



RURAL INDUSTRIES RESEARCH
& DEVELOPMENT CORPORATION

Rural Communities and Rural Social Issues: *Priorities for Research*

**A report for the Rural Industries
Research and Development
Corporation**

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Foreword

While Australian rural industries continue to adapt to global markets by improving innovation and technical efficiency, there is a need to respond to the social consequences of these changes. Undesired side effects of technological and economic change may diminish the potential benefits of increased rural production, or at the very least exclude rural communities from some of its social and economic benefits.

The mission of the Rural Industries Research and Development Corporation (RIRDC) is to make and manage research and development investments on behalf of government and industry for the benefit of the rural sector. Part of RIRDC's core business is to address strategic cross-sectoral issues facing that sector. This includes investigating rural social issues and issues concerning to rural communities that relate to rural industries.

This wide-ranging report was commissioned to assist RIRDC in formulating research priorities in this area. Some of the recommendations of the report have been adopted by RIRDC in framing Key R&D issues for 2000-2001. Others will be considered for inclusion in the new Five Year Plan. However, it is not RIRDC's mandate to sponsor research in all the areas identified in this report. It is hoped, therefore, that the report will also help to inform research commissioned or supported by other relevant agencies.

This project was funded from RIRDC Core Funds which are provided by the Federal Government.

This report, a new addition to RIRDC's diverse range of over 450 research publications, forms part of our Human Capital, Communications and Information Systems R&D program, which aims to enhance human capital and facilitate innovation in rural industries and communities

Most of our publications are available for viewing, downloading or purchasing online through our website:

- downloads at www.rirdc.gov.au/reports/Index.htm
- purchases at www.rirdc.gov.au/eshop

Peter Core
Managing Director
Rural Industries Research and Development Corporation

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Abbreviations and acronyms

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ACIR	Australian Council for Intergovernmental Relations
ACT	Australian Capital Territory
AEA	Agroecosystems Analysis
AFFA	Agriculture, Fisheries and Forestry Australia
AIHW	Australian Institute of Health and Welfare
ALGA	Australian Local Government Association
ARIA	Accessibility/Remoteness Index for Australia
CEO	Chief Executive Officer
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSO	Community Service Obligations
DEETYA	Department of Employment, Education, Training and Youth Affairs
DELTA	Development Education Leadership Teams in Action
DPIE	Department of Primary Industries and Energy
ECU	Edith Cowan University
ESD	Ecologically Sustainable Development
EU	European Union
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GP	General Practitioner
IT	Information Technology
JCU	James Cook University of North Queensland
LEI	Local Employment Initiative
LGA	Local Government Area
LWRRDC	Land and Water Resources Research and Development Corporation
MPC	Multi-Purpose Centre
MPS	Multi-Purpose Services
NACS	National Anti-Crime Strategy
NCASS	National Committee of Agricultural Statistics Stakeholders
NCAVAC	National Campaign Against Violence and Crime
NCP	National Competition Policy
NCVER	National Centre for Vocational Education Research
NESB	Non-English speaking background
NFF	National Farmers' Federation

NHMRC	National Health and Medical Research Centre
NIEIR	National Institute of Economic and Industry Research
NPM	New Public Management
NRHA	National Rural Health Alliance
NRM	Natural Resource Management
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Cooperation and Development
PAR	Participatory Action Research
R&D	Research and Development
RAAG	Rural Affairs Advisory Group
RAP	Rapid Assessment Procedures
RDO	Regional Development Organisation
REDO	Regional Economic Development Organisation
RHSET	Rural Health Support, Education and Training Program
RIP	Rural Incentives Program
RIRDC	Rural Industries Research and Development Corporation
RMIT	Royal Melbourne Institute of Technology
RPL	Recognition of Prior Learning
RRA	Rapid Rural Appraisal
RRMA	Rural, Remote and Metropolitan Areas
SA	South Australia
SCARM	Standing Committee on Agriculture and Resource Management
SES	Socio-economic Status
SLA	Statistical Local Area
SLWRMC	Sustainable Land and Water Resources Management Committee
TAFE	Technical and Further Education
TFD	Theatre for Development
UK	United Kingdom
URAP	Understanding Rural Australia Program
USO	Universal Service Obligations
VROCS	Voluntary Regional Organisation of Councils
WA	Western Australia
WHO	World Health Organisation

Executive summary

This report deals with priorities for research into rural communities and rural social issues. Although the study was commissioned by the Rural Industries Research and Development Corporation (RIRDC), the views expressed are those of the team from Edith Cowan University responsible for its preparation. These views have been informed and tempered by input from many other organisations and people interested in this important field.

The report is based on an extensive literature review, together with information derived from a survey of policy-making agencies and researchers, as well as discussion at a national workshop held in Canberra on 19 May 1999.

The literature review concentrates on work published in the past five years, although some seminal, older publications are also mentioned.

An e-mail survey questionnaire was used to obtain information on recent publications, research projects currently under way and issues that respondents considered should be accorded priority for further research.

The recommendations contained in the report give priority to issues that meet each of the following criteria

1. The issue is itself one of major importance.
2. There is a major gap in recent research in this field.
3. Further research has the potential to inform policy-making, public discussion and/or social practice.

The report is structured as follows:

Chapter 1 outlines the background, purpose and methodology of the study.

Chapter 2 begins with a discussion of issues involved in defining the term 'rural'. After considering various types of social research, it discusses the relationship of RIRDC's research program to that of other agencies.

Chapter 3 examines the range of large-scale economic adjustments that have affected life in rural Australia, particularly as these relate to agriculture, regional development, local government, demographic change, and the viability of small towns and rural communities.

Chapter 4 deals in more detail with labour markets, employment and unemployment in country towns and rural communities.

Chapter 5 takes up the issue of social wellbeing, and problems in measuring the impact of policies and socioeconomic changes on different segments of the population. It discusses the integration of social, environmental and economic objectives in the quest for sustainable rural communities.

Chapter 6 addresses issues of education and learning as they bear upon rural productivity, employment opportunities, personal development, and the resilience of rural communities.

Chapter 7 considers a broad range of health-related issues, including health service delivery, the health needs of particular segments of the population, issues of safety at work and on the roads, and mental health.

Chapter 8 discusses further infrastructural issues that are salient to the wellbeing of rural communities. These include telecommunications, banking services, housing, transport and the consequences of a rapidly growing tourist industry.

Chapter 9 reviews other possible priority areas for research. These include Indigenous issues, women, youth, farm succession, disasters and risk management, and crime.

The order of the different sections of the report is largely a matter of convenience in exposition. It does not represent an ordering of the importance of particular issues.

The recommendations are:

1. Introduction

There are no recommendations in Chapter 1.

2. Setting the scene for research on rural communities and rural social issues

2.1. What and where is rural Australia?

Recommendation 1: That for the purposes of its program of research on rural communities and rural social issues, RIRDC should focus primarily on people living on farms or in agricultural service centres. Although there is also a need for research on mining towns and coastal holiday/retirement communities, it is further from RIRDC's core concerns and should generally be sponsored by other agencies.

2.2. Types of research and development (R&D)

Recommendation 2: It is recommended that RIRDC's program of research into rural communities and rural social issues should focus on issues that have the potential to inform policy-making, public discussion and/or social practice. Rather than being confined to a single theoretical or methodological paradigm, such research should use methodologies appropriate to the particular issues being addressed. In some cases, this will require multi-disciplinary research.

2.3. Relationship of RIRDC's program to that of other agencies

Recommendation 3: In framing its program of research into rural communities and rural social issues, RIRDC should avoid unnecessary duplication or overlap with the work of other agencies such as Agriculture, Fisheries and Forestry – Australia, the Australian Bureau of Statistics, the Australian Bureau of Agricultural and Resource Economics, the Bureau of Rural Sciences, the Department of Transport and Regional Services, and the Land and Water Resources Research and Development Corporation. RIRDC might, however, wish to commission some projects in partnership with these agencies.

2.4. Changes to the Agricultural Census

Recommendation 4: To facilitate its program of research on rural communities and rural social issues, it is recommended that RIRDC should make submissions on data needs to the Australian Bureau of Statistics and to the National Committee of Agricultural Statistics Stakeholders. Where appropriate, RIRDC should commission additional questions for inclusion in Australian Bureau of Statistics data gathering.

3. Economic and social change in rural Australia

3.1. Agricultural adjustment

Recommendation 5: It is recommended that there be on-going monitoring of the outcome of the Farm Business Improvement Program, the Farm Family Restart Scheme, and the Retirement Assistance for Farmers Scheme. For comparative purposes, it would also be useful to examine the situations of (a) farmers who narrowly fail to qualify for assistance, and (b) other rural businesses facing serious difficulties.

Recommendation 6: Studies of the strategies adopted by farmers or rural businesses that have successfully diversified, engaged in niche marketing or value adding would be instructive. Such research should include an examination both of the benefits and of the risks associated with such strategies, and a consideration of the extent to which similar strategies could be successfully applied elsewhere.

3.2. Family and corporate farming

Recommendation 7: There is a need for research in Australia on ways in which

- sizes of farms,
- business structures of farms, and
- occupational structures of communities

affect the sustainability and wellbeing of rural communities.

3.3. Other aspects of restructuring in agriculture

Recommendation 8: There is a need for research on the likely short and long term local economic and social impacts of significant changes in rural industries, for example the extensive adoption of plantation forestry.

3.4. Impact of regional development processes and policy

Recommendation 9: Research is needed to answer questions on regional development such as the following

- What social factors (or interactions between social factors and economic and biophysical factors) might account for differing levels of performance in regions with similar economic and/or biophysical fundamentals?

- How do the roles played by federal, state and local governments and by private enterprise and community organisations influence regional development or decline?
- What can Australia learn from regional development strategies and processes in other countries?
- What are the best ways of diversifying the regional economy while ensuring that small towns, remote areas and the environment do not miss out?
- How feasible and desirable is the National Rural Health Alliance proposal for the creation of regional development corridors?

3.5. Local government

Recommendation 10: There is need for research that monitors the impact of Federal and State initiatives on the capacity of local government authorities (LGAs) to respond to local needs.

Recommendation 11: Research is required on the impact of changes to local government organisation, including the amalgamation of LGAs, on the capacity of rural local governments to preserve environmental, cultural and social amenity.

Recommendation 12: Research is needed into impediments facing rural local governments in developing cooperative strategies to promote regional economic, social and environmental objectives.

3.6. Demographic change

Recommendation 13: There is a need for on-going research into the drivers and consequences of population change in rural areas. Particular attention should be given to issues such as the following

- who are moving, for what reasons, and with what consequences?
- how is demographic change related to the provision of infrastructure and government services and infrastructure in rural areas?
- what are the social and economic implications of current and projected age profiles of rural communities?

3.7. Small towns

Recommendation 14: There is a need for research on processes of structural adjustment in country towns and rural communities. Issues needing to be examined include

- revitalisation strategies
- diversification strategies

- factors influencing the likelihood that local initiatives can arrest or reverse processes of population decline
- outcomes of government policies and programs designed to facilitate structural adjustment
- efficiency and equity considerations associated with structural adjustment processes.

3.8. Peri-urban issues

Recommendation 15: Qualitative research in peri-urban areas where agricultural activities coexist with other land uses would complement existing quantitative studies and could also throw light on broader issues associated with competing land uses in rural areas.

3.9. Impact of National Competition Policy

Recommendation 16: Following the publication of the reports of the Senate Select Committee and the Productivity Commission on these matters, further research is warranted on policy options to mitigate negative impacts of National Competition Policy. As some of the costs of reform may be short-term and concentrated, whereas the benefits may be longer-term and more broadly dispersed throughout the nation, further research is needed in the longer term to monitor costs and benefits, and to assess the outcomes for rural communities of any offsetting measures or policy changes.

Recommendation 17: Government agencies with responsibility for welfare service delivery should fund independent empirical studies on the impacts of competitive tendering and contracting out of welfare services, particularly the impacts on (a) service quality, (b) costs, and (c) volunteerism in the welfare sector. A component of such research should focus specifically on the impacts in rural communities.

4. Labour markets, employment and unemployment

4.1. Issues and generally accepted findings

Recommendation 18: In some rural areas there is limited scope for adjustment to structural changes in labour markets. Further research is needed into the effects of flexible labour markets on rural communities, and into innovative ways of adjusting to structural change.

4.2. Disguised and hidden unemployment

Recommendation 19: Research is needed to compensate for deficiencies in labour market measures for rural areas where unemployment is likely to be hidden or disguised, and where Indigenous unemployment is systematically underenumerated.

Recommendation 20: There is a need for research on links between the formal and informal economies in rural areas. Such research could contribute to initiatives to minimise the adverse effects of falling or insecure employment.

4.3. Differences across regions in unemployment

Recommendation 21: Qualitative research is required on aspects of regional unemployment. On their own, quantitative measures do not provide an adequate understanding of these

aspects, which include

- the expectations with which job-seekers migrate to towns or cities that have both high unemployment and high labour market growth
- disguised and hidden unemployment
- marginal attachment to the labour force.

4.4. Other neglected issues

Recommendation 22: There is an urgent need to extend research on the social effects of unemployment on rural communities. This research should take account of the effects on education and out-migration of young people, the effects on families with dependent children, and the effects on family businesses.

Recommendation 23: Research is needed into the links between structured training and employment opportunities in rural regions, as recommended by *Jobs for the regions: a report into regional employment and unemployment* (Senate Employment, Workplace Relations, Small Business and Education References Committee 1999: 6-7).

5. Social wellbeing, and the sustainability of rural communities

5.1. Social equity

Recommendation 24: Issues of social equity need to be incorporated into priorities for research into rural communities and rural social issues

- There is a particular need to identify categories of people who have a significantly poorer quality of life because they are systematically disadvantaged in one way or another, and to explore ways in which this disadvantage can be reduced
- Longitudinal research is needed to assess the extent to which poverty is episodic or persistent among various segments of the population in country areas and to analyse the structural influences on such poverty
- There is a need to assess the impacts of welfare service policies and programs on disadvantage and quality of life in rural areas.

5.2. Social capital, community development and capacity building

Recommendation 25: It is recommended that research be conducted to

- identify the conditions under which social capital and adaptive capacity grow or decline in rural communities
- analyse the significance of such growth or decline in relation to economic performance and social wellbeing

- assess the impacts institutions and institutional reform on rural communities and rural industries.

Recommendation 26: Research that equips communities to initiate local responses to global changes should complement other forms of research. In particular,

- current research into community development needs to be supported and extended
- research is needed to identify the conditions required for vibrant rural communities able to support satisfying lives for a growing diversity of people.

5.3. Social indicators

Recommendation 27: There is a need to develop social indicators addressing all aspects of rural social life. Such indicators would support research and policy-making that takes account of issues of social equity, social integration and social wellbeing. Research directed toward the development of indicators at the local level also has the potential to inform efforts toward community and regional development.

