



Post Impact Analysis and Regional Profile Eden CRA Region

A report undertaken for the NSW CRA/RFA Steering Committee
April 1998



POST IMPACT ANALYSIS AND REGIONAL PROFILE

SOCIAL ASSESSMENT UNIT, DPIE

**A report undertaken for the NSW CRA/RFA Steering
Committee
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Report Status

This report has been prepared as a working paper for the NSW CRA/RFA Steering Committee under the direction of the Economic and Social Technical Committee. It is recognised that it may contain errors that require correction but it is released to be consistent with the principle that information related to the comprehensive regional assessment process in New South Wales will be made publicly available.

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

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EXECUTIVE SUMMARY

This report has been prepared for the joint Commonwealth/State Steering Committee which oversees the comprehensive regional assessments of forests in New South Wales.

The comprehensive regional assessments (CRAs) provide the scientific basis on which the State and Commonwealth governments will sign regional forest agreements (RFAs) for the major forests of New South Wales. These agreements will determine the future of the State's forests, providing a balance between conservation and ecologically sustainable use of forest resources.

This report was undertaken to establish an historical account of social change with the area since the processes of social change which result in relation to one proposal are not unique, but are likely to resemble processes which have occurred before in relation to important population/community parameters. The report also provides a statistical and historical profile of the Eden Forest Region. A more detailed population profile of selected case study communities is contained in the Social Values Report

The objectives of this report are:

- To provide a review of social impact studies conducted within the Eden RFA region.
- To provide a review of national and international studies relating to social impacts in resource based communities.
- To develop a regional profile for the Eden Forest Region and service sectors within that region.

A literature search was employed to identify existing social assessment work within the RFA region and studies of comparative communities which resemble the current impact context. A careful study of comparative communities was also undertaken to describe the social characteristics which exist and the subsequent changes experienced as a result of impacting events.

This profiling project involved the collection of statistical and historical data within the Eden Forest region using existing databases such as the Australian Bureau of Statistics and the IRDB (Integrated regional database) as well as other data sources such as local shire histories. Statistical data was based on the 1991 ABS Census and any available 1996 updates.

Data was also obtained from relevant state agencies and local government authorities in regard to the provision of infrastructure services throughout the RFA region.

The following assessment report contains:

- a review of national and international social impact assessment studies relevant to the Eden region.
- a summary of the main post impact studies specifically relating to the south east forests of NSW.
- a summary of the social impact and assessment findings of the various Environmental Impact Statements relating to the Eden region.
- a description of the social assessment objectives and indicators to be used in the process.
- a summary of employment changes in Eden from 1975 to 1997.
- a summary of relevant mitigation programs.

1. POST IMPACT ANALYSIS

1.1. INTRODUCTION

Social impact assessment is a methodology used for examining social change due to external sources, especially significant development projects, but also government policies, technological change and social processes. Social Impact Assessment has become an essential part of Environmental Impact Assessment where a balance is sought between the social, environmental and economic aspects of change.

The Eden CRA region social assessment has been undertaken within the framework of the Regional Forest Agreements. That is, communities which may be affected by changing policies have been studied over a range of social indicators. An impact assessment may then be provided to each resource option and against these indicators.

Such impact statements relate to the potential policy changes which will be agreed to by both Commonwealth and New South Wales governments relating to levels of hardwood resource supply and forest management practices within the area known as the Eden Forest Management Area.

Communities within the region which may be affected to varying degrees by the Regional Forest Agreement are described in the regional profile according to social indicators. Those communities likely to experience significant benefits or costs as a result of such change are the main subject of any subsequent social impact assessment.

The possible options for forest resource supply and management practices, the impacts, will be defined by the Commonwealth State Steering Committee.

1.2. REPORT OBJECTIVES

A significant aspect of social assessment is to review the past patterns of change within the region and to provide baseline data on the social demography of the area. This is done primarily by searching for material which provides insights into the trends and responses of communities within the region of study.

The objectives of this report then are

- To provide a review of national and international studies relating to social impacts in resource based communities
- To provide a review of social impact studies conducted within the Eden CRA /RFA region
- To develop a regional profile for the Eden region
- To develop profiles of service sectors within the region

In addition, the objectives of the social impact assessment and an outline of the social indicators to be used in such as impact assessment is provided.

1.3. REVIEW OF NATIONAL AND INTERNATIONAL STUDIES

An extensive bibliography of Social Impact Assessment is available through Dr Frank Vanclay, Centre for Rural and Social Research, Wagga Wagga, NSW 2678.

The RAC Forest and Timber Industry Inquiry 1991

In 1991, the Resource Assessment Commission (RAC, Appendix W), examined the use of social impact assessment and concluded that social

impact assessment is more than the documentation of the social dimensions of change. It can also investigate public values and preferences and focus public participation in a constructive way.

The Inquiry also commissioned a detailed case study review of the social impacts of changes to the north Queensland timber industry, that is, impacts arising from the cessation of logging in the north Queensland forests placed on the World Heritage list.

The Forest and Timber Industry Inquiry commissioned consultants (Lynch- Blossie et al) to evaluate the social and economic impact assessment.

The objectives of the Inquiry's study were to :

- document the events following the cessation of logging
- evaluate the social and economic impacts and to compare these with predicted impacts
- assess whether the Structural Adjustment Package (\$73.5M) was effective in mitigating negative impacts
- advise on possible methods for mitigating the adverse social impacts of forest industry restructuring.

A brief summary of the findings is included here.

- Baseline estimates of predicted employment loss provided in 1987 were reasonably accurate measured in 1991, if anything, underestimated those numbers.
- Impacts to the region were differentially distributed in communities and the degree of impact depended largely on the economic profiles of the affected sub-region.
- At the community level, some impacts were concealed by the growth in tourism and sudden expansion of the building industry, the exception being Ravenshoe where the timber industry was a relatively large part of the overall economy.
- In the community of Ravenshoe, the negative impacts of the cessation of logging were found to have been offset to a certain extent by an influx of new residents attracted by cheaper land prices. Survey respondents' accounts of negative impacts were concerned with problems arising from business compensation part of the Structural Adjustment Package

which was aimed at retooling the Ravenshoe mill to accept plantation timber and thus continue operating, maintaining employment in the town. This has been unsuccessful, for a variety of administrative and financial reasons concerning the failure of the Ravenshoe mill's parent company and the mill was in the hands of receivers at the time of the inquiry.

- Many of the impacts were most felt at the individual level, the social and psychological problems which were at least as tangible and disruptive as the economic costs.

In 1987, World Heritage area management was considered a potential source of jobs available for displaced timber workers. Due to delays in the agreement between the Commonwealth and State, which included funds for capital works, jobs which might have been filled by displaced timber workers had not been created in a manner to benefit those workers.

The report makes a number of recommendation as to the effectiveness of the Structural Adjustment package available in the case of the north Queensland timber industry. It also recommends a high degree of community participation in decisions that affect individuals and may help to deal with the issues of uncertainty. In relation to social assessment, the RAC Forest and Timber Inquiry reported that:

Where policy initiatives are contemplated, greater commitment to the process of social impact assessment outlined in Section W1 should be considered. It is recognised that the assessment of impact and their mitigation is not a one-off event but an ongoing process.

the process needs to take into account the long term nature of social and psychological impacts of change and dislocation that occur, as well as material and monetary impacts (RAC Forest and Timber Inquiry Draft Report 1991 W 18).

Additional social impact studies undertaken in relation to forest decisions in the Eden region are included in the section below.

1.4. POST IMPACT STUDIES REVIEW

The purpose of the post impact studies review is to provide a review of all studies conducted within the Eden Forest region, specifically those which refer to social impacts and other social

issues. It is important in social assessment to establish an historical account of social change within the area. This serves to inform subsequent data collection for the current study.

A literature search has been undertaken to identify existing social assessment work within the Eden RFA region and studies of comparative communities which resemble the current impact context.

