that those who are highly educated, or of a high socioeconomic status (both of whom are disproportionately represented in this survey) may show more concern for environmental issues than the general public.

Figure 7

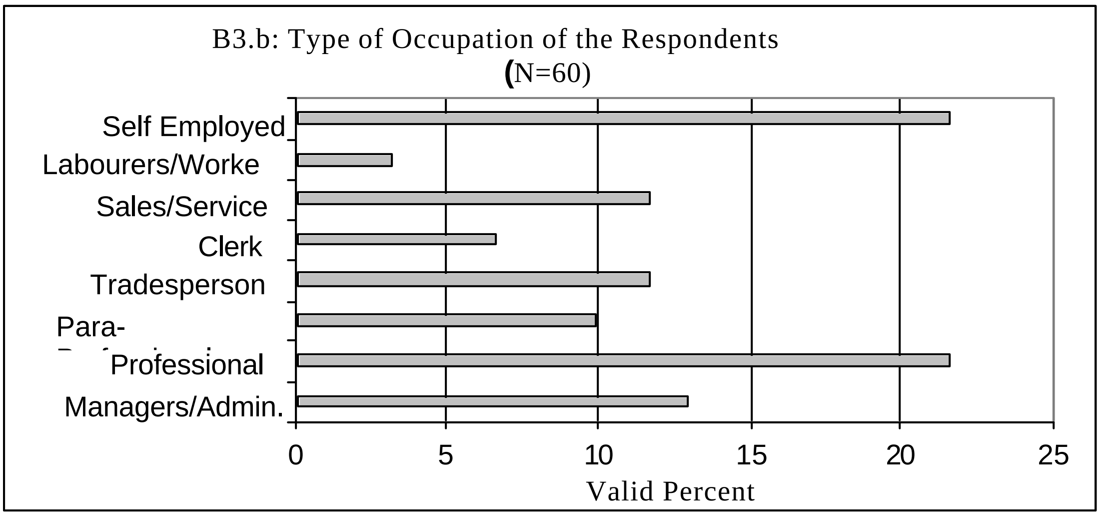


Table 8: Occupation types of respondents (N = 60)

	Frequency	Percentage
Managers and administrators	8	13.1
Professionals	13	21.7

[9] The category 'Self Employed' was included although it is not an ABS category. The ABS category 'Plant and Machine Operators and Drivers' was incorporated into 'Labourers and Related Workers' in this survey.

Para-professionals	6	10
Tradespersons	7	11.7
Clerks	4	6.7
Salespersons and personal service workers	7	11.7
Labourers and related workers	2	3.3
Self employed	13	21.7

Income

We can see from table 9 and figure 8 that a large percentage of respondents can be classified as medium to low income earners. Almost 30% of respondents reported earning less than $15 000, reflecting the high number of respondents who were not currently employed. One fifth of the respondents indicated they earned more than $35 000 per year, whilst the remainder either earned between $15 000 and $35 000 per year (36.7%) or did not respond (14.3%).

Figure 8

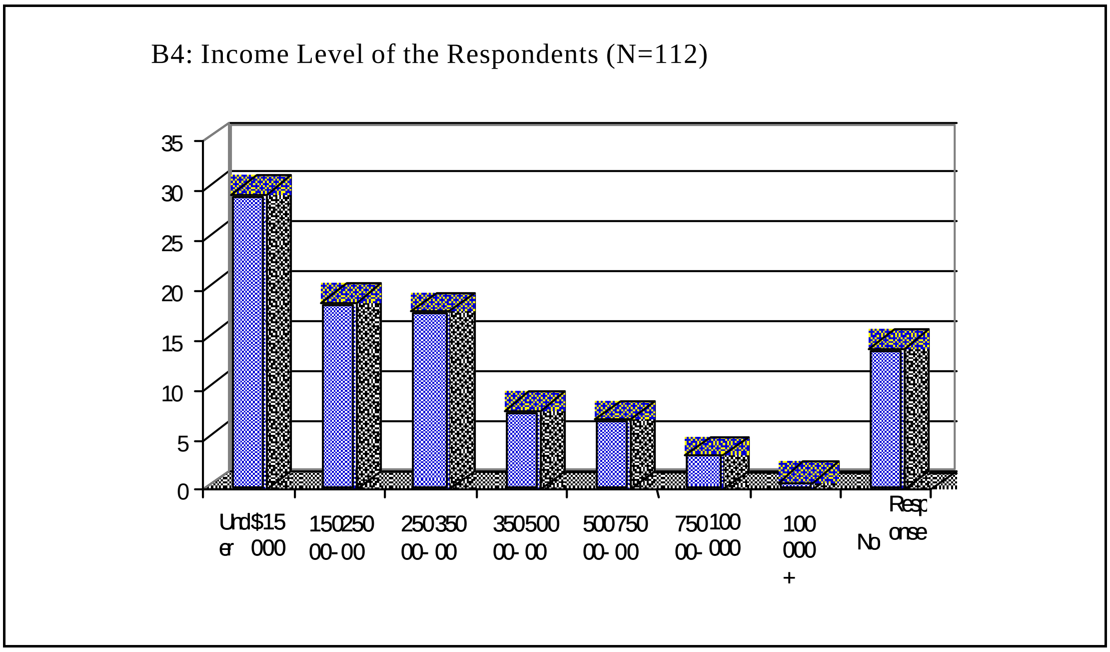


Table 9: Income levels (in $) of respondents (N = 112)

	Frequency	Percentage
Under 15 000	33	29.5
15 000–25 000	21	18.8
25 000–35 000	20	17.9
35 000–50 000	9	8
50 000–75 000	8	7.1
75 000–100 000	4	3.6
100 000+	1	.9
No response	16	14.3

Social and environmental issues

Introduction

In order to investigate how people think about general environmental issues, four questions were asked investigating the extent and structure of their concern. The first question asked people to rank the importance of environmental issues when compared with other broad social and economic issues at an abstract level. The second question investigated the strength of people's concern for environmental issues as a whole, whilst the third question investigated the structure of people's concern for the environment. The last question looked at the strength and commitment people have for environmental issues by seeing how concern has been translated into behaviour.

Contemporary social issues

A list of seven contemporary social issues were read out to participants in the survey and they were asked to indicate which two issues they felt were of most importance to Australia at the present time. The list included education, environment, the health system, unemployment, crime, promotion of economic growth, and discrimination.

Figure 9 and table 10 indicate that 'unemployment' (ranked as one of the top two issues by 46% of people surveyed), education and the environment (40% each) were the main issues people from the Upper North East CRA sample were concerned about. The health system was the fourth most popular issues followed by crime, promotion of economic growth and discrimination. When compared to a recent face to face survey commissioned by the New South Wales Environment Protection Authority (EPA 1994) which asked a similar question for the whole of New South Wales, some differences become apparent. The EPA study found unemployment (50.4%), education (30.9%) and health (29%) as the three highest ranked issues whilst only 22.8% mentioned environment as one of their primary concerns. This shows that people in the Upper North East region are concerned about social (health, education) and economic issues (unemployment) but are also more concerned about environmental issues than has been found in previous studies.

Figure 9

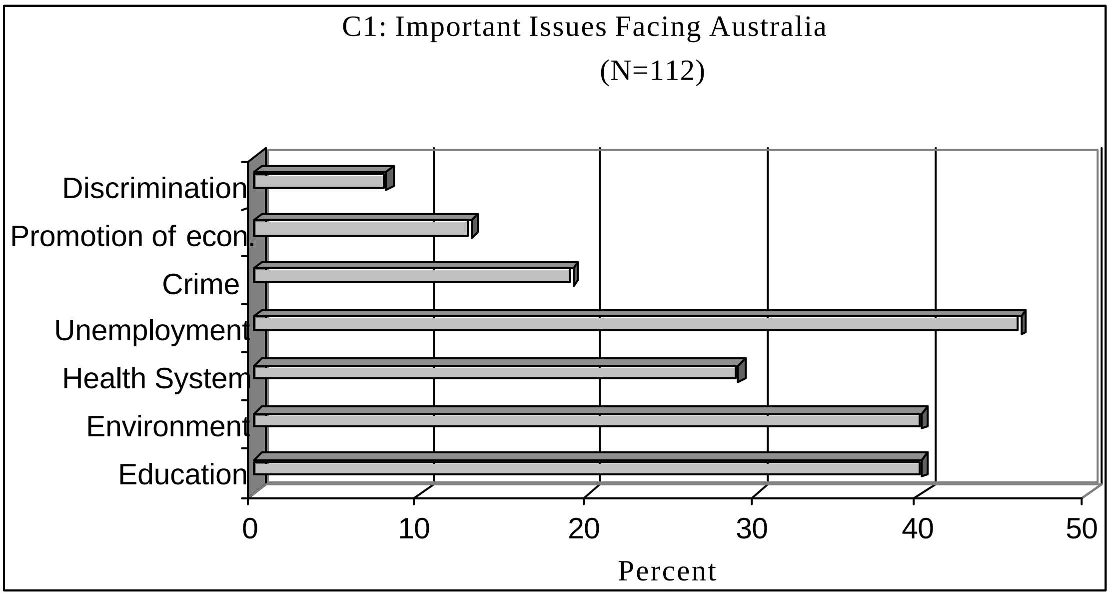


Table 10: Most important issues facing Australia (N = 112)

	Frequency	Percentage
Discrimination	9	8
Promotion of economic growth	14	13
Crime	21	19
Unemployment	52	46
Health system	33	29
Environment	45	40
Education	45	40

Social concern for the environment

Of a list of three statements relating to the level of concern shown by society for the environment, respondents were asked to indicate which statement most closely matched their own attitude. Table 11 indicates that 67.9% of respondents felt that society doesn't show enough concern for the environment, while only 9.8% of people thought society shows too much concern for the environment. There is a high degree of concern and interest within the sample group towards environmental issues, with two-thirds of the respondents indicating they would prefer to see more attention given to environmental values.

Table 11: Social concern for the environment (N = 112)

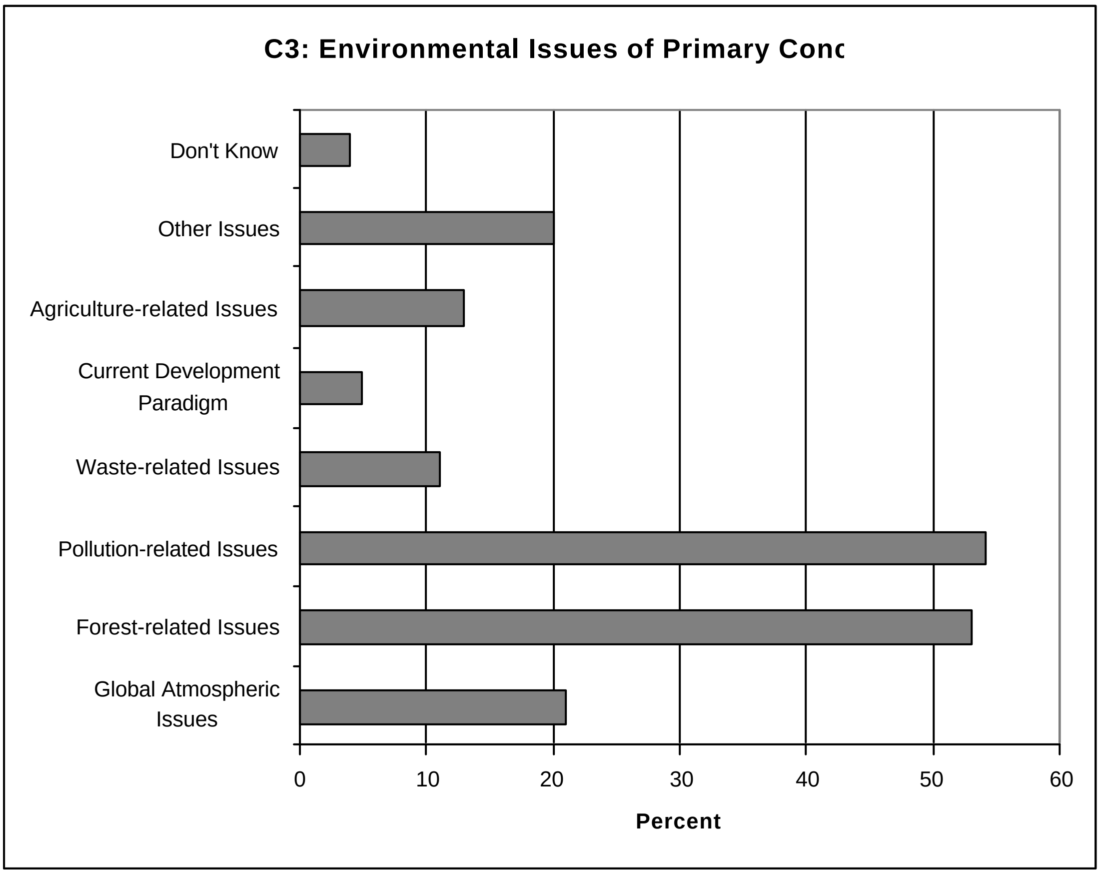
	Frequency	Percentage
Society shows too much concern for the environment	11	9.8
Society shows about the right amount of concern for the environment	25	22.3
Society doesn't show enough concern for the environment	76	67.9

Environmental issues of most concern

Participants were asked to indicate the two environmental issues about which they were most concerned, in order to evaluate issues of prime importance by region, and demonstrate the structure of people's environmental concerns.

Table 12 indicates that for the Upper North East CRA region 41% of respondents indicated forest-related issues[10] such as logging and deforestation were the environmental issues they were most concerned about. Pollution issues, particularly water pollution (25%), were also high in the structure of people's environmental concerns. Figure 10[11] groups together the primary categories of issues showing that both forest-related issues and pollution-related issues were the primary concerns of the respondents. This reveals the high symbolic value both forests and pollution command in the structure of people's environmental concern.

Figure 10



[10] Due to the opening sentences of the questionnaire in which the term 'forest' is mentioned (see Appendix 1), there is the potential for respondents answers to be structured in ways that prioritise forest-related issues.
[11] The categories for figure 10 were created as follows: Global Atmospheric Issues (Greenhouse Effect / Global Warming / Ozone Layer / CFCs); Forest Related Issues (Deforestation / Logging / Biodiversity); Pollution Related Issues (Beach Pollution, Water Pollution, Air Pollution, Unspecified Pollution), Waste Related Issues (Production of Waste, Waste Disposal, Litter); Current Development Paradigm (Current Development Paradigm, General Consumption); Agricultural Issues (Pesticides / fertilisers, Land degradation / Erosion / Salinity), Other Issues (Energy Production, Water Conservation, Mining, Population Pressure, Noise Pollution, Media /Education, Urban Sprawl, Other)

Table 12: Environmental issues of most concern (N = 112)

	Frequency	Percentage
Greenhouse effect/global warming	12	11
Ozone layer/CFCs	10	10
Deforestation/logging	46	41
Biodiversity loss	13	12
Mining (non uranium)	1	1
Population pressure	2	2
General consumption	2	2
Noise pollution	2	2
Beach pollution	4	4
Water pollution	28	25
Water conservation	5	4
Air pollution	6	5
Unspecified pollution	21	19
Litter	3	3
Production of waste	3	3
Waste disposal	6	5
Land degradation/erosion/salinity	12	11
Energy production	2	2
Pesticides/fertilisers	2	2
Industrial emissions	1	1
Urban sprawl	7	6
Media/education	1	1
Current development paradigm	3	3
Others	2	2
Don’t know	5	4

Environmentally responsible behaviour

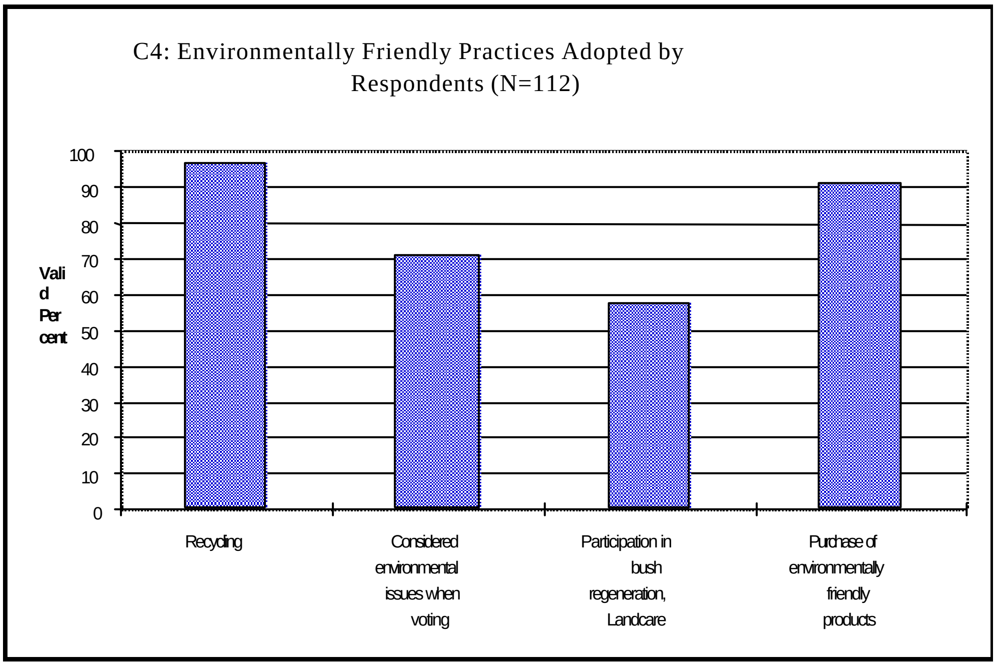
In order to assess how people’s environmental concerns are translated into environmentally responsible behaviour (as a measure of their commitment to environmental issues) the survey asked participants whether they had adopted any of the following practices in an effort to become more environmentally friendly in the last five years: recycling (waste-minimisation behaviour); considered environmental issues when voting (political activity); participation in bush regeneration, Landcare or an active anti-litter campaign (active participation); and purchase of environmentally friendly products (consumption behaviour).

Table 13 reveals a strong performance by the participants on behaviour such as recycling, with 97.3% of respondents indicating they recycle, and the purchase of environmentally friendly products (91.8%). More committed forms of behaviour such as voting considerations and participation in community-based environmental campaigns also ranked relatively highly showing a strong commitment and interest in environmental issues within the sample (see table 13 and figure 11).

Table 13: Adoption of environmentally friendly practices (N = 112)

	Frequency (Yes)	Percentage
Recycling	108	97.3
Considered environmental issues when voting	79	71.2
Participation in bush regeneration, Landcare or an active anti-litter campaign	65	58
Purchase of environmentally friendly products	101	91.8

Figure 11



Uses of forested land

Introduction

There are two dimensions to people’s attitudes towards forest land use. The first is their actual personal use, and the second is how they would like to see the land used at a broader scale. Factors influencing people’s ideas include current land categories, the two most important ones being the division between State forests and national parks. To investigate these factors people were asked about their current usage patterns and how they think the land should be managed. If people were aware of the differences between national parks and State forests they could indicate different uses for each of these land units; if they were unaware, forested land was referred to under the umbrella term of ‘public forests’. To further investigate uses of forested land a series of statements were read out to the respondents where they could indicate the extent to which they disagreed or agreed with the statement. To differing extents all the questions in this section also indicate the way people value forested land.

Personal uses of forested land

Awareness of national park/State forest distinctions

Respondents were asked about their awareness of the difference between State forests and national parks, and based on their response they were streamed into a series of questions. Almost two-thirds of respondents (63%) reported an awareness of the difference between State forests and national parks (figure 12) whilst approximately one-third of respondents were unaware of the difference between State forests and national parks.