5.4. Social Impact Assessment

Recommendation 28: Further practical research is needed to promote and test the potential value of Social Impact Assessment in mitigating the social changes arising from broadscale resource use policy (e.g. national competition policy) and planning (e.g., water allocation management planning). Particular emphasis is needed on the development of appropriate indicators to model change, and on negotiatory structures required to identify and mitigate negative broadscale and community impacts.

5.5. Integration of social, environmental and economic aspects of sustainability

Recommendation 29: There is a need for research on the integration of social, environmental and economic dimensions of sustainability at farm, catchment, local community and regional levels, including the answering of questions such as the following

- what institutional arrangements (laws, policies and programs) create the best circumstances for ecologically sustainable regional development?
- what are the appropriate mechanisms to encourage people's involvement in decision making about resource use at the local/regional level?
- how can the social sciences assist communities and policy makers understand and address the problems of institutional and market failure?
- as responsibility for catchment management is devolved to the local/regional level, what are the needs of stakeholder groups in relation both to state support and to social science-based research?

- what role do women play in natural resource management and how might their presence and influence be strengthened?
- what is the meaning of sustainability for Indigenous Australians, and how can an Indigenous perspective be incorporated into sustainability programs?
- what are the most reliable indicators of sustainability, and how can they be employed at the local/regional level, and in guiding policy?
- what methodologies can be applied, or developed, to ensure that there is integration between the physical and social sciences in sustainability research?

Recommendation 30: There is a need for research on strategies that support rural producers' efforts to pursue sustainable practices despite economic pressures that may impede them. Questions here would include

- in what ways does the economic performance within farming relate to, or affect, sustainable resource use?
- what state interventions might move agriculture towards greater sustainability?
- what group-based and other educational processes best 'engage' rural producers and in so doing lead to appropriate changes in farming practice?

6. Education and learning

6.1. Formal—secondary academic

Recommendation 31: There is a need for research on education indicators for different segments of the rural population. Aggregated figures for rural regions or schools are inadequate to identify the precise nature of educational problems to be remedied by policy.

Recommendation 32: There is need for research into the social and economic implications of different success rates and educational outcomes for rural and urban participants in the formal education system.

6.2. Formal—secondary vocational

Recommendation 33: Research into the integration of vocational education into secondary schools in rural areas, and the prospects of vocational education's improving educational outcomes, is a matter of high priority. The research needs to be supported by analyses of the dynamics of decision making about leaving school.

6.3. Formal post-compulsory

Recommendation 34: The lower rates of transition to post-compulsory education for rural and remote students present a challenge for researchers. Research is required into access and participation issues in relation to post-compulsory education through distance education, and providing courses that meet the needs of the rural population.

6.4. Education and rural productivity

As a report was recently made to RIRDC on issues for research and development in farmer education and training (Synapse Consulting 1998), we are not presenting further recommendations on this matter.

6.5. Education as human capital

Recommendation 35: The role of education in economic development, in building vibrant rural communities, and in providing opportunities and promoting demand for life-long learning should be a priority area for research.

6.6. Summary

Recommendation 36: Because education is so central to issues confronting rural communities, research into access to, and success in, education at primary, secondary and post-secondary levels deserves to be a high priority for further research.

7. Rural health

Recommendation 37: In view of the funding and coordinating role now being played by the Rural Health Research Committee of the National Health and Medical Research Council, it is recommended that rural health should not be a major area for funding from RIRDC, with the exception of research into farm occupational health and safety, and selected intersectoral issues.

Recommendation 38: The health-related research priorities identified below should be regarded as provisional and subject to revision if the review recently undertaken for the National Health and Medical Research Council establishes that a particular issue has already been adequately researched.

Recommendation 39: Primary research is required on the structural factors (such as socio-economic disadvantage) affecting rural health. This research should focus on those groups, and those geographic regions, where health status is demonstrably worse.

7.1. Intersectoral collaboration

Recommendation 40: There is a need for policy oriented research which examines the multifaceted way in which local, State, and Commonwealth agencies need to interact with community based agencies for the better delivery of health care services. Case studies of intersectoral collaboration in health would be useful. One specific example might be the way in which education and health professionals could cooperate with respect to the health education and health promotion needs of young people. Another suggestion is evaluation of transport provision in rural communities, and the way in which cooperative transport arrangements between all health and community service organisations might be utilised more effectively and efficiently.

7.2. Health services and health workforce

7.2.1. Health services

Recommendation 41: It is recommended that research be conducted into different ways of funding health services other than the traditional funding mechanisms currently available.

Recommendation 42: Research into the effectiveness and efficiency of Multi-Purpose Centres in delivering appropriate, acceptable, accessible and affordable health services is required. Related to this is the need for research into the possibility of local control in the purchasing of health services.

Recommendation 43: Research into the decision-making processes of health and community service personnel, and particularly their assessment of the impact of their decisions on rural communities, may assist rural communities to understand rural health and community services decisions.

Recommendation 44: *Bush talks* calls for health care to be considered within a human rights framework. Research is needed to assess the extent to which this applies, and how such changes might be implemented. As part of this research, successful rural and remote community initiatives and the factors contributing to their success should be identified.

7.2.2. Health workforce

Recommendation 45: Investigations should be undertaken as to why some areas appear to have ongoing problems of recruitment and retention of health professionals even though those areas appear to be similar in other respects to areas which do not have problems of the same magnitude.

7.3. Hospitals and acute care

Recommendation 46: Unless it has already been undertaken, research on the health economics of rural hospitals compared to other health service options should be pursued. This work needs also to take account of the contribution rural hospitals make to local social infrastructure.

7.4. Death or injury from road accidents

Recommendation 47: Research into rural male perceptions of road risks and ways to promote less risky behaviours would be valuable.

Farm safety

The Rural Industries Research and Development Corporation, in a joint venture with the International Wool Secretariat, the Grains Research and Development Corporation and the Meat Research Corporation, has established a strategic plan for a Farm Occupational Health and Safety Program for the period 1998–2001 (Rural Industries Research and Development Corporation 1998). Because of the recency of the review that led to the adoption of this plan, we are not making any further recommendations for this area.

7.6. Aged care

Recommendation 48: There is a need for research on the implications for rural communities of the ageing of the Australian population. Such research should include, but not be limited to, an examination of the health-related needs of the elderly in rural areas.

7.7. Mental health

Recommendation 49: As mental health is a National Health Priority Area, research into the social and cultural contexts of rural mental health, and into health promotion strategies and their evaluation should receive urgent attention.

Recommendation 50: Research into the establishment of self-help networks for specific illnesses such as depression and other mental illness, eating disorders, and the like would be valuable. The issue here is the extent to which geographic and social isolation inhibit the development and maintenance of such networks.

7.8. Suicide

Recommendation 51: Rural suicide, especially among young people, is widely acknowledged as a pressing concern. There needs to be recognition of the very different contexts in which suicide among, for example, Indigenous youth, gay and lesbian youth, and young males of Anglo-Australian background takes place. There is a need for applied research such as evaluation research of alternative prevention programs for each of these target groups.

7.9. Indigenous health

Recommendation 52: Research with community controlled Indigenous health services needs to examine ways in which the recommendations of reports such as the Royal Commission into Aboriginal Deaths in Custody, *Bringing them home*, and *Ways forward* can be implemented at a local level.

7.10. Health of people from non-English speaking backgrounds (NESBs)

Recommendation 53: There is a need for some basic research to document the extent to which people from non-English speaking backgrounds are hindered in accessing mainstream health services in rural Australia. Local level evaluations of ethnic-specific services should be funded, to determine the effectiveness of these programs.

7.11. Women's health

Recommendation 54: Research on the health and social needs of rural aged women and ways in which these needs may be met is required. For young women, applied research on their abilities to participate meaningfully in their communities would be valuable.

7.12. Men's health

Recommendation 55: Qualitative research on rural male health concerns and their relationship to health concerns identified by epidemiologists would be valuable. For example, to what extent do rural men regard so-called 'risky' behaviours, such as excessive drinking,

and smoking, as 'real' threats to their health and to what extent do their beliefs influence their health care seeking behaviour?

7.13. Alcohol and other drugs

Recommendation 56: Research is needed into the effectiveness of various strategies for dealing with drug and alcohol problems in rural areas.

7.14. Consultation

Recommendation 57: Research on ways in which meaningful consultation can produce better health outcomes in rural areas needs to be undertaken. This includes a review and evaluation of consultation protocols. Case studies of community initiated and maintained health services and programs should be conducted.

7.15. Economy and health

Recommendation 58: Research which assists in the disaggregation of rural health disadvantage would be useful. That is, to what extent do factors such as socio-economic disadvantage and geographic isolation contribute to poor health status?

8. Further infrastructural issues in rural communities

8.1. Telecommunications

Recommendation 59: It is recommended that research be instigated to collect case studies of rural communities that have successfully developed community-based internet services for socially and economically beneficial purposes. Analysis of these cases could provide useful pointers for other communities.

Recommendation 60: There is a need for research to provide a picture of the current use of telework in Australia, and the potential of telework to enhance employment opportunities in rural communities.

8.2. Banking services

Recommendation 61: Even though there have been several recent studies on withdrawal of financial services from small towns, there is a need for on-going monitoring of the situation and for an examination of the outcomes of various alternative provisions. This research should identify the impacts on particular sections of the community, such as farmers, local businesses and other citizens.

8.3. Universal service obligations and community service obligations

Recommendation 62: Although there is a need for on-going monitoring of the extent to which universal service obligations and community service obligations are being fulfilled in rural areas, such monitoring should usually be undertaken by the relevant regulatory or welfare agencies rather than RIRDC.

8.4. Housing

Recommendation 63: There is need for research to assess the extent to which current policies at federal, state/territory and local levels are alleviating or aggravating housing stress in rural areas, and to identify initiatives that could help to reduce housing stress.

8.5. Transport

Recommendation 64: Further research is needed on ways of mitigating actual or potential negative social impacts of

- the lack of adequate public transport in rural areas;
- the construction of bypasses.

8.6. Tourism, recreation and leisure

Recommendation 65: There is need for research that examines the impacts of tourism, recreation and leisure activities on rural communities, including the impacts on

- local employment opportunities;
- local amenities and services, such as health care and recreational facilities;
- the pricing of housing and land for local residents;
- social structure and culture;
- Indigenous communities.

9. Other research issues

9.1. Indigenous issues

Recommendation 66: Although there are many agencies funding Indigenous research, there is a case to be made for mainstream rural funding agencies indicating their commitment to rural reconciliation through the funding of research on case studies of primary producers and Indigenous Australians working successfully together. These case studies should examine the bases of such successful collaborations.

9.2. Women

Recommendation 67: Research should be commissioned to identify the needs of non-farm women in rural and remote areas of Australia.

Recommendation 68: In the research agenda on issues affecting farm women, there should be a place for consideration of matters of equity, not simply efficiency.

9.3. Youth

Recommendation 69: In addition to the recommendations under other headings and in the review by Bryant and Hoon (1999), further research is needed on

- ways in which the needs of young people in rural areas can be more adequately met
- ways of involving young people in decision making on farms and in various community organisations.

9.4. Farm succession

Overall, the issue of farm succession has been relatively well researched. The reluctance of many farm families to discuss succession issues is well documented. Researchers such as Gamble and Blunden have made recommendations for extension and advisory programs to address these issues. Consequently, we are not recommending that further research on this subject should be commissioned now.

9.5. Disasters and risk management

Recommendation 70: It is recommended that RIRDC, in conjunction with other rural R&D corporations, conduct a review of the adequacy of existing risk management instruments for farmers.

9.6. Crime

Recommendation 71: Without implying that major crime is a widespread social problem in most rural communities, there is scope for further research in this area. For example, little if any research has been done on white-collar crime (such as fraud, tax evasion, insider trading, illegal conduct by corporations, commercial misrepresentation, and the like) in rural areas. The relationship between economic or social deprivation and crime needs further analysis for rural Australia. So, too, do various proposals for preventing or dealing with crime. However, it is unlikely that RIRDC would wish to fund research into such issues, as they are not sufficiently close to RIRDC's core concerns. They fall more into the province of the Australian Institute of Criminology and of law and justice agencies at State/Territory and Commonwealth levels.

1. Introduction

This report deals with priorities for research into rural communities and rural social issues. Although the study was commissioned by the Rural Industries Research and Development Corporation (RIRDC), the views expressed are those of the team from Edith Cowan University responsible for its preparation. These views have been informed and tempered by input from many other organisations and people interested in this important field. This chapter outlines the background, purpose and methodology of the study, followed by an overview of the rest of the report.

1.1 Background and focus

The main objective of funded rural research in Australia has been to advance technical developments, economic efficiencies and strategic marketing in the rural sector. The primary goal of the research has been to improve the economic competitiveness of Australian rural production while minimising adverse environmental consequences. Much less attention has been given to the social consequences of technological innovations, economic policies, environmental trends and population changes in rural areas. Systematic research into social issues in rural communities can enable public policy to be shaped so as to ameliorate any undesired side-effects of economic or technological changes. It can also help policymakers and the public to respond in positive ways to the challenges and opportunities facing rural communities.

Part of RIRDC's core business is that of addressing 'strategic cross-sectoral issues facing the rural sector.' Given the limited funds available to it for this purpose, it is important that RIRDC identifies those issues that should be accorded highest priority for research. However, in commissioning this report, it was not intended that the review should be limited to areas of research that RIRDC has hitherto funded.

Within its general charter, it is ultimately up to RIRDC to decide how widely it wishes to cast its research net. Whilst we make some recommendations that are specific to RIRDC, on others we leave it to RIRDC to determine whether it wishes to sponsor research for which a need has been identified. Much turns on how widely the term 'the rural sector' is interpreted. If it is interpreted to mean 'the farm sector', then research into rural communities and rural social issues will be of interest to RIRDC only insofar as these affect, or are affected by, farms, farm families and those who provide services to farming.

Whilst this is a fairly wide net, it would not necessarily include some people who reside in country towns and are engaged, for example, in mining, manufacturing or the tourist industry. The majority of people now living in rural Australia as defined in this report are not involved in farming. As Sher and Sher (1994) noted in a wide-ranging, provocative yet constructive review, such people have often been forgotten when rural policy is being considered.

Depending on the resources available, RIRDC might leave some priority areas to other funding agencies or it might jointly sponsor research with those agencies. Where there are no specialised agencies with an interest in research on a particular topic, research proposals could be directed to general funding agencies such as the Australian Research Council and the National Health and Medical Research Council.

1.2 Methodology

This report is based on an extensive literature review, together with information derived from a survey of policy-making agencies and researchers, as well as discussion at a national workshop held in Canberra on 19 May 1999.

The literature review concentrates on work published in the past five years, although some seminal, older publications are also mentioned. Because of the sheer volume of available publications and the need to keep this review within manageable size, not all available publications are cited. Attention is focused on the most significant ones.

The survey questionnaire was sent by e-mail to agencies and individuals known to be working in this field, as well as to persons subscribing to e-mail lists such as those of the Australian Sociological Association, the Rural Studies Group of the Institute of Australian Geographers, and the Australian Rural Social Research network. The questionnaire sought information on publications in this field in the past five years, research projects currently under way and issues that respondents considered should be accorded priority for further research. Over 150 responses were received. These responses covered the main research agencies and many individuals working in this field. Only about half of the policy-making agencies responded, even after receiving reminders.