The South East forests of NSW, which include the Eden Forest Management Area, have been under increasing public scrutiny since the early 1970's, dating from the establishment of the Harris Daishowa Woodchip Mill in 1969. Of the huge volume of literature describing the Eden forests, the following studies comment to some extent on the social contexts of forest operations in the Eden CRA region.

- Scott, W D & Co. Pty Ltd (1975) A study of the environmental, economic and sociological consequences of the wood chip operations in Eden, New South Wales. A study commissioned by Harris-Daishowa (Australia) Pty Ltd.
- Senate Standing Committee on Science and the Environment (1978) Woodchips and the Environment. AGPS, Canberra.
- Harris-Daishowa (Australia) Pty Ltd (1986) Final Environmental Impact Statement for the Eden (NSW) Export Woodchip Operation for the Period 1989 - 2009. A report prepared by Margules and Partners (Consultants), December 1986.
- Forestry Commission of New South Wales (1986) Supplementary Document to Harris-Daishowa (Australia) Pty Ltd Draft Environmental Impact Statement for the Eden (NSW) export woodchip operation for the period 1989 - 2009. April, 1986.
- McCormick, William A (1986) The export woodchip industry of South East New South Wales - major environmental issues. A report for the Parliament of the Commonwealth of Australia.
- Joint Scientific Committee on South East Forests (1989) Interim Report to Senator the Hon Peter Cook (Minister for Resources, Commonwealth) and Hon Ian Causley MP (Minister for Natural Resources, NSW).
- NSW Forest Products Association Ltd (1990) The South East Forest Debate: Where to Next? A response to the South East Forest Alliance Plan of November, 1989.
- Margules and Partners Pty Ltd (1990) The feasibility of establishing a flitchmill in south eastern New South Wales. A report prepared for the Commonwealth Department of Primary Industries and Energy.
- Margules and Partners Pty Ltd (1990) Value-adding Manufacture in the Sawmill Industry. A report prepared for the Commonwealth Department of Primary Industries and Energy
- Gibbs, Diana M H (July 1990) Economic Impacts on the NSW South East Forests: an assessment of the economic impact of the exclusion from logging of existing National Estate Areas (Coolangubra, Tantawangalo and Egan's Peak) and also the additional Proposed National Estate Areas within the State forests of the South East Of NSW. A report prepared for the South East Forest Industries Group.
- Margules, Groome, Poyry Pty Ltd (1991) Feasibility of establishing a recovery sawmill in South East of New South Wales. A report commissioned for the Commonwealth Department of Primary Industries and Energy.
- Forestry Commission of New South Wales (1991) Forestry operations in Eden Management Area: Environmental Impact Statement.
- Forestry Commission of New South Wales (1992) Proposed forestry operations in Eden Management Area: Supplementary Environmental Impact Statement.
- Gibbs, Diana M H (1992) Promises and realities: political decisions affecting the timber industry. A report commissioned by the NSW Forest Products Association Ltd.
- South East Forests Industries Group (1993) Economic implications of the South East Forests Protection Bill (1993) for the Eden region.
- State Forests of NSW Environmental Impact Statement (1994) Main Report: Proposed Forestry Operations in the Eden Management Area
- ERM Mitchell McCotter (1995) Social Impacts of Deferred Forest Assessments: Four

Case Studies. A report prepared for the Department of Primary Industries and Energy

- ABARE (1995) Financial and employment implications of restrictions on 1995 woodchip export licences (399 coupe assessment).
- Manidis Roberts (1996) Preliminary forestry social impact assessment. June 1996. Prepared for the RACAC Socio-Economic Working Group.
- Resource and Conservation Assessment Council (1996) Interim Assessment Process Report, NSW.

In addition, as part of the Interim Assessment Process, a comprehensive literature review of Forest and Forest products industries Economic Studies was commissioned by the Resource and Conservation Assessment Council (RACAC) (Fortech 1996).

1.5. ENVIRONMENTAL IMPACT STATEMENTS

A series of Environmental Impact Statements by Harris-Daishowa (Australia) Pty Ltd (HDA, 1986) the Forestry Commission (1986, 1988, 1990, 1991, 1992), State Forests NSW (1994), and other reports have been written on the impact of the forest harvesting proposals. The social impact components of these studies have been given progressively greater attention in these documents. Where available, the literature outlining the social impacts of significant government policy changes 1975 - 1995 in the Eden region is reviewed below.

1975

In 1975, following 5 years of operation in Eden, HDA commissioned a study into the environmental, economic and social consequences of the woodchip operations in Eden, NSW (Scott W D and Co Pty Ltd, 1975). The report was based on analysis of information from thematic discussions with 30 prominent members of the community and structured interviews conducted with 274 people, approximately 10% of Eden's population. The themes of the discussion related to economic and social changes.

The analysis found that, while the birth rate had largely not changed, rapid population growth had occurred and had affected a rise in the standard of

living. This was demonstrated by the following social indicators: an increase in the use of postal and telephone services, an expansion in service industries, increased water consumption, and marked improvement in the education facilities available.

A number of less desirable features had also been introduced as a result of population growth, however the details are not provided. There is mention of strain on public utilities and projected growth rates were expected to exacerbate the problem. Crime rates remained largely unchanged.

The authors' analysis suggest that these impacts were not entirely attributable to the woodchipping industry as tourism had also expanded.

The Cannery at Eden reported that the availability of unskilled women workers had increased as a result of the mill work force. The Cannery would therefore remain open the year round in 1975 and into the foreseeable future. Formerly it had closed down in off season periods.

The community attitudes to the woodchipping industry, and its impact on Eden were also investigated. 84 % of interview respondents who were aware of the industry's presence, (197 out of 247) regarded the industry in a favourable light because of the employment opportunities it provided through increased industry and tourism, the expansion of housing, retail and service industries and the increase in educational facilities.

In contrast, 12 % criticised the industry because of removal of forest, clearing of aesthetic sites, the leaving behind of refuse, and the lack of economic motivation given the low profit margin to be gained.

The residents indicated that the mill had contributed to the expansion of the Bega Valley Shire, and hence to the development of services and facilities in the public and private sector. The survey found that the town would not have attained the current level of economic activity or the services necessary to provide the tourist industry with the facilities and attractions necessary to compete with the more established tourist centres such as Merimbula.

Responses about the negative social impacts experienced in Eden arising from the industry referred primarily to the increased cost of land and housing, lack of accommodation, increasing

industrialisation, increasingly impersonal nature of the town, and the increased cost of food.

The advantages and disadvantages of living in Eden were also reviewed. The advantages related mostly to the environment, surroundings of Eden (beach, climate, clean air, lack of noise) and recreation opportunities (in relation to the ocean and coast line).

The disadvantages noted were the higher cost of living, a perceived lack of retail services (shops, major stores), community services (hospitals/doctors), and facilities (social, entertainment, playing space for children) and transport. Some respondents mentioned the isolation as a disadvantage.

1986

In April 1986 an Environmental Impact Statement ('the 1986 EIS') for the Eden Forest Management Area was produced by HDA (HDA, 1986a) in connection with their submission for the renewal of their export licence for an additional 20 year period beyond 1989. In 1989 the 20 year licences granted by the Forestry Commission in 1969, were due for renewal. A final EIS was published by HDA in December 1986 (HDA, 1986b).

In the Draft EIS prepared in 1986 a social analysis of the impact of the woodchipping operation on the Eden community was conducted. The social and economic impact of the withdrawal of forest areas nominated for listing on the National Estate register in the Eden Management Area from harvesting was also analysed.

In the Draft EIS, the social environment in the region is depicted by the population and population growth rates of the Bega Valley and Bombala Shires. These were found to be significantly higher than the State population growth rate. Appendix 19 to the 1986 EIS provides a detailed listing of community facilities, voluntary groups, service clubs, and sporting, health and education facilities available in Eden.

This document also provides a description of the socio-economic characteristics of the region. The economic indicators used to construct the economic picture of the region were population, labour force, value of building, gross value of agricultural produce, wages and salaries paid in manufacturing businesses, and bed spaces and gross takings in the tourist industry. In addition industry employment levels and unemployment

data is provided. The major industries in the regional economy (forest based industries, fishing industry, tourism, transport) are described, in particular, the economic role of HDA is outlined. Revenue flows from HDA, and their payments to the Forestry Commission are specified.