Figure 12

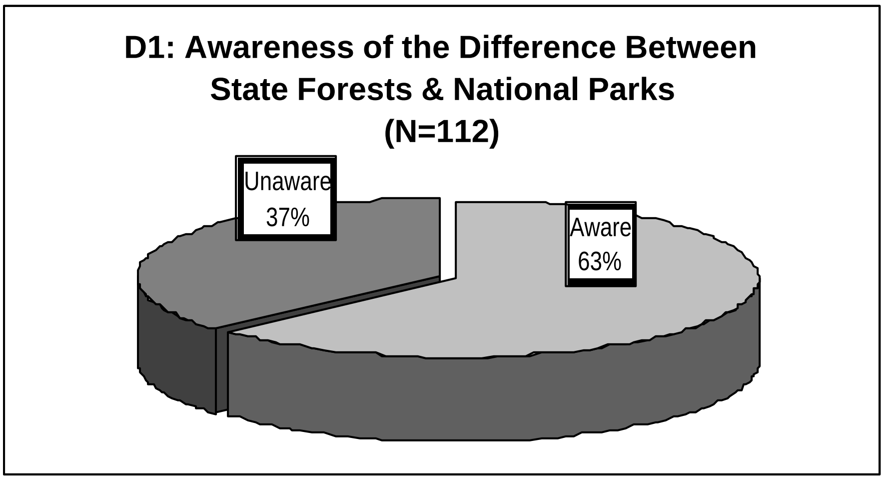


Table 14 shows the frequency of visits to State forests and national parks (for people aware of the difference in tenure between the two) and public forests. There was a large diversity within the sample group in regard to the frequency with which they visited forested land. Some respondents visited forested areas (State forests, national parks and public forests) regularly, with 16.9%, 15.5% and 9.2% respectively, reporting to visit these at least once every two weeks. However a high percentage of respondents reported having little contact with forested areas, visiting irregularly, with 26% of respondents reporting they visited State forests once a year or less, 35.7% visiting national parks once a year or less, and 29.3% visiting public forests once a year or less.

Table 14: Frequency of visits to public forests

	Frequency			Percentage		
	N=71 State forests	National parks	N=41 Public forests	State forests	National parks	Public forests
>once a week	7	6	2	9.9	8.5	4.9
Fortnightly	5	5	2	7	7	4.9
Once a month	6	10	7	8.5	14.1	17.1
Once every 2–3 months	15	17	11	21.1	23.9	26.8
Once every 6 months	12	13	7	16.9	18.3	17.1
Once a year	10	7	7	14.1	9.9	17.1
Hardly ever	10	10	5	14.1	14.1	12.2
Never	6	3	0	8.5	4.2	0
Not applicable	41	41	71			

Entrance fees

Table 15 shows that 52% of respondents who were aware of the difference between State forests and national parks reported having paid an entrance fee to visit a State forest or national park. There was, however, a lower percentage of respondents (24%) reporting paying an entrance fee who were not aware of the difference between State forests and national parks.

Table 15: Payment of entrance fee to visit forested land

	Frequency (yes)	Percentage (yes)	Frequency (no)	Percentage (no)
State forests & national parks (N = 71)	37	52.1	34	47.9
Public forests (N = 41)	17	41.5	24	58.5

Willingness to pay

Table 16 shows the results of the question inquiring about respondents' willingness to pay an entrance fee to forested land. Figures 13, 14 and 15 and table 15 highlight the differences in responses for State forests and national parks. Twenty five per cent of respondents reported that they would not be prepared to pay an entrance fee to State forests compared to only 17% for national parks. The most popular amount people would be willing to pay was between $4 and $6.

Fifteen per cent of respondents who did not know the differences between national parks and State forests would not be prepared to pay an entrance fee to public forests. The most popular amount they would be prepared to pay was similar to those who were aware of the differences, being between $4 and $6.

Table 16: Amount (in $) respondents are prepared to pay to visit forested land

	Frequency			Percentage		
Amount in $	(N = 71) State forests	(N = 70) National parks	(N = 40) Public forests	State forests	National parks	Public forests
None	18	12	6	25.4	17.1	15
1–3	21	20	9	29.6	28.6	22.5
4–6	23	23	12	32.4	32.9	30
7–9	6	9	7	8.5	12.9	17.5
10–15	3	4	4	4.2	5.7	10
16–20	0	1	2	0	1.4	5
21–30	0	1	0	0	1.4	0
>30	0	0	0	0	0	0

Activities in forested land

The main activities people undertake when they visit public forests are bushwalking, picnics and nature appreciation (table 17, figures 16 and 17). People who knew the difference between national parks and State forests were more likely to visit forested land in order to visit wilderness areas, to camp, or for employment (figure 16), whilst those who did not know the difference were more likely to visit public forests for nature appreciation (figure 17).

Table 17: Typical activities in forested land

	Frequency		Percentage	
	Aware of difference (SF & NP) N = 71	Unaware of difference (SF & NP) N = 41	Aware of difference (SF & NP)	Unaware of difference (SF & NP)
Picnics	28	14	39.4	34.2
Camping	15	4	21.1	9.8
Bushwalking	51	30	71.8	73.2
Nature appreciation	29	21	40.9	51.2
Visit wilderness	11	3	15.5	7.3
4WD	1	2	1.4	4.9
Cycling	0	1	0	2.4
Touring	3	1	4.2	2.4
Educational and scientific	3	1	4.2	2.4
Hunting	0	1	0	2.4
Swim, surf	5	2	7	4.9
Employment	4	0	5.6	0
Clean-up campaign	1	2	1.4	4.9
Spiritual	1	1	1.4	2.4
Cultural appreciation	1	0	1.4	0

Figure 13

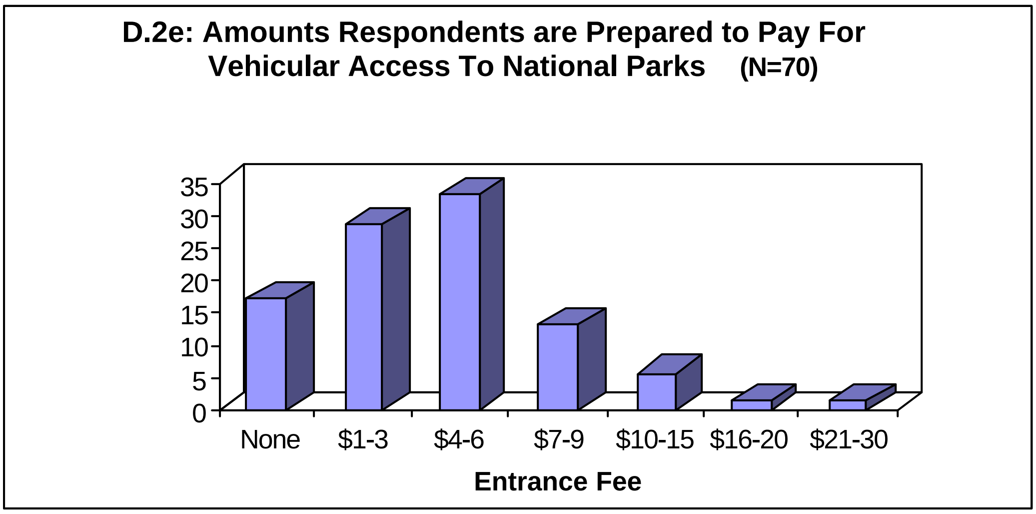


Figure 14

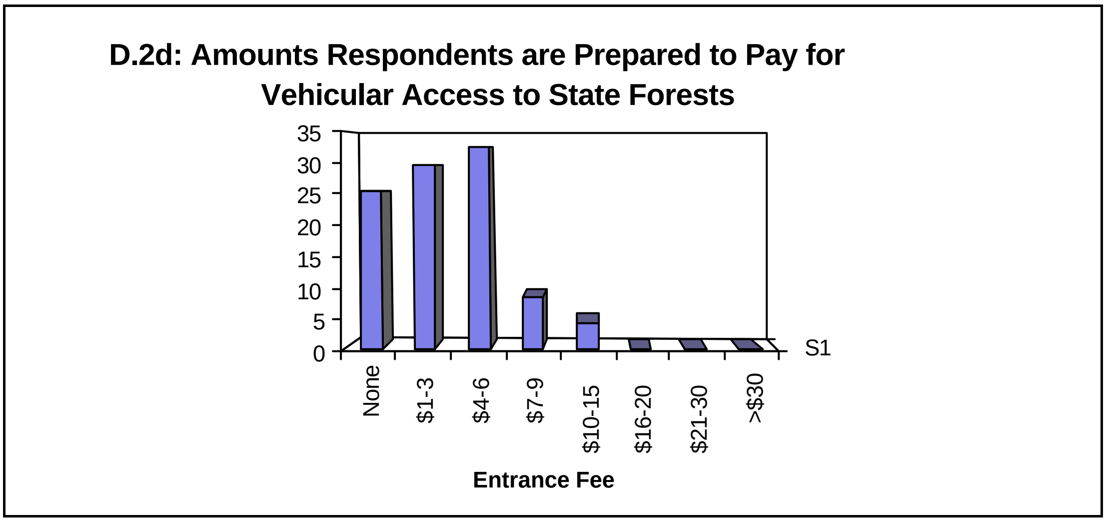


Figure 15

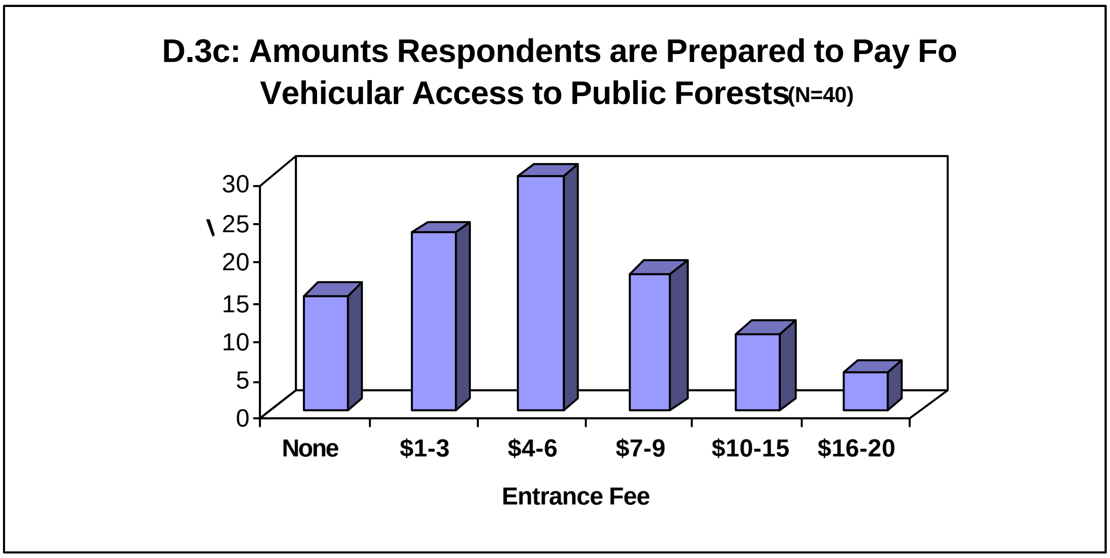


Figure 16

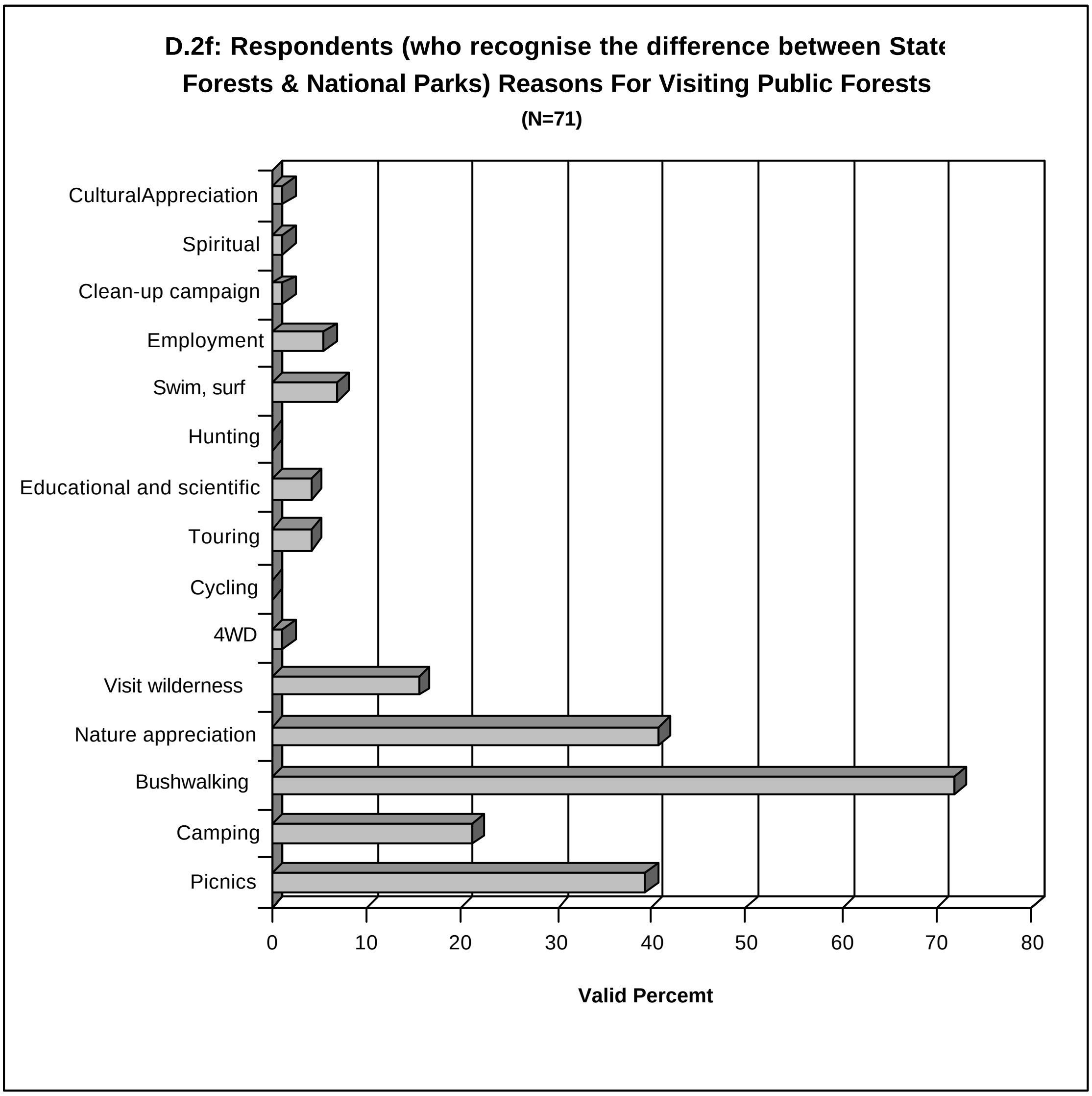
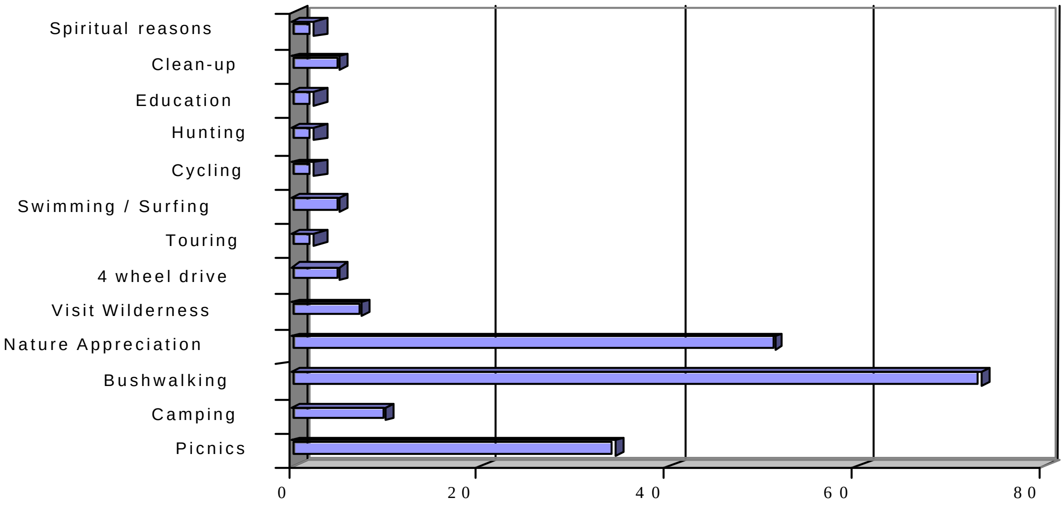

D.2f: Respondents (who recognise the difference between State
Forests & National Parks) Reasons For Visiting Public Forests
(N=71)
CulturalAppreciation
Spiritual
Clean-up campaign
Employment
Swim, surf
Hunting
Educational and scientific
Touring
Cycling
4WD
Visit wilderness
Nature appreciation
Bushwalking
Camping
Picnics
0
10
20
30
40
50
60
70
80
Valid Percemt

Figure 17

Respondents' (who do not recognise the difference between State Forests and National Parks) Reasons for Visiting Public Forests



Broadscale uses of forested land

Priority uses of forested land

Figures 18 and 19 indicate the responses from questions investigating what priority respondents gave to various activities with relation to public forests.

Figure 18 and table 18 indicate that 100% of respondents thought protecting native plants and animals should be a high priority for managers within both national parks and State forests. Other activities people felt should be high priorities in both forms of land tenure are protecting wilderness, bushwalking/picnics, education/scientific, camping, protecting Aboriginal sites, maintaining sites of natural beauty, ecotourism and maintaining water quality. Respondents did not think hunting, woodchipping, providing grazing land, paper production, off-road recreation or mining should be high priorities for managers in either land tenure. Respondents were unsure as to whether economic uses of forests such as timber and paper production should be a high priority in State forests only, both, or neither.