In answer to the question on priorities for further research, there was a tendency for some researchers to identify issues falling mainly in their own area of interest and expertise. Whilst such suggestions are useful, they do not in themselves enable one to judge the relative importance of that area compared to others. In making our recommendations, we have given priority to issues that meet each of the following criteria

1. The issue is itself one of major importance.
2. There is a major gap in recent research in this field.
3. Further research has the potential to inform policy-making, public discussion and/or social practice.

In making judgments in relation to the first of these criteria, one or more of the following should apply: there is widespread public concern; large numbers of people are affected; issues of social equity are involved; there is, or is likely to be, a profound impact on society, the economy or the environment.

In judging whether there is a gap in recent research, attention is given not only to the existence or non-existence of research but also to the comprehensiveness, the methodological adequacy and, where situations are changing rapidly, the recency of the research. As far as possible, account is also taken of research currently under way.

Because the survey information was, of necessity, gathered by open-ended questions, and because it would be invalid to draw conclusions about priorities on the basis merely of a count of topics spontaneously mentioned, a quantitative analysis of the survey data has not been attempted.

A draft of this report was discussed at a national workshop convened by the Bureau of Rural Sciences on behalf of RIRDC. Present at the workshop were approximately 45 researchers and representatives of various government and non-government agencies interested in this

field. Most of the draft recommendations discussed at the workshop were endorsed by participants although there were some differences of opinion on the relative priority to be given to particular issues. Such differences of opinion reflect to some degree the different interests of researchers and the different needs of various users of research.

As a result of suggestions made at the workshop, some of the draft recommendations have been modified and some further recommendations have been added.

1.3 Structure of the report

The rest of the report is structured as follows:

Chapter 2 sets the scene for research on rural communities and rural social issues, beginning with a discussion of issues raised in defining the term 'rural'. After considering various types of social research, it discusses the relationship of RIRDC's research program to that of other agencies.

Chapter 3 examines the range of large-scale economic adjustments that have affected life in rural Australia, particularly as these relate to agriculture, regional development, local government, demographic change, and the viability of small towns and rural communities.

Chapter 4 deals in more detail with labour markets, employment and unemployment in country towns and rural communities.

Chapter 5 takes up the issue of social wellbeing, and problems in measuring the impact of policies and socioeconomic changes on different segments of the population. It discusses the integration of social, environmental and economic objectives in the quest for sustainable rural communities.

Chapter 6 addresses issues of education and learning as they bear upon rural productivity, employment opportunities, personal development, and the resilience of rural communities.

Chapter 7 considers a broad range of health-related issues, including health service delivery, the health needs of particular segments of the population, issues of safety at work and on the roads, and mental health.

Chapter 8 discusses further infrastructural issues that are salient to the wellbeing of rural communities. These include telecommunications, banking services, housing, transport and the consequences of a rapidly growing tourist industry.

Chapter 9 reviews other possible priority areas for research. These include Indigenous issues, women, youth, farm succession, disasters and risk management, and crime.

The order of the different sections of the report is largely a matter of convenience in exposition. It does not represent an ordering of the importance of particular issues.

Recommendations relating to each subsection are made at the end of that subsection.

1.4 Acknowledgments

The Principal Investigators for the project were Alan Black, John Duff, Sherry Saggars and Patricia Baines. Anne Jennings worked as a research associate throughout the project and Paul

Bowen did so in the later stages. Allan Dale and Matthew Tonts each helped to draft one or two sub-sections of the report. Jim McColl generously contributed to project planning and commented helpfully on parts of the draft report. Carla Patterson and Linda Holub kindly made comments on a draft of the Chapter on rural health. The help of the many persons who responded to the survey or participated in the Canberra workshop is gratefully acknowledged. Final responsibility for the report rests with the Principal Investigators.

2. Setting the scene for research on rural communities and rural social issues

2.1 What and where is rural Australia?

It is difficult to achieve consensus on the meaning of the term 'rural'. Definitions have variously been based on

- *socio-demographic characteristics*, such as population density or settlement size
- predominant forms of *economic activity or land use*, such as agricultural, pastoral and other primary industries
- *socio-cultural characteristics*, such as particular kinds of social relationships and values.

Each of these types of definition has attracted criticism. Definitions of the first type have been criticised for their arbitrariness: where does one set the dividing line between the rural and the non-rural, and is this point of division appropriate for all purposes? Definitions of the second type have been criticised on the grounds that a substantial and increasing proportion of the population in areas that we would usually call rural is not directly or exclusively engaged in primary production, and there is often a diversity of land uses. Definitions of the third type have been criticised as painting a romanticised or inaccurate picture of the differences between rural and non-rural (*e.g.* urban) sections of society (see Hoggart and Buller 1987; Pahl 1966).

Because of the different definitions adopted in member countries, the OECD has proposed a working definition that would facilitate comparisons between countries (Dax 1996). Its primary criterion is population density: rural areas have no more than 150 inhabitants per square kilometre, except in Japan where the upper limit is 500 inhabitants per square kilometre. Once communities have been categorised into *rural* and *urban* on the basis of population density, regions that might include both rural and urban communities are classified into three types

- *predominantly rural regions*, where more than 50 per cent of the population lives in rural communities
- *significantly rural regions*, where the proportion of the population in rural communities is 15-50 per cent
- *predominantly urbanised regions*, where less than 15 per cent of the population is in rural communities.

Although the Australian Bureau of Statistics (ABS), together with the former Department of Primary Industries and Energy (DPIE), has done some exploratory work in applying these criteria to Australia, this work has had little impact on domestic policy development.

In recent decades, the Australian Bureau of Statistics (1996) has generally used a four-fold system to classify settlement types

- *major urban areas*: urban centres with a population of 100,000 and over
- *other urban areas*: urban centres with a population of 1,000 to 99,999
- *rural localities*: population clusters of 200 to 999 people in a minimum of 40 occupied non-farm dwellings
- *other rural areas*: areas not included in the previous three categories – nearly all farm dwellings are located within this category.

For some purposes, the first two categories are aggregated into a single *urban* category. Similarly, the third and fourth are sometimes combined into a single *rural* category. This is a much narrower definition of the rural than that adopted by the Department of Primary Industries and Energy and the Department of Human Services and Health (1994) in their jointly developed Rural, Remote and Metropolitan Areas (RRMA) system of classification.. This system of classification defined metropolitan areas as urban centres with a population of at least 100,000. All other areas of Australia were classified as rural unless they met specified criteria of remoteness. The index of remoteness took account both of the average distance between residents and the distance of the statistical local area (SLA) from an urban centre offering a wide range of goods and services. Thus *rural* areas were defined as non-metropolitan areas that were less remote than *remote* areas. This system of classification had two implications: (a) urban centres with populations up to 99,999 could be classified as rural, but (b) a particular SLA could not be classified as both rural *and* remote. These two implications are somewhat at odds with everyday use of the term ‘rural’. For an outline of other limitations of this system of classification, see Bamford and Dunne (1999).

The Commonwealth Department of Health and Aged Care recently commissioned the National Key Centre for Social Applications of Geographical Information Systems (GISCA) to develop a better index of remoteness and accessibility to services. GISCA has now developed a methodology to calculate levels of accessibility from any part of Australia to any size centre and any service (Hugo *et al.* 1999). The new Accessibility/Remoteness Index for Australia (ARIA) is likely to become the standard measure. In this index, access is measured along road networks from 11,338 populated localities to four categories of service centres

- Category A: more than 250,000 persons
- Category B: 48,000-249,999 persons
- Category C: 18,000-47,999 persons
- Category D: 5,000-17,999 persons

In *Prospects and Policies for Rural Australia*, Sorensen and Epps (1993b: 2) defined rural as comprising all parts of the nation except the capital cities, the Gold Coast, the New South Wales Central Coast, Newcastle, Wollongong and Geelong. In its *Blueprint for Rural Development*, the National Rural Health Alliance (1998a) adopted a fairly similar definition but with Townsville also excluded. Under this definition, rural Australia is very diverse, including not only farming areas but also agricultural service centres, mining towns, coastal communities attracting holiday-makers and retirees, Aboriginal outstations, remote islands, alternative communities, wilderness and desert areas, and many of the major regional centres.

Because we consider that they are better classified as urban than rural, major regional centres such as Townsville, Cairns, Toowoomba and Albury-Wodonga as well as other cities or towns with a population of 20,000 or more are not a primary focus of this report. The focus is, rather, on small towns (less than 20,000 in population) and rural areas as defined by the Australian Bureau of Statistics. At the 1996 Census, approximately 14 per cent of the Australian population resided in settlements of between 1,000 and 19,999 people. A further 14 per cent lived in smaller settlements or on farms (Australian Bureau of Statistics 1998c: 11, 42). As the wellbeing of these people and communities is linked in various ways with developments elsewhere, some attention is also given to these wider linkages.

Recommendation 1: That for the purposes of its program of research on rural communities and rural social issues, RIRDC should focus primarily on people living on farms or in agricultural service centres. Although there is also a need for research on mining towns and coastal holiday/retirement communities, it is further from RIRDC's core concerns and should generally be sponsored by other agencies.

2.2 Types of research and development (R&D)

The Australian Research Council distinguishes between three types of research

- *Pure basic research* is experimental and theoretical work undertaken to acquire new knowledge without looking for long-term benefits other than the advancement of knowledge
-
- *Strategic basic research* is experimental and theoretical work undertaken to acquire new knowledge directed into specified broad areas in the expectation of useful discoveries. It provides the broad base of knowledge necessary for the solution of recognised practical problems
-
- *Applied research* is original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken either to determine possible uses for the findings of basic research or to determine new ways of achieving some specific and predetermined objectives.

Much of the R&D sponsored by RIRDC is either strategic basic research or applied research. Often it is designed to solve a specific problem or, at the very least, to provide knowledge that will be useful to various stakeholders such as producers, practitioners, policy-makers and the public at large. For example, it might involve identifying the causes of a particular phenomenon, or evaluating the outcomes of particular policies or practices, or developing and testing innovative responses to existing or emerging situations.

Concern that the results of some R&D are not quickly adopted by relevant stakeholders has led to the development of participatory R&D strategies. Listed in Table 1 is a selection of participatory methodologies developed in various parts of the world since the late 1970s. In some of these approaches, such as Agroecosystems Analysis, Rapid Assessment Procedures and Rapid Rural Appraisal, people's participation tends to be limited to providing information to researchers, whose analysis generates solutions or recommendations. Others, such as Development Education Leadership Teams in Action, Participatory Action Research and Theatre for Development, emphasise community empowerment and are based on the assumption that communities themselves have the ability to develop solutions to their problems (Cornwall *et al.* 1993; Pretty and Chambers 1993).

Table 1. A selection of participatory methodologies of the 1980s and 1990s (in alphabetical order)	
AEA	Agroecosystems Analysis
ARCD	Action Research for Change and Development
BA	Beneficiary Assessment
DELTA	Development Education Leadership Teams in Action
D&D	Diagnosis and Design
FPR	Farmer Participatory Research
FSR	Farming Systems Research
FSR/E	Farming Systems Research and Extension
LBPAL	Local Best Practice Action Learning
PALM	Participatory Analysis and Learning Methods
PAM	Participatory Action Model
PAR	Participatory Action Research
PDR	Process Documentation Research
PLAR	Participatory Learning and Action Research
PPS	Participatory Problem Solving
PRA	Participatory Rural Appraisal
PRAP	Participatory Rural Appraisal and Planning
PRM	Participatory Research Methods
PTD	Participatory Technology Development
RA	Rapid Appraisal
RAAKS	Rapid Assessment of Agricultural Knowledge Systems
RAP	Rapid Assessment Procedures
RAT	Rapid Assessment Techniques
RCA	Rapid Catchment Analysis
REA	Rapid Ethnographic Assessment
RMA	Rapid Multi-perspective Appraisal
ROA	Rapid Organisational Assessment
RRA	Rapid Rural Appraisal
TFD	Theatre for Development
TFT	Training for Transformation
ZOPP	Objectives-Oriented Project Planning [from the German 'Zielorientierte Projektplanung']

Source: Cornwall *et al.*, 1993; Pretty and Chambers, 1993; with additions.

Within the USA, there are various community-based research centres. Some of these are located at universities whereas others are independent non-profit organisations. As described in a recent report, community-based research is 'research that is conducted by, with or for communities'; it 'differs fundamentally from mainstream research in being coupled relatively tightly with community groups that are eager to know the research results and to use them in practical efforts to achieve constructive social change' (Scolve *et al.* 1998, i-ii).

Advantages claimed for participative 'bottom-up' styles of experimentation, learning and action include the following

- Participative approaches recognise the importance of local ways of knowing and draw upon the accumulated knowledge and experience of the community (Cornwall *et al.* 1993)

- They ‘support local innovation and adaption, accommodate and augment diversity and complexity, enhance local capabilities, and so are more likely to generate sustainable processes and practices’ (Pretty and Chambers 1993)
- They are consistent with the ethical principle that there should be stakeholder involvement in any research that is likely to have social and financial impacts on the community (Marsh 1998: 5)
- They encourage community ‘ownership’ both of problems and of solutions (Marsh and Pannell 1998: 148).

There are, however, critics of some aspects of participatory methodologies, especially when these methodologies are advocated as the only worthwhile approaches. Thus, for example

- Writers such as Cornwall *et al.* (1993), Scoones and Thompson (1993) and Gray *et al.* (1997) point out that the ‘local community’ which is urged to control its own research and develop its own solutions to problems is typically made up of people with diverse interests and with differential access to resources, including biophysical and financial resources, education, interpersonal skills and social support. Consequently, there are competing conceptions of community needs, depending upon which interest groups and individuals are involved or considered. Most of the participatory approaches listed in Table 1 tend to ignore or underestimate the significance of these differences. These approaches are frequently weak at recognising and dealing with situations of conflict (Cornwall *et al.* 1993: 32)
- Although valuable knowledge may be developed within local groups, there may be little documentation and dissemination of that knowledge beyond the group. In that case, the accumulation of knowledge is impeded (Marsh and Pannell 1998: 146)
- While research and action at a local level may be necessary for the achievement of some social goals, other goals require research and action on a much broader front. Policy-making at Regional, State and Federal levels needs to be informed by research at an appropriate scale.

From an extensive review of community participation in land management extension, research and development, Campbell (1997: 2) – a long-standing advocate of participatory approaches such as those of the Landcare movement – has concluded that:

widespread use of participatory approaches without a shared understanding of their limitations is leading to immense frustration as communities confront problems of great scale and complexity, without commensurate resources or policy support;

greater clarity and understanding of the dimensions of sustainability and the role of participatory approaches among policy makers and other relevant stakeholders would focus the use of such approaches to situations in which they are most likely to be effective, and would result in greater effort being given to other more appropriate approaches elsewhere.