The Draft EIS draws its social impact assessment from the Scott report (Scott W D and Co Pty Ltd, 1975) as well interviews conducted in mid 1985 with a range of interest groups. These latter data are not available but the findings are recorded.

Bega Valley Shire state that the growth experienced between 1971 and 1981 in Eden was largely the result of the industrial development associated with the woodchip industry and required a complimentary growth in community facilities and services. The chip mill had become important to the socio-economic structure of the town and it predicted that its closure would result in the closure of some businesses, a decline in population and therefore services.

The importance of the chip mill to Eden is illustrated by the fact that 90 % of new businesses opened in Eden since the mill commenced operations. Major infrastructure was provided during this time. It was also noted that as a result of the diversification of industry in Eden, this community was better able to survive the recession than Bega, despite some economic setbacks at the time. It was judged that the mill did not negatively affect tourism. (EIS 1986)

In the same Draft EIS (HDA 1986) the impact on the timber industry of the areas in Coolangubra and Tantawangalo nominated for listing on the National Heritage register being withdrawn from harvesting is stated in terms of maximum potential loss of yield to the sawlog (572 000 m³) and pulpwood (3 840 000 tonnes) industries. The total potential resource remaining amounts to 12 265 000 tonnes of pulpwood and 1 404 000 m³ sawlogs.

A social and economic impact assessment is included in the final report issued in December (HDA, 1986b). The EIS states that the impact of the withdrawal on economic viability of the sawmilling and pulpwood industry of the region would be major. The Bega Valley and Bombala regions are heavily dependent on these forest based activities. However, links between the forest industry and other sectors of the economy (transport, mechanical servicing, and retail, financial and community services) would mean that the social and economic implications would

be far reaching in these communities, and not only concentrated on businesses directly concerned with sawmilling and woodchipping industries.

The sawmilling industry and the woodchipping industry would face a loss of 48% and 36% of the remaining sawlog resource and potential resource available in the Eden Forest Management Area respectively. No practical alternative resources are available. For the sawmilling industry the most likely outcome would be the closure of 2 of the major mills particularly in Bega and Nimmitabel (rely on Tantawangalo) and Bombala (relying on Coolangubra). It was suggested that three mills might close. The impact on the sawmilling industry would be greater than on the woodchipping industry given the high yielding forest type potentially affected. The loss to woodchipping would mean the Agreement of 1989 would have to be re-negotiated if no viable alternative resource could be found.

In terms of employment, the reduction in the resource available was estimated to result in the loss of 97 sawmilling and 49 woodchip. Using multipliers, the number of jobs lost in other dependent sectors are estimated, to be 145 and 273 due to changes in the sawmilling and woodchipping industries respectively. Within the community, the loss of jobs would result in reduced household incomes, closure of many businesses deriving income from the forest based industries, and the relocation or closure of these businesses would further result in a reduction in availability of government and commercial services to the community. Welfare costs to the commonwealth would become significant.

1990

In 1990 Gibbs wrote a report entitled "Socio-economic impacts on the NSW South East Forests: as assessment of the economic impact of the exclusion from logging of existing National Estate areas (Coolangubra, Tantawangalo and Egans Peak) and also the additional proposed National Estate areas within the state forests of the South East of NSW". In this report Gibbs updates her previous estimates of socio-economic impacts above and in the 1988 EIS (see HDA 1986b) after further developments.

Gibb (1990) examines the social and economic implications of the withdrawal of the forest resource listed and on the interim listing of the National Estate register in Coolangubra, Tantawangalo and Egans Peak from harvesting,

as well as the withdrawal of additional areas proposed for National Estate listing, assuming logging is prohibited. However, it is important to note that National Estate listings would not necessarily mean a loss to the industry, unless a government decision was made to prevent harvesting in these areas.

It was predicted that if the areas of Coolangubra, Tantawangalo and Egans Peak on the interim list of National Estate register were added to the register, a total 61 000 Ha would have been excluded from forest harvesting. This constituted an estimated 36% of the total pulpwood resource and 40 % of the total sawlog resource in the Eden Management Area. The areas proposed for listing comprise approx. 65 000 Ha, and 15.9 % and 16.8 % of the total sawlog and pulpwood resource in the Eden Management Area. Thus the total proposals for National Estate Listing comprise 126 287 (Ha) and 56.3% and 52.5% of the total sawlog and pulpwood resource in the Eden Forest Management Area (Gibbs 1990).

Estimates documented that the sawmilling and woodchipping industries were responsible for around 12 % of all employed persons in the Bega Valley and the Bombala Shires (Forestry Commission 1988) and were therefore significant. Social impacts of the exclusion of areas listed in Coolangubra, Tantawangalo and Egans Peak predicted a closure of at least 1 sawmill in the region and cause the chip mill to reduce to a 1 shift operation. An estimated loss of 200 direct jobs and a further 430 indirect jobs from the region as a whole are given.

Gibbs estimated that the exclusion of all areas nominated for National Estate Listing would result in the loss of around 275 direct jobs and 575 indirect jobs in the region. The social impact would be marked in the smaller population centres in the region such as Bombala and Nimmitabel resulting in reduced level of services following business closures and contractions. The removal of the entire area proposed for listing would have a permanent negative impact on the industry.

1990-1993

Between 1990 and 1993 major events took place influencing forest management practices. These were the Commonwealth - State Agreement of 1990, the initiation of the Resource Assessment Commission (RAC) Forest and Timber Inquiry of 1990, the National Forest Policy Statement of 1992, and the South East Forests Agreement of

1993 (formalising the agreement of 1990). The latter was to provide a framework for ongoing co-operation between the Commonwealth and NSW for the management of forests in South East NSW.

The 1992 Forestry Commission Supplementary EIS (Forestry Commission 1992) proposed harvesting schedules to replace the compartments withdrawn from operations because the National Parks and Wildlife Service had classified them as possible habitat for the long footed potaroo .

In addition, as a result of the Commonwealth - State Agreement of October 1990 the timber allocation was revised downwards. A total of 47 530 Ha of State Forest and other Timber Crown Land were transferred to National Parks and 4 928 Ha of State Forest was set aside in new flora reserves. The Agreement reduced the long term timber resource availability by 10% and 5% reduction in pulpwood allocation in the Eden Management Area. The socio-economic implications had not been assessed but it was anticipated to affect employment level in the industry.

1994

Within the State Forests NSW 1994 EIS, a social description of the region was given based on population growth, age structure, labour force characteristics - participating population, status of employment, income distribution, and occupation. Base datasets were obtained from the 1991 Census. These were compared to state trends. Community services in the Eden region were listed in selected communities of Bombala, Bega, Bemboka, Bermagui, Candelo, Cobargo, Eden, Merimbula, Nimmitabel, Pambula, Quaama, Tanja, Tathra, Towamba, Tura Beach and Wyndham (Appendix 19).

The structure of the regional economy was described using indicators of employment and unemployment levels, the level of economic activity in key sectors (manufacturing, value of building, gross value of agricultural production, Shire outlays and visitor expenditure). Other economic activities dependent on the forest are also listed: grazing, beekeeping, occupational permits and tourism.

To ascertain the towns and services most likely to be affected by changes in the timber industry, existing community services were indicated in the 4 major towns in the region: Bega, Merimbula, Eden, and Bombala. The report found that in the

event of a decline in the timber industry, Eden and Bombala would be most at risk as they are the residential towns of timber workers.

In Bombala, loss of any employment in the forest industry would have an adverse impact on the town because of the lack of alternative employment, added pressure on the retail sector, and the diminishing value of the towns assets. In Eden no statement in relation to the timber industry was made but it was mentioned that employment opportunities for young people will need to be found in future to keep them in the region. In Nimmitabel, a small town with a population of 261 in 1991, only limited community services are available. Key services are provided for in the regional centre of Cooma.