Table 18: Priority uses of State forests and national parks

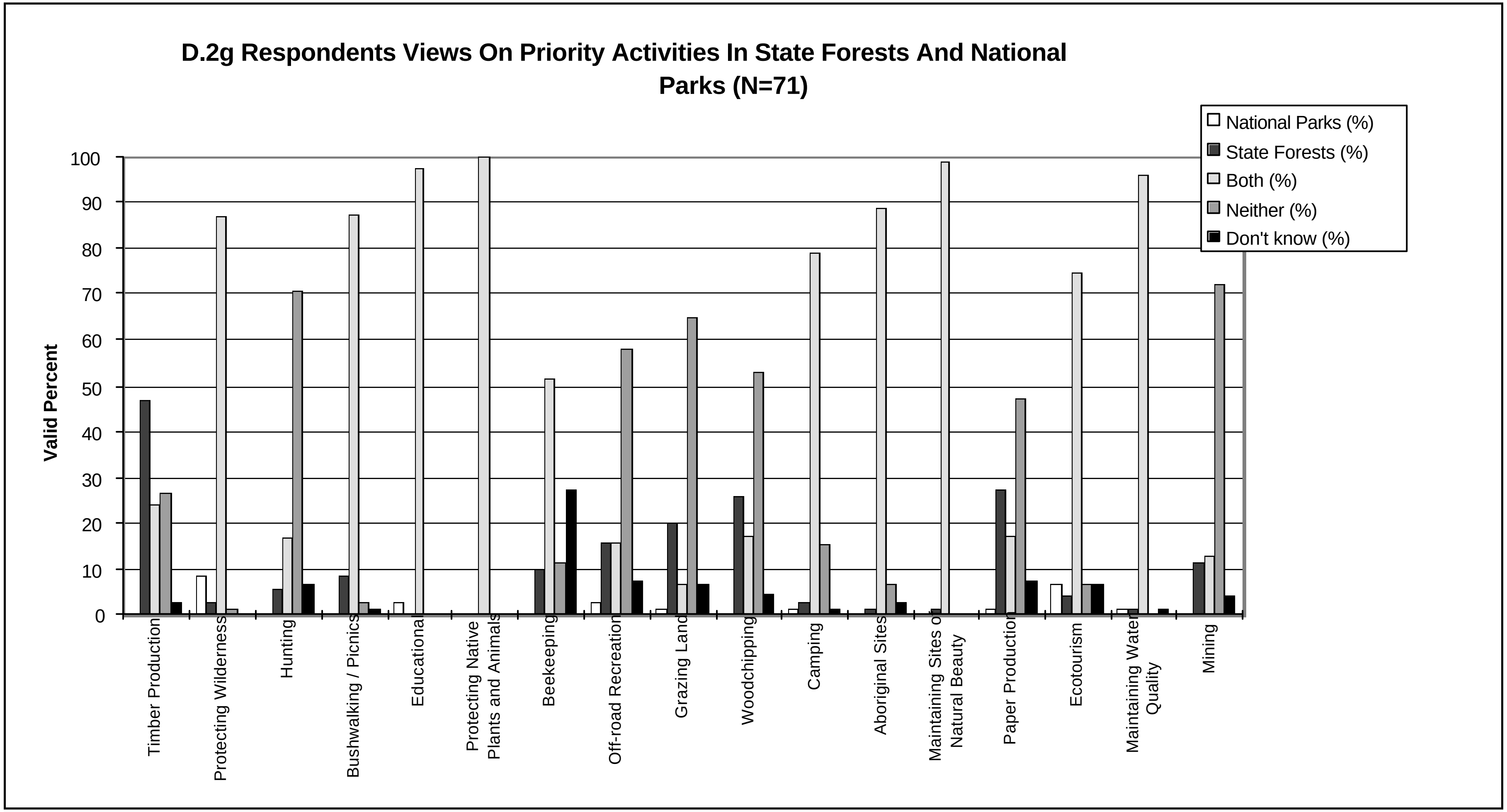
Priorities (N = 71)	National parks (%)	State forests (%)	Both (%)	Neither (%)	Don't know (%)
Timber production	0	46.5	23.9	26.8	2.8
Protecting wilderness	8.6	2.9	87.1	1.4	0
Hunting	0	5.6	16.9	70.4	7
Bushwalking/picnics	0	8.5	87.3	2.8	1.4
Educational/scientific	2.8	0	97.2	0	0
Protecting native plants and animals	0	0	100	0	0
Beekeeping	0	10	51.4	11.4	27.1
Off-road recreation	2.9	15.9	15.9	58	7.2
Woodchipping	1.4	19.7	7	64.8	7
Grazing land	0	25.7	17.1	52.9	4.3
Camping	1.4	2.8	78.9	15.5	1.4
Aboriginal sites	0	1.4	88.7	7	2.8
Maintaining sites of natural beauty	0	1.4	98.6	0	0
Paper production	1.4	27.1	17.1	47.1	7.1
Ecotourism	7	4.2	74.6	7	7
Maintaining water quality	1.4	1.4	95.8	0	1.4
Mining	0	11.3	12.7	71.8	4.2

Results for those who were not aware of the differences between State forests and national parks are similar to rates for those who were aware of the differences. The question for this group was modified slightly to allow them to indicate what activities should be a high priority, low priority and not allowed. The activities which received the highest number of responses for the high priority category include the protection of wilderness, protection of plants and animals, providing for bushwalking/picnics, educational/scientific, maintaining sites of natural beauty, maintaining Aboriginal sites, and maintaining water quality. Activities which received a large number of responses as a low priority include beekeeping, off-road recreation, providing grazing land, and paper production. Hunting, woodchipping and mining received the largest 'not allow' responses. It should be noted that there were some difficulties with the 'hunting' category with some people being pro-hunting feral animals but anti-hunting native animals.

Table 19: Priority uses of public forests (in percentages)

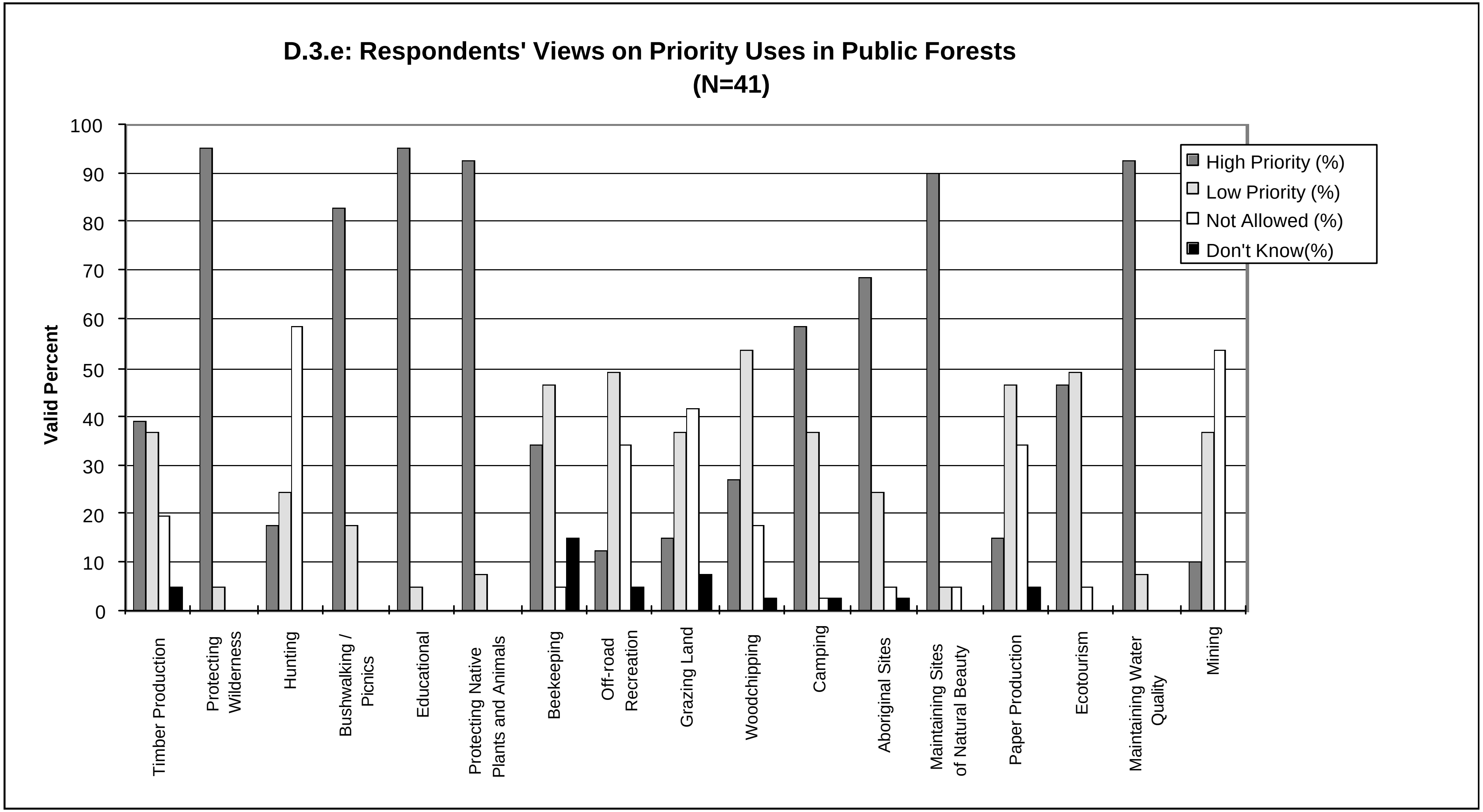
Priorities (N = 41)	High priority	Low priority	Not allowed	Don't know
Timber production	39	36.6	19.5	4.9
Protecting wilderness	95.1	4.9	0	0
Hunting	17.1	24.4	58.5	0
Bushwalking/picnics	82.9	17.1	0	0
Educational/scientific	95.1	4.9	0	0
Protecting native plants and animals	92.7	7.3	0	0
Beekeeping	34.1	46.3	4.9	14.6
Off-road recreation	12.2	48.8	34.1	4.9
Woodchipping	14.6	36.6	41.5	7.3
Grazing land	26.8	53.7	17.1	2.4
Camping	58.5	36.6	2.4	2.4
Aboriginal sites	68.3	24.4	4.9	2.4
Maintaining sites of natural beauty	90.2	4.9	4.9	0
Paper production	14.6	46.3	34.1	4.9
Ecotourism	46.3	48.8	4.9	0
Maintaining water quality	92.7	7.3	0	0
Mining	9.8	36.6	53.7	0

Figure 18



D.2g Respondents Views On Priority Activities In State Forests And National Parks (N=71)
National Parks (%)
State Forests (%)
Both (%)
Neither (%)
Don't know (%)
Valid Percent
100
90
80
70
60
50
40
30
20
10
0
Timber Production
Protecting Wilderness
Hunting
Bushwalking / Picnics
Educational
Protecting Native Plants and Animals
Beekeeping
Off-road Recreation
Grazing Land
Woodchipping
Camping
Aboriginal Sites
Maintaining Sites of Natural Beauty
Paper Production
Ecotourism
Maintaining Water Quality
Mining

Figure 19



D.3.e: Respondents' Views on Priority Uses in Public Forests
(N=41)
Valid Percent
100
90
80
70
60
50
40
30
20
10
0
High Priority (%)
Low Priority (%)
Not Allowed (%)
Don't Know(%)
Timber Production
Protecting Wilderness
Hunting
Bushwalking / Picnics
Educational
Protecting Native Plants and Animals
Beekeeping
Off-road Recreation
Grazing Land
Woodchipping
Camping
Aboriginal Sites
Maintaining Sites of Natural Beauty
Paper Production
Ecotourism
Maintaining Water Quality
Mining

Uses, attitudes and beliefs

The following section of the questionnaire explored respondents' attitudes to different uses of forested land and the conflict, perceived or actual, between certain uses. A series of statements were read out to the participants and they were asked to indicate whether they strongly agreed, agreed, were not sure, disagreed, or strongly disagreed with the statement.

Aboriginal values

A large majority of Aboriginal sites, both historical and sacred, are to be found in State forests and national parks throughout New South Wales. In order to assess participants' attitude to the preservation of Aboriginal sites and the importance of this goal over all other uses of forested land, the questionnaire asked participants' response to the following statement '*Aboriginal sites of significance should be protected, and are more important than other uses of forested land'*.

Figure 20

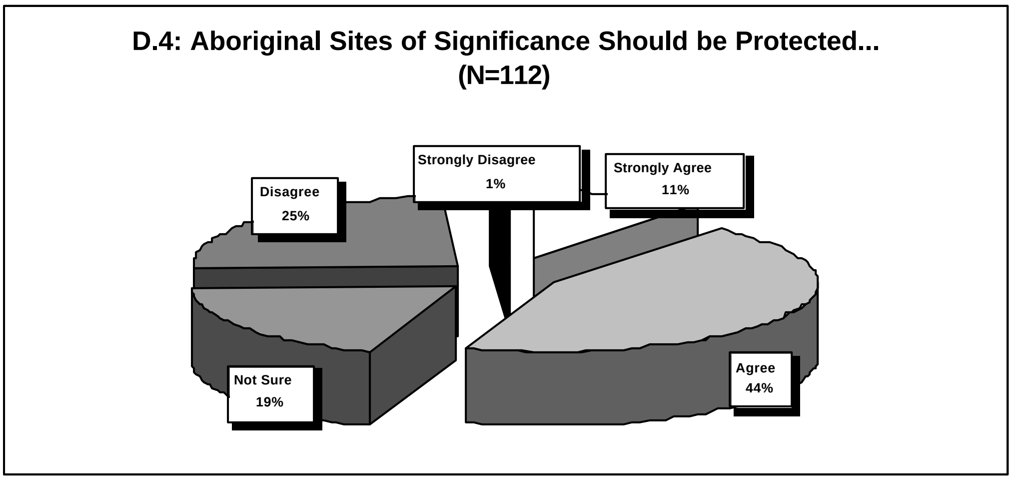


Figure 20 shows that 55.3% of respondents believe Aboriginal sites should be protected, and are more important than other uses of forested land. A significant percentage of respondents were not sure (19%), and a total of 26% disagreed (table 20).

Table 20: Aboriginal sites of significance should be protected, and are more important that other uses of forested land (N = 117)

	Frequency	Percentage
Strongly agree	12	10.7
Agree	50	44.6
Not sure	21	18.8
Disagree	28	25
Strongly disagree	1	.9

Coexistence of environmental and economic goals

State natural resource management policy aims to ensure environmental protection and forestry industries exist side-by-side. To investigate community attitudes towards this policy objective the statement ‘*Environmental protection cannot co-exist with forestry industries’* was tested on the participants.

Figure 21

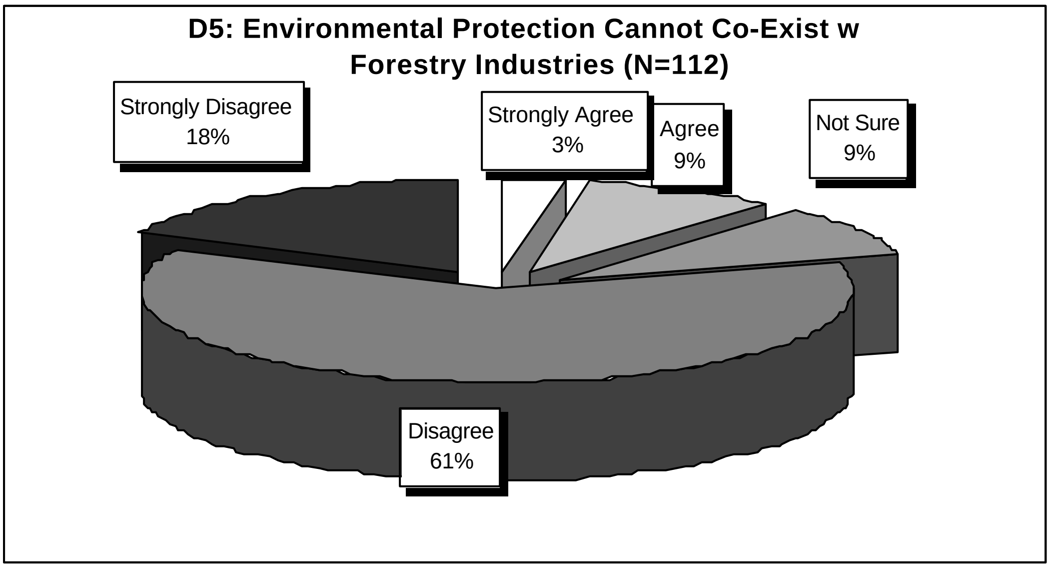


Figure 21 and table 21 show the responses to the above statement, indicating that 79.5% of respondents either disagreed (61.6%) or strongly disagreed (17.9%) with the above statement, meaning that most of those surveyed felt that environmental protection can co-exist with forestry industries. Only 11.6% of people felt forest industries and environmental protection could not co-exist.

Table 21: Environmental protection cannot co-exist with forestry industries (N = 112)

	Frequency	Percentage
Strongly agree	3	2.7
Agree	10	8.9
Not sure	10	8.9
Disagree	69	61.6
Strongly disagree	20	17.9

Economic importance of the forestry industry to small communities

The statement ‘*The forestry industry can be economically important for some small communities providing valuable employment, and therefore should be maintained’* was tested on the participants in order to elicit their attitude to the maintenance of primary industry activities in small towns in the light of the perceived economic importance of such activities.

Figure 22

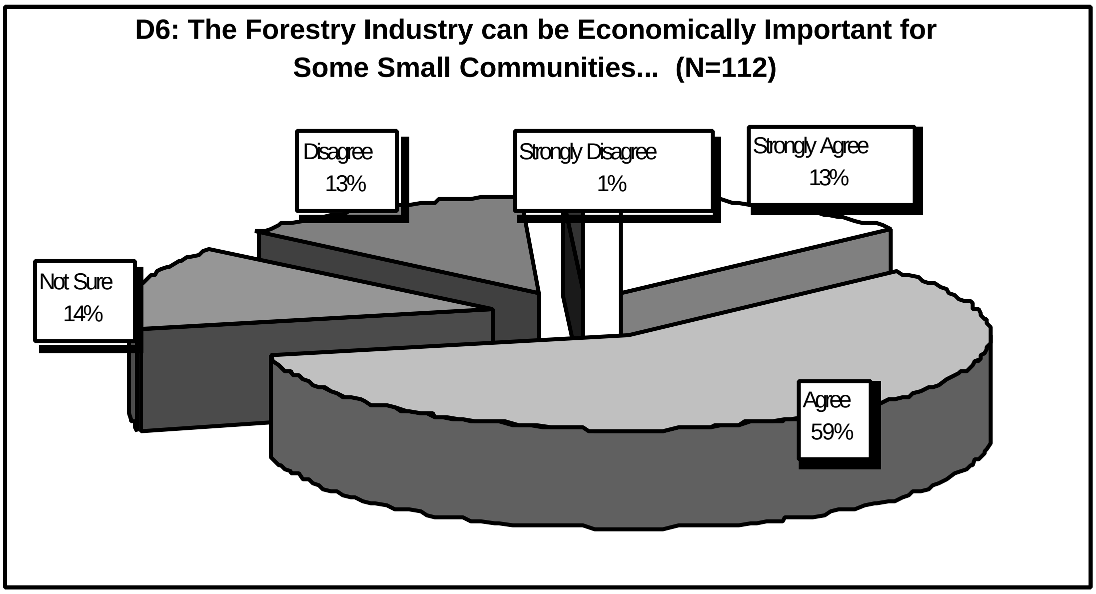


Figure 22 and table 22 show that most respondents (80%) believe some small communities are economically reliant upon the forestry industry and believe it should be sustained for these small communities. Only 22.3% of people disagreed with the statement.

Table 22: The forestry industry can be economically important for some small communities, providing valuable employment, and therefore should be maintained (N = 112)

	Frequency	Percentage
Strongly agree	15	13.4
Agree	65	58
Not sure	16	14.3
Disagree	15	13.4
Strongly disagree	1	.9

International dimension of forest use

To explore the international dimension of forest use, and more specifically timber products, the statement *'Australia should draw its timber products from Australian forests rather than overseas forests even if overseas timber products are cheaper'* was tested on participants.

Figure 23

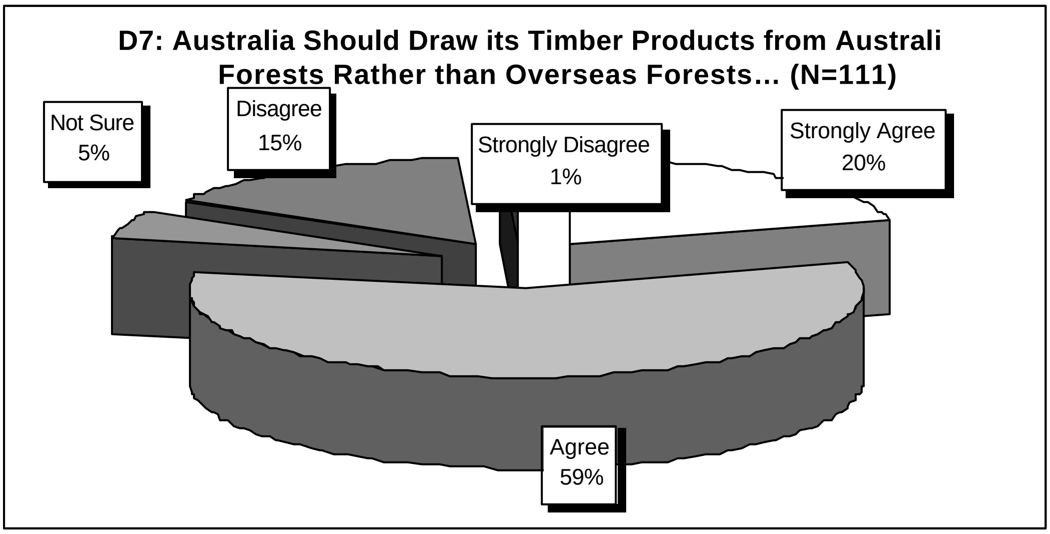


Figure 23 and table 23 indicate that 78% of respondents agree (58%) or strongly agree (20%) with the above statement, and wish to see Australia draw its timber product needs from Australian forests rather than overseas. Only 16.4% of respondents disagreed with the statement.