This is a useful guideline also for other research into rural communities and rural social issues.

Recommendation 2: It is recommended that RIRDC’s program of research into rural communities and rural social issues should focus on issues that have the potential to inform policy-making, public discussion and/or social practice. Rather than being confined to a single theoretical or methodological paradigm, such research should use methodologies appropriate to the particular issues being addressed. In some cases, this will require multi-disciplinary research.

2.3 Relationship of RIRDC’s program to that of other agencies

To avoid unnecessary duplication or overlap, it is important that RIRDC be aware of research currently funded, or being considered for funding, by other agencies. In addition to the work being undertaken by Agriculture, Fisheries and Forestry – Australia, the Australian Bureau of Statistics, the Australian Bureau of Agricultural and Resource Economics, and the Bureau of Rural Sciences, two other Commonwealth agencies have a specific interest in social research in rural communities

- the Department of Transport and Regional Services (especially through the Understanding Rural Australia Program, the Rural and Regional Development Grant Program and the Research, Information and Data Fund Program)
- the Land and Water Resources Research and Development Corporation.

The Understanding Rural Australia Program (URAP) was originally part of the Agriculture Advancing Australia package, which came within the portfolio of the then Minister for Primary Industries and Energy. At the time of its inception, the objectives of the URAP were

To improve the availability and use of data on rural social issues and trends, particularly on a local and regional basis, with a focus on

- understanding changes occurring in rural communities and the impact of these changes on the performance of rural industries
- assessment of the overall impact and effectiveness of the broad package of rural policies at local and regional levels, including analysis of the interaction between different policy elements and identification of any gaps
- assessment and analysis of other rural social issues identified as priorities for policy development by the Minister for Primary Industries and Energy.

As a result of the restructuring of ministerial portfolios, the URAP is now one of three research and development programs administered by the Department of Regional Services, Territories and Local Government and aimed specifically at rural and regional Australia. The stated objectives of these programs are to improve the availability and application of research and data on rural social and economic issues, to foster community development activities and to enhance community understanding of development techniques and processes. Fuller details of these programs, to which the Commonwealth government has committed \$2 million over two years, are available on the Department’s website: <http://www.dotrs.gov.au>.

In 1998, the Land and Water Resources Research and Development Corporation (LWRRDC) commissioned a review of social, economic, legal, policy and institutional R&D for natural resource management. The results of that review (Mobbs and Dovers 1999) include a recommendation that LWRRDC increase its investment in social and institutional R&D relating to ecologically sustainable development (ESD) and natural resource management (NRM). Recommended themes include, for example:

- requirements of an adaptive policy and institutional framework for the delivery of ESD/NRM objectives at a regional level
- social research on respective implications in changes of tenure – private property rights, water rights, land rights and native title – for people’s environmental behaviour
- identification of different forms of and structures for community involvement in ESD/NRM, and analyses of appropriateness and effectiveness for different purposes under varying conditions
- cross-sectoral and institutional analyses of the social and environmental impact of market-orientated institutional and policy reform in NRM
- exploration of the extent, nature and effectiveness of social influence in learning processes and the alteration of environmental cognitions among Landcare and Total Catchment Management groups
- implications for NRM of structural adjustment.

In view of the attention given to issues such as these in the report to LWRRDC, they are given only limited examination in this report.

Recommendation 3: In framing its program of research into rural communities and rural social issues, RIRDC should avoid unnecessary duplication or overlap with the work of other agencies such as Agriculture, Fisheries and Forestry – Australia, the Australian Bureau of Statistics, the Australian Bureau of Agricultural and Resource Economics, the Bureau of Rural Sciences, the Department of Transport and Regional Services, and the Land and Water Resources Research and Development Corporation. RIRDC might, however, wish to commission some projects in partnership with these agencies.

2.4 Changes to the Agricultural Census

Some information on farming has been tracked by the Australian Bureau of Statistics (ABS) through its Agricultural Census. Like most other federal government agencies, the ABS has recently been subject to cut-backs in funding and has increasingly been required to adopt a ‘user pays’ approach. In 1994-95, the ABS moved from a comprehensive annual Agricultural Census to a three year cycle of one ‘long’ and two ‘short’ forms. Then in 1997, due to a \$1 million reduction in funding for its Agricultural Program, the ABS decided to move to an annual sample survey in four years out of five, conducting a full Agricultural Census in every fifth year, the next such Census being scheduled for 2001-2002.

A consequence of these changes is that Statistical Local Area (SLA) and Local Government Area (LGA) level data on crop area, production, livestock inventory and value of production statistics will not be available in four years out of five. This will make it more difficult to conduct analyses that link such data to other local data, except at five year intervals. On the other hand, the range of data being gathered in the sample surveys and the Agricultural Census is likely to be expanded to include information not only on commodity and financial issues but also on technical, social and environmental aspects of farm operation. Such information could in turn become part of ABS’s Integrated Regional Database and thus available to policy-makers, planners and social researchers.

At the time when the present report was being written, the scope of future data collections was being addressed by two bodies

- the National Committee of Agricultural Statistics Stakeholders (NCASS), convened by the National Farmers’ Federation (NFF) and made up of representatives from various agriculture-related agencies at state and Federal levels, as well as from various industry bodies
- a joint working group from Agriculture, Fisheries and Forestry – Australia (AFFA), the Australian Bureau of Statistics, the Australian Bureau of Agricultural and Resource Economics (ABARE), the Rural Affairs Advisory Group (RAAG), and the Sustainable Land and Water Resources Management Committee (SLWRMC).

Recommendation 4: To facilitate its program of research on rural communities and rural social issues, it is recommended that RIRDC should make submissions on data needs to the Australian Bureau of Statistics and to the National Committee of Agricultural Statistics Stakeholders. Where appropriate, RIRDC should commission additional questions for inclusion in Australian Bureau of Statistics data gathering.

3. Economic and social change in rural Australia

There has been a major restructuring of the Australian economy during the 1980s and 1990s. This restructuring has resulted in part from a series of policy changes whose effects have been both to link the Australian economy more tightly into the global economy and to make it more responsive to market forces. These policy changes have included

- deregulation in the finance sector, involving the floating of exchange rates, the abolition of foreign exchange controls and the removal of interest rate controls
- reduction in general levels of government assistance to industries, eg reduction in tariff protection
- privatisation of government business enterprises
- reform of statutory marketing arrangements for primary products
- microeconomic reform and the introduction of the National Competition Policy
- steps toward labour market deregulation
- wider application of the ‘user pays’ principle
- tax cuts financed by a reduction in public sector and welfare spending.

People living in rural areas have not been exempt from the effects of these changes, which have reinforced processes of agricultural adjustment and rural restructuring that had begun decades earlier. Various aspects of these ‘big picture’ issues are considered in publications such as those of Sorensen and Epps (1993b), Burch *et al.* (1998; 1999), Lawrence *et al.* (1996; 1998), McMillen (1997), Staples and Millmow (1998) and Tonts (1998).

3.1 Agricultural adjustment

Technological change has been a major factor driving the process of agricultural adjustment during the greater part of the twentieth century. The increasing mechanisation of agriculture, together with advances in genetics, animal nutrition, fertilisers and pest management, have all contributed to improvements in farm productivity. These technologies have also reduced the need for farm labour and increased the total area that an individual farmer can operate successfully.

Coupled with other factors such as changing consumer tastes, these technologies have led to an on-going or recurrent oversupply of some agricultural commodities, such as wheat and wool, forcing down prices paid to growers. With new technologies, costs of farm inputs have tended to increase. Rising costs and falling commodity prices have resulted in decreasing farm profits, a result that has prompted farmers to seek even higher levels of productivity. This has accentuated the problem of oversupply and tended to depress prices still further.

Nevertheless, to continue farming commercially, there seems to be little real alternative to what Cochrane (1965) has called ‘the technological treadmill.’

Farm adjustment tends to gain prominence in public discussion at times when catastrophic events such as severe droughts, unexpected slumps in commodity prices and/or high interest rates force farmers from their properties. Nevertheless, structural adjustment is an on-going process affecting all industries. Most agricultural adjustment occurs progressively as farmers adjust the size and nature of their operations in response to changing market and other conditions (Stayner 1996; Australian Bureau of Statistics 1998a: 20). On strategies adopted by farmers facing structural adjustment, see Gray *et al.* (1993), Cook *et al.* (1994) and McColl *et al.* (1997). On the role of the regional economy in farm adjustment, see Stayner (1998b).

One strategy adopted by some farmers has been to seek economies of scale by increasing the size of their landholding. Over time, this has resulted in an increase in average farm size and a decrease in the number of farms. In the ten years to 1994-95, the number of farms declined by an average of 1.3 per cent per year, continuing a long-term trend in this direction (Australian Bureau of Statistics 1998a: 20). Consolidation of properties has progressively resulted in a reduction in the size of the farm population. This has in turn affected the viability of businesses, educational institutions, community organisations and social amenities in small towns heavily dependent on servicing agriculture. Other aspects of agricultural adjustment that have economic and social ramifications for rural communities include: alterations to enterprise mix, intensification of production, greater involvement of women and other family members in production processes, increasing incidence of off-farm work, and a decline in the practice of farm succession within families. Issues such as these will be dealt with under the appropriate headings below.

In recent decades, successive Australian governments have introduced schemes to facilitate structural adjustment in the farm sector. Although the objectives and forms of these schemes have varied, in all cases they have been targeted at farmers in serious difficulties, not at other rural businesses in similar sorts of difficulties. Each scheme has generally been reviewed after several years in operation, the most recent review being by McColl *et al.* (1997). As a result of this review, the previous Rural Adjustment Scheme has been replaced by a Farm Business Improvement Program (FarmBis) and a Farm Family Restart Scheme. In addition, a Retirement Assistance for Farmers Scheme has been introduced for a three year period from 15 September 1997. Government support also continues for the work of rural financial counsellors and to assist long-term viable farm businesses in regions facing exceptional circumstances such as prolonged drought. As part of the Rural Communities Access Program, the work of rural financial counsellors was reviewed in 1996 (Rural Division, Department of Primary Industries and Energy in collaboration with Centre for Rural Social Research, Charles Sturt University 1997).

There are positive as well as negative aspects of the process of agricultural adjustment. Research into successful adjustment strategies could help others to learn from such experience.

Recommendation 5: It is recommended that there be on-going monitoring of the outcome of the Farm Business Improvement Program, the Farm Family Restart Scheme, and the Retirement Assistance for Farmers Scheme. For comparative purposes, it would also be useful to examine the situations of (a) farmers who narrowly fail to qualify for assistance, and (b) other rural businesses facing serious difficulties.

Recommendation 6: Studies of the strategies adopted by farmers or rural businesses that have successfully diversified, engaged in niche marketing or value adding would be instructive. Such research should include an examination both of the benefits and of the risks associated with such strategies, and a consideration of the extent to which similar strategies could be successfully applied elsewhere.

3.2 Family and corporate farming

The overwhelming majority of farms in Australia are owned and operated as family partnerships or sole proprietorships rather than being owned by corporations. For example, 82 per cent of commercial broadacre or dairy farms in 1994-95 were operated as partnerships, and in nearly all cases these were partnerships among relatives. Another 12 per cent were operated as sole proprietorships. Of the relatively small number of broadacre or dairy farms that operated under company structures, the majority were family owned companies (Martin 1996). From the figures over the last ten years, there is little evidence that corporate ownership constitutes an increasing proportion of the total number of broadacre or dairy farms (Garnaut and Lim-Applegate 1998: 49-50).

Nevertheless, corporately owned farms are a significant part of the beef industry, especially in northern Australia. Because such farms are often quite large, corporately owned farms constitute about 26 per cent of the total area of land devoted to broadacre or dairy farming in Australia and account for about 19 per cent of the total beef production (Martin 1996). In intensive activities such as the broiler industry, in pig production and in grape growing, many of the larger farms are part of vertically integrated production and processing operations. Vertical integration is also increasing in the beef industry, where feedlotting is often associated with abattoirs (Australian Bureau of Statistics 1998b: 16).

At the National Farm Finance Summit in 1996, the Workshop Group on Future Farm Business Structures recommended:

That industry and farmers recognise the need for dynamic, flexible and responsive farm business structures enabling profitable, sustainable and self reliant agriculture.

- Break the link between farm ownership and farm businesses which inhibits the development of dynamic, flexible business operating arrangements
- Create new ways of thinking about the family farm as a business. Strategies include to: lease land; encourage creative tenancy and sharefarming arrangements, partnerships with people (group farming, marketing cooperatives, producer networks); increase equity (establish corporate farm business structures)
- Develop business structures, that are easy for partners/investors to get into and out of, to enable further investment in agriculture.

Developments such as these have led some people to ask whether the family farm can survive in the long term. A collection of papers edited by Lees (1997) addresses this issue. Clearly the ownership of a particular farm by a specific family is sometimes put in jeopardy by unfavourable economic, environmental or social situations. Even if that family sells the farm, in nearly all cases the farm is bought by another family rather than a corporation. Thus, the family farm has continued to be the predominant type in Australia, especially for broadacre or dairy farming. Writers such as Wright and Kaine (1997) and Bell and Pandey (1997) argue that one reason why corporate ownership is not more widespread in such farming is that the potential returns on capital tend to be much lower than for capital invested in various other forms of business. Families are generally more adroit than corporations at dealing with the fluctuating demands for labour throughout the production process. Farm families also tend to be willing, when necessary, to work for low monetary returns in order to survive adverse conditions and achieve other life-style goals

The survival of family farming has been aided by the status attached to landownership and by the pervasive ideals of being self-sufficient and being one's own boss. As farmers have embraced these ideals from at least the time when farming began in Australia, it is not surprising that they generally resist financial and other pressures to leave the land, except as a last resort. Alston (1997) has suggested, however, that some of these attitudes may be changing, especially among farm women and children who are aware of opportunities for a higher standard of living away from agriculture. As the economic climate for farming becomes more difficult, there is an increasing tendency for farmers to adopt more business-like farm management practices. Although driven by economics, this change can lead to broader changes in farmers' attitudes and values. When they regard farming primarily as a business, the question arises as to whether the farm is the best way of investing the capital tied up in it. The very asking of this question can sometimes prompt a reassessment of the lifestyle realities associated with family farming (Lees 1997).

Notwithstanding the predominance of the family farm in the broadacre and dairy industries, the substantial presence of corporate farming in some forms of intensive production and in the beef industry raises issues that merit research. In an influential pioneering study, Goldschmidt (1947) found dramatic differences in the quality of rural life in two communities in the San Joaquin Valley, California. These two communities were similar in soil, climate and size of the population centre. Both produced high value crops under intensive irrigation. Dinuba, a community surrounded mainly by family farms averaging about 140 hectares in size, had more businesses, a greater volume of retail sales, a higher per capita income and a wider range of social, recreational, educational and cultural institutions than did Arvin, a community surrounded by farms that averaged more than 1200 hectares in size and were mainly owned by corporations. Goldschmidt contended that the differences in community vitality were due primarily to the impact of the social organisation of agriculture upon the community's occupational structure: the high ratio of farm labourers to other occupational groups in Arvin made that community less vibrant socially and economically than Dinuba. So Goldschmidt predicted that the development of large-scale corporate agriculture would have deleterious effects on rural communities.