The social benefits to the community of proposed forest management was stated in the following terms: not proceeding with the proposal would issue a cost to the society of \$61.6 million balancing costs and benefits, increasing if a compensation package for unemployed workers were included. The employment figures given for the timber industry (497 people) who manage the forest estate, process timber and distribute the forest products.

It was estimated that an additional 530 jobs in the region are being supported by the timber industry amounting to 1030 jobs in total. Household income generated, providing the basis for other elements of economic activity through creation of demand for goods and services required for production and consumption, estimated at \$15.9 million annually.

1995 Woodchip Export Licences

In 1995 the Commonwealth Department of Environment, Sport and Territories identified 509 forest coupes which were proposed for harvesting as having high conservation values. In January 1996 these coupes were placed under interim protection by the Commonwealth Government requiring that they be set aside from logging until their conservation value could be assessed. Of these, 399 coupes remain on the interim protection in February 1996. 133 of these coupes were in NSW.

The impact of these Commonwealth restrictions for the export of woodchips in these coupes was assessed by ABARE in the report entitled "Financial and Employment Implications of Restrictions on 1995 Woodchip Export Licences (399 Coupe Assessment)". In this report a case

study of the Eden area was made as part of a series of national case studies. The contribution of the forestry industries to the Eden regional economy was described in terms of its contribution to the value of regional output and direct and indirect employment. Their summary results in Eden were as follows:

If it is assumed that all areas recommended in the Eden and Bombala districts are to be withdrawn from timber production then a reduction in pulplog volume is 79 000m³ and sawlog volume of 12 000m³. On the assumption of 1.02 jobs per 1000 cu m are directly created in the timber industry in the Bombala and Eden districts (taken from Streeter and Hamilton's study 1991), it is estimated that up to 93 direct timber industry jobs could be lost by the removal of this log volume. Using an average employment multiplier of 2.06 (State Forests NSW 1994) the potential indirect job loss could be as high as 99. The value of lost wages for both direct and indirect job losses is estimated to be \$6.7 million. In regard to re-employment opportunities, unemployment level in the region was estimated to be 11 per cent (State Forest NSW 1994) in June 1993 This was above the state average and suggests that re-employment in the region could be difficult (ABARE 1995:28)

1995 Deferred Forest Areas

In March 1995, the Commonwealth government proposed that high conservation value forests should be accorded protection status in the lead up to the finalising of Regional Forest Agreements. In order to investigate the potential social impacts of deferring areas for harvest pending final negotiations, consultants were engaged to conduct social impact assessments in seven case study areas nationally. One of the case study areas was Bombala Shire. The ERM Mitchell McCotter study was perhaps the most extensive social impact study of those mentioned so far, its objectives being :

- to determine the social impacts that have resulted since 264 forest coupes were withheld in March 1995 in the context of the Commonwealth Government's decision on woodchip export licences for 1995 and
- to determine the vulnerability of the community to social impacts if more coupes

are withdrawn, or the withdrawals are made permanent..

Readily available quantitative data was substantiated by qualitative and quantitative information gained from field trips in the case study regions. The researchers employed a range of social and community indicators to assess the ability of the community to manage change. In developing these indicators, previous studies on the timber industry and the social impacts of loss of employment in agriculture or agricultural processing industries in rural and regional areas were drawn on.

Five impact areas were identified; the impacts on the local community, impacts on employment, impacts on individuals and families, impacts on community services, and impacts on community vitality. While economic factors were considered, the focus was on the social issues of employment, impacts on small business, and impacts on community self sufficiency and sense of identity.

The diversity of the economy was identified as a key indicator of its ability to cope with structural adjustment, with an interrelationship between it, declining household incomes, the number of families who leave the area, and the size of businesses.

Medical and educational facilities were identified as the most noticeable indicators of community decline. Cumulative social costs were increased costs by residents to obtain basic services, and increased costs and pressures on other essential services.

The potential loss of employment and income were shown to have significant impacts on individuals and families. They include; increased dependence on social security, increase in family debt, falling standards of living, stress leading to health problems. Indicators of the ability of individuals and families to cope with change included; the age of household head and potential to find alternative employment, presence of dependent children, household income, length of time in the timber industry.

It was assumed that length of experience in the timber industry, experience in other industries, age, skills levels or industry specific skills affected the confidence of displaced workers to find alternative employment.

Twelve indicators were used to indicate community vitality; number of family members living in the community, degree of pride in

appearance of the community, length of residence in the community, preparedness to relocate if necessary, general level of satisfaction with the community, adequacy of local services, ability of members to speak out on community issues, ability of the community to work together on issues, whether crime was generally a problem, degree of membership in community organisations, effective political representation at local government, and whether internal community politics were open.

The study found that generally there had been little or no reported loss of employment or business failure. This was attributed to strategies adopted by the timber industry. Despite increased costs for a number of operators, logging contractors had shared coupes, and timber mills had shared or diverted logs to other mills where the immediate need was greater. In other instances forest managers had been able to obtain resource from other forest areas. Impacts that were felt but were difficult to quantify included a marked reduction in stockpiles and buffer stocks, and the harvesting of contingency coupes.

There was a high degree of uncertainty in the industry which had affected the ability to plan business operations, and make major investment decisions. The uncertainty impacted on businesses in forest dependent communities and on individuals and families where the cumulative adverse impacts of a range of constraints and setbacks for the forestry industry over a number of years had left the communities with little flexibility to cope with future changes in timber supply.

Bombala was found to be different from a number of other areas that are timber dependent in that it relies on both hardwood and softwood with a declining hardwood industry and expanding softwood industry. The community were very concerned about the costs involved in restructuring to softwood. While they had demonstrated substantial community vitality and moved towards developing alternative forms of economic development for the region, they had faced a range of stresses over recent years. Potential impacts depended on the availability of alternative employment in the area, the level of skills required, and the ability of those made redundant to transfer their skills to another sector.

Two constraints to the ERM Mitchell McCotter study were noted. The first was the limited

timeframe which affected the ability to provide very specific data. The second was the difficulty in addressing cumulative socio-economic impacts given the complexity of previous government policies and decisions and their affect on the timber industry. Nevertheless the case studies indicated the vulnerability of forest dependent communities and the consequent importance of social assessment in considering forest resources and in developing Deferred Forest Areas (DFAs) and Regional Forest Agreements (RFAs).

1996 Interim Forest Assessment Process (IAP)

The Interim Assessment Process identified further areas of forest which would be unavailable for harvest pending the final Regional Forest Agreement. The NSW Government was seeking specific outcomes:

- an increase in national Park area from 42,000 hectares to 90,000 hectares
- a reduction in sawlog supply from the then current quota of 59,000 m³ and 504,000 tonnes of pulplog per annum to 26, 000 m³ per annum.

A social assessment process was commissioned with the major objective of furthering the development of methodology and suitable key indicators for the Regional Forest Agreement Process. Consultants (Manidis Roberts) were commissioned by the Social and Economic Working Group and RACAC to undertake a series of five case studies in New South Wales. None of these case study areas was in the Eden Forest Management Area, the closest community being Narooma.

A methodology was established by the consultants, using field visits, phone interviews, community workshops and secondary data to comment on the impact of a possible 30% quota sawlog reduction on each of the case study communities. Manidis Roberts developed impact statements using five key indicators: social profile; social cohesion; social resilience; social infrastructure; social fragmentation (Preliminary Forestry Social Impact Assessment 1996).

The social impact assessment was subjected to criticism and a review by an expert panel. During the negotiation process, the social impact assessment was not integrated into the decision making process of the Interim Forest Agreement (September 1996).

The baseline employment data available at this time is provided by the CARE Report (1996), details of which are provided in the next section Post Impact Analysis.

1.6. SOCIAL ASSESSMENT WITHIN THE REGIONAL FOREST AGREEMENT PROCESS

The following description of the objectives of social assessment and the indicators likely to be used in the process, has been devised by Sue Richards and Lois Boswell, Forest Community Co-ordinators employed to manage the social assessment process leading to a Regional Forest Agreement.