Table 23: Australia should draw its timber products from Australian forests rather than overseas forests even if overseas timber products are cheaper (N = 111)

	Frequency	Percentage
Strongly agree	22	20
Agree	64	58.2
Not sure	6	5.5
Disagree	17	15.5
Strongly disagree	1	.9

Conservation and State income

To contrast conservation uses with economic uses (such as timber production) the following statement was tested on the survey participants *'I would like to see more forested land conserved even if it means a loss of income to the State from timber harvesting'*. The question also explored participants' responses to the situation of potential conflict between conservation use and State income from the use of forests for timber harvesting.

Figure 24

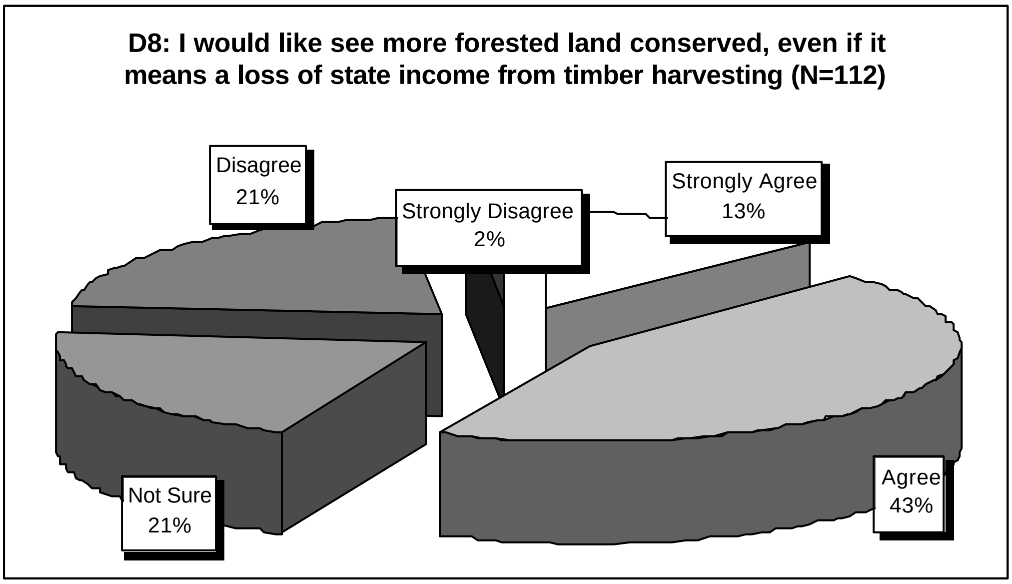


Table 24 and figure 24 show that in total 56.3% of people agreed with the statement whilst 23.2% disagreed with the statement. This shows that more than half the sample group would put environmental principles before economic principles at a State level and in a forestry context.

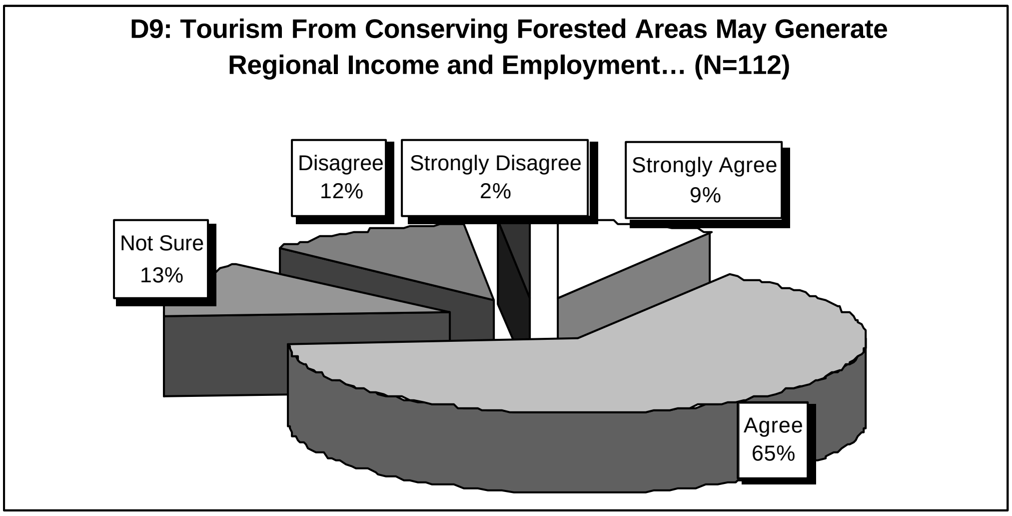
Table 24: I would like to see more forested land conserved even if it means a loss of income to the state from timber harvesting (N = 112)

	Frequency	Percentage
Strongly agree	14	12.5
Agree	49	43.8
Not sure	23	20.5
Disagree	24	21.4
Strongly disagree	2	1.8

Non-extractive economic uses of forested land

To reveal the extent to which people believe the non-extractive economic uses of forested land can offset income and employment losses in extractive industries, respondents were asked to respond to the following statement, '*Tourism from conserving forested areas may be able to generate regional income and employment offsetting possible losses in the timber industry*' Responses are given in figure 25 and table 25.

Figure 25



A total of 74.1% of people agreed with the statement, believing increased tourism offsets possible losses in the timber industry. Only 13.4% of people did not agree with the statement and another 12.5% were unsure.

Table 25: Tourism from conserving forested areas may be able to generate regional income and employment offsetting possible losses in the timber industry (N = 112)

	Frequency	Percentage
Strongly agree	10	8.9
Agree	73	65.2
Not sure	14	12.5
Disagree	13	11.6
Strongly disagree	2	1.8

Source of timber products

The figures represented in figure 26 and table 26 indicate that most respondents wish to have timber sourced from pine (53.6%) or eucalypt plantations (39.3%). Almost 30% of people did not mind where the timber came from, whilst only 4.5% of people thought timber should only come from native forests.

Figure 26

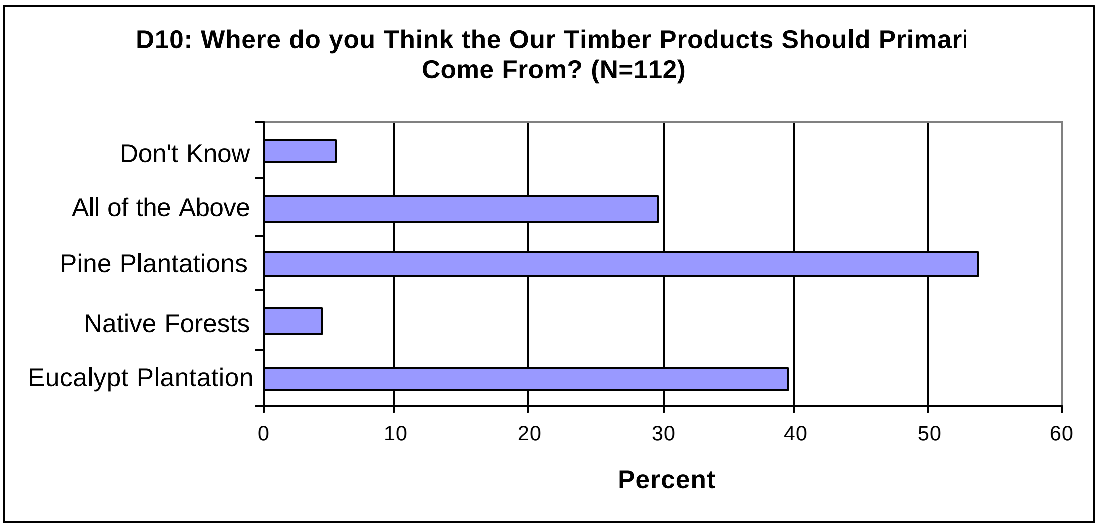


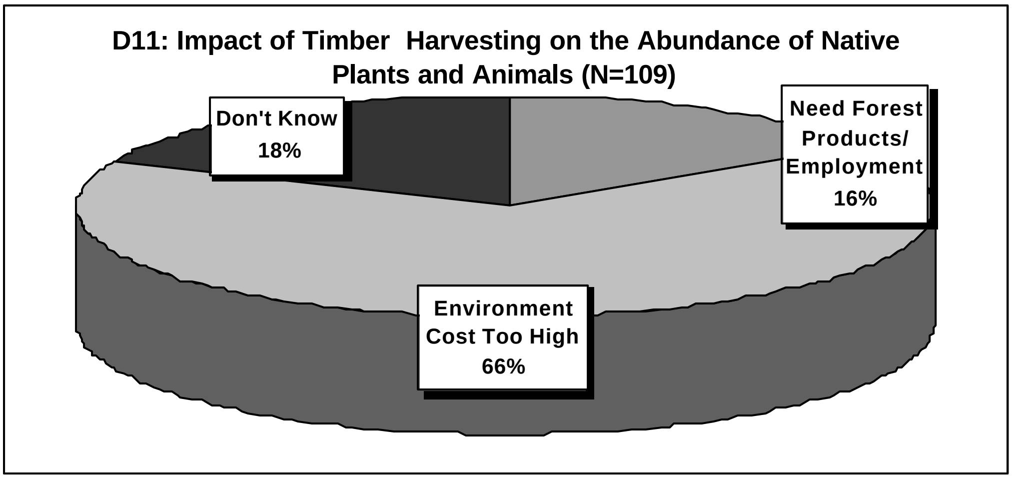
Table 26: Preferred source of timber products (N = 112)

	Frequency	Percentage
Eucalypt plantations	44	39.3
Native forests	5	4.5
Pine plantations	60	53.6
All of the above	33	29.5
Don’t know	6	5.4

Economic and conservation uses of forests

In order to explore the potential scenario of a conflict between conservation and socioeconomic uses of forested land, participants were given a probable scenario and then given two options in order to clearly identify people’s value orientations. The probable scenario was that timber harvesting in native forests may have an adverse impact on the abundance of native plants and animals. The options respondents had to choose from were limited in order to identify their value orientation between socioeconomic objectives (forestry products and employment) and environmental objectives (conservation and protection of native species).

Figure 27



The figures presented in figure 27 and table 27 indicate that two-thirds of the respondents (66.1%) valued conservation and the preservation of animal and plant species over economic objectives such as jobs and forestry products (15.6%). A significant percentage were unsure (18.3%).

Table 27: Timber harvesting in native forests may have an adverse impact on the abundance of native plants and animals (N = 109). If this is the case, do you think:

	Frequency	Percentage
This is unfortunate but we need forestry products and employment	17	15.6
The environmental costs are too high, it might be better to compromise on forestry activities	72	66.1
Don't know	20	18.3

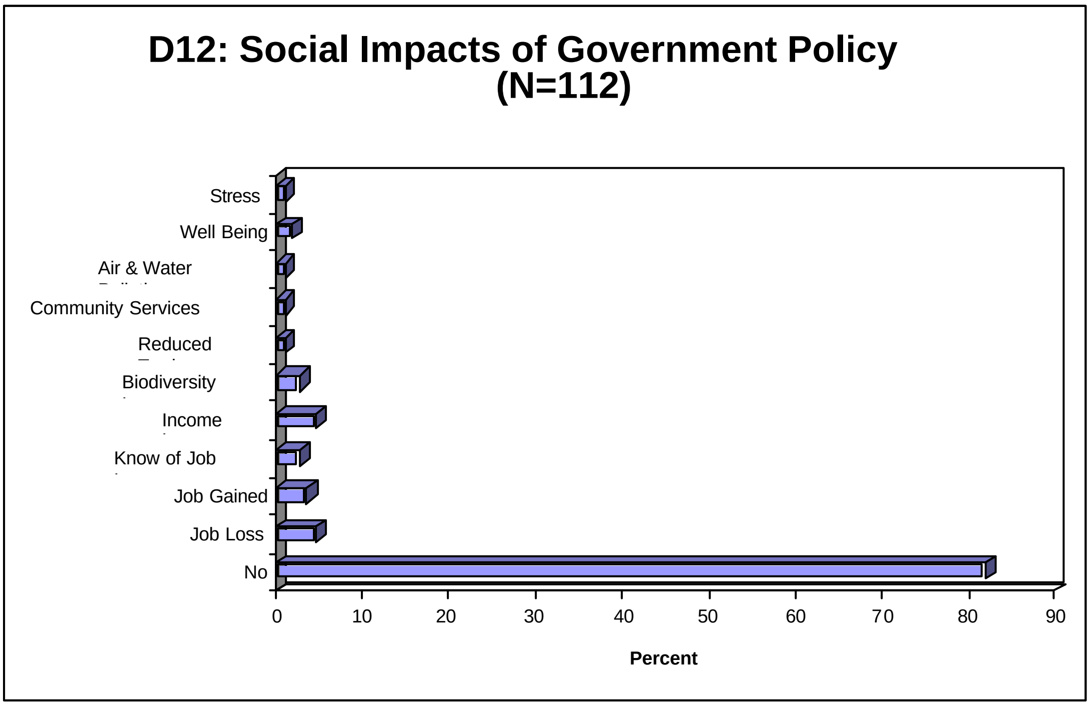
Social impact of forest policy

Participants were asked if they or their family had been directly affected in any way by government policy relating to forests, in order to identify the social impacts of forest policy and the geographical location of these impacts. Table 28 gives the percentages and frequencies for this question; the responses indicate that most respondents (82.1%) have not been directly affected by government forest policy. The most common effects upon people in the Upper North East CRA region were income loss (4.5%) and job loss (4.5%).

Table 28: Have you or your family been directly affected in any way by government policy relating to forests, if so how? (N = 112)

	Frequency	Percentage
Stress	1	.9
Well-being	2	1.8
Air and water pollution	1	.9
Community services closed	1	.9
Biodiversity	3	2.7
Reduced trade	1	.9
Income loss	5	4.5
Know of job loss	3	2.7
Job gained	4	3.6
Job loss	5	4.5
No	92	82.1

Figure 28



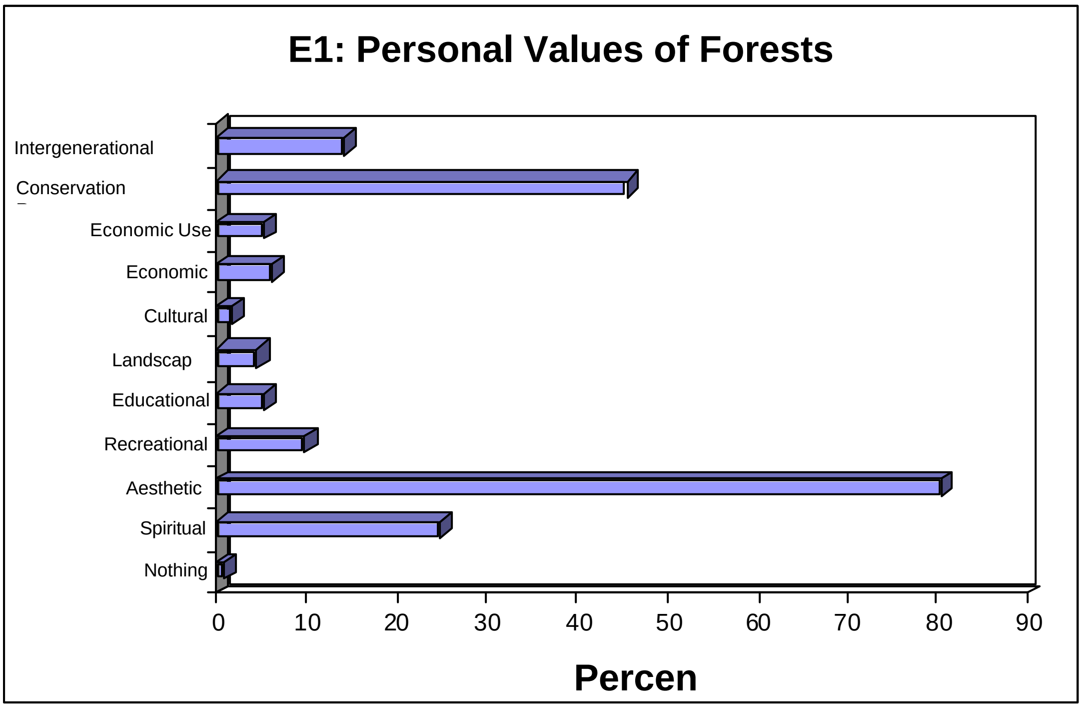
Social values of forested land

This section was composed of five key questions to further investigate how people value forested land.

Personal value of forests

To gain an understanding of what people value about forests at a personal level, people were asked '*What is it about forests that you value?*'. Figure 29 and table 29 display the responses to the question.

Figure 29



The results indicate that a high percentage of respondents (80.4%) valued the aesthetic qualities of forests highly. Respondents also indicated that the conservation qualities (45.5%) were highly valued as were the spiritual qualities (25%). The next most frequent response was from those who wanted to sustain forests for future generations (14.3%) and for recreation reasons (9.8%). Responses show that environmental and anthropocentric values rank highly, with the economic values of forests rating lower. Over 12% of people did, however, indicate they valued the economic (provision of employment) (6.3%) and economic use (resources) (5.4%) value of forests.

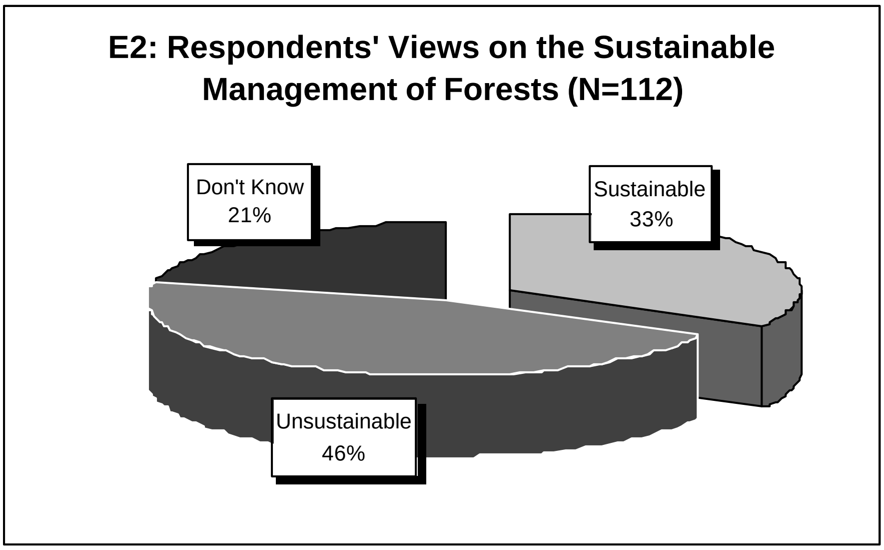
Table 29: Personal value of forests (N = 112)[12]

	Frequency	Percentage
Nothing	1	0.89
Spiritual	28	25
Aesthetic	90	80.36
Recreational	11	9.82
Educational	6	5.36
Indigenous culture	-	-
Landscape	5	4.46
Cultural	2	1.79
Economic/employment	7	6.25
Economic goods and use	6	5.36
Conservation	51	45.54
Intergenerational equity	16	14.29
Others	2	1.79

Ecologically sustainable forest management

Ecologically sustainable management is a basic policy principle for forests in Australia. To test the public's perception and awareness of the term, participants were asked if they thought current management of forested land is ecologically sustainable. Responses were fairly evenly broken down into three categories for this question (although 13% more respondents considered current management practices unsustainable), with a high percentage of respondents (21%) reporting they did not know.