Broadly similar conclusions were drawn in several subsequent studies in the USA although some studies indicated that there were marked regional variations in the degree and form of the impact. For reviews of this literature, see Buttell *et al.* (1990) and Lobao *et al.* (1996). Critiques of these studies indicate the importance of

- taking account of the extent to which a community's economy depends directly on the farm sector
- using appropriate research methodologies
- considering alternative directions of causality
- examining the locally and historically specific nature of farm-community interactions.

There might be various ways in which farm business structure is related to the vitality or wellbeing of rural communities. For example, it is sometimes suggested that corporate farms are less likely than family farms to purchase their farm inputs and services locally. To what extent is this so? Is a tendency to purchase farm inputs and services from outside the local community more related to farm size than to farm business structure?

In 1996-97, which was a relatively good season for agricultural production in most parts of Australia, 11 per cent of the farm businesses accounted for over 47 per cent of farm output and 45 per cent of cash operating surplus generated (Australian Bureau of Statistics 1998b: 18). A somewhat similar situation exists in the UK and the USA. Indeed, as early as the end of the 1970s, over half of the total agricultural output in the UK came from only 10 per cent of farm businesses (Newby 1980: 80), while in the USA over 50 per cent of all agricultural production came from 6 per cent of farm businesses (Dillman and Hobbs 1982: 307).

Although the Australian Bureau of Agricultural and Resource Economics has done research on the impact of farm size on farm viability, little empirically grounded research has been done in Australia on the ways in which farm size and farm business structure relate to the structure and functioning of rural communities.

Recommendation 7: There is a need for research in Australia on ways in which

- sizes of farms,
- business structures of farms, and
- occupational structures of communities

affect the sustainability and wellbeing of rural communities.

3.3 Other aspects of restructuring in agriculture

Influenced in part by the burgeoning North American and European literatures in this field, there is a growing body of Australian literature on what has been termed the 'new political economy of agriculture'; for example, Burch *et al.* (1996; 1998; 1999), Lawrence *et al.* (1996; 1998).

This literature examines issues such as the impact of global changes in patterns of food production, distribution and consumption, the large-scale effects of technological changes (including biotechnologies), the influence of transnational agribusiness, the roles played by governments, and the challenges or resistances coming from various social movements such as environmental, consumer, health and animal rights movements. A feminist strand of literature looks particularly at issues of gender, though not all who write about gender do so from a specifically feminist perspective. Later sections of this report deal with gender-related issues.

Some studies in the new political economy of agriculture are very general in their focus, while others are much more specific examinations of particular industries, technologies or localities. With over thirty Australian and New Zealand researchers being members of the Agri-food Research Network, it is safe to assume that work will continue within this field. For example, Rickson and Burch have a current Australian Research Council grant for a study entitled 'Globalising industries and local communities: organisation/community relationships in agri-food processing and cement production.'

One aspect of agricultural adjustment relates to the increasing concern, both within the farming community and among the public at large, about environmental issues (Lawrence *et al.* 1992; Reeve and Black 1993; Vanclay and Lawrence 1995). In a later section of this report, further reference will be made to some of these issues.

Various reports and government policy statements have alluded to the substantial economic and environmental benefits that would accrue to Australia by the more widespread adoption of agroforestry or farm forestry (Commonwealth of Australia 1991; 1992; 1995; Farm Forestry Task Force 1995; Greening Australia 1996). To help achieve a sustainable supply of wood and wood products for both domestic and export purposes, the timber industry recently set itself the goal of trebling Australia's forest plantation estate to three million hectares by the year 2020. That goal was endorsed by the federal government in its Wood and Paper Industry Strategy (Commonwealth of Australia, 1995). It was envisaged that a substantial part of the increase would come from trees newly planted on cleared agricultural land, either in association with other farm enterprises (farm forestry) or through some existing farm properties being converted wholly into forest plantations (plantation forestry). Farm forestry and plantation forestry also have the potential to contribute to other conservation objectives, such as: reducing the rate of salinisation by lowering the watertable; reducing greenhouse gases through the sequestration of carbon dioxide; and conserving biodiversity, especially of native flora and fauna.

Although most farmers prize their capacity to be independent, they are also influenced by the farming subculture in which they are located. This subculture consists of the prevailing beliefs, attitudes and way of life within the farming community. Some older farmers who were brought up at a time when tracts of land were being cleared for agriculture are averse to the suggestion that some land should now be revegetated with trees. Many farmers are strongly opposed to any moves to turn whole farms in their vicinity into forestry plantations, as they see this as possibly leading to further rural depopulation, with a consequent decline in local social amenities (Rose 1996). As those purchasing land for plantation forestry are often able to pay higher prices than are nearby farmers, the latter find it difficult to expand their operations in these circumstances. Some people also take the view that it is wrong to take land out of food production in a world with an expanding population. Others argue that trees and tree products also serve human needs.

<p>Recommendation 8: There is a need for research on the likely short and long term local economic and social impacts of significant changes in rural industries, for example the extensive adoption of plantation forestry.</p>

3.4 Impact of regional development processes and policy

Except for some initiatives taken by the Curtin and Chifley governments, regional development policy was, prior to 1972, seen as a responsibility of the States rather than the Commonwealth. Since then, there have been periodic forays by the Commonwealth into this

field, but there has been considerable discontinuity of policy (Taylor and Garlick 1989; Vipond 1989; Woodhill and Dore 1997).

In 1993-94, four reports on regional development were published at Commonwealth level (McKinsey & Company 1994; Taskforce on Regional Development (Chair: Bill Kelty) 1993; Industry Commission 1994; Bureau of Industry Economics 1994). Taking some advice from each of these reports, but mainly from the McKinsey report, the Keating government released its regional development strategy as part of *Working Nation*, a White Paper on employment (Commonwealth of Australia 1994). This strategy emphasised the need for continuing micro-economic reform, the integration of economic, social and environmental objectives, and the development of community self-help. To stimulate this process, the federal government offered foundation funding for Regional Economic Development Organisations (REDOs) whose role was to develop a common vision and plan of action for regional development.

Upon election, the Howard Government commissioned a review of the previous government's Regional Development Program. Before the report (McKinsey & Company 1996) was completed, the Program was abolished for budgetary and perhaps other reasons. Some REDOs have survived as local corporations. In May 1998, the Howard government announced *Regional Australia: Our Initiative* with the stated objective of 'providing the economic, environmental and social infrastructure necessary for Australia's regions to realise their potential.' Included in this policy are the \$250 million Regional Telecommunications Infrastructure Fund, the \$1.25 billion Natural Heritage Trust, \$787 million for national highways and roads of national importance, and \$525 million for the Agriculture Advancing Australia Package.

In seeking reelection in 1998, and subsequently, the Howard Government has announced further initiatives in its Regional Australia Strategy, which is designed to establish a 'coordinated "whole of government" approach to achieving sustainable growth in regional Australia' (Anderson and Macdonald 1999: 2). Within this strategy, the Government has identified key priorities, including

- improving regional services;
- fostering employment and business initiatives;
- enhancing regional infrastructure, particularly communications infrastructure;
- improving family and community lifestyles; and
- achieving environmental sustainability.

(Anderson and Macdonald 1999:2)

The House of Representatives Standing Committee on Primary Industries and Regional Services recently conducted an inquiry into the role of infrastructure in assisting the economically sustainable development of Australia's regional areas. In addition to identifying current deficiencies in infrastructure, the Committee considered the most appropriate approaches to providing the infrastructure needed to stimulate growth and employment, such as energy, transport, telecommunications, water supplies and facilities that deliver educational, health and financial services. Under the title *Time running out: shaping regional Australia's future* (House of Representatives Standing Committee on Primary Industries and Regional Services 2000) the final report of that inquiry contained an extensive list of recommendations. The focus on infrastructure was somewhat reminiscent of the

recommendations of the Taskforce on Regional Development (1993), commonly known as the Kelty report.

Members of the Australian and New Zealand Regional Science Association are engaged in various forms of analysis at a regional level, including studies of regional development and of regional policy and planning. Factors influencing regional population growth and decline have been studied by Maher and Stimson (1994), McKenzie (1994), Bell (1996), Bell and Newton (1996) and Hugo and Bell (1998).

Researchers from various academic disciplines at Monash University are examining aspects of structural change and social dislocation in regional Australia, including demographic, economic, technological, political, social and environmental aspects.

Research on enterprise development within communities and regions is being undertaken by the Centre for Australian Regional and Enterprise Development, which incorporates researchers from Southern Cross University, the University of Queensland, the University of New South Wales, the Centre for Agricultural and Regional Economics, and the Cooloola Regional Development Bureau. The results of this research are periodically presented at workshops for practitioners, as well as in printed form.

The National Institute of Economic and Industry Research (NIEIR) uses regional modelling to estimate likely growth within regions and also the potential impact of infrastructure and business investment upon a region. Much of NIEIR's research is done for specific public or private sector clients. A recent NIEIR report concluded that compared with regional economic development initiatives in the United States and the European Union, Australia is 'lagging well behind leading world examples', including in 'the central role of the federal government, support from state governments and an innovative and expanded role for local government in local and regional economic development' (National Institute of Economic and Industry Research 1998: 2).

Street (1987), the Bureau of Industry Economics (1994) and West (1998) have appraised various models to explain regional differences in economic performance. One major deficiency of current models is that environmental factors, particularly natural resource constraints, are not adequately incorporated into them (West 1998). Conversely, biophysical models often give inadequate attention to the impact of economic policies and other social factors on regional and local ecologies.

A major priority of the Institute for Sustainable Regional Development, Central Queensland University, is the integration of biophysical, economic and social factors in a framework for sustainable regional and community development. Greening Australia has recently completed an interactive study of various initiatives at a regional level to integrate economic development and management of the natural environment in the pursuit of sustainable development (Dore and Woodhill 1999; Dore *et al.* 1999). In its Revaluing Rural Australia project, the Bureau of Rural Sciences is undertaking quantitative analysis of regional trends in socio-economic and environmental performance.

Non-metropolitan centres with populations greater than 20,000 have some characteristics in common with smaller country towns (for example, generally co-operative industrial relations and a low-cost wages structure), but their economies perform diverse and complex roles not found in those towns (Beer *et al.* 1994). In its *Blueprint for Rural Development*, the National Rural Health Alliance (1998a: 21) (NRHA) has argued that:

When regional or rural development policies are based on nodes, one of the consequences is to ‘bleed’ the smaller towns which are close enough to be affected by the ‘central’ growth, but not close enough to become dormitory towns. One of the alternatives to nodal development is *corridor development*. This has the effect of stimulating ribbon development for all of the places between two selected nodes, and from them out along their branches.

To create such corridors, the NRHA proposes that there should be business incentives together with the development or upgrading of rail services along routes such as, for example, from Bendigo to Wentworth (Victoria), from Ballarat to Mt Gambier, from Townsville to Mt Isa, from Rockhampton to Longreach, from Brisbane to Charleville, and a very fast train route from Melbourne, through Canberra, to Sydney. Proposals such as this inevitably lead to questions about

- feasibility and desirability;
- the roles of government and private enterprise in such schemes;
- likely economic, social and environmental impacts.

Beer and Maude (1996) have provided a comprehensive review of State frameworks for local or regional economic development, but subsequent changes of government have rendered some of that work obsolete. During 1998, the New South Wales and Queensland governments published regional development strategies. The Queensland strategy has since been put in limbo with the defeat of the Borbidge government. The other three mainland states have initiated processes aimed at formulating policies and strategies for regional development. Across Australia, the policy-making process has involved varying degrees of public consultation and input at regional and local levels. A comparative analysis both of processes and of outcomes would be useful. Here ‘outcomes’ refers not simply to the content of the strategies but also, in the longer term, to their impact in particular regions and rural localities.

Recommendation 9: Research is needed to answer questions on regional development such as the following

- What social factors (or interactions between social factors and economic and biophysical factors) might account for differing levels of performance in regions with similar economic and/or biophysical fundamentals?
- How do the roles played by federal, state and local governments and by private enterprise and community organisations influence regional development or decline?
- What can Australia learn from regional development strategies and processes in other countries?
- What are the best ways of diversifying the regional economy while ensuring that small towns, remote areas and the environment do not miss out?
- How feasible and desirable is the National Rural Health Alliance proposal for the creation of regional development corridors?

3.5 Local government

Local government in Australia emerged in a piecemeal way during the colonial era, based on English antecedents (Tucker 1997). Local government is not formally recognised in the Constitution, acting under the auspice of State government. It has limited dealings with the Federal government, which relies on States to be the conduit to the local level (McNeill 1997; Walmsley 1993).

A referendum in 1988 failed to grant local government official status in the constitution. This rejection may have been the stimulus for an internally driven process of reform. The Australian Local Government Association (ALGA) and various State associations started working to review structures, and define issues and objectives for the sector as a whole. The process of reform culminated in a 1995 accord between the Federal government and the 770 local councils represented by ALGA (Marshall 1997; Chapman 1997). The accord was intended to 'build a more productive relationship to show that, given appropriate support, local government could demonstrate its ability to deliver agreed national priorities' (Chapman 1997: 55). The accord has been used to play a part in the implementation of major Federal government strategic policies, including strategies for micro-economic reform (Johnston 1997).

Since 1990, all States have been reviewing their local government Acts (Wensing 1997). Federal efforts to achieve co-ordinated responses to Commonwealth programs promoted a degree of cooperation, but also tended to strengthen Federal controls over activities at the local and State level (Chapman 1997).

The process of reform in local government has some similarities to reforms in the State and Federal sectors (Tucker 1997). A form of managerialism known as New Public Management (NPM) has exerted an influence on local government reforms as well as in the State and Federal arena. NPM involves 'the adoption of corporate management strategies and a renewed emphasis on client services and effective outcomes' (Marshall 1997: 8). Local governments are being encouraged to change their emphasis from producing services in-house to cost-efficient purchasing of services through outsourcing. Restructuring and rationalisation processes have resulted in many services being privatised, and government agencies downsized (Tucker 1997). The final manifestation of this process is local government amalgamations to achieve economies of scale (Vince 1997).

The impact of NPM programs has not been adequately evaluated and, consequently, not properly understood. The social impact of NPM can be seen in the changes to the political culture of local government, changes to the configuration of interest groups, and in the way that local governmental areas have been amalgamated. These social impacts raise a range of issues for rural Australia, including the social costs of amalgamations and rationalisation of services. Without appropriate and intensive planning, the costs may include some losses of local and regional initiative (Vince 1997). Other impacts include changes to the balance between political and managerial dimensions of council activity, and the potential for conflict between efficiency and representativeness (Newnham and Winston 1997; Aulich 1997; Sproats and Crichton 1997). This conflict may be more difficult to manage in rural LGAs with a smaller population base, and may be exacerbated by funding that elevates the management functions of local government over its political and representative functions (Marshall 1997; Tucker 1997). With the emphasis on economic efficiency, local cultures will be valued only if they provide direct and immediate economic benefits (Rentschler 1997).