The social assessment work has been negotiated through a Social and Economic Technical committee which included Commonwealth and State agencies and stakeholder groups representing the interests of conservationists, industry and union members.

The social consequences, both positive and negative, of policy changes to forest use and management in the Eden RFA region will largely occur at the individual and community level, while the policy settings will be driven by state and national objectives.

These broad national objectives are defined in the National Forest Policy Statement as

1. A comprehensive and adequate reserve system (CAR)
- 2 Efficient viable and competitive timber industry.

The achievement of these two objectives in the region will have community and social consequences.

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

- address some of the equity issues involved in achieving these objectives
- highlight those consequences which may be undesirable or avoidable in the pursuit of those objectives
- model the likely community response to proposed change options

The objectives of the CAR system are driven by the JANIS criteria and have quantifiable targets.

Social and economic objectives do not readily lend themselves to quantifiable targets. However within the RFA process, social assessment will identify communities where there may be significant social consequences, and suggest where these may be minimised or enhanced. Broad defined social objective are outlined below.

Social Objectives

Social Objectives within the RFA process are defined at the community level and include:

1. To minimise social dislocation
2. To minimise social disadvantage
3. To minimise social costs arising from any land use changes
4. To enhance community vitality, social cohesion
5. To maximise employment opportunities and skills development within communities
6. To identify previous and proposed community mitigation measures

1. Social Dislocation

Social dislocation may occur at the community level when significant parts of the community relocate and/or change their employment status. Measures include: population demography changes, changes in age structure in communities, significant numbers of dependent people such as young people and older people in the community as more mobile families with children leave to find employment.

2. Social Disadvantage

Social disadvantage may occur at the community level with land use changes.

Measures may include: levels of unemployment; levels of participation in the workforce; relative median incomes; significant numbers of disadvantaged family structures such as single parents, divorce, absent parents due to work travel.

3. Social Costs

To minimise social costs arising from any land use changes such as welfare payments, increases in health requirements, distances travelled for schooling and other community services

4. Quality of Life

This objective is largely achieved when there is adequate leadership in a community and optimism about alternative visions for economic and social development. Community vitality and social cohesion will be affected by the extent and type of cumulative changes that have occurred and the ability of communities to adapt to those changes.

5. Employment Opportunities

To maximise employment opportunities and skills development within communities. This objective will largely be achieved through the identification of industry development scenarios, alternative economic development, access to tertiary and trade education.

6. Community Mitigation

Each land use and management option will have community impacts, some of which may have already been anticipated. Other mitigation measures either at the industry or community level need to be estimated in order to adequately take account of the need for compromise in fully achieving environmental targets within the proposed timeframe of the RFA.

Sensitive Communities

Within a region there will be some communities which are more sensitive to hardwood resource supply issues, and some less sensitive communities. It is within the JANIS agreement that reserve configuration and target seeking should minimise impact on most sensitive communities where possible. Targets may be defined at the community level, for example, that reserve design and achievement of JANIS criteria within reserves be flexibly applied to meet social objectives in all those communities which are high - moderately sensitive to hardwood resource supply.

The key indicators outlined in the table below are based upon the Social Indicators Workshop Outcomes that were agreed to at the November 1996 Montreal Process National Conference. National Stakeholders were involved in this workshop and conference.

The Table below uses these criteria and indicators and tailors them to maximise information from the approved social assessment projects data collection. The measures used include a mixture of quantitative data collected from published sources and surveys and qualitative data which

has been collected with scientific rigour and validated from a number of sources.

The data will be used at three levels in the integration phase.

1. Identification of sensitive communities
2. Descriptions of affected communities
3. Impact modelling

1.7. POST IMPACT ANALYSIS

As can be seen by the post impact review, extensive studies have been undertaken throughout the policy changes that have occurred in the Eden Forest Management Area 1975 - 1997. Early Environmental Impact Statements included employment estimates and predictions based on industry and key local government informants. Later studies undertaken State Forests of NSW followed a methodology outlined for example in the latest revision "Guide to socio-economic analysis" (State Forests, 1994).

Comparative or time series analysis of such studies is hampered by the quality, scale and continuity of data. For example, in many of the studies, employment data has been included and is a key social indicator in the social assessment. The following is a review of employment data covering the 1986 EIS, 1994 EIS and the IAP Regional Socio-economic Impact predictions.

Employment Data

The 1986 EIS gives the following employment data:

"In direct terms, the forest based industries centred on Eden account for employment of around 590 people, providing an estimated 6 per cent of the total employed labour force of the region. this total is made up of

HDA	134
FCNSW	152
Forest Contractors	156
Haulage (logs and chips)	115
Sawmill chipping	29
ELITT team	3
TOTAL	589

Source 1986 Eden EIS

This total excludes employment in sawmills within the region (including the Duncan's mill in Eden) which could add a further 150 or so to the total in the table above. this would include mills such as the Allen Taylor mill in Bega, and hardwood and pine sawmills at Bombala and Nimmitabel. the Kapundah pine operation at Bombala and Pericoe must also be considered as a forest related employment centre, although not directly associated with the HDA activity. Similarly, FCNSW employees required to manage the pine operation (approximately 20 persons)

have also been excluded from the total list in the previous table. " (Margules 1986)

The above demonstrates some of the complexity involved in inclusion and categories of employment. In many studies simple totals are given without definition.

The 1994 EIS states that:

"The independent report commissioned by the legislation committee examining the 1992 version of the South-East Forest Protection Bill (Smart 1992) estimated that 524 persons were directly employed as a result of activity based on the EMA forests. The 1993 industry census (SEFIG 1993), together with revisions to these data, indicate that, as at February 1994, some 497 persons were directly employed full-time. This includes employment at the chipmill and the three major mills listed in Table 7-1, the contractors (logging and haulage), forest management (SFNSW staff, excluding those involved in softwood plantation management), and other forest employment, as shown in the table below.

DIRECT EMPLOYMENT AS A RESULT OF ACTIVITY BASED ON THE STATE FORESTS OF THE EDEN MANAGEMENT AREA (AS AT JANUARY 1994).

Type of employment	No of people employed full - time
Chipmill	111
Sawmills	70
Logging contractors	128
Haulage contractors	51
Other forest employment:	
Firewood cutting	3
Fencing products	3
Eden Logging & Investigation Training Team	2
Forest management	129
Total	497

Source 1994 Eden EIS

The main differences between the 1994 EIS data and the estimates used by Smart (1992) are that the 1994 data exclude forest management (and miscellaneous) employment associated with softwood activities and excludes haulage contractors operating in the EMA but not based solely in the EMA. Of the 72 trucks delivering logs to the mills, only 51 jobs were allocated to the regional industry, as only 51 trucks operate solely within the EMA.

The data presented above do not therefore reflect an industry decline between September 1992 and February 1994 but do reflect a more accurate assessment of employment based on the native forest resource of the EMA. This total of 497 represents full-time employment provided solely as a result of activities in the EMA. A further 27 part-time jobs have been identified as being created by the industry; these include primarily secretarial jobs, as well as some occasional labourers. Many more 'part-time' jobs also exist, although they are not recognised as such, with spouses and partners providing business support (bookkeeping, secretarial functions, etc.) for contractors and particularly for owner-operators. These others are 'employees' of the industry, as it is likely that owner-operators of logging and haulage enterprises would share taxable income with family members who assist in the running of the business.

Data obtained from the mills on location of residence also confirmed the local importance of the industry. This information indicates that the main population centres could be expected to receive greatest direct benefit from the continuing employment of the mill workers. As might be expected, the town of Eden (and nearby communities, such as Nethercote and Kiah) was

'home' to the greatest number of mill employees (over 62%). Bombala and other inland centres, such as Wyndham, were home to a further 18% of mill workers, another 12% live along the coastal zone north of Eden (e.g., Pambula, Merimbula and Wolumla), and 8% live in other areas. Eden and Bombala were described as the two centres most likely to be affected by any change in activity level in the timber industry, with four out of every five mill workers living in or around these two centres. This concentration of residence in these two centres is further enhanced by the fact that most logging and haulage contractors are also based in Eden or Bombala." (1994 EIS:

Interim Assessment Process - 1996 Employment

During the Interim Assessment process, RACAC commissioned a Regional Socio-economic Impact Study. This study (CARE 1996) included the Eden Forest Management Area as part of a larger south Eastern division which included the area of NSW from Narooma to Crookwell, Yass to Snowy Rive and including Queanbeyan. The following table summarises the employment estimates and job losses under each of the hypothetical quota reductions.