Figure 30



[12] Spiritual – well being, peace and quiet, escape, faith in the world, good feelings. Aesthetic – beauty, space, experience nature. Recreational – exercise, sport, games. Educational – learn things about nature. Indigenous culture – understand / experience Aboriginal culture. Landscape – paint, take photographs. Cultural – socialise. Economic – employment. Economic goods and use – gathering firewood / seeds. Conservation – various conservation reasons. Intergenerational equity – sustain values for future generations.

Forty-six per cent of the sample from the Upper North East CRA region perceive current management of forested land to be ecologically unsustainable, with 33% of the sample reporting that they thought management was sustainable and a significant percentage (21%) reporting they did not know (table 30 and figure 30).

Table 30: Do you think current management of forested land is ecologically sustainable? (N = 112)

	Frequency	Percentage
Yes	31	33
No	51	45.5
Don't know	24	21.4

Issues of concern relating to forested land

Respondents were asked what issues regarding forested land they were specifically concerned about. Twelve point five per cent of people stated they had no particular concerns regarding forested land. Forty five per cent of the entire sample indicated they were concerned about logging and 20% reported they were concerned about woodchipping. The next most frequently recorded issues were 'loss of wilderness' (18%) and 'degraded land' (18%) (figure 30, table 31).

The response which received the next highest percentage of responses related to concern regarding the creation of wilderness areas and the negative impact this would have on regional economies (12.5%), followed by 11% of respondents indicating the loss of biodiversity was a concern. Economic and social concerns were the next most frequently cited responses, with 9% of people indicating a concern for job losses and 7% of respondents indicating a concern about limited access to resources.

Figure 31

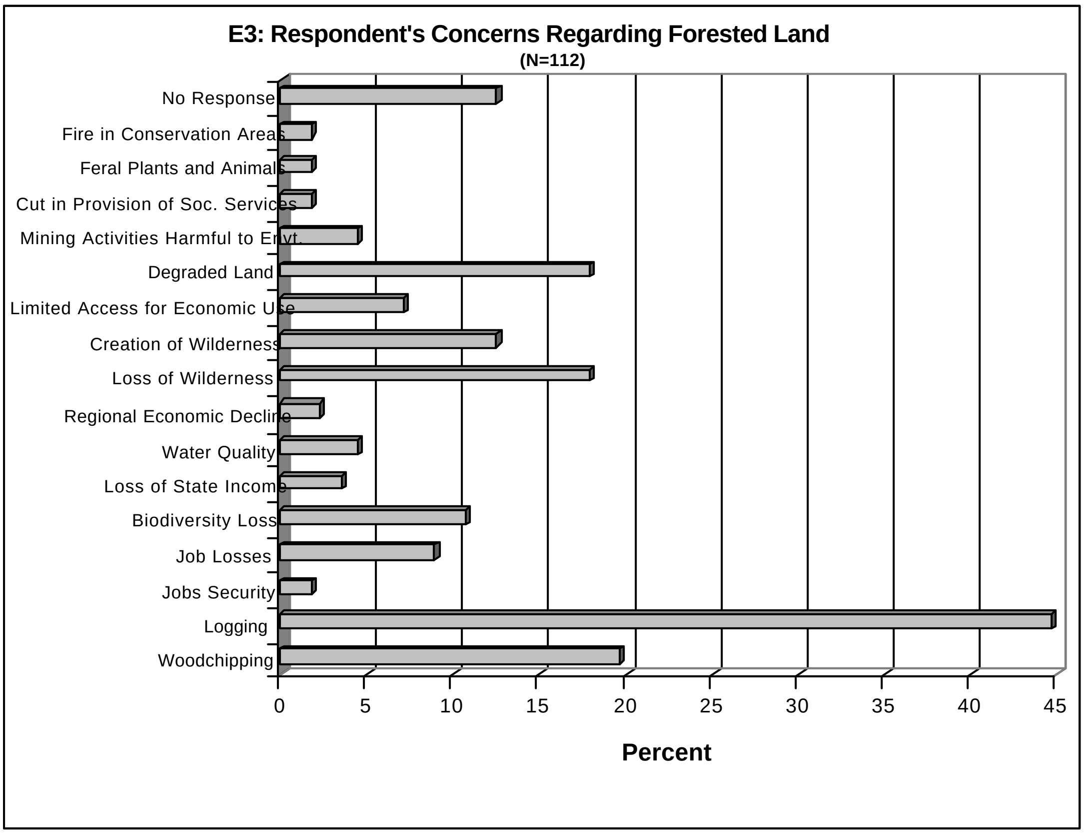


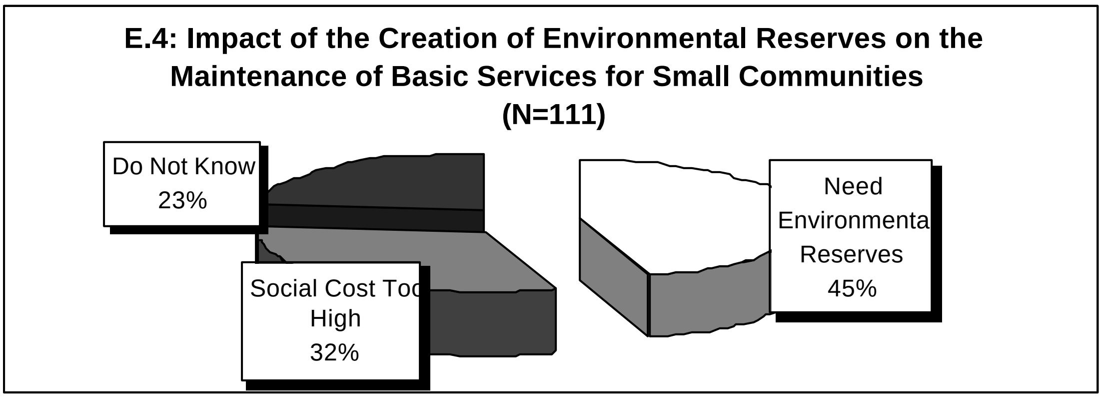
Table 31: Issues of concern regarding forested land (N=112)

	Frequency	Percentage
Woodchipping	22	19.64
Logging	50	44.64
Job security	2	1.79
Job losses	10	8.93
Biodiversity loss	12	10.71
State income	4	3.57
Water quality	5	4.46
Regional economic decline	3	2.68
Loss of wilderness	20	17.86
Creation of wilderness area a threat to regional economy	14	12.5
Limited access to natural resources for economic uses	8	7.14
Degraded land	20	17.86
Mining activities environmentally harmful	5	4.46
Not enough mining activities	2	1.79
Feral plants and animals	2	1.79
Fire in conservation areas	2	1.79
Loss of grazing land	-	-
No response	14	12.5

Social and conservation values

This question explored people’s responses to the potential scenario of a conflict between conservation and social values relating to the use of forested land. Survey participants were given a probable scenario and then given two options in order to clearly identify people's value orientations. The scenario was that forestry jobs may be lost to create environmental reserves, and this may then affect some small communities adversely by reducing their access to basic services (as the population may decline to a level that may lead to the closing of schools, health services etc.). The options respondents had to choose from were limited in order to identify their value orientation between social and community objectives (access to basic services) and environmental objectives (conservation and environmental reserves). The results are displayed in figure 32.

Figure 32



The data in Table 32 show that the largest category of respondents who answered this question (45%) felt it was unfortunate for communities to be faced with reduced access to basic services but that environmental reserves are needed. Thirty two per cent of respondents indicated the social costs of closing basic services in small communities are too high, and that it would be better to compromise on environmental reserves. It is important to note, however, that 23% of people did not know which option to choose or did not understand the question.

Table 32: Forestry jobs may be lost to create new environmental reserves. This may then affect some small communities adversely by reducing their access to basic services (N = 111). If this is the case do you think:

	Frequency	Percentage
Unfortunate for these communities but we need environmental reserves for the benefit of future generations	50	45
The social costs are too high, it may be better to compromise on creating environmental reserves than reduce people's access to basic services.	35	31.5
Don't know	26	23.4

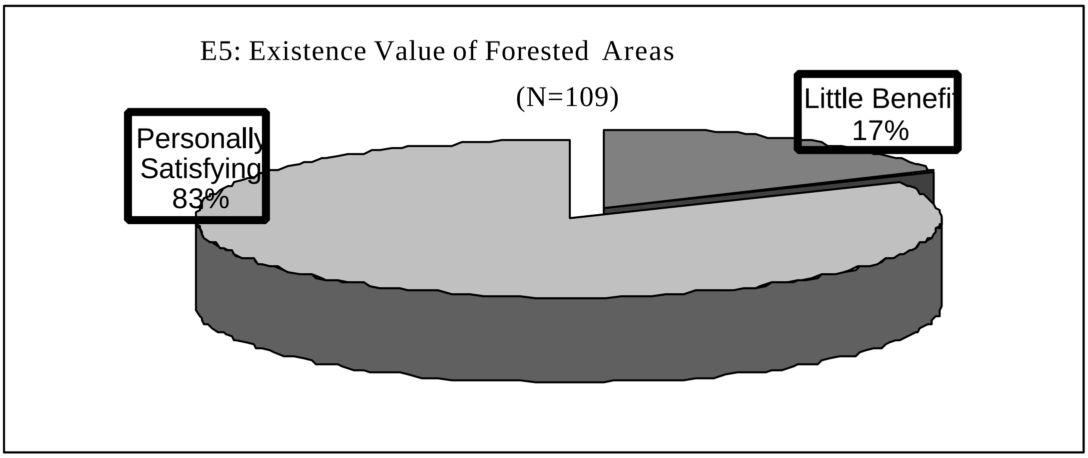
Existence value of forests

To explore respondents' attitude to the wilderness and existence values of forests in comparison to anthropocentric values the following question was asked of the survey participants: '*Some forested areas are rarely visited or used by people. Do you feel there is little benefit in having forested land if humans can't use it for some type of recreational or economic activity; or it is personally satisfying to know that there is forested land that is 'untouched' by humans even if it is never used for recreational or economic activity?'*.

Table 33: Some forested areas are rarely visited or used by people (N = 109). Do you feel:

	Frequency	Percentage
There is little benefit in having forested land if humans can't use it for some type of recreational or economic activity	19	17.4
It is personally satisfying to know that there is forested land that is 'untouched' by humans even if it is never used for recreational or economic activity	90	82.6

Figure 33



The results (figure 33, table 33) clearly show that people are in favour of wilderness areas that are not used for recreational or economic activities, with 83% of respondents indicating that it is personally satisfying to know there is forested land 'untouched' by humans.

Concluding comments

This report investigated the attitudes of people in the Upper North East CRA region towards forests and forest use. One hundred and twelve people were interviewed with a Statewide rejection rate (those who were actually contacted as opposed to unanswered) of approximately 70%. The attitudes of these people remain unknown and are an unavoidable problem in any mass surveying method. The demographic profile of those who did respond showed a trend towards people employed in high socioeconomic positions and towards people who have received further education, when compared to profiles generated from 1991 census data. The effect of these trends upon people's attitudes is unknown and a source of debate, although it is possible that highly educated people, or those employed in occupations of high socioeconomic status, may have stronger environmental value systems than the general public.

Forest use

There was a large diversity within the sample regarding the amount of contact people had with forested land, although they generally had more contact than most people within New South Wales (table 14, and see Report 5). The high percentage of people who knew the difference between State forests and national parks (63%) indicated higher personal values for visiting national parks more than State forests, by indicating they would be willing to pay more to visit them (table 16). The most popular uses of forested areas were recreational uses such as bushwalking, picnics, camping and nature appreciation (figures 16, 17). Respondents indicated that recreational and conservation uses of forested land should be priorities for forest managers in all types of forests. Respondents indicated that timber production should be a priority in State forests only whilst other economic uses such as woodchipping and paper production were not considered to be a high priority in either form of land tenure (table 18, 19). There was considerable opposition to using forested land for hunting or mining purposes. Using forested land to conserve Aboriginal sites of significance gained high support throughout the survey (D2g, D3e, D4).

Forest values

The strength of people's economic, social and environmental values was analysed at two scales. Firstly at a non-specific macro-scale, respondents tended to place economic priorities before both social and environmental priorities when asked about their concern for various abstract issues (figure 9). 'Unemployment' was the most frequently mentioned response when the sample was questioned about their primary concerns, followed closely by 'education' and 'the environment' being mentioned an equal number of times. 'The environment' was ranked particularly highly by women and members of environmental groups. Still at a macro-scale, but in a forestry specific context, more respondents put environmental principles before economic principles when an environment versus economic question was posed (figure 24). This change in value orientation shows the high status forest issues possess in the structure of people's environmental concern (figure 12).

At a micro-scale attitudes towards forests in terms of environmental, social and economic priorities was investigated again by looking at hypothetical micro-scale effects of broad policy decisions. When forestry products and employment were contrasted with the abundance of native plants and animals, most respondents opted for the environmental priority (figure 27). This shows that in this particular situation at a micro-scale, people value the biological communities of forests more than they value the economic benefits of forests. Consequently, respondents from the Upper North East CRA region displayed commensurate environmental value structures at both macro and micro-scales. This can also be seen in responses in figure 33 where people indicated their support for the existence of wilderness areas even if these areas are never used for economic or social reasons. In this regard the Upper North East region differs significantly from other key CRA areas, in particular those on the New South Wales South coast where socioeconomic issues concerning unemployment and the consequences of declining forestry industries were emphasised (see Reports 1 and 2).

Another question was asked which contrasted micro-scale value orientations by considering a hypothetical social effect of conserving forested land (table 32). In this case respondents again opted for the environmental priority over the social priority, revealing a strong commitment to environmental values in forest contexts. Thus most people thought that the environmental standards of forested land should be maintained even if this has both social and economic costs. This value orientation differs from an earlier question where respondents recognised the importance of forestry activities to small communities (figure 22). Thus those sampled indicated that they were concerned about unemployment at a macro-scale (along with environmental and other social issues) but, when put into a forest context, people generally ranked environmental values of forests over the economic values of forests. The sample also believed that increased tourism could offset some of the losses if forestry activities were scaled down (figure 25) and saw it as a potential industry that could sustain social services without affecting people's environmental values.

At a very personal level respondents indicated the main reason they valued forests was for aesthetics (figure 29). They enjoyed the beauty, space and natural experiences forests provide. They also valued forests for conservation reasons, valuing the knowledge that forest ecosystems are able to survive. The third most popular reason was spiritual — valuing forests for the way it made them 'feel'. The fourth most popular reason was intergenerational — valuing forests as an entity that can be enjoyed or used by future generations in equitable ways.

There were considerable differences and conflicts suggested within the sample, nonetheless the general trend was that environmental values ranked as high priorities at the macro-scale (alongside issues such as employment) and were commensurate with the micro-scale prioritisation of the environment within forest contexts. Forests have a very strong symbolic environmental value that people want to preserve even if this is seen to cause local social and economic difficulties.

6 REVIEW OF FOREST INDUSTRY MITIGATION MEASURES

A survey of structural adjustment and mitigative processes in the Upper North East region was commissioned as part of the social assessment. The study intended to document the experiences of workers and contractors in the native hardwood timber industry affected by forest industry structural adjustment from January 1996 to August 1998. This study was completed by Rush Social Research consultants and the data is held by the NSW Department of Urban Affairs and Planning, Resource and Conservation Division.

7 THE LOCATIONAL IMPACT OF BUSINESS INDUSTRY EXPENDITURE

A study has been carried out by the consultants Rush Social Research of the locational effects of change in the native hardwood timber industry in the Upper North East forestry region of New South Wales.

The approach adopted has used a ‘cascade’ principle, whereby the potential effects of change on timber industry businesses (mills, contractors, hauliers) is examined, together with the consequent effects on timber industry supply businesses in the local area.

Background

The population of mills and contractors in the Upper North East

The primary database on mills and contractors used for the Upper North East project has been provided by NSW State Forests.

This database contains various information, with records essentially based on the administrative requirement of the issuance of licences to carry out forest activities, such as milling. A number of mills have on-going relations with NSW State Forests. These mills are often the larger ones with log quotas from Crown land native forests. However many licence holders have smaller operations involving non-quota salvage timber operations, and involving harvesting from private property either partly or wholly. These operations may involve only part-time or ad hoc work: a mill licence holder may be a farmer with a stand of trees on his or her own property. For such licence holders, use of the licence may be a sometime affair.

The timber industry in the Upper North East is in constant flux at the present time. Businesses are closing, continuing with reduced staff, or amalgamating; and some are expanding. Businesses with valid licences may have wound up; amalgamated businesses may have changed names; staff numbers may have changed since the most recent industry survey. These changes make it difficult for any database operation to ensure that its records are completely up to date.

Following a process of updating and editing, the lists provided by State Forests for the Upper North East contained the names of about 117 mills and 11 contractors. A further independent process of editing attempted to cross-check these lists, so that as far as possible they represented the current situation of mills and contractors in the Upper North East.

Whereas the list of mills was not changed substantially as a result of these enquiries, in the course of the project over 30 further contractors were identified, some of whom had been active in the 1997–98 financial year. We have attempted wherever possible to include these businesses in the survey work.

Elements of the survey

Face-to-face interviews

From the lists of mills and contractors available, a selection was made of 23 businesses for face-to-face interviews. These businesses were seen as important for the project in terms of their location and size. The interviews with the 23 businesses involved a wide ranging qualitative discussion of the timber industry within the region and the business's experiences over the past few years. Following this, the participants were asked to respond to a semi-structured questionnaire which covered the key topics with regards to locational impact. This questionnaire was developed by Rush Social Research and confirmed by the client.

In some cases the questionnaire was left on site, for later return to Rush Social Research. This enabled the questionnaire to be completed by the participant in his or her own time, since questions often covered data only available in annual reports or financial statements. The completed questionnaires were varyingly comprehensive in the information provided, and some were not returned at all.

The face-to-face interviews were conducted during the week of 27–31 July 1998 and consisted of:

- mill owners/managers — 15 (including two NSW State Forest regional representatives)
- contractors — 9.

Mail survey of remaining mills/contractors

The data collected and the comments from the businesses interviewed face-to-face focused attention on the content of a questionnaire that was to be mailed to all other known mills and contractors within the Upper North East. The content of the questionnaire was confirmed by the client. The mail survey was intended to provide a better geographical spread than was possible using a face-to-face method. Included in the mail-out was a return slip which could be used to indicate if that business had closed down.

After that, the Rush Social Research offices in Sydney made telephone calls to those of the larger mills who had not responded to the mail questionnaire, reminding them of the questionnaire and inviting their response and participation in the project. However, a poor response rate was achieved overall.

Response to the survey

Level of response

As at Friday 23 October, the number of usable questionnaire responses in hand was 16 from mills, and seven from contractors and hauliers. Employment represented is 417 full-time, 16 part-time, and 56 casual positions. Comparing the responses to the State Forests' mills and contractors database, we note:

Table 1: Upper North East employment figures

	Number mills/contractors	Percentage of Upper North East[a]	Number employed[b]	Percentage of Upper North East[a]
Mills	16	14	453	53
Contractors	7	?	75	?

Notes:
a. Determined on the basis of SF database information
b. Part-time and casual employees are counted as half a full-time employee

Ten survey return slips were received, indicating that these businesses had closed.

A number of respondents adopted very positive approaches to the present project and went out of their way to assist in its completion. Overall, however, there has been a lack of detailed response from both mills and contractors to the survey. This appears to have been due to several factors: respondents exercising their right not to participate; and for those participating:

- choosing to provide some of the information requested;
- being reluctant to provide financial information;
- being reluctant to set aside the time necessary to complete the questionnaire.

Such limited responses were not restricted to any particular size of operation. Some possible reasons for respondents exercising these choices include:

- feeling that the information requested was their property and should not be disclosed;
- being sympathetic but feeling ‘surveyed out’;
- anxiety over the future of their own business and being reluctant to disclose it;
- being cynical about the nature and purpose of the exercise, and its political context.

(All these reasons have been expressed to Rush Social Research during the course of the project.)