Recommendation 10: There is need for research that monitors the impact of Federal and State initiatives on the capacity of local government authorities (LGAs) to respond to local needs.

Recommendation 11: Research is required on the impact of changes to local government organisation, including the amalgamation of LGAs, on the capacity of rural local governments to preserve environmental, cultural and social amenity.

Local governments have a potentially greater role to play in regional development than they are playing at the moment. The key to that role is coordination and cooperation.

The main impetus for regional cooperation, from the level of the local governments, would seem to be the ability to share initiatives and resources with other local governments. In some regions, coordination between councils and with voluntary regional development organisations has existed for many decades. Some States, in conjunction with the Federal government, began the process of formalising cooperation in the 1980s and 1990s. In Victoria, for example, this was first achieved in 1990 with a National Conference on Voluntary Regional Cooperation (National Steering Committee on Voluntary Regional Cooperation 1992). In WA, a 1998 survey of local governments involved with regional cooperation groups, showed that 81 per cent declared resource sharing as their main reason for joining these groups (Department of Local Government 1998). Other significant motivations were increased political influence (56 per cent) and co-ordination of services (65 per cent).

The cross-sectoral approach to regional economic development, made necessary by global economic objectives of the Federal government, has provided the basis for the new relationship between local government and Federal governments. Micro-economic reform through local government was one of the main features of the Keating Government's accord with ALGA (Johnston 1997). There has, however, been State opposition to the Federal model, based on States' rights to use their own existing regional structures as a basis for reform. This was opposed by ALGA, environmental groups and trade unions, as States were perceived as lacking the necessary nation-wide vision necessary for success (Garlick 1997).

Recommendation 12: Research is needed into impediments facing rural local governments in developing cooperative strategies to promote regional economic, social and environmental objectives.

3.6 Demographic change

The changing demographic characteristics of rural Australia have generated considerable interest during the 1990s. One of the consistently noted themes in this research is the growing division between those (mainly coastal, accessible or environmentally attractive) rural areas experiencing population growth, and those (mainly inland agricultural regions) experiencing decline (Smailes 1996). For example, much of coastal Queensland, New South Wales and Western Australia has experienced strong population growth throughout the 1990s (Maher and Stimson 1994; Burnley 1996). By contrast, rural depopulation is occurring across the wheat/sheep belts of Queensland, New South Wales, Victoria, South Australia and Western Australia (McKenzie 1994). This demographic divide began to emerge during the late 1960s and early 1970s, when improvements in transport technology, together with changing lifestyle

preferences, contributed to the movement of people from metropolitan areas into peri-urban regions and/or environments perceived to have high amenity value (Sant and Simons 1993). At the same time, processes of agricultural adjustment, together with perceptions of lifestyle inequalities between urban and rural areas, were contributing to outmigration from broadacre agricultural regions (see, for example, McSwan 1983; Salmon and Western 1974).

Much of this research still provides the foundations for contemporary understandings of rural depopulation. In summary, such decline may be seen to lie initially with technological change and agricultural adjustment. Agricultural adjustment, made possible by farm modernisation and mechanisation, has reduced the number of farms, farm workers and farming families, thereby contributing to reduced employment opportunities in rural areas. At the same time, improvements in transport and communications technology have allowed industries and services to concentrate in larger regional centres, where economies of scale can be maximised and wider hinterlands served (Beer *et al.* 1994). In smaller towns, improvements in transport technology and personal mobility have seen farmers and residents bypass local services in favour of the greater variety and price competitiveness of those services and amenities available in larger centres (Smailes 1996). For smaller towns, the outcome is widely held to be a vicious cycle of decline, since rural population loss produces negative multipliers resulting in the contraction of local economies, the withdrawal of services, the erosion of local employment opportunities and further outmigration (Sorensen 1993).

Recent studies of internal migration in Australia have provided additional insights into the nature of rural depopulation (Hugo 1994; Salt 1992; Western Australian Planning Commission 1996). These studies, which are based on 1991 Census data, confirmed that those regions dependent upon broadacre grain and livestock production are also those which are most likely to experience severe outmigration. Importantly, this body of research also offered some insights into the characteristics of the outmigrants. One of the important findings was that the majority of outmigrants were between 15 and 35 years of age. The loss of this (at least potentially) 'child bearing' section of the population can contribute to a reduction in the birth rate and, consequently, to further population decline (Hugo 1994). There is also evidence to suggest that this age cohort tends to generate economic growth through higher levels of spending than some other sections of the population (Hudson 1986). The loss of this section of the population, together with the retention of older age cohorts, can contribute to a distorted age profile, with significant consequences for local social interaction and community sustainability. While identifying these trends is important, one of the problems with using Census data is that it provides no indication as to why members of this 15-35 year age cohort are leaving certain rural areas. While anecdotal evidence, together with the findings of research conducted in the 1970s (e.g. Montague 1978), suggests that the combination of greater educational, employment and lifestyle opportunities in urban areas is likely to explain these trends, there is virtually no recent research which has attempted to uncover the motives or characteristics of those leaving rural areas. A better understanding these trends is important, since it might help to provide direction to Commonwealth, State and local government employment, industry and welfare policy in rural areas.

Other studies of rural depopulation reveal important characteristics about those areas experiencing decline. Research in rural South Australia (Smailes 1997) and Western Australia (Tonts 1998) has found that areas of low household and individual incomes tend to be associated with high levels of depopulation. McKenzie (1994) also points to the gradual withdrawal of public services in rural areas as an important component of population decline. While contributing directly to the loss of local employment, the closure of public services can also have a significant psychological impact on rural communities, perhaps signalling the

'death' of a town. Some commentators have argued that such changes can lead to a sense of deprivation among the remaining rural residents and contribute to further outmigration (McKenzie 1994; Sorensen 1993). However, the absence of systematic research on migrants' decision-making processes and motives makes the confirmation of such assertions problematic.

Similar deficiencies are also evident in research on rural population growth. While a considerable body of literature has discussed the nature and distribution of rural growth (e.g. Maher and Stimson 1994; Burnley 1996), relatively few researchers have examined the local causes and consequences of such changes. Even when such studies have been undertaken, they tend to examine coastal regions experiencing population growth. As such, this research tends to interpret the growth occurring in rural areas as an extension of urban processes of diffusion (eg Essex and Brown 1997; Selwood *et al.* 1995). There are, however, a number of recent studies which examine the nature of population growth in previously declining agricultural areas (Sorensen and Epps 1996; Greive and Alexander 1996; Clements 1995). In explaining the population turnaround, these studies identify the importance of, *inter alia*, effective local leadership, locational advantages, amenity and/or heritage attributes, and the emergence of new, often non-agricultural, industries and employment opportunities. Despite this, one of the problems facing formerly declining rural communities is that the population growth is often only temporary and highly dependent upon one or two propulsive industries (Tonts 1998). The failure of such industries can lead to a return to decline (see, for example, Chisolm 1995).

The extent of in-migration to some rural areas has raised questions about the environmental impacts of population growth, and of new agricultural or industrial pursuits (Greive and Tonts, 1996). Anecdotal evidence suggests that, when coupled with inappropriate local planning and/or environmental legislation, population growth and associated new industries might be contributing to severe impacts on natural environments, amenity landscapes, and traditional agricultural systems. To date, however, little detailed research has been conducted on such issues. Other areas in need of research attention include studies of: the capacity of community infrastructure to cope with growth (Clements 1995); the social impacts of in-migration on the 'host communities' (Selwood *et al.* 1996); and the impact of changing social structures on local political and decision making processes (Greive and Tonts 1996).

Recommendation 13: There is a need for on-going research into the drivers and consequences of population change in rural areas. Particular attention should be given to issues such as the following

- who are moving, for what reasons, and with what consequences?
- how is demographic change related to the provision of infrastructure and government services and infrastructure in rural areas?
- what are the social and economic implications of current and projected age profiles of rural communities?

3.7 Small towns

During the past 20 years, there have been various studies of small towns in Australia. Much of that literature has been reviewed by Geno (1997). During the 1990s, some sociologists or social anthropologists such as Poiner (1990), Dempsey (1990; 1992) and Gray (1991) have published detailed ethnographic studies of particular country towns, in much the same genre as earlier studies by Oxley (1978) and Wild (1978; 1983). Various social geographers such as Hugo and Smailes (1992), Sorensen (1993), Jones (1993) and Tonts (1998) have examined general factors leading to the growth or decline of country towns.

In 1996 there were 678 towns with populations in the 1,000-19,999 range, 100 more such towns than in 1986. The aggregated population of these towns in 1996 was nearly 2.5 million – an increase of about 324, 000 in the ten-year period. Of the 578 towns of this size that existed in 1986, about a third had suffered population losses by 1996, with one tenth declining by at least 10 per cent. Nevertheless, in the same period, nearly half the towns in this size range had grown by at least 10 per cent. Towns in decline between 1986 and 1996 were usually inland in wheat-sheep belts, dry land grazing zones or mining regions. Conversely, most towns experiencing substantial growth were situated near metropolitan areas or in other coastal locations or were associated with growth in particular industries such as tourism or viticulture (Australian Bureau of Statistics 1998c: 10-14).

Sorensen (1995: 51-52) contends that the population sizes of country towns are affected primarily, though not exclusively, by the following factors

1. The size and wealth of their hinterland populations (and also the stability of that wealth)
2. Their portfolio of basic functions, defined as 'export' industries, including manufacturing, education, tourism, etcetera
3. The quantity of public services they distribute
4. Their residential attractiveness for retirees, the unemployed, pensioners, etcetera
5. The location and relative accessibility of other more commercially dominant places
6. The general quality of life they offer
7. The quality of local leadership
8. The opportunities available for economic development, including untapped resources such as mineral wealth
9. The extent to which corporate capital is prepared to invest in the town.

These factors are interrelated. Towns scoring well on these criteria tend to grow, while places scoring poorly tend to decline.

The decline of rural towns has meant a loss of key services, and a consequent burden of isolation, increased costs and reduced opportunities for the population that remains in rural industries. While there are no simple panaceas for the problems of decline, some rural communities have begun to explore and implement rural survival and revival strategies. This response has come usually through the leadership of the local shire council and the business community, including farmers and graziers who have recognised that the wellbeing of farm businesses and of farm families depends partly upon the support of sustainable rural communities. State and Federal governments have sought to encourage local initiatives through various community planning/development programs.

Despite the growing emphasis on rural communities' committing themselves and their local resources to rural revitalisation strategies, and despite the existence of various Commonwealth and State government programs designed to encourage such initiatives, there has been relatively little systematic research in Australia on the factors underpinning successful revitalisation efforts. Such research or reporting as has occurred has generally been limited to a single case study (e.g. Wildman *et al.* 1990; Chisholm 1995; Mouritz 1998; Trigg 1998) or a small number of case studies, usually in one State (e.g. Cahill 1995; Tonts 1998). Nor has there been a comprehensive assessment of the contribution played by various community planning/development programs. Given the resources of time and funding devoted to such methodologies, it is important to assess whether they are a cost-effective means of stimulating processes of change, adjustment and innovation.

Similar rural revitalisation initiatives have been occurring in places like New Zealand, South Africa, Western Europe, Canada and the USA over the last fifteen years. There now exists a growing body of information from these experiences (see, for example, Salant and Marx 1995; Centre for Development and Enterprise 1996; Kinsley 1997; National Center for Small Communities 1997; Stevenson n.d.) but there has been little attempt to evaluate and interpret this information in terms of its relevance to the Australian context. A study published by the Heartland Centre for Leadership Development (1986) provides an example of the type of research and development needed in Australia. That publication is an in-depth study of 20 small Nebraska towns that were identified as surviving the worst agricultural economic crisis since the Depression. These case studies were developed to

- provide a counterbalance to the 'dying community' image that had become commonly accepted
- provide information to State government leaders for potential use in guiding program initiatives
- provide an information base for leadership development activities aimed at leaders in rural communities.

RIRDC is currently funding a somewhat similar research and development project in Australia. From a review of Australian and overseas literature and experience, and through a study of 12 small inland towns or rural communities that have experienced social and economic revitalisation in recent years, together with a review of various community development and technical assistance programs, this project aims to produce a user-friendly resource kit on strategies for revitalising small towns and rural communities in Australia.

Geno (1997) noted the need for further research on ways in which country towns (and, one might add, farming communities) can diversify their economies. Such research should include

an examination of strategies for assessing and expanding the skills base within such towns and rural communities.

In *Regional Population Decline in Australia: Impacts and Policy Implications*, McKenzie (1994: 73) suggested that policy-related research be undertaken on the question 'Is there a role for government in 'helping' towns to decline rather than propping them up, or is this approach politically unsaleable?' The Issues Paper prepared for the Rural Social Policy Conference held in Dubbo, NSW, in 1995 raised the question 'Is the community witnessing the inevitable decline of small rural towns? Is there a threshold for viability in rural areas, beyond which the market, government and the community should make no further investment? Who should determine this?' (Westmore 1996: 4). These are difficult questions that cannot be answered adequately by empirical research alone, though such research could provide evidence to inform public discussion and policymaking.

Recommendation 14: There is a need for research on processes of structural adjustment in country towns and rural communities. Issues needing to be examined include

- revitalisation strategies
- diversification strategies
- factors influencing the likelihood that local initiatives can arrest or reverse processes of population decline
- outcomes of government policies and programs designed to facilitate structural adjustment
- efficiency and equity considerations associated with structural adjustment processes.

3.8 Peri-urban issues

Murphy and Burnley (1999), who are among the leading Australian researchers in the area, choose the term 'exurbia' to refer to the land space just beyond urban areas, saying that this is the term being used in the international literature. Bryant and Johnston (1992), overseas scholars looking at the peri-urban, break this down into zones beyond the urban core. Following Russwurm, they speak of an inner and outer urban fringe, an urban shadow and a rural hinterland. Despite the diverse terminology, there is a common recognition that the processes occurring in the countryside around cities and urban centres are worthy of examination in their own right and are not necessarily identical to what is happening in other rural areas. Several recent articles by Australian researchers in this field are contained in a collection edited by Epps (1998).

The same thread runs through the peri-urban/urban fringe research as runs through rural sociology generally, namely that there is sub-regional variation and heterogeneity (Bryant 1995). Nonetheless, what is common to the designation *exurbia* is that it is an area in which agricultural producers coexist with households that do not make their livelihood from the land. Bryant and Johnston (1992) see the processes of change in land use in the 'city's countryside' as the key feature to be examined as it has implications for the quality of life for future generations.

The area around urban centres in Australia has become a focus of research for several reasons

- There has been a growth in population in those urban fringe/urban shadow areas which are within commuting distance of urban employment.
- The incomers into exurbia may be interested in rural lifestyle rather than agricultural production but may be living on prime agricultural land (a reducing resource)
- The countryside around cities is now seen not only as an area of agricultural production but also as the recreational and vacational space of urban dwellers. It has amenity value as well as production value.