IAP EMPLOYMENT BY RESIDENCE AND IMPACT ESTIMATES

LGA/ Region	Sawmill job estimates employment by residence	Sawmill jobs by sawmill location	Job loss estimates under 70% quota retention	Job loss estimates under 50% quota retention	Job loss estimates under 30% quota retention
Bega Valley	105	151	50	104	145
Bombala	35	38	13	26	36
Cooma Monaro	21	24	8	17	23

Source: CARE 1996

The Interim Assessment Process outcome created a change in the sawlog quota of 60% retention in the Eden Forest Management Area, that is from 59,000 m³ to 26,000 m³ per annum.

Areas currently in State Forests but unavailable for harvest pending investigation of conservation value are known as Interim Deferred Forest Areas (IDFA's). This area was estimated to be approximately 36,000 hectares.

Mitigation Programs

Two major mitigation programs have been offered to offset regional economic impacts since the 1990 South East Forest Agreement (SEFA).

In 1990, the Commonwealth and NSW Governments identified areas of the South East

Forests to be included in conservation reserves and those to be managed primarily for wood production. The Government's agreed an additional 50,000 hectares should be included in conservation reserves.

To give effect to this agreement, the Governments signed the South East Forests Agreement (SEFA) in December 1993, which included undertakings by the Commonwealth to provide funding up to \$10 million for structural adjustment assistance for the region in the areas of; research, industry restructuring and value adding, skills education and workplace reform, public awareness and private forest management. The Commonwealth Government reduced the total funding available under the SEFA to \$7.5 million in the 1996

Federal Budget. To date projects totalling \$6.7 million have been approved under the SEFA.

In NSW a Commonwealth/State FISAP with a total value of \$120 million is currently being implemented with funding being jointly contributed by both Governments. FISAP provides assistance for businesses and workers in the native forest industry directly and adversely affected as a result of the implementation of the Regional Forest Agreement (RFA) process or the State's 1995 forest policy. The FISAP is being implemented in NSW under three main elements; worker assistance, industry development assistance and business exiot assistance.

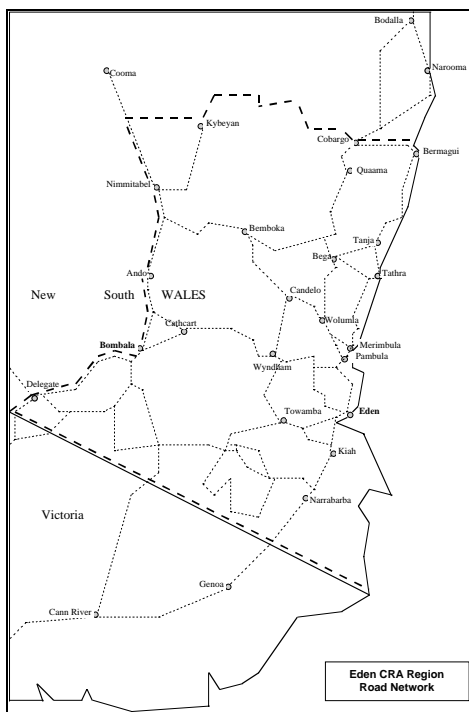
Implementation of the package is being overseen by a committee consisting of representatives from the Commonwealth, State, industry and unions. As at the end of June 1997 over \$17 million had been made available to assist forest businesses and workers in NSW, which includes over \$6 million in Southern NSW (including the Eden RFA and the area south of Sydney). A supplementary project will provide more details regarding as to the provision of mitigation specifically within the Eden CRA under this program.

2. REGIONAL PROFILE

2.1. INTRODUCTION

The purpose of this section is to provide a description of the settlement geography, local histories, socio-demographic and socio-economic statistics collected for the local government areas in the Eden RFA region. Detailed profiles will also be developed for service sectors such as education, health, finance, communication, transport, childcare and development services, retail and trade services, financial and legal services, housing and recreation, emergency services, voluntary community groups and organisations.

2.2. GEOGRAPHIC DESCRIPTION OF THE STUDY AREA



The study area is defined as the Eden Forest Management Area which comprises the following local government areas

- the whole of the Bega Valley Shire (6050 sq kilometres) running from Wadbilliga national park in the north to the Victorian Border in the south and west to the top of Brown Mountain. (Bega Valley Shire State of the Environment Report 1994/5)
- only that area of Bombala shire represented by Bombala township
- the south eastern corner of the Cooma Monaro local government area

Forest tenures in Study Area

In the 1994/5 Bega Valley Council State of the Environment report, it is estimated that 73% or approximately 4,400 square kilometres are publicly owned forests, that is, National Parks, State Forest and State Recreational Areas.

Water Catchment Areas

The Bega Valley Shire is generally accepted to contain two large catchments, the Bega River Catchment (estimated area 2850 square kilometres) and the Towamba River Catchment (2200 square kilometres) (BVSC SOE 1994/5).

The Snowy and Murrumbidgee Rivers form the major catchments within the Bombala Shire region. The watershed between those rivers which forms part of the Great Dividing Range occurs just north of Nimmitabel as is the highest topographic point in the region (Bombala SotE Report 1996).

2.3. HISTORY OF SETTLEMENT

Aboriginal History

The numerous tribes in the area east of the Great Dividing Range between the Moruya River and the Snowy River referred to themselves collectively as Ratungal Yuin (on the coastal

areas) and Paendra Yuin (on the plateau). The Ngarigo tribe was the common family group around the Bombala Shire region. Coastal tribes such as the Walbanga, the Djiringanj and the Thaua occupied areas north of the Bemboka River and the Bidewal tribe extended from Green Cape to Mallacoota and onto the tableland.

The annual harvesting of the bogong moths was a significant event for local tribes, as was the occasional beaching of whales, providing an abundance of food which was shared between the coastal and neighbouring tribes.

Aboriginal artefacts have been found in the region, some dating back 5,500 years. The tribes of the Monaro region have been estimated at 1,500 adults.

A separate report profiles some of the Aboriginal communities in the Eden CRA region.

European History

Bombala township was gazetted on 18 September 1849 taking its name from the Aboriginal word for "meeting of the water". Bega was also settled around this period with the Imlay family the most prominent land holders in this period renting land to new settlers. The name Bega is taken from the Aboriginal word "Biggah" meaning 'beautiful' or 'large'. The Bega Valley Shire Council was created in 1981, following the amalgamation of three separate Shires (Imlay, Mumbulla, and Bega Municipality).

Towns and Villages in the Study Area

Bega Valley Shire	
Bega	Wonboyn Lake
Bemboka	Towamba
Bermagui	Wolumla
Wallaga lake	Wyndham
Candelo	
Cobargo	Bombala Shire
Eden	
Merimbula	Ando
Tura Beach	Bombala
Pambula	Cathcart
South Pambula	
Tathra	
Kalaru	Cooma Monaro
Quaama	
Mogareeka	Nimmitabel

2.4. CURRENT DEMOGRAPHY AND TRENDS

The population of the Bega Valley Shire in 1996 was recorded as 28 845 persons, a change from 1991 (27 352) of an additional 1493 persons. The population of Bombala shire in 1996 was recorded as 2246, a loss from 1991 (2285) of 40 persons.

Population Projections 1976 - 2021

The following table shows the population change for Bega Valley Shire from 1976 to 1996, and projections to 2021 prepared in 1994 by the NSW Department of Planning.