Characteristics of responding businesses

The characteristics of the businesses who have provided useful questionnaires are as follows:

Table 2: Timber industry operations conducted by businesses in sample

	Mills	Contractors
Total businesses	16	7
Of which:		
Buy logs	13	2
Fell hardwood	8	6
Fell softwood	1	1
Snig/load/haul hardwood	9	5
Snig/load/haul softwood	1	1
Haul only (hardwood)	0	1
Mill hardwood	15	n/a
Mill softwood	1	n/a
And produce:		
Hardwood sawlog products	8	
Hardwood pulp log products	0	
Softwood sawlog products	3	
Softwood pulp log products	0	

The businesses were located in 12 different communities or centres widely distributed across the Upper North East region, with the main representation being from the Grafton area.

Based on the evidence of the sample returns, larger mills (employing over 20 workers) obtain high proportions of their timber (80% or more) from Crown lands. Some smaller mills also obtain high proportions from Crown land, but for those mills employing less than 20 people, there is a much higher likelihood that their timber resource will be derived in large measure from private property.

Approach adopted to the analysis

The low levels of response to the questionnaire have presented the need to adopt a very precise approach to the analysis of the data.

The problems posed relate in the main to the following:

- the precision with which the populations of mills and contractors are known;
- the small number of responses to the survey questionnaire;
- the variable nature of the responses written onto the questionnaires;
- the representativeness of the respondent sample to the State Forest-identified population.

With regard to the knowledge of the mill and contractor populations, the best information available at the time has been employed. It has not been possible to check whether all the enumerated licensed mills are operating day-by-day, are currently quiescent, or have closed. Indeed, changes continue to happen monthly, if not weekly.

However with regard to larger mills, it is known whether they are operating or closed, so there is an additional confidence that can be attached to statements about employment in comparison to the overall population of mills.

The situation with regard to contractors is somewhat different, as the initial number of businesses identified was quite low, and continues to grow. The nature of contracting is such that it is harder to have knowledge of the existence of a contracting company than it is for mills.

The small number of responses to the survey questionnaire need not constitute a problem provided conclusions drawn are not surrounded by spurious statistical significance. One matter that does need to be attended to here is whether the sample is biased in relation to the question that it is being asked to answer. For example, whereas it might fairly be assumed that the number of respondents is biased towards businesses that are operating vigorously relative to those on the point of closure, there would appear to be few grounds for an assumption of bias in relation to the distribution of journey to work for mill A relative to a mill B.

The variable levels of completion of the questionnaires introduce a similar issue. Data missing from one questionnaire can sometimes be interpolated using other questionnaires, thus making the first more useful, in several ways.

Non-representativeness of the sample in relation to mills can be overcome in large measure by transforming variables to measures 'per employee' rather than per mill, as the sample is much more representative of the former than the latter (the respondent sample representing 14% of mills, but 53% of employees (cf. section 2.3).

Another set of responses to low data quality can involve the following types of change:

- from exact numerical expression to probabilistic expression;
- from cardinal measures to ordinal measures;
- replacing numerical statements with grammatical statements.

We have used these in the following pages, where appropriate.

In approaching the task of analysis, Rush Social Research has been conscious of the need to identify the local and regional consequences of change in the timber industry (in relation to issues such as 'If A then B'). The generic method of analysis, such as in specifying variables as 'per employee' and calculating distributions over a number of mills, contributes specifically to this aim.

When a change 'A' is specified, the results of this project provide information to determine the outcomes 'B'. The results themselves are not geographically referenced or locationally specified until the change 'A' is specified. Thus the results of this work, while able to describe change in all situations are, of themselves, specific to none (apart from being relevant to the Upper North East). It has been possible only in one sense therefore ‘to provide data in a form which would enable thematic geographic referencing of key variables using a Geographic Information System’ (consultancy brief, p. 2).

A note on units of measurement

Because the focus of the project is on locational effects, we have adopted the following conventions:

mill	A number of companies which mill timber have mills at a number of sites, sometimes with long distances between them. Because the focus of this study is on locational effects, the unit for ‘mill’ is taken to be the individual site in all cases where this is appropriate.
employment	This is chosen an the focal variable in descriptions of the scale of operations for both mills and contractors. It has the advantage of being well defined, relatively easily identified, and it allows comparisons to be made across all types of operation where financial information is not available. This study uses the concept of the number of full-time equivalent (FTE) employees:, part-time and casual employees are treated as half an equivalent full-time employee.
disaggregation of data	All data provided by respondents was made available on the basis of strict confidentiality. It has therefore been found necessary is some parts of this report to aggregate data or circumscribe some statements, in order that the confidentiality of businesses be maintained. (This is the commonly adopted convention in such circumstances.)

In the statistics of individual businesses this study uses the concept of the number of ‘full-time equivalent’ (FTE) employees.

The timber industry in Upper North East New South Wales

Industry structure

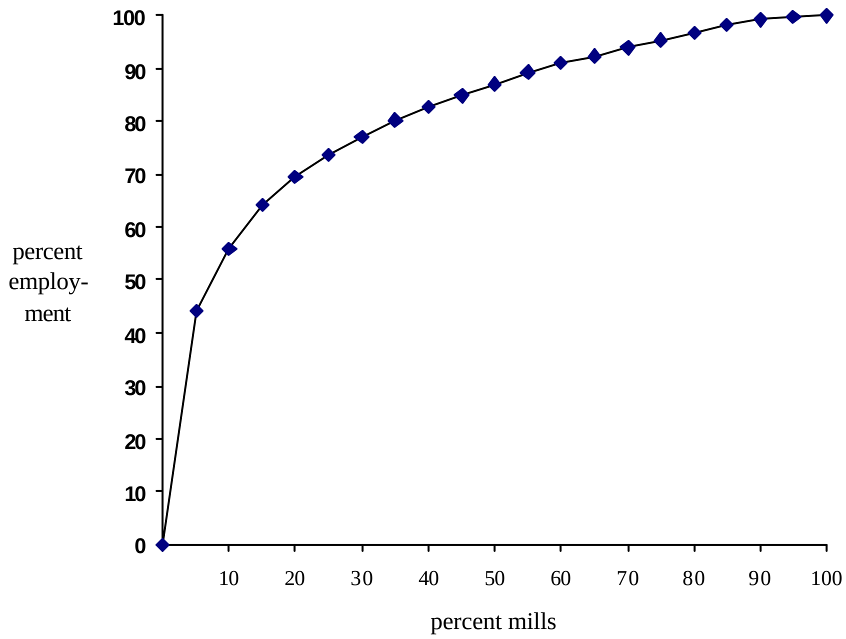
It is the timber mill and processing companies who hold licences to access hardwood timber from native forests, and it is they who pay royalties to the New South Wales government for that privilege. In the Upper North East, many mills retain their own — what are referred to as — ‘contracting’ functions, which include the felling of trees, and the snigging, stacking and hauling of the timber to mills. Other mills use independent contracting companies to carry out these tasks. Some mills employ both means of bringing timber to their mills. Some independent contractors subcontract one or more of the ‘contracting’ functions they are responsible for. (In this report, reference to contracting companies means independent contracting companies.)

There is a great diversity in the hardwood timber industry in the Upper North East forest region, with timber mills and processors producing a range of products that include bearers, building frames, decking, fencing, floorboards, girders, joists, laminated boards, marine decking, palings, pallets, panels, parquetry, plywood, posts, poles, skewers, sleepers, stairs, tool handles, veneers and weatherboards.

Mills

Information made available from NSW State Forests suggests that in the Upper North East there are about 117 mill sites (115 businesses) currently operating, employing about 860 individuals. The mills vary considerably in size, from large operations with over 100 employees to those employing only one person. Nine mill sites employ over 50% of the workforce, and seventeen mill sites employ ten people or more. Over 50 mills are identified as employing one or two people only (figure 1).

Figure 1: Cumulative percentages of employment over mills, Upper North East region



Many of the mill sites cluster around commercial centres. However even for those sites not so situated, the lines of economic activity draw them towards one centre or another. The locational distribution of mill sites around commercial centres, weighted in terms of employment, is shown in table 3.

In terms of employment, Grafton is clearly the major centre for timber industry activity in the Upper North East, drawing to it over one-third (35%) of mill activity. Lismore (18%) and Casino (17%) each draw to themselves about half that activity. In terms of employment attached to the larger mills employing 50% of the workforce, Grafton (46%) and Lismore (29%) are the predominant centres. (In interpreting the figures of table 3, it needs to be noted that the commercial activities of larger mills are more likely to extend further afield than those of smaller mills.)

Table 3: Commercial centres of timber mill activity

Centre	Employment weight (%) All mills	Employment weight (%) Large mills with 50% employment
Grafton	35	46
Lismore	18	29
Casino	17	8
Coffs Harbour	9	5
Woodenbong	5	8
Mullumbimby/Murwillumbah	5	
Kyogle	4	4
Tenterfield	2	
Glen Innes	1	
Ballina	1	
Other	2	
Total	99	100

Source: NSW State Forests data.

Independent contractors

Although there are exceptions, independent contractors and hauliers are in general small companies (in terms of employment, if not in terms of capital employed per employee), the operations of which are not focused at any one ‘site’ — least of all the place where the business has its office.

Depending on the way in which the company operates, a minimum sized team to carry out the felling, snigging and hauling operations would include a team of 3–4 persons working together.

It is not known accurately how many contracting firms are operating in the Upper North East, or the number of persons employed. Information available suggests that there may be about 35–40 such companies based in the Upper North East, employing about 170 workers. Because these firms are mobile in their operations they can operate over wide areas: a number of companies from the Lower North East forest region also, no doubt, operate in the Upper North East (and vice versa).

The mobile nature of the operations of contracting companies permits their ‘head office’ location to be widely dispersed (see below).

Wages and salaries

Based on returns from 13 companies at 13 mill sites and employing 342.5 full-time equivalent workers, the average annual wage for a mill company worker in the financial year 1997–98 was approximately $26 690. The range of annual wage at these sites was from about $31 000 down to $15 000. There is a tendency for larger mills to pay a somewhat higher wage on average than smaller mills. This may be a consequence in some cases of expansive activities based on the receipt of Industry Development Assistance grants.

(The Social Assessment Unit of the Department of Primary Industries and Energy has provided survey data from a sample of Upper North East mills which enables an independent estimate of mill wages to be made. Data covering 305 persons from 13 mills employing 467 workers suggests an average annual wage of $25 980 per FTE employee. On the other hand, using data from seven mills for which data covering almost all staff are available (194 out of 229), the estimate of annual wage per FTE is $24 620. Of the two sets of 13 mills in the Rush Social Research and SAU data, only four are in common.)

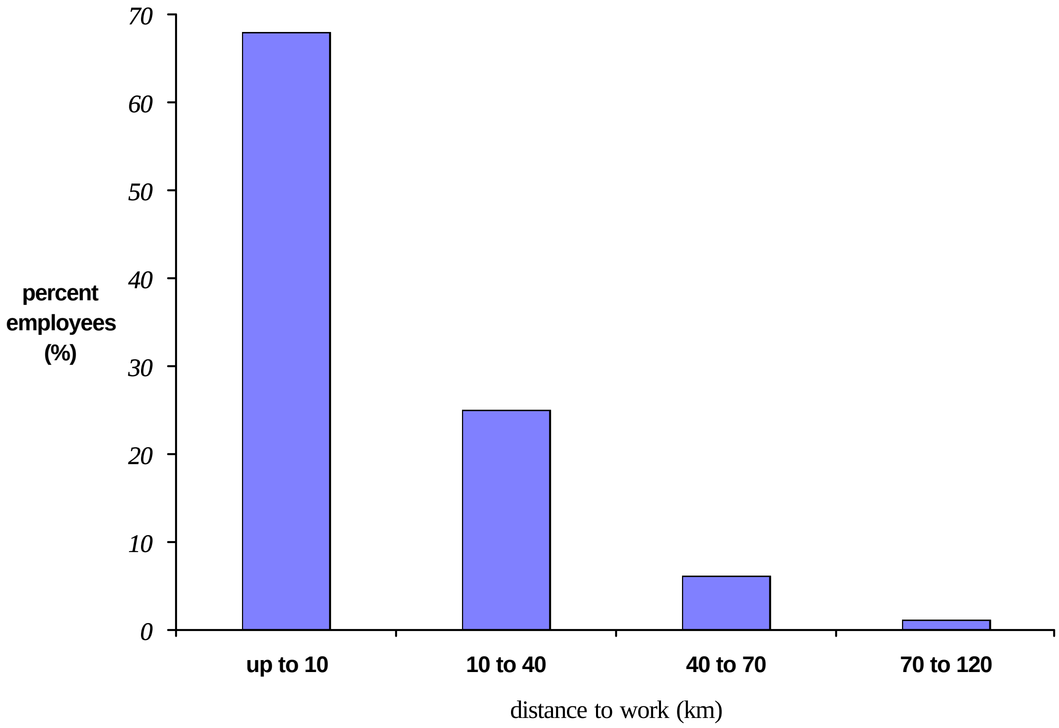
From the small sample of contractors responding (seven companies, over 75 employees), indications are that the average wage for contractor employees is about $24 500 (range $31 000–$15 500). Haulage-only contractors appear to receive a wage at the lower end of this range. Overall, employees with contracting companies in the Upper North East appear to receive a somewhat lower wage, on average, than mill company employees.

The journey to work

Ten mill company respondents provided information on employee domiciles that could be used to examine journey to work characteristics of timber industry workers. By comparing the results of individual mills, it does not appear that the distribution of distance travelled to work is different for smaller mills than for larger ones.

By combining the results for the ten mill sites (217 employees), we have derived an approximate frequency distribution for all mill workers. In terms of percentages, we estimate that 68% of employees live within ten kilometres of their place of work, 25% live from 10 to 40 kilometres away, 6% from 40 to 80 kilometres, and 2% from 80 to 120 kilometres (figure 2). The median distance for the journey to work is estimated as around 7 to 8 kilometres. (figure 2).

Figure 2: Journey to work (Upper North East mills)



In the case of contractors, and based on the sample of seven businesses, the distribution of employee domiciles for a given company from a central office location is on average much more widespread than in the case of mill employees. This is not surprising as the focus of contracting operations is the forest from which the resource is being drawn, and this varies with time and can vary over a wide geographical area.

In the case where the contracting company operates more than one crew, the domiciles of different crews may tend to cluster around different towns.

Local expenditures

As part of the questionnaire, respondent mills were asked to make a calculation to identify the amount of money they spent locally in the year 1997–98. The details of the calculation are set out in the 'Business Services Expenditure' section of the questionnaire (cf. Appendix XX).

In essence this calculation commences with an estimation of total business outgoings (excluding wage-related outgoings) for the year, subtracts expenses on business services such as insurances, registrations, loan and lease payments etc., log royalties, and major expenditures on capital equipment. These items are assumed not to be local expenditures. The remaining dollar amount is taken to represent expenditures on such items as:

- freight haulage
- fuel/oils
- felling/snigging
- log haulage
- gas
- tyres
- spare parts
- chainsaws
- hardware
- mechanical equipment
- repairs and maintenance
- fabricated items
- electrical services
- engineering services
- other tradesmen
- accommodation
- accountancy services
- stores (stationery, packaging etc.)

These items can potentially be purchased locally, and respondents were asked to estimate the percentage of the residue amount they did spend locally. The dollar amount resulting from this calculation is taken to be the amount spent locally by the mill (excluding wage payments to employees).[1]

Taking N to represent the full-time equivalent employment at a mill, and D as the money in dollars spent locally, and assuming they are related in linear fashion, it is possible to estimate by least squares a regression line:

$$D = a + b.N \qquad (a, b \text{ constants})$$

The data provided in the questionnaires by ten mills has allowed the calculation of such a regression. With D expressed in units of thousands of dollars, this line is:

$$\underset{(25.69)}{D = 2.37} + \underset{(0.71)}{12.81N} \qquad n = 10 \qquad R^2 = 0.97$$

Statistical tests (t-test) indicate that b is significant at the 95% level, and that the constant a is not significantly different from zero.

[1] It is important to note that the local expenditure of a mill should be estimated net of expenditure on local independent contractors. If this provision is not made, estimates of expenditures locally by the timber industry will include an element of double counting. The same is true for the purchase of sawn boards from other mills.

This provides a method for determining the amount of money entering or leaving the local economy as a result of changing employment levels in the local timber industry. The regression indicates that annual mill purchases from the local economy change by about $12 810 for each worker taken on or made redundant (given present technology).

With regard to contractors and hauliers, the questionnaire data provided on local expenditures is very variable and the level of confidence in it does not permit a calculation equivalent to that for mills. Results from elsewhere, which could be considered indicative only, suggest that the local expenditure per employee by contractors may be more than twice that by mills, and that about 50% of local expenditure by contractors is used to purchase fuel.[2]

Industry change 1996–1998

There have been many changes in the timber industry in Upper North East in recent years. The resource available from Crown forests has reduced substantially, increasing pressure on the private property resource. With the RFA process continuing, there is an air of uncertainty in the industry. Many companies, including some significantly sized mills, have closed their doors; others have downsized; some, however, have increased their turnover.

There have been consequential changes in employment across the region. Accurate figures are not available for company closures in recent years. NSW State Forests estimates suggest a net fall in the number of persons employed in the timber industry over the last three years, of about 400 persons. However the figure needs to be treated with circumspection owing to the possibilities in the State Forest records of duplications, the non-standard nature of licensing arrangements, and because it is not possible to discriminate between full-time and part-time employment.

All timber mills that responded to the survey questionnaire are currently operating, with only one exception. Twelve respondents provided employment and wage figures for the three years 1995–96, 1996–97, 1997–98, and additional respondents provided employment figures only over the three years, or employment and wages figures for less than the three years. From this data we deduce that:

- of the 15 mills in the sample, employment overall rose by about 9.8% (408 to 448 FTE employees) over the three years (over 3% per annum). Seven sites recorded employment gains over the period, for four employment was static, and for four mills, employment reduced. Both large and small mills showed employment gains and losses.
- over the 12–14 mills for which data is available, average annual wages currently stand at $26 690. Wages appear to have fallen by about 4% over the three year period.

The sample responses are summarised in tables 4 and 5.

Table 4: Employment at 15 mill sites across the Upper North East region

	Employment			
Year	**Full-time**	**Part-time**	**Casual**	**FTE**
1995–96	384	9	39	408
1996–97	382	22	50	418
1997–98	417	16	45	448

Note: FTE = full-time equivalent workers

[2] Rush Social Research Agency, *Locational Impact of Forest-Based Industry Expenditure in the Lower North East Region of NSW*, a report prepared for SAU/DPIE & RACAC/DUAP, 1998.

Table 5: Change in wages across the Upper North East mills

	Sample[a]		
Year	Mills	Employees[b]	Ave annual wage ($)
1995–96	12	223	27,870
1996–97	14	293	25,930
1997–98	13	342.5	26,690

Notes:
a. Twelve mills provided data for all three years; other mills provided data for one or other years
b. employees as FTE

For the sample of seven contractors, employment levels have dropped about 5%, and wage rates have been virtually static over the years 1995–96 to 1997–98:

Table 6: Employment by six contractors across the Upper North East region

	Employment				
Year	**Full-time**	**Part-time**	**Casual**	**FTE[a]**	**Ave ann. wage ($)[b]**
1995–96	75	4	0	77	24 472
1996–97	76	4	0	78	25 730
1997–98	72	5	0	73.5	24 485

Notes:
a. FTE = full-time equivalent workers
b. Based on FTE for seven contractors and hauliers

FISAP Industry Development Assistance Grants

Under the New South Wales Forest Industry Structural Adjustment Package (FISAP), native timber sawmills, veneer and plywood mills, tool handle and pole manufacturers, sleeper cutters and logging and transport contractors may apply for Industry Development Assistance grants.[3] Individual grants may range from a few tens of thousands of dollars to as much as one million dollars.