There has been a shift in perspective from seeing the rural-urban fringe as simply land in the process of being taken into urban development, to recognising that the peri-urban areas may in fact have a dynamic of their own in which rural businesses coexist with hobby farms and other kinds of small holdings.

Agricultural production within the countryside around cities is subject to some beneficial circumstances as well as to competing but not necessarily incompatible purposes. On the positive side, there is a local market for fresh produce, and thus a saving on transport costs. Intensive farming and niche marketing may be profitably pursued but the possibilities of expansion may be reduced as a result of rising land prices. Increasing land values result from the urban movement into exurbia, but these may be of value to agricultural producers as there may be future capital gains on their land. On the other hand, farm operators may experience pressures from their non-farming neighbours in ways that interfere with productivity. 'Rural retreaters' / rural commuters may emphasise beautification of their land, be concerned for environmentally friendly farming practices (object to chemical sprays and strong odours), desire peace and quiet. Conversely, purchasers of rural land who do not come from farming backgrounds and who are part-time or hobby farmers may be subject to critical appraisal by full-time farmers. Concern is sometimes expressed as to whether hobby farmers or small holders are making the most appropriate use of the land. Some buyers of rural land who do not use it for agricultural production may nonetheless seek to preserve it and be reluctant to subdivide their properties, thus saving the land from urban development.

Recent statistical data indicate that many farm families have members working off-farm, so the ideological differences between farm families and other families living in peri-urban areas may be reducing. Furthermore, with technological advances, farm families are increasingly facing the same global pressures and are exposed to the same information as other families.

Processes of rural gentrification may be occurring in the peri-urban area (Murphy and Burnley 1993). There are hints in the literature that agricultural interests may not get a fair hearing if other groups are able to act as vocal pressure groups influencing local and regional decisions (the implication being that the new gentry are well educated and articulate). The other possibility is that members of the heterogeneous peri-urban population may form alliances which allow them to achieve political influence in their combined interests (Bryant and Granjon 1998).

Murphy and Burnley have a current project funded by the Australian Research Council and looking at lifestyles and the economy in peri-urban areas around Sydney, Canberra and Melbourne. This builds on to their previous research in this field. What appears to be lacking is up-to-date qualitative research looking at specific peri-urban areas from a sociological perspective similar to that adopted by Wild (1978; 1983), Dempsey (1990; 1992) and Gray (1991) in their studies of country towns.

Peri-urban areas may provide indications of how agricultural production is able to coexist with other interests. Since the coexistence of agricultural uses of countryside with recreation and tourism seems to be the way of the future, peri-urban areas are ideal locations for research into the concepts of the countryside as a place of production and a site of consumption.

Recommendation 15: Qualitative research in peri-urban areas where agricultural activities coexist with other land uses would complement existing quantitative studies and could also throw light on broader issues associated with competing land uses in rural areas.

3.9 Impact of National Competition Policy

Following the report of the Independent Committee of Inquiry (1993) chaired by F.G. Hilmer, the Commonwealth and all State and Territory governments agreed in 1995 to adopt a series of measures to encourage greater competition, especially in markets where there had been little or no competition (for the text of these agreements, see National Competition Council 1997). Underlying National Competition Policy (NCP) is the premise that:

greater competition will create incentives for improved economic performance – for producers to use their resources better (higher productivity), to increase their efforts to constrain costs (lower prices) and be more responsive to users' demands (improved quality). To the extent that these outcomes are achieved, incomes, employment and living standards will rise.
(Productivity Commission 1998b:5)

However, NCP does not necessarily ensure that every individual or business will be better off. In a more competitive environment, some businesses may decline or even close, while others may expand. Similarly, jobs in some industries or locations may be lost and others created (Productivity Commission 1998b: 5).

The Industry Commission (1995) estimated that NCP and related reforms would result in a long term annual gain in real GDP of 5.5 per cent. Quiggan (1996) estimated the benefits to be much lower at about 0.5 per cent of GDP. Agencies such as the Regional Development Council in Western Australia (1998) have contended that in rural and regional areas the NCP has not delivered promised benefits in terms of improved living conditions, greater employment and investment. The Department of the Treasury (Department of the Treasury, Australia 1998: 43) has argued that:

although net benefits to rural and regional areas may be less than those accruing to urban areas, this is not an argument against the reforms proceeding ... However, if there is an imbalance in the distribution of benefits from the reforms, then governments may wish to increase their focus on re-distributive elements to ensure a more even spread of benefits.

Has the latter happened or not?

A further question relates to the appropriateness of applying competition policies to the delivery of health, education and welfare services, especially in rural areas (O'Brien and Walder 1998; Hazel 1998). Quiggan (1998: 4) argues that 'attempts to apply pseudo-market principles in community services have produced highly unsatisfactory outcomes wherever they have been applied in Australia and overseas.' Williams (1997) contends that competition in the health area creates 'perverse incentives', encouraging health and other authorities to

'cost shunt' across their borders rather than cooperating. Under competitive pressures, welfare service providers may concentrate on less expensive clients, leaving the more difficult cases undealt with (Healy 1998a). Competition may undermine cooperation at a time when better coordination between services is required (Australian Council of Social Service 1998; Hazel 1998; Williams 1998).

As a result of its recent inquiry into the issues, the House of Representatives Standing Committee on Family and Community Services (1998) concluded that in many rural and remote communities competitive tendering may not be an appropriate means of achieving effective and efficient welfare service delivery. The Committee also recommended that government agencies with responsibility for welfare service delivery should fund independent empirical studies on the impacts of competitive tendering and contracting out of welfare services, particularly the impacts on (a) service quality, (b) costs, and (c) volunteerism in the welfare sector.

There have recently been two inquiries on the effects of NCP. A Senate Select Committee has been examining socio-economic consequences. When it was established in 1998, the terms of reference of the Committee required an examination of the impact of NCP on: unemployment, working conditions, social welfare, equity, social dislocation and the environment. They also required an analysis of the relative impact on urban and rural and regional communities, together with a clarification of the definition of public interest as related to NCP processes. When the Committee was reappointed in 1999, an additional item was added to the terms of reference, namely an examination of NCP's relationship to other micro-economic reform policies. The Select Committee has released an interim report as the basis for further deliberation (Senate Select Committee on the Socio-Economic Consequences of the National Competition Policy 1999). Several issues were identified as having a particular impact on rural areas. Contracting out was reported to affect small towns, with the loss of human capital and reduced economic capital. While accepting that NCP may have been wrongly blamed for the effects of other economic factors such as globalisation, the Select Committee found that the disproportionate effects of NCP and other economic factors on rural and regional areas warrant further attention. There is special concern that the dominance of economic over social criteria is resulting in the loss of human capital on which sustainable rural communities depend.

At the request of the Federal Treasurer, the Productivity Commission has also been examining the impact of competition policy reforms on rural and regional Australia (Productivity Commission 1999a). The Commission used economic modelling in an attempt to assess the impact of NCP *per se*, as distinct from the effects of other factors such as world commodity prices, technological changes and changes in tariff policy. The commission's findings reaffirm the positive values of NCP, and attribute doubts about its success in rural Australia to poor public knowledge of NCP and its effects.

Recommendation 16: Following the publication of the reports of the Senate Select Committee and the Productivity Commission on these matters, further research is warranted on policy options to mitigate negative impacts of National Competition Policy. As some of the costs of reform may be short-term and concentrated, whereas the benefits may be longer-term and more broadly dispersed throughout the nation, further research is needed in the longer term to monitor costs and benefits, and to assess the outcomes for rural communities of any offsetting measures or policy changes.

Recommendation 17: Government agencies with responsibility for welfare service delivery should fund independent empirical studies on the impacts of competitive tendering and contracting out of welfare services, particularly the impacts on (a) service quality, (b) costs, and (c) volunteerism in the welfare sector. A component of such research should focus specifically on the impacts in rural communities.

4. Labour markets, employment and unemployment

Employment opportunities are closely linked with the decline or revitalisation of rural towns and regions. Labour force changes which result from the growth, downsizing or closure of one industry affect other industries in turn (Senate Employment, Workplace Relations, Small Business and Education References Committee 1999: 17). Having fewer workers in agricultural industries means that there are fewer children attending schools or fewer clients for professional and trade workers. The effect of a school or medical clinic closure is that young people have fewer opportunities for skilled work in their region if they complete post-compulsory qualifications. On the other hand, growth based on new rural industries, including tourism and other service industries, has the potential to increase the range of employment opportunities for school-leavers. It also provides new opportunities for those whose traditional sources of income have been changed by economic restructuring, and for those seeking off-farm income. While it is true that some areas of rural Australia enjoy low rates of unemployment, more have higher than average unemployment with few prospects for growth. Declining opportunities for employment may not only affect the economic vitality of regions but also widen the quality of life gap between different segments of the population. A report by the National Institute of Economic and Industry Research (1998: 62) concluded that ‘the high and increasing unemployment levels and living standards, as well as widening unemployment and income differentials, requires urgent policy intervention’.

4.1 Issues and generally accepted findings

With rapid and ongoing changes to industry organisation, more people can expect to change employers and jobs during their working life. There is a growing tendency to shorter work contracts, so that maintaining continuous employment is a problem for many workers. Seasonal workers are already familiar with the organisation of industries around the ‘just-in-time’ principle, in which employees are taken on only for such hours, days, weeks or months as they are required. The wide adoption of the principle results in more workers being employed part-time or part-year, with recurring periods of unemployment or underemployment. Economic restructuring seems to have created a greater burden of unemployment and underemployment in rural towns than in capital cities. As demand for labour in agriculture and manufacturing in rural areas has declined, there has not been sufficient growth in other areas to allow all affected workers to remain employed.

Through restructuring, older industries are replaced by newer ones based on flexible employment conditions. In February 1998, about one in five job holders, or about 2 million people, had been job seekers in the previous year, with about 35 per cent of these having come from outside the labour force. At this rate of change, the entire labour force would find a new job every four or five years. The labour force is, in reality, divided into a relatively stable core and the remainder which has much more mobility. Over 40 per cent had held their job for five years or more, a further 25 per cent had been in the same job from between two and five years, while the rest had held their job for a shorter period (Productivity Commission 1998a: 64). Households with no members in the core labour force may need to rely on income from several sources, even to the point of individuals building up a ‘portfolio’ of jobs. In this new climate of employment, there are greater structural disadvantages for residents of rural as

compared to urban areas, and it is not surprising that problems of unemployment or underemployment appear to be greatest outside the capital cities.

Relative social disadvantage in rural areas cannot be explained simply in terms of poor returns for agriculture. The lack of room for adjustment in rural labour markets is a major issue, for which innovative solutions are necessary. Solutions will depend in part on what we know about the relative impact of unemployment or underemployment on different segments of the rural population. Although there is a considerable amount of information on the employed component of the labour force in rural areas, there is much less detailed information about unemployment and underemployment.

Attempts to identify labour market issues in rural areas are beset by the recurring problems of definition of 'rural'. There are two broad types of statistics available, one based on industry and one based on region. Broad industry groups as defined for the purposes of the Australian Bureau of Statistics differ in the proportion of the labour force employed outside the metropolitan area of the capital city. In NSW, for example, the proportion of the total labour force employed outside metropolitan Sydney is 35.6 per cent whereas it is 89.3 per cent for agriculture and 84.3 per cent for mining. It would be reasonable to identify these as 'rural' industries, compared to those industries with a small proportion of the labour force employed outside the metropolitan area of the capital. The main 'urban' industries are finance/property/business services, with 20.7 per cent employed outside metropolitan Sydney (Borland 1998). These figures are of value in analysing labour force profiles for different industries, but only of limited use in understanding the dynamics of rural unemployment. Geographical regions permit more refined analysis, but not all figures are disaggregated in the same way. The Australian Bureau of Statistics distinguishes between major urban areas with a population of 100,000 and over, other urban areas with a population of 1,000 to 99,999, rural localities with a population of 200 to 999, and the rural balance living in clusters of less than 200 people (Australian Bureau of Statistics 1998c). With few exceptions (for example, Garnett and Lewis 1999), differences at the local level are concealed in studies that rely on statistics aggregated into regional or wider levels.

Despite the differences in measurement framework, there are some broadly agreed on figures about employment and unemployment in regional Australia. They are as follows

- Unemployment is higher in rural towns and cities than for capital cities or smaller rural localities (Garnett and Lewis 1999: 1; Beer *et al.* 1994: 53; Australian Bureau of Statistics 1998c: 45)
- Unemployment varies markedly by region. Some regions are more exposed than others to unemployment because of the decline of core industries in those regions (National Institute of Economic and Industry Research 1998: 21-3; Borland 1998: 148)
- From the mid-1980s, retrenchments in agriculture (that is, the proportion of people leaving their jobs involuntarily) rose above the average for the whole economy when it had typically been below the average (Productivity Commission 1998a: 62). About 50 per cent of all retrenched workers were re-employed during the three year period of the study (July 1995-1997), although for a quarter of these full-time work was replaced by casual work

- More farm households are relying on off-farm income to survive. The proportion of farmers and spouses who work off farm has doubled since the 1980s, with 34 per cent of farmers or spouses doing so in 1995/6 (Garnett and Lewis 1999: 3)

The opportunities for individuals and families to adjust to a more mobile labour force, in which more people have changing, part-time or casual employment, are likely to be less in rural areas. This situation is exacerbated by the decline of older industries without a corresponding growth in newer industries. The way changes to employment are being negotiated by people in rural areas is a high priority for research.

Agriculture as an industry, although it is influential, is not the major determinant of unemployment rates in rural areas, since even in the smallest rural communities it provides no more than 25 per cent of employment (Garnett and Lewis 1999). The number of people employed in agriculture has barely increased over thirty years while both the size of the Australian population and total labour force have been steadily increasing. Between 1971 and 1998, the absolute size of the agricultural labour force increased by 1.4 per cent compared to 54.8 per cent for all industries (Productivity Commission 1998a: 59). Part of the explanation lies in increasing efficiencies in agriculture and part in the growing propensity of farm enterprises to rely on family members rather than hiring paid labour. Where farmers leave their businesses, they are also likely to leave the region and so not add to the unemployment rate in the area.

With the smaller role played by agriculture, more farming households are developing strategies to supplement farming income. Women are contributing significantly to farm production, although they continue to be the mainstay in unpaid domestic work. In broadacre farming in 1996/7, men spent an average of 48 hours in on-farm work with another six hours in off-farm employment, while the figures for women were sixteen and eight hours respectively (Garnaut *et al.* 1999: 17). Women with post-school qualifications are more likely to gain off-farm employment in the services industries such as education or health. This is one way in which farming families can avoid financial problems that could cause them to leave the industry and become unemployed.

Recommendation 18: In some rural areas there is limited scope for adjustment to structural changes in labour markets. Further research is needed into the effects of flexible labour markets on rural communities, and into innovative ways of adjusting to structural change.