BEGA VALLEY SHIRE POPULATION CHANGES 1976 - 2021

1976	1981	1986	1991	1996
17350	20100	23170	26450	(29400)

2001	2006	2011	2016	2021
32 200	34600	36900	39100	41200

Source: DUAP 1997

2.5. NSW DEPT OF URBAN AFFAIRS AND PLANNING SETTLEMENT STRATEGY 1997

In 1997 a Regional Settlement Strategy was published by the Department of Urban Affairs and Planning (DUAP) to guide the growth of settlements while protecting the Region's environment. The study suggests a 'Regional Settlement Hierarchy' based on the population size of the centres and the range of human services available. It is suggested that new services should be located to reflect the existing settlement hierarchy. The hierarchy is described in some detail in the report but summarised briefly here:

- Subregional centres - provide the highest level of services within the region such as hospitals TAFE colleges, government administrative offices, commercial retailing activities and industrial development. **Bega** is nominated in the study as a Subregional Centre.
- District Centres - provide services that need to be located in the local community, for example, high schools, medical facilities and a range of convenience facilities and professionals services. **Merimbula** and **Eden** are nominated in the study as District centres.

- Local Centres - provide services to a local area which meet the daily needs of residents and surrounding rural areas, for example, a primary school, post office, and a limited range of convenience shopping. **All other townships** in the Shire except for Bega, Merimbula and Eden are nominated as local centres/villages.

Mobility

New residents in the Lower South Coast Development Strategy were identified as mainly in the 30 - 39 year age group or retirees over 60 years old. Between 1986 and 1991, South-Eastern NSW, along with the North Coast region, were the only regions which experienced net gains from interstate movements (DUAP 1997). A continuation of this trend is likely to alter existing population structure and has implications for the location and type of services needs in the region (DUAP 1997).

Over half the residents of Bombala Shire lived at the same address five years ago. Just under half the residents of Bega Valley shire lived at the same address five years ago.

2.6. INDUSTRIES - DIVERSITY AND EMPLOYMENT

5.1. Employment in Forest Industries

Employment in the native forest industry in the Eden region has declined over the last ten years. Estimates of this decline have been documented in the Post Impact Analysis (previous section).

In particular, over the period 1992 to 1996, employment in sawmilling and product distribution decreased by 50%, in the pulpwood processing and product distribution employment fell by 44%, and employment in the harvesting and transport sector fell by 30% (ABARE 1997). Probably the most significant decreases have occurred since December 1995 with approximately 21 businesses, including small sawmills, logging and hauling contractors having received Business Exit Assistance under the NSW/Commonwealth Forest Industry Structural Adjustment Package (FISAP) as at the end of July 1997. Employment in the State Forests District Office has also decreased since the early 1990's by 13% between 1991 and 1995 and a further 13% in 1997 (SAU Survey Data). Further

decreases in State Forests employment in the region is expected before the end of 1997.

The table below sets out employment directly related to the native forest industry. The information has been collected by the SAU from a variety of sources including consultation with industry, surveys and published data. It should be noted that fluctuations in employment over the period of data collection may account for small differences in absolute numbers within each category. The data is based on employment levels as of the first half of 1997.

**NATIVE FOREST INDUSTRY EMPLOYMENT
1997 - EDEN REGIONAL FOREST
AGREEMENT AREA**

Harvesting, Hauling & Processing	No.
Contractors	14
Bush Workers	47
Truck Drivers ^a	21
Hauling Contractors	10
Additional Employees ^b	34
Harris Daishowa	75
Tablelands Sawmills ^c	37
TOTAL	238

Forest Management

State Forests ^d	45
National Parks and Wildlife ^e	33
TOTAL	78

Other Forest Users

Bee Keepers (Occupational Permits)	10
Graziers (by permits)	8
Firewood and Poles ^f	10
Non Quota Mills ^g	20

a employed by contractors

b employed by contractors in workshops, admin etc. (24Ft, 5pt, 5cas)

c Bombala and Cooma

d District Office

e Merimbula Office

f Based on June 1996 sales - State Forests

g Dependent on private and public native forest.

Sources: SAU Survey Data 1997, State Forests, Harris-Daishowa 1997, ABARE 1997.

2.7. TRANSPORT SYSTEMS

The Bega Valley Shire area is serviced by road, sea and air. There are no rail systems.

The predominant form of transport is private vehicle (BVSC SoE 1994/5). Daily air flights and long distance coach services are available to Sydney and Melbourne.

In the Bega Valley Shire there are some 1,600 kilometres of road networks (1106 local roads, 256 regional roads and 237 kilometres of highway). Bega Valley Shire Council budget for road maintenance and repair for January 1994-June 1995 was approximately \$3 million. Public transport within the shire is linked with school transport between towns.

2.8. REGIONAL UNEMPLOYMENT

Since June 1995, unemployment rates in both the Bega Valley and Bombala Shires have been higher than the rate for New South Wales and Australia as a whole. In particular, unemployment in the Bega Valley Shire in June 1995 and 1996 was 11.8 % and 11.2% compared with a state average of 7.7% and 7.8%, respectively.

Area	Bega Valley Shire	Bombala Shire	New South Wales	Australia
1990	7.9	3.7		6.5
1991	9.5	6.2	8.4	9.6
1992	9.9	6.8	10.1	10.8

Source: Dept of Employment, Education, Training and Youth Affairs, *Small Area Labour Markets - Australia, June Quarter 1996*.

2.9. REGIONAL STRATEGIC PLANNING

Various industry and agency bodies are actively developing regional strategic plans on an industry or area basis. Many of these plans identify impediments and initiatives as part of the development and strategic planning process. A small selection is discussed below.

The South East Regional Development Council (SERDC) produced an Interim Economic

Development Strategy in October 1995 with a focus on "valuing diversity and acting together". The SERDC identified specific initiatives to assist in regional economic development on both a regional and industry specific basis. The SERDC identified the major impediments to regional development within the South East was, inter alia, poor infrastructure, inefficient unfriendly bureaucracy and the ramifications of the environmental debate leading to a lack of security over investment decisions (SERDC October 1995).

The vision of the Australian Capital Region Development Council's strategy, *Dealing with Change* (1997) includes specific social and economic goals such as; developing a more diverse economy providing more jobs, combining the advantages of a rural lifestyle and proximity to urban service, developing an export culture with competitive industries building national and international markets.

The development of sustainable rural, remote and isolated communities has been identified by the National Rural Women's Stakeholders group as an approach which must be based on recognising the interrelationship between social, economic and environmental issues (National Rural women's Stakeholders Meeting, 1996). The group also called for a recognition of the issues and trends impacting on rural people and on the sustainability of rural communities, embracing economic, environmental and social changes.

A recent workshop of the Rural Communities Consultative Council of NSW in Merimbula (1997) identified goals and action plans relating to the needs and visions of local participants. Among the identified goals were; a sustainable, viable and inclusive country NSW economy, an equitable and effective system of services and infrastructure for rural and regional communities and rural and regional communities based on an ecologically sustainable environment. Specific desirable outcomes relating to the timber industry included; establishment of a recovery mill, the softwood industry at Bombala/Tumut, and the multi-purpose wharf at Eden (NSE RCCC 1997).

The South East Regional Strategic Planning Forum is currently developing a regional plan based on three main areas; tourism market

research, stabilising businesses/recovery mill, multi purpose wharf/OSB mill. Their reports are expected before the end of 1997.

Health

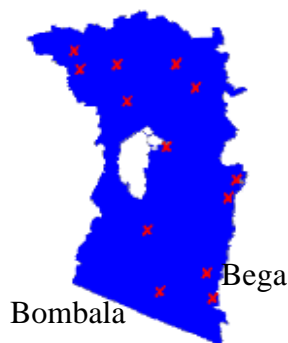
Various forms of social stress, such as that resulting from unemployment or the anticipation of unemployment, has negative effects on health (Wilkinson 1996). Such stress also includes that related to the perception of job insecurity, which encompasses a much wider population than those currently unemployed. For communities faced with continuing uncertainty regarding unemployment and the long term viability of their communities, access to appropriate health facilities is essential.