The successful applicant for a FISAP grant is enabled to raise further capital and invest in value-adding and/or productivity enhancing activities. These activities may (but do not necessarily) raise mill employment either directly through application of the grant monies, or indirectly through the grant's flow-on effects. The implicit assumption in the government approval of a FISAP–Industry Development Assistance grant, of continuity of resource supply, may of itself raise the employment level at that mill.

It is understood that over the period January 1996 to July 1998, FISAP–Industry Development Assistance grants to businesses in the Upper North East were as follows:

Table 7: FISAP Industry Development Assistance grants in the Upper North East

No. of applications approved	10
No. of businesses involved	7
Amount made available	$2 894 584

The evidence available suggests that Industry Development Assistance grants have so far been directed to larger mills, particularly those deemed capable of significant value adding. It does not appear that any mill in the Upper North East employing less than about 12 persons has yet received an Industry Development Assistance grant.

[3] Department of Land and Water Conservation, *FISAP - Help for You and your Industry* (Information Package), 1996.

Donations to community

Many of the respondent mills and contractors contribute to the life of their local communities in ways other than with wage payments and local purchases. As one manager explained, summing up what appears to be the common approach: *'We are a regular part of country life, and we try to donate in proportion to our presence'*.

Donations can be in cash, or in kind — particularly in providing timber for community projects. Cash donations cover a broad spectrum, including monies to sports clubs and events (soccer, cricket, golf, softball, motorcycling, rodeo), schools, churches, community events and programs such as drug awareness programs, Channel 10 Christmas party, the agricultural and horticultural show, country music talent quest, Beef Week (Casino), rescue helicopter and bush fire brigade. (Donations were not necessarily restricted to the local community, with one business donating significantly to overseas charities.)

Levels of optimism

As part of the questionnaire, respondents were asked: *'How optimistic do you personally feel about your business's ability to adapt and adjust to major changes to industry (generally considered) in the Upper North East region?'* Responses were recorded on a five-point scale, from 1 ('not at all optimistic') to 5 ('very optimistic'). Responses were as follows:

Table 8: Level of optimism for the business

	Scale	Mills	Contractors
Not at all optimistic	1	2	0
	2	1	1
	3	4	1
	4	1	2
Very optimistic	5	7	3
Total		15	7

Amongst this sample of mills, the level of optimism was independent of mill size. As can be seen, half of the mills were optimistic or very optimistic.

The high levels of optimism amongst some contractors in the sample may be due to the fact that they have existing contracts (in a situation of low resource availability), coupled with their mobility in relation to serving the milling industry over a wide area.

Views of mills and contractors

During the week 27–31 July (and subsequently), face-to-face interviews were carried out with a number of mill managers/owners and contractors in the Upper North East. The following represents an overview and summary of the views expressed.

Overview

There are three main issues which stand out as a consequence of the face-to-face interviews:

- Different stakeholders interviewed have had **significantly different experiences** of recent changes in the timber industry in the Upper North East. For some, their position has improved. For others their position has deteriorated.

- The prime concern and anxiety of those interviewed is **resource security** (including volume availability and security of that volume), and the consequential matters of financial security and the capacity and will to invest.
- Amongst those interviewed, small and medium sized operators often expressed a sense of injustice, feeling that, relative to the larger mills, they were being discriminated against in decisions being taken about their future.

Resource security

In the current environment, the available hardwood timber resource from Crown land has been cut to 60% of what it was a few years ago. This reduction has been felt particularly by companies not having supply contracts with State Forests. These are generally the smaller mills.

There is a general sense that the average quality of resource (including quota logs) provided from State forests has declined in recent years. This is attributed to the government's volume commitments being greater than the forest areas currently available for logging can provide. A consequence has been that some companies are working on finer and finer margins.

In the situation of lack of resource security, or of total volumes available, the industry is turning to private property, either in harvesting more from this source, or in buying tracts of forested land as a hedge measure.

Lack of a secure future has been reflected in the unwillingness of banks to provide loans to timber industry companies.

Firm size

It was generally considered by medium and smaller firms, that the large firms were benefitting from Industry Development Assistance grants, to the disadvantage of the smaller firms. This observation is consistent with the view that it is generally the large firms who hold supply contracts with State Forests and can plan on that basis.

A number of medium sized and smaller firms said they had 'looked at' Industry Development Assistance grant application and decided not to proceed in making an application. Concerns expressed in this regard included:

- companies themselves being required to put funds in, but with no guarantee of resource availability;
- government changing the rules regarding Industry Development Assistance eligibility.

One observation encountered was that for smaller mills, getting access to timber resource depended on 'who you know'.

Harvesting plans are only available to large contractors. It is considered 'too much trouble' to prepare a plan, for example, for fencing. If someone wants to access that resource, they have to negotiate with the large contractor.

Smaller mills are usually more productive from the log that larger mills. Anecdotally, it was claimed that some large mills have recovery rates as low as 30%.

There was concern expressed for the future of many smaller mills. These are often family companies with low overheads, efficient resource use, and low profit margins. Some may be able to continue in this manner into the future, if resource is available. However the scale of investment required for producing finer specification timber and higher value adding products, is likely to be beyond many of these mills.

The interests of smaller mills, represented by the Timber Trades Industries Association rather than the Forest Products Association, had been excluded from negotiations over the RFA, it was claimed.

Mill management and economy

For many mills, the consistency of log supply is a problem. Despite quota allocations, these were not always being met (‘arrears’ in quota log provision could be up to several thousands of cubic metres, it was claimed).

With decreased resource availability, some mill operators were having to spend considerable time and travel assessing log supply possibilities.

Some millers were finding it much more difficult to obtain timber from private property: applications could take up to six months to process, and many areas required environmental impact statements and EPA approvals. Such were often beyond the means of private property millers, who had consequently left the industry.

One mill owner identified a decline in mills skills available and the difficulty of finding workers for some skilled jobs

> *Experienced staff are a dying breed... we’ll find it hard if one of our benchmen goes.*

More than one mill owner stated that order books were full, but could not be met with current resource availability.

Competition from alternative sources of some products, such as the use of concrete for telephone poles and railway sleepers, and of plastics for handles, was causing concern for some businesses.

Some mills are finding it difficult to adjust to the current conditions because of the specificity of their milling equipment (such as the ability to handle different log sizes, accuracy of cut), and the cost of new equipment in an environment in which there is no resource security.

Some mills, especially those operating from private property, were having to diversify into such activities as earthmoving and transport, in order to survive.

Some smaller mill companies considered that they did not have the time to participate appropriately in the RFA processes, were not well informed by government about them, and hence were often shocked when public announcements were made about them.

Value adding

Several of the firms interviewed were actively moving towards value adding, particularly involving timber drying and dressing, but also developing other niche markets. Others would like to do this but were unsure how they could achieve it, given the current situation.

A number of comments were offered on value adding in the interviews:

- mills using lower grade timbers have less opportunity for value adding;

- inability to add value on the last 20% of log volume (fence posts, pallets etc.);
- value-added product markets are more specific and more vulnerable to change.

Some ancillary types of value adding mentioned included the introduction of log grading courses for contractors, the use of AusIndustry diagnostic studies, and market research.

One relatively small company has developed a new hardwood plantation harvesting head, now being sold in markets overseas.

Timber growing and timber quality

Comments made included the following:

- the region needs a chip mill to use timber waste;

  'A chip industry would increase employment without felling another tree'

- State Forests has large tracts of unproductive land: these need to be put plantations, and they need to buy such land if necessary;

  'Hardwood plantations must be made to work'

- plantation hardwoods don't appear to be as good as natural regrowth for milling, as they are more springy and contain more knots;
- private land holders may be harvesting timber but not replacing it.

Attitudes and outlook

There was an evident tiredness of what was seen as continual changes in the timber industry in recent years, in resource access and harvesting regulations:

> *We're sick of this continual change.*

There was also a degree of cynicism about government consultation processes, and an acute awareness of their political dimensions:

> *I'm all for sustainability and proper forest management... but decisions are now politicised and this is virtually the end of the timber industry.*

Nonetheless, there was a degree of optimism expressed by those interviewed, although this was often forced:

> *You've got to be [optimistic], haven't you?*

As was often clearly stated in these interviews, the key to the future is resource supply:

> *Future? We've got none. If they gave us a guarantee on supply, we could do something*

> *I updated my equipment in 1985 for about half a million dollars. I could spend double that now, but not without resource supply.*

Timber industry supply

A significant part of the locational effects of change in the timber industry it is the repercussions which such change would have on other industries and businesses in the locality. In this investigation, we have attempted to answer this question qualitatively and quantitatively.

Local supply to the timber industry

Basis of the approach

In the questionnaires completed by businesses in the timber industry (mills and contractors), and after the identification of the total of local business service expenditure, respondents were asked to provide a list of local suppliers of products and services, identifying the product or service provided and an estimate of the amount of money spent with that supplier over the past year (1997–98)(questionnaire Q. 8).[4]

The responses to this question were extremely varied. A few respondents provided comprehensive and detailed lists of the creditors, including amounts paid. Others provided some back-of-the-envelope indications. Again, others believed that this information was properly not to be shared and declined to provide it.

From all the information provided, we have made estimates of which economic sectors have received what proportions of each dollar spent by a mill or contractor locally. In this regard, a few introductory words are necessary.

First, in interpreting the information provided, it is necessary to remove from the list of suppliers those who are themselves in the timber industry, such as. contractors supplying these services to mills. If this is not done, there will be double counting. The correct estimate of extra-timber industry supply expenditures represented in these transactions will be reflected in expenditures of that contractor on his services.

Secondly, the nature of the products/services supplied have been classified using codes of the Australian and New Zealand Standard Industrial Classification.[5] These codes have been combined in terms of categories which appear as important to the timber industry. These categories form one of the main bases for the analysis of the survey of suppliers themselves, detailed below.

Thirdly, it needs to be noted that the amounts paid to suppliers are identified for one year: 1997–98, and that this was a year of much change in the timber industry in the Lower North East. For some companies (including those who received Industry Development Assistance grants), this year was one of investment and increasing employment; for others this has been a year of stasis, and for others again a year of decline. Therefore it is not possible to give more than broad indications as to average values for amount spent.

Fourthly, it needs to be recalled that, as has been set out in the preceding section, we have made a particular set of assumptions about what monies are spent locally, and what monies can be considered as ‘lost’ to the locality and indeed the region.

---

[4] Note that this does not include wage payments to employees.
[5] Australian Bureau of Statistics and Department of Statistics (NZ), *Australian and New Zealand Standard Industrial Classification,* 1993 edition; see also idem, *Australian and New Zealand Standard Industrial Classification: Alphabetic Coding Index,* 1994.

Significant local inputs

From the data received, we have estimated the proportions of the 'locally spent dollar' which go from economic units in the timber industry in different directions into the local non-timber industry economy.

For small to medium sized mills, the two largest slices of the locally spend dollar go to freight haulage (products) and to petroleum product (fuels, oils) costs. In the former case this can be more than 50% of the local dollar, and in the latter, over 30%. Somewhat lesser slices go to parts, hardware and supplies such as bearing, wire ropes, saws and repairs to these; to repairs and maintenance of machinery and electrical equipment, and to motor vehicle repairs and spare parts, particularly tyres. For small to medium sized mills, these probably represent the significant total of local expenditures.

For the larger mills, all these categories of expenditure are significant, and other sets of identifiable expenditures include expenditure on an increased range of hardware products and services, retail expenditures (including motor vehicles, food, clothing), business services (including accounting services, computer systems, advertising, and security services). Construction expenditure may also be a significant item in 1997–98.

In the case of contractors, local expenditures are similar to those of small and medium mills, with the difference that the contractors do not spend on haulage as the mills do, but spend proportionately more on vehicle and machinery repairs and maintenance, and in particular on tyres. More might also be spent, on average, on petroleum fuels.

The following estimates are based on the responses of those companies who provided supplier lists together with money amounts. We have attempted to construct 'average' values from these figures. In doing so there is a need to take account not only of different sizes and functions of individual mills, but of the different accounting systems used by individual companies. We have employed a system of asterisks to identify allocation of the local dollar on a relative basis. These findings are summarised in table 9.

Table 9: Local expenditures of the timber industry — proportions of the dollar spent

	Timber industry business		
Category	**Contractors**	**Mills small/medium**	**Larger**
freight		****	****
fuel, petroleum products	****	***	**
hardware, 'parts'	***	**	***
machinery and electrical (repairs and maintenance)	***	**	**
motor vehicle repairs, tyres	**	*	*
retail products & services			(*)
business products & services			(*)
construction		[ ]	[ ]

Note: For each type of timber industry business, the number of asterisks against a given category of goods and services gives an indication of that category's relative importance in each locally spent dollar. The columns are not comparable horizontally.

Timber industry dependent businesses

Approach taken

An important part of the questioning applied to mills and contractors was the request for a list of main suppliers. This list was given by some but not all participants in the face-to-face and telephone interviews. The importance of the list to the 'cascade' principle is that, when attempting to measure the 'flow-on' effects of restricted access to hardwood, the local suppliers of goods to the timber industry are of prime concern.

The names and addresses of all suppliers named by the mills and contractors were listed and categorised by location (Upper North East/Lower North East). Once all replies from mills and contractors were collated, the sample of suppliers was supplemented by a random selection of similar industries from the yellow pages. In the Upper North East 57 addresses were provided by the mills and contractors, and to ensure a larger sample a further 400 names were drawn from the yellow pages. Postcodes and industry type 'screeners' ensured that a) the booster sample reflected the characteristics of the listed suppliers and b) all were from within the locational scope of the research. Thus, while the sample consists of businesses directly supplying the timber industry, it is not representative of all businesses within the Upper North East. The results from the survey of timber industry dependent businesses should be read keeping this in mind.

A very low response rate was achieved by mail: in the event eight questionnaires came back from suppliers whose businesses had closed with no forwarding address, six were returned with a note to say the survey was not applicable to them, two came from timber industry businesses and have been omitted, and 17 came back with very little in the way of usable data.

Once the 'return by' date had passed, Rush Social Research then used the mail-out list to contact by telephone a sample of 100 businesses which had been nominated by the mills and contractors as being direct suppliers. This sample is discussed in this section of the report. Even collecting data on this more personal level has not overcome the reluctance of a number of suppliers to provide financial data.

The pre-coded questionnaire used to measure impact amongst timber industry related businesses was developed by Rush Social Research and confirmed by the Department of Primary Industries and Energy.

The sample of businesses supplying the timber industry

The respondent for the interview was generally the owner/manager/partner (72 of 100); fourteen (14) were administrative personnel, eleven (10) were office managers and the remaining 45 were business professionals or service/sales people.

Ninety-six of the 100 businesses in the final usable sample were 'local' in that their head office was within the Upper North East of New South Wales.

Responses came from 26 townships, with most (more than half) coming from four centres, Grafton, Coffs Harbour, Lismore and Casino (see table 10).

Table 10: Location of businesses in the sample

Centre/township	% of 100
Grafton	26
Coffs Harbour	12
Lismore	9
Casino	8
Kyogle	6
Murwillumbah	6
Ballina	4
A number of other towns were represented by one to three returns	29

Type of business

We have described above the direction of timber industry 'locally spent dollar' in the Upper North East. Relative allocations of the dollars spent by mills and contractors have been identified and described in table 9. The categories used in the analysis of the suppliers to the mills/contractors were extracted from the Australian and New Zealand Standard Industrial Classification tables (1993), and reflect these categories. The balance of interviews within the sample of 100 also favours some of these sectors, such as motor vehicle repairs, fuel/petroleum, business services, and construction. The allocation of each supplier to an appropriate category was undertaken with reference to table 9.

Table 11: Type of business

	% of sample
auto repairs and service/tyres	25
business services	13
fuel suppliers	10
machinery and motor vehicle wholesaling	12
machinery and equipment manufacturing	9
road transport/storage/haulage	7
construction/trade services	6
auto electrical services	5
car retailing,	4
financial services	4
general retailing	4

Of particular 'fit' between the suppliers and the hypothesis within table 9 is the prevalence of transport and machinery-related businesses. Auto repairs and services; fuel suppliers; tyres and auto electric services are a significant proportion of the sample. 'Matching' the three asterisk status in table 9, machinery and equipment manufacturing and wholesaling are also represented in quite large numbers in the supplier sample: this includes parts manufacturing.

Of interest in the supplier sample is the comparatively high proportion of business services made up of legal and accounting services, computer services and real estate: this sector does not appear to be of consequence in table 9.

Employment of staff at June 1997 and June 1998

June 1997

As of June 1997, just under one in four (23%) of the businesses had only one full-time staff member, with a further 9% having two full-time staff members. Ten per cent did not disclose their staff numbers. Overall, the average (mean) number of full-time staff in the Upper North East was 8.0. At the same time (June 1997), sixty of the 100 businesses had no part-time staff. Of the remaining 40, 16 had one part-timer and 15 had two, with an average of 2.5 amongst those having part-time staff.

The average number of casual staff at June 97 was 4.1 amongst those employing casual staff at that date. This is biased a little by a small number of businesses having a larger number of casual staff. For instance, of the 23 businesses who had casual staff, 14 had one and three had two casual staff. At the other end of the scale two had 14, one had 15 and one had 20 casual staff.

June 1998

As at June 1998, slight changes had occurred in the average staff numbers, with a downturn in full-time and part-time staff numbers in the smaller businesses: casual staff level have stayed static. Amongst the suppliers employing larger staff numbers, changes have not been particularly noticeable although the number of companies employing 5–6 part-time staff has dropped while the number employer fewer (3–4) has grown.

The table following shows staff number at year-end as well as the percentage change which has occurred.

Table 12: Staffing levels at June 1997 and June 1998

Full-time staff (n = 100)	**% at June 97**	**% at June 98**	**% change**
1–10 full-time staff	72	64	-8
11–25 full-time staff	14	11	-3
26–50 full-time staff	2	2	nil
51–75 full-time staff	-	1	+1
76–100 full-time staff	2	1	-1
Average full-time staff	*7.9*	*8.1*	
No information on full-time staff	10	22*	
Part-time staff			
1–2 part-time staff	31	24	-7
3–4 part-time staff	3	6	+3
5–6 part-time staff	5	1	-4
15 part-time staff	1	1	nil
*Average part-time staff***	*2.5*	*2.3*	
Casual staff			
1–2 casual staff	17	17	nil
3–4 casual staff	1	5	+4
5 or more casual staff	5	5	nil
*Average casual staff***	*4.1*	*3.3*	

* eight auto retailers gave data for 1997 and not for 1998.
** average amongst those employing part-time/casual staff

The number of responses within each industry type is small and it is therefore not appropriate to draw conclusions about the very slight movements in full-time staff numbers within each sector. However, as a trend there seems to be a downsizing within the construction industry (1997 four businesses with 11–25 full-time employees, 1998 two businesses with 11–25 full-time employees: 1997 two businesses with 1–10 full-time employees, 1998 one business with 1–10 full-time employees). In the retail automotive trade there also appear to be eight businesses who dropped full-time staff numbers.

When looking at part-time employee numbers across the sample, within the wholesale sector there were, in 1997, eight respondents employing part-time staff compared to five in 1998. In the retail automotive sector, eighteen businesses employed part-time staff in 1997, compared to 14 in 1998.

Twenty-three respondents recorded casual staff at June 1997 compared to 27 at June 1998, an increase of four businesses with casual staff. Two of these businesses were in the retail automotive trade and two in transport/storage. One construction and one wholesale business reduced their use of casuals between 1997 and 1998.

A total of 731 staff were listed by the 100 supplier businesses. The domicile of staff is shown against the domicile of the supplier companies in table 13. As can be seen 73% of staff are accounted for by the seven towns most often represented in the sample of suppliers.

Table 13: Location of staff employed by businesses in the sample

Centre/township	% of 100 suppliers	% of full-time employees (n = 731)
Grafton	26	24
Coffs Harbour	12	6
Lismore	9	10
Casino	8	11
Kyogle	6	11
Murwillumbah	6	8
Ballina	4	3
A number of other towns were represented by one to three returns	29	

Other towns represented by 10 or more employees listed were Tweed Heads (21 or 3%), Coolangatta (20 or 3%), Mullumbimby (19 or 3%), Macksville (12 or 2%), Urunga (11 or 1%) and Alstonville (10 or 1%). Fewer staff members were listed as living in Byron Bay, Bellingen, Dorrigo, Port Macquarie, Barringah, Sawtell and a range of other townships.

Client base

In assessing the extent to which businesses supplying the timber industry could be at risk in the face of economic change in the area, the nature of the client base is important. Businesses with a wide client base could be seen to be less at risk than those with fewer clients. In the sample of businesses in the Upper North East, most (82%) had more than 50 customers last year, whilst only 2% had five or less (table 14).

Table 14: Businesses' client base

Number of customers last financial year	% of 100
A few (5 or less)	2
Several (6–10)	1
Quite a number (11–20)	6
A few dozen (21–50)	3
Many (more than 50)	82
No information	6

The number of clients was lowest in the auto repair/tyres/auto electrical services sector (73% more than 50); otherwise most of those businesses identified as being suppliers to mills and contractors also supplied a large number of clients.

Income details 1996–97 and 1997–98

Total (gross) income

There was a relatively high refusal rate for questions relating to financial performance — income (35 of 100 businesses) and gross wages (49 of 100). Comparisons between gross income for the financial years ending June 30 1997 and June 30 1998 can be seen in the following table.

In 1996–97, approximately 15% of businesses in the sample had a gross income of up to $100 000 and a further 11% had a gross income of between $100 000 and $200 000. Overall, about one-quarter of the respondents therefore had a relatively low gross annual income, with 19% having a gross income of $1 million or more at the end of the 1996–1997 financial year.

As can be seen, the percentage of businesses in each gross income bracket changed only marginally from 1996–97 to 1997–98 and, given the small sample size, no changes can be seen as significant. Perhaps what can be said is that the changes are complementary to some extent with (for example) a small increase in the number of businesses in the $100 000 to $150 000 gross income bracket being 'matched' by a small decrease in the numbers of businesses with gross income in the next highest bracket. If we inspect the higher end of gross income levels we see that there is similar complementarity. The median gross income remains the same at the $300 000 to $500 000 level per year, for suppliers to the mills and contractors in the Upper North East.

Table 15: Changes in gross income financial years 1996–97 and 1997–98

Gross income in $ (n = 100 businesses)	% at 30/6/97	% at 30/6/98	% change
Less than 50 000	7	8	+1
+50 000–75 000	3	3	nil
+75 000–100 000	5	4	-1
+100 000–150 000	6	9	+3
+150 000–200 000	5	2	-3
+200 000–300 000	5	7	+2
+300 000–500 000	6	5	-1
+500 000–750 000	8	8	nil
+750 000–1 million	1	3	+2
+1–2.5 million	13	11	-2
+2.5–5 million	2	3	+1
+5–7.5 million	4	3	-1
No response	35	34	

The following table looks at changes in gross income for those sectors identified in table 9: when inspecting this table it must be remembered that the number of businesses in each sector is small. Little in the way of change in income is observable.

Table 16: Changes in gross income for various sectors

Gross income ($)	Wholesale machinery 96/97 n = 12 %	Wholesale machinery 97/98 n = 12 %	Petrol/fuel 96/97 n = 10 %	Petrol/fuel 97/98 n = 10 %	Auto repairs/tyres 06/97 n = 30 %	Auto repairs/tyres 97/98 n = 30 %	Transport/ storage 96/97 n = 7 %	Transport/ storage 97/98 n = 7 %	Business service 96/97 n = 13 %	Business service 97/98 n = 13 %
Less than 50 000	17	17	-	-	7	10	-	-	8	15
+50 000–$100 000	-	-	10	20	17	7	14	14	1	-
+100 000–$200 000	8	17	-	-	13	17	-	-	31	30
+200 000–$500 000	17	-	10	10	17	17	-	-	-	-
+500 000–1 million	-	8	10	20	10	10	-	-	15	15
+1–2.5 million	-	-	20	10	7	7	43	43	8	8
+2.5–5 million	-	-	10	10	-	-	-	-	-	-
+5–7.5 million	-	-	10	10	3	3	3	-	-	-
No response	58	58	30	20	27	30	43	43	39	31

Percentage of sales (income) from five largest customers

An alternative measure of the risk of concentrating on a small client base is the percentage of total sales represented by the business's 'top five' customers.

On average 35% of sales to businesses in the sample made in this last financial year have been to their five largest customers in the Upper North East. The median figure is 30% of sales going to the five largest customers. There does not appear to be any particular sector where a larger proportion of sales is concentrated in the top five customers. However, for about 7% of the businesses in the survey, a low customer base is evident with the five largest customers representing 71% or more of their total sales. These are mostly in the transport/storage; construction; business services and manufacturing sectors.

Percentage of sales (income) from timber industry

On average, 22.3% of sales during the last financial year went to the timber industry. This differs across the different industry sectors (although sample sizes are very small) to some extent, with an indication that two sectors — transport/storage and construction — rely more on the timber industry for income than others. However approximately one-quarter of sales from auto repairs/tyres/service; machinery manufacturing; and wholesale trade go to the timber industry, as is shown in table 17.

Table 17: Proportion of sales to top five and timber industry

Industry sector	Average % of sales going to top five customers	Average % of sales going to timber industry
Transport/storage	61	38
Construction	45	37
Auto repairs/tyres/service	37	26
Manufacturing	41	25
Wholesale trade	29	24
Business services	25	16
Finance/insurance	55	13
Petrol/fuel	21	10
Retail (cars)	8	9
Retail trade (general)	25	8
Average over total sample	*37*	*26*

Money going into the local community

The questionnaire sought to establish the amount of money going out into the community, from the suppliers in this sample, and thus a series of questions were asked about wages paid, capital outlays and the amount spent on other local suppliers.

Comparison of gross wages paid 1996–97 and 1997–98

The median gross wage bill has stayed the same across the two financial years at $75 000–$100 000. As with the gross income table, the gross wage table shows very slight movements which appear to be complementary but generally show a very slight drift downwards of the gross wages bills incurred by the suppliers to the mills and contractors.

Table 18: Changes in gross wages paid, financial years 1996–97 and 1997–98

Gross wages in $ (n = 100 businesses)	% at 30/6/97	% at 30/6/98	% change
Less than 50 000	14	16	+2
+50 000–75 000	9	7	-2
+75 000–100 000	4	3	-1
+100 000–150 000	1	2	+1
+150 000–200 000	4	4	nil
+200 000–300 000	9	10	+1
+300 000–500 000	4	3	-1
+500 000–750 000	4	4	nil
+750 000–1 million	-	1	+1
+1–2.5 million	2	-	-2
+2.5–5 million	-	1	+1
No response	49.0	49.0	

Redundancy paid

Of the 100 respondents, two paid redundancies at less than $50 000 in the 1996/1997 year and one at the same level in the year 1997/1998. Two of these payments occurred in the construction sector (1 each year) and the third redundancy occurred in the automotive retail area.

Spending on business services, and capital outlays

A set of questions measured expenses incurred by the businesses in the financial year ending 30 June 1998, in such areas as:

- insurances, vehicle registration and lease payments, payroll tax, workers compensation, superannuation payments, bank fees, power, rates, telephone and other similar expenses;
- major capital outlays;
- purchases from suppliers.

Spending on business services

Just over four in ten (43% of the 100) refused to discuss their financial outgoings. Amongst those businesses which did complete the question on outgoings on business services, the median amount (where half pay the amount or below and half pay the amount or more) is found at between $20 001 and $50 000. For just over half (52%) of those businesses completing this section of the questionnaire, the business expenses were up to $50 000, as follows:

Table 19: Business expenses at 30 June 1998

Expenses ($)	n = 57 %	Total sample (100) %
1000–20 000	28	16
+20 000–50 000	23	13
+50 000–100 000	12	7
+100 000–200 000	11	6
+200 000–300 000	9	5
+300 000–500 000	7	4
+500 000–1 million	7	4
+1 million	4	2
No information		43

Major capital outlays

Sixty-seven of the 100 did not answer the question on major capital outlays, leaving a total of 33 businesses which did. The median spend on major capital outlays was $30 000. Only two outlays were above the $100 000 mark.

Table 20: Major capital outlays at 30 June 1998

Outlay ($)	n = 33 %	Total sample (100) %
1000–10 000	24	8
+10 000–20 000	18	6
+20 000–50 000	24	8
+50 000–100 000	27	9
+200 000 and over	6	2
No information	-	67

Current spend on local suppliers

Amount spent on goods and services

Forty-five per cent did not answer this question, leaving a total of 55 businesses who estimated the amount they spent in the financial year ending 30 June 1998 on goods and services. Amongst those 55 businesses, the median amount spent on suppliers was $130 000 (see table 23). As shown, 22% spent $500 000 or more on suppliers and 9% spent over $2 million; 24% spent between $200 000 and half a million dollars. Approximately one in three (32%) spent up to $50 000.

Three sectors appeared to spend larger amounts on goods and services than others: these were the general retail trade (food, non-automotive retailing), construction and the automotive retail sectors.

Table 21: Current spend on goods and services at 30 June 1998)

Spending ($)	n = 55 %	Total sample (100) %
1000–20 000	16	9
+20 000–50 000	16	9
+50 000–100 000	13	7
+100 000–200 000	13	7
+200 000–300 000	1`	6
+300 000–500 000	9	5
+500 000–2 million	13	7
+2 million	9	5
No information		45

Percentage of outgoing on goods and services spent locally

An average of 59% was spent locally by the 70 of the 100 businesses who answered this question. The median percentage figure was 75% of outgoings spent locally.

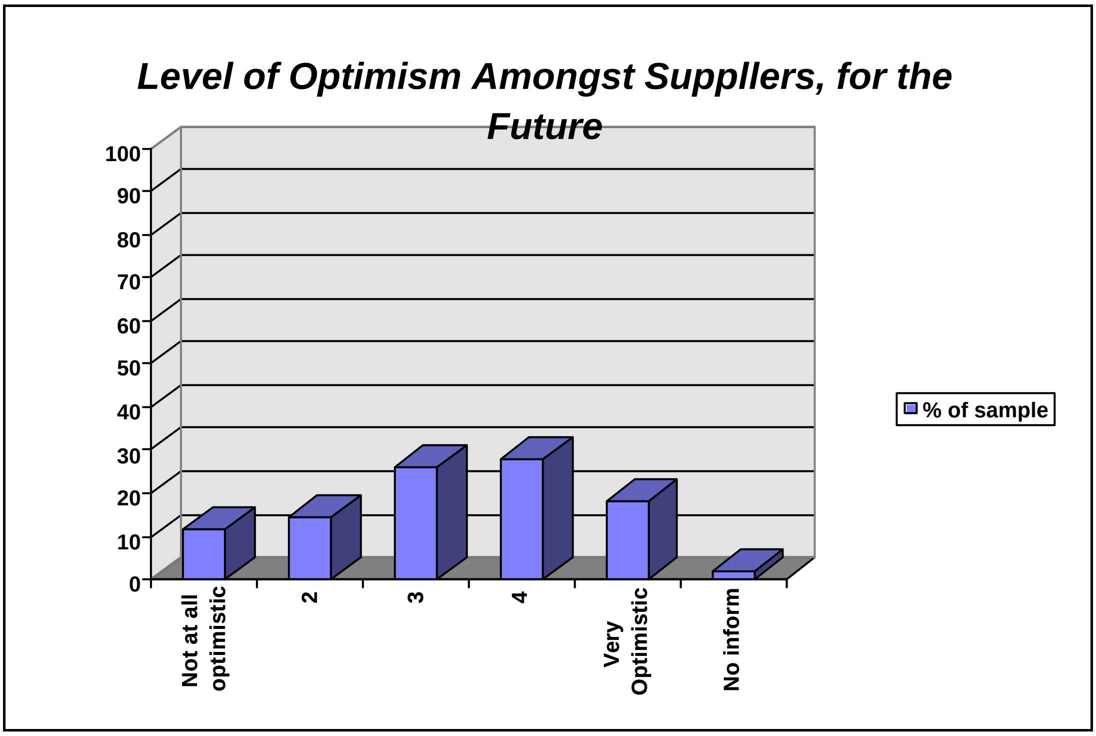
Sixteen businesses claimed that between 91 and 100% of their outgoings on suppliers was spent locally and 13% claimed to spend between 81 and 90% locally. Two industry sectors stood out in this result, finance/insurance, and property/business services, both sectors with a relatively minor proportion of their income generated within the timber industry. Auto repairs/tyres/service, transport/storage and automotive retail also spent a relatively high proportion of their suppliers outgoings within the region and the former two of these do receive about a quarter of their income from the timber industry. Lowest spend within the regions was shown by the manufacturing and wholesale sectors, but again respondents in these two sectors are relatively timber industry dependent..

Table 22: Average of outlays spent locally and average sales to timber industry

Industry sector	Average % spent locally	Average sales going to timber industry
Finance/insurance	97	13
Property/business services	82	16
Auto repairs/tyres/service	73	26
Transport/storage	71	38
Retail (cars)	55	9
General retail	48	8
Construction	45	37
Petrol/fuel	36	10
Wholesale trade	33	24
Manufacturing	29	25

Level of optimism

All but 2 of the 100 businesses responded to this question, giving an indication of whether they felt ‘very optimistic’ about the future (+5), ‘not at all optimistic (+1), or somewhere between these two extremes. On average a ‘score’ of 3.3 was achieved, indicating that the businesses tended towards the optimistic end of the scale. However, over one quarter of the ‘scores’ (27%) sat in the middle, viz:



The sub-group samples were very small and it cannot be thought that differences in the average level of optimism are significant. However, the sectors showing lower average scores out of five were:

▪ manufacturing (n = 9)	2.3
▪ transport/storage (n = 7)	2.9
▪ retail (cars) (n = 4)	3.0
▪ auto repair/tyres/service (n = 30)	3.1
▪ petrol/fuel (n = 10)	3.2

and two sectors showed much higher optimism levels:

▪ finance/insurance (n = 4)	5.0
▪ property/business services	4.3

Key points around table 9

The following summary of trends which have been observed in the data from suppliers to the timber industry in part refers back to table 9, in that we describe the key points which relate to each sector described in table 9, and in the supplier data.

Sector	Table 9: No. of asterisks	Key trends in supplier survey
Transport/storage (compare to freight in table 9)	****	Move to casual staff Higher % of income from low number of customers Higher dependency on timber industry (38% income) 71% of spend is local Low level of confidence in future
Construction	[ ]	Slight downturn in full-time employees Higher % of sales to smaller number of clients Higher dependency on the timber industry (37% income) 45% of spend is local
Motor vehicle repairs/tyres/ service	**	Lowest number of clients Slight drop in gross income 25% of sales to timber industry 73% of spend is local Average level of confidence
Fuel/petroleum	****	36% of spend is local 10% of sales to timber industry Average level of confidence
Manufacturing (machinery & electrical)	***	Higher % of income from a low base 25% of sales to the timber industry Lowest level of confidence
Business services	(*)	Drop in gross income Higher % of sales to lower base 82% spend is local High level of confidence

REFERENCES

Bean, C., McAllister, I. and Warhurst, J. 1990. *The greening of Australian politics: the 1990 Federal election.* Longman Cheshire, Melbourne.

Bell, A. 1994. Climate of opinion: public and media discourse on the global environment. *Discourse and Society* vol 5 (1) pp 33–64.

Bolton, G. 1992. *Spoils and spoilers: a history of Australians shaping their environment.* second edition. Allen and Unwin, St Leonards.

Brennan, M.J. and Frank, R.J. August 1997. *Wilderness declarations and national park extensions: social and economic impacts for northern New South Wales.* Coastal Agribusiness Advisory Council, Coffs Harbour.

Centre for Coastal Management. 1993. *Community consultation report Casino, Murwillumbah and Grafton management areas, Northern Region State Forests NSW of New South Wales.* University of New England, Northern Rivers.

Cotgrove, S. and Duff, A. 1981. Environmentalism, values, and social change *British Journal of Sociology* vol 32 (1) pp 92–110.

Crook, S. and Pakulski, J. 1995. Shades of green: public opinion on environmental issues in Australia *Australian Journal of Political Science* vol 30 pp 39–55.

EPA 1994. *Who cares about the environment: a benchmark survey of the environmental knowledge, skills, attitudes and behaviour of the people of New South Wales.* NSW Environment Protection Authority, Chatswood.

ERM Mitchell McCotter Pty Ltd. November 1995. *Social impacts of Deferred Forest Assessments: three additional case studies.*

Ford Timbers Pty Ltd. July 1, 1996. *Response to the Draft Interim Forestry Assessment Report: Northern Study Area.*

Forest-based Communities of North East New South Wales. October 1995. *Submission to Department of Prime Minister & Cabinet Forest Task Force on the Deferred Forest Assessment.*

Gibbs, D. March 1992. *Promises and realities: political decisions affecting the timber industry - a case study of far north coast experience following the Rainforest Policy Decision of 1982.* Forest Products Association Ltd, Darlinghurst NSW.

Gibbs, D. October 1992. *The economic impacts of the NSW Rainforest Decision of 1982 on the timber industry of the far north coast.* Institute of Foresters of Australia Inc. volume 55 (1&2).

Hurford, Lexie. 1995. *A personal submission to the Resource and Conservation Assessment Council.* Lismore.

Hurfords Building Supplies. 1996. *Submission to the Resource and Conservation Assessment Council.* Lismore.

Kable, J.C. February 1981. *The socio-economic effects on Casino of the closure of the Washpool State Forest to logging.*

Kinhill Engineers Pty Ltd. 1993. *Wet tropics of Queensland Structural Adjustment Package, Final Report.* Milton.

Koch, N. and Kennedy, J. 1991. Multiple-use forestry for social values *Ambio* vol 20 (7) pp 330–333.

Lothian, J. 1994. Attitudes of Australians towards the environment: 1975–1994. *Australian Journal of Environmental Management* vol 1 (September) pp 78–99.

Lugg, Andrew. 1995. *The social impacts of a forest policy on a dependent rural community: 'bombshell or blessing'.* Trinity College, University of Oxford.

New South Wales Government. December 1995. *Deferred Forest Areas New South Wales.* Report of the Deferred Forest Assessment process.

Papadakis, E. 1993. *Politics and the environment: the Australian experience.* Allen and Unwin, Sydney.

Pugh, D. June 1992. *How the 1982 Rainforest Decision benefited the far north coast: a reply to 'Promises and realities'.* For the North East Forest Alliance.

State Forests of NSW. December 1995. *Casino Management Area EIS* vol. A — Main report.

State Forests of NSW. December 1995. *Coffs Harbour–Urunga Management Areas EIS* vol. A — Main report.

State Forests of NSW. December 1995. *Dorrigo Management Area interim EIS* vol. A — Main report.

State Forests of NSW. December 1995. *Tenterfield Management Areas EIS* vol. A — Main report.

State Forests of NSW. December 1995. *Urbenville Management Area EIS* vol. A — Main report.

State Forests of NSW. December 1996. *Murwillumbah Management Area EIS* vol. A — Main report

State Forests of NSW. November 1994. *Grafton Management Area EIS* vol. A — Main report.

State Forests of NSW. October 1992. *Glen Innes Forest Management Area EIS.* Forestry Commission of NSW.

Tracey, Jacqueline Lee. 1995. *Coping with insecurity: family firms in the New South Wales logging industry.* A study undertaken for submission for Doctor of Philosophy degree, Australian National University, Canberra.

Urbenville Progress Association Inc. n.d. *Submission on the socio-economic fragility of the villages of Urbenville and Woodenbong.*

Watson, I. 1990. *Fighting over the forests.* Allen & Unwin, Sydney.