This access assumes additional importance as many rural communities already experience significant problems of inequity with respect to, access to, and provision of, health services in comparison to their urban counterparts (AHMAC 1994). While rural and remote areas account for 28 % of the population, only 20% of primary care practitioners and 12% of specialists are located in a rural or remote areas (AMWAC 1996).

In regards to health administration, the Eden RFA area lies within the Southern Health Service area of NSW, with Queanbeyan as its management centre. Bega Hospital is the major hospital servicing the area, and hospital services are also provided at Pambula and Bombala Hospitals.



Southern Health Service



Access to Services

There are 26 General Practitioners which service the Local Government Areas of Bega Valley and Bombala. There are two small public hospitals located at Pambula and Bombala and a major hospital in Bega. In 1992/93 Bega Hospital treated approximately 3,500 patients, Pambula Hospital treated 1,669 patients and Bombala Hospital treated 384 patients (South Coast Health 1995).

The Bega Hospital is the main surgical centre in the region and theatre facilities are also available at Pambula Hospital. In September 1997, the local community successfully influenced a decision to maintain surgical and obstetrics services at the Pambula Hospital. No theatre facilities are available at Bombala Hospital. However, the Hospital hosts 27 visiting outreach services such as palliative care, from Cooma, and a social worker based in Cooma spends one day a week at Bombala. The Hospital offers day care for the aged for four (4) days per week and currently there are 14 people participating in this program.

While over \$55 million was identified in the NSW Government’s Vision for Rural Health *Caring for Health* (1996) to fund capital works to develop new hospital facilities and upgrade existing facilities, none of these funds were reported in that document to be made available in the Eden RFA region in the 96/97 financial year.

Health Services in the Region

Service	Eden	Bombala	Bega	Merimbula	Pambula
General Practitioners	4	2	12	5	3
General Surgeons	-	-	2	-	b
Specialists	-	-	1 + a	-	a
Hospitals	-	25 beds	70 beds	-	25 beds
Community Health Centres	1	-	1	-	1

a visiting specialists on a regular basis but not resident in area.

b some GPs carry out simple theatre procedures

Source: Bega Valley Community Support Services Directory, 1996/97. Bega, Bombala and Pambula Hospitals.

Bed Occupancy Rate	1993/94 (%)	1994/95 (%)	1995/96 (%)
Bega Hospital	64.6	72.6	72.1
Bombala Hospital	52.2	63.2	55.7
Pambula Hospital	55.0	61.7	75.6

Source: Southern Health Service Annual Report, 1996

Aboriginal Health

Within the region, Aboriginal people are admitted to hospital at a rate between 75% to 85% of that of non-Aboriginal people (South Coast Health 1995). Admission rates are higher in the coastal area. In general, Aboriginal people have a high premature death rate with life expectancy about 55 years and in the Monaro region only 1 % of the Aboriginal population are 65 years and over (Monaro's Health 1995).

Specific health services in the region include; the Aboriginal Community Health Service (Eden), Community Options Project (Bega), and the Twofold Aboriginal Corporation (Eden).

Incidence of Suicide

The male rate of suicide is generally higher in the area than the NSW average and has been increasing since 1981 (South Coast Health, 1995). On average, seven male deaths and two female deaths occurred each year, mainly by firearms (48%) which were used more frequently by males less than 25 years of age (58%) (South Coast Health, 1995).

Rural Medical Practitioners

The current shortfall in rural and remote General Practitioners across New South Wales is estimated to be 445 full time equivalents, and the estimated specialist shortfall is 900 (AMWAC 1996). A Working Party of the Australian Medical Workforce Advisory Committee has developed a range of strategies, including under and post graduate education, for the consideration of governments, the medical profession, local communities and stakeholders, in an effort to reduce this shortfall.

2.10. EDUCATION

The following tables present detailed information on service provision of education in the Eden CRA region.

Thresholds in Primary School provision.

The application of teaching staff thresholds is indicative only and each case is determined on its merits taking into account a variety of

Primary School Category	Student Range	Teaching staff allocation
PP1	Over 700 students	Various
PP2	450 - 700	Various
PP3	301 - 450	Teaching Principal
PP4	180 - 300	Non - teaching principal Assistant principal Executive Teacher
PP5	30 -180	Teaching Principal
PP6	0-29	One teacher school

factors such as remoteness, community input and predicted future developments. The following table outlines indicative thresholds of teacher allocation per student numbers.

2.11. PRIVATE SCHOOLS IN THE EDEN CRA REGION

St Joseph's Catholic Primary School - Eden

The following figures have been provided by the School:

Year	Students	Families
1990	177	
1991	184	118
1992	190	125
1993	196	119
1994	174	110
1995	182	115
1996	168	104
1997	156	98

The ration of students per family has been averaged over the last seven years as 1.585 students per family.

TEACHING STAFF

Year	Teaching staff	Ancillary staff
1992	8.2	.6
1993	8.8	1
1994	9.4	1.4
1995	9.2	1.3
1996	9.3	1.4
1997	8.6	4

Current staffing is: 1 Principal; 7 teachers; 3days teacher/2 days librarian; 24 hrs clerical; 2 days resource teacher; 2 days Aboriginal assistant.

ST PATRICK'S PRIMARY SCHOOL BEGA

Year	Students	Teaching staff	Ancillary staff
1992	236	10	.6
1993	242	10.5	1.1
1994	243	11.1	1.8
1995	239	12.1	1.8
1996	268	11.6	1.8
1997	268	12.1	1.8

Current staffing: Principal; 10 full time equivalent teachers; librarian (3 days pw); 3.5 days /week resource teacher; 30 hours secretarial.

ST JOSEPHS PRIMARY SCHOOL - BOMBALA

Year	Students	Teaching Staff	Ancillary Staff
1992	62	3.4	.3
1993	72	3.4	.9
1994	78	4.6	1.3
1995	72	4.6	.7
1996	62	4.0	.7
1997	62		.7

Current staffing: Principal; 4 teachers, one teachers aide; one integration aide; one clerical.

2.12. HIGH SCHOOLS IN THE EDEN CRA REGION

There are three High Schools in the Eden CRA Region - Bega High, Eden Marine Tech High and Bombala High

School	1989	1990	1991	1992	1993	1994	1995	1996	1997
Bega High	973	982	1008	1053	1072	1091	1082	1081	1110
Eden Technical High	725	707	703	731	752	762	753	807	786
Bombala High	243	241	262	258	278	266	253	260	248

School	Range	Lowest/ Highest Years	Teacher Range	Supplementary Staff Range
Bega High	973-1110	1989/1997	(33-37)	(4.270-4.638)
Eden Technical High	703-807	1991/1996	(24-27)	(3.292-3.518)
Bombala High	241-278	1990/1993	9-10	1.178-1.420

**2.13. EDEN CRA REGION:
PRESCHOOLS AND
KINDERGARTENS**

Bega Preschool and Kindergarten

There are “about 140 children” and three full time teachers plus four part-time staff (includes a cleaner).

Year Day	Bombala Preschool Inc. (Pupils at end of year)					Totals	
	Mon.	Tues.	Wed.	Thurs.	Fri.	Pupils	Staff
1997	16	14	9	13	6	43	2
1996	20	11	19	20	14	61	3+2 part
1995	16	9	17	16	12	56	2
1994	14	10	18	17	10		2
1993	18	17	20	17	17		2
1992	17	14	20	19	14		2

Year Day	Pambula Preschool Kindergarten Assoc. Inc.					Totals	
	Mon.	Tues.	Wed.	Thurs.	Fri.	Pupils	Staff
1997	20	31	33	37	29	98	6
1996						104	5
1995						120	5
1994						129	5
1993						127	6
1992						128	4

Year Day	Merimbula-Tura Kindergarten					Totals	
	Mon.	Tues.	Wed.	Thurs.	Fri.	Pupils	Staff
1997	39	34	39	29	39	95	7
1996						90-100	6
1995						90-100	6
1994						85-100	4
1993						85-100	4
1992						85-100	4