4.2 Disguised and hidden unemployment

Unemployment may be disguised or hidden. It is disguised where people declare themselves to be working, but are in effect underemployed. Unemployment may be disguised in family businesses in which family members share in the profits generated by the enterprise. People in rural families are much more likely to be employers or self-employed than are people in towns and cities (Australian Bureau of Statistics 1998c: 42-5). We know that although the number of farms has been declining by an average of 1.3 per cent per year over the ten years to 1994-5 (Australian Bureau of Statistics 1998a: 20), the unemployment rate of the Census's 'primary reference person' is about the same as for major cities at 6.7 per cent. We also know that despite higher rates of unemployment outside the capital cities, a lower proportion of the population received a benefit in a major category of income support (Beer *et al.* 1994: 115). The collection of figures using different categories, and the differing criteria used by different government agencies when compiling figures, make it difficult to infer the effects of economic restructuring on unemployment. Studies in other countries have worked from the

assumption that members of farm families who have been unsuccessful in seeking employment off-farm are being counted not as unemployed but as working on the family farm. Anecdotal evidence from Britain is likely to be replicated in Australia. It suggests that family members are working on farms for little or no financial reward when, were there jobs available, they would be employed elsewhere (Errington 1990: 142). It is not clear in cases like these whether extra family member is replacing a paid worker, or whether the farm family is simply supporting another member. The distinction is an important one, since in the former case per capita standard of living in the family may increase, while in the latter case it is more likely to decrease.

The second way in which unemployment may be underestimated is through failing to account for the hidden unemployed. Unemployment may be hidden where individuals are not actively looking for work because of their expectations that work would be impossible to find, or because of problems such as child-care. Hidden unemployment is likely to be higher in areas where there are few employment opportunities and where individuals may find it difficult to qualify for social support. This form of hidden unemployment is more likely to affect women, and more so in rural areas, where the working status of farmers may make spouses ineligible for programs such as Jobsearch and Newstart, than in urban areas. One study estimated that in 1991 there were 600,000 marginally attached women and 220,000 men, and this is most pronounced in non-metropolitan areas (Beer *et al.* 1994: 115). Marginally attached workers withdraw from the labour market between spells of employment and thus do not appear as unemployed members of the labour force.

The shortcoming of unemployment measures has recently been highlighted by Gregory (1999), who uses the term 'jobless' in his analysis of changes to the Australian labour market. There is an increase in the proportion of men who have dependent children but do not have paid employment. Many of these have withdrawn from the labour force, as men with dependent children who become jobless are finding it more difficult than was the case twenty years ago to regain employment. The situation is worse for men with lower education levels. Unemployment measures will consistently miss groups such as these men. Because they have withdrawn from the labour market, they are not unemployed even though they are jobless. This phenomenon may be contributing to the growing number of children living in households below or barely above the poverty line.

There is also a consistent underenumeration of Aboriginal and Torres Straits Islander unemployment in remote areas (Beer *et al.* 1994: 55). With the higher rates of unemployment of Indigenous Australians, particularly in areas where there are few prospects for employment growth, this is a problem that is often left for specialist indigenous portfolios. The ANU's Centre for Aboriginal Economic Policy Research has been studying trends in Indigenous employment, especially the use of the Community Development Employment Program (CDEP) (Rowse 1997). Indigenous employment and unemployment challenge the conventional ideas of labour markets, labour market participation, and 'actively looking for work'. Further, there are structural problems in addressing the situation of Indigenous employment, and with a rapidly growing Indigenous population, the situation will worsen unless growth in their employment opportunities far outstrips that of the economy as a whole (Rowse 1997). One of the primary ways in which Indigenous economic strategies challenge the conventional definitional boundaries is through attachment to the informal Aboriginal economy (Rowse 1997: 121). This means that individuals can fall between the categories of 'employed', 'unemployed' and 'not in the labour force'.

The informal economy is relatively neglected in research on employment and unemployment. One American study of this phenomenon (Nelson 1999) reports that residents of rural counties develop survival strategies which combine the formal and informal economies. For some, the informal economy is a way of supplementing the income of a household, for example by exchanging home produce, whereas for others, it is a way of maintaining a sense of worthwhile employment not provided by the formal economy. There appears to be little information in Australia on the role of the informal economy in the maintenance of rural households in difficult economic circumstances.

Recommendation 19: Research is needed to compensate for deficiencies in labour market measures for rural areas where unemployment is likely to be hidden or disguised, and where Indigenous unemployment is systematically under-enumerated.

Recommendation 20: There is a need for research on links between the formal and informal economies in rural areas. Such research could contribute to initiatives to minimise the adverse effects of falling or insecure employment.

4.3 Differences across regions in unemployment

There are considerable differences in labour markets and unemployment across regions. The way rural areas and non-capital city urban areas are defined determines the comparisons that can be made. The NIEIR report (National Institute of Economic and Industry Research 1998) divides the country into 'functional' areas such as production, resource, lifestyle and rural, as well as core metro and dispersed metro. Rural areas such as south-west Western Australia and southern Northern Territory are identified as among the areas with the best employment prospects, although metro regions are more likely to be among those with expected employment growth. In general, rural areas are more likely to be among those with poor employment prospects.

Rural towns and cities of 1,000-99,999 have higher rates of unemployment than either larger cities or areas smaller than 1,000. A division of these smaller areas, however, into 200-999 and 'the rural balance' of areas up to 200, reveals a difference between them (Garnett and Lewis 1999). The 'rural balance', the smallest area of analysis, experienced unemployment rates rather like the larger cities, while the rural localities of 200-999 shared similar rates with the towns of 1,000-99,999. Further, there are differences among towns and regions of similar size, depending on the dynamics of economic growth.

There are high rates of unemployment reported in two different types of regional city. The first type is coastal cities characterised by (a) high rates of casual and seasonal employment and (b) in-migration of unemployed people seeking an amenable lifestyle and affordable housing. Hervey Bay, although it experienced 125 per cent growth in the work force between 1976 and 1991, has a 20.7 per cent unemployment rate (Beer *et al.* 1994: 53). The authors who studied this region argue that where there is strong employment growth in coastal cities, the in-migration to take advantage of the jobs tends to overshoot the number of jobs available.

Regions which come to depend on tourism are vulnerable to the volatility of that industry. A recession can have a profound impact on the rate of unemployment as people defer plans for spending on tourism. Fieldwork with in-migrants to areas popular with tourists supports the conclusion that unemployment in these areas is explained by over-adjustment (i.e. an excess

of job seekers migrating to regions of strong employment growth) (Beer *et al.* 1994: 52). This explains why there is a simultaneous growth in both the labour force and unemployment in these areas. Measures to discourage people from migrating to regions with high unemployment may be misguided, since it is the strong labour force growth to which people are responding.

The second type of city with a higher than average rate of unemployment is one, such as Burnie, that is characterised by a period of steady decline. There are few opportunities locally, and perhaps limited advantage to be gained in close-by labour markets (such as Launceston or Hobart). The rate of unemployment in these cities depends on the relative advantage of moving to larger regional or capital cities. Goulburn or Colac, for example, do not have high such high unemployment rates despite declining labour markets because Sydney and Melbourne offer benefits that are readily accessible. The same is not true for Burnie, where the logistics of migration are more formidable.

Regional cities with lower than average unemployment are often in areas with higher than average growth. These areas have not experienced the 'over-correction' that leads to more job seekers coming in than there are jobs available. Reasons for this include the pressures for people without jobs to move on, either because of the lack of housing or the prospect of jobs in larger centres. While this may explain the low unemployment rate in Karratha where access to company housing requires employment by mining companies, it would not explain the low rate in Bathurst (Beer *et al.* 1994: 55).

Recommendation 21: Qualitative research is required on aspects of regional unemployment. On their own, quantitative measures do not provide an adequate understanding of these aspects, which include

- the expectations with which job-seekers migrate to towns or cities that have both high unemployment and high labour market growth
- disguised and hidden unemployment
- marginal attachment to the labour force.

4.4 Other neglected issues

The focus of much data gathering on labour markets is the employed labour force, with unemployment being relatively neglected. There is also much more analysis of economic dimensions of labour markets than there is of the social consequences of changing employment patterns. It is these consequences, especially of unemployment, that should be a priority for further research, since findings from such research are pertinent for policy making.

Unemployment is a problem not only because of its economic consequences. There are profound consequences for personal and social wellbeing. Persistent unemployment can exacerbate family and community breakdown, and ultimately result in suicide. In the past, where there has not been an adequate response to the social consequences of unemployment, social and political instability has followed (Webster 1999). Unemployment and underemployment would appear to be debilitating in their effect on the lives of people in rural and regional Australia; a more detailed knowledge of the effects may be required to supplement economic information as a sure basis for sound policy.

In rural areas as elsewhere, prolonged periods of unemployment for individuals can make re-employment difficult to achieve when the labour market improves. One explanation for this is that people who are unemployed for a long period of time suffer demoralisation and a loss of skills. It would follow that economic policy which results in long-term unemployment has an effect not only on the welfare of those who lose their jobs, but also on the productive capacity of the whole economy (Quiggin 1995). A major priority for research on unemployment would be to investigate ways of avoiding the social marginalisation of a growing proportion of unemployed workers as their time of unemployment lengthens.

There is a second explanation for the difficulties encountered by people in finding employment after long periods of unemployment. Networks which include employers and employees play an important part in the filling of job vacancies. People who have become detached from these networks through a long period of unemployment are at a disadvantage to the extent that positions are filled by word of mouth on the recommendation of current employees (Quiggin 1995). It would be useful to review the effectiveness of job placement agencies in dealing with this problem in rural areas. The majority of the Senate Committee on regional employment and unemployment accepted that competitive tendering of employment services had seriously undermined the 'existing network of employment services organisations, many of them community based, non-profit organisations' (Senate Employment, Workplace Relations, Small Business and Education References Committee 1999: 67).

The experience of long periods of unemployment in households is likely to have an effect on children in those households. Recent research has attempted to analyse this problem (Gregory 1999). Although no specific information is provided for rural areas, it is possible to make some inferences. Almost one in five dependent children in Australia live in a household in which no adult is employed. Many of these are living with a sole parent who is not in the labour force, but there is an increasing proportion living with two parents who are either unemployed or not in the labour force. The social and psychological effects of joblessness on children may be felt regardless of the labour force status of the parent(s). There appears to be little research in rural areas on this phenomenon. Gregory's research concludes that if all children shared jobless households equally, each would spend about two and a half years out of the first fifteen in such a household. Given that joblessness is not evenly distributed, it is likely that some children are spending a much higher proportion of their childhood in such circumstances (Gregory 1999). Gregory's paper does not provide specific information on rural areas, but given that joblessness is concentrated among families with lower educational qualifications, it is likely that the figures are at least as high there as for Australia as a whole.

Youth unemployment is a particularly serious issue for rural communities because limited opportunities for skilled work may discourage young people from undertaking further education which could otherwise be a pathway to employment. This translates into a loss of skills for rural communities and the perpetuation of educational disadvantage of many rural areas. Young people are also more inclined to leave the region if there are few jobs available, and this represents a loss of both social and human capital. There is relatively little information on the movement of young people into or out of regions in response to employment opportunities. Attempts by local government or local community groups to combat the lack of job opportunities for young people could be assisted by research on the way young people make decisions about education and residence in the light of these opportunities.

There are fundamental differences of view about both the causes and remedies for unemployment, as is evident in *Youth employment: a working solution* and other inquiries (House of Representatives Standing Committee on Employment, Education and Training 1997; Senate Employment, Workplace Relations, Small Business and Education References Committee 1999). In evidence before each of these committees, there were profound differences over the role of economic restructuring and the attributes of the unemployed in explaining regional, gender and age differences in unemployment. Some witnesses emphasised the lack of employment opportunities whereas others emphasised the deficiencies in the skills and expectations of young job seekers. Other witnesses here and elsewhere pointed out that valuable work could be done, for example in maintaining a deteriorating infrastructure of community buildings, except that funding for such projects was being eroded. In areas with a steady economic decline, witnesses admitted to a high degree of demoralisation, believing that the situation had been made much worse by government policies over the years.

The need for further research into the effect of restructuring on rural towns and regions has prompted two recent national inquiries, one by the Senate and one by the Productivity Commission. Although it was intended that these would provide answers about the implications for employment in rural regions, *Jobs for the regions: a report into regional employment and unemployment* (Senate Employment, Workplace Relations, Small Business and Education References Committee 1999) revealed a discrepancy between many of the submissions made to the inquiry and the monitoring of changes to government policy. In particular, many witnesses from rural areas reported that both national competition policy and

changes to labour market programs had adverse impacts on their localities, while performance indicators presented to the inquiries by the Government senators and the Productivity Commission indicated net benefits. The Committee made two recommendations for further research in response to these submissions. The first is 'that the Commonwealth investigate strategies to facilitate the provision of structured training opportunities and the implementation of appropriate accredited training packages to alleviate skills shortages in regional areas'. The second is 'that the Commonwealth evaluate the use of training incentives in meeting the needs of regional industries for increased structured training opportunities in categories of high employment growth'.

Witnesses to the Productivity Commission's inquiry into the impact of National Competition Policy on rural and regional Australia also expressed concern over the loss of jobs and skills at the local level (Productivity Commission 1999a: 239-246). The view was expressed that competitive tendering and contracting resulted in the loss of employment and income within regions, as well as the loss of equipment, workers and families who contributed to the community in times of crisis such as bushfire. There was a sense of injustice that the competitive neutrality required by National Competition Policy made it almost impossible to include the adverse effects of such tendering on local employment.

Recommendation 22: There is an urgent need to extend research on the social effects of unemployment on rural communities. This research should take account of the effects on education and out-migration of young people, the effects on families with dependent children, and the effects on family businesses.

Recommendation 23: Research is needed into the links between structured training and employment opportunities in rural regions, as recommended by *Jobs for the regions: a report into regional employment and unemployment* (Senate Employment, Workplace Relations, Small Business and Education References Committee 1999: 6-7).

5. Social wellbeing, and the sustainability of rural communities

There are systematic reasons why issues of social wellbeing and social equity are relatively neglected in research into rural communities and rural social issues. This is best understood by comparison with research related to economic dimensions of rural production. Economic matters appear much more urgent, related as they are to the survival and success of individual enterprises. The universal language of accounting provides the basis for consensus over basic principles, and treats these questions as technical rather than political. By contrast, questions of social wellbeing seem far too nebulous to be dealt with in short-term policy and research, and above all, make agreement on conceptual and methodological questions difficult to achieve.

Economic efficiency has understandably been at the heart of Australia's rural research program. The need to compete nationally and internationally has provided the impetus for technical innovations, especially biotechnical ones, and for innovative marketing strategies. Environmental consequences of these innovations are posing significant questions for research, partly because of acknowledged dependence of economic sustainability on environmental sustainability. Issues of social wellbeing, for example the maintenance of rural social infrastructure, are likewise often justified in terms of their contribution to a profitable and efficient rural sector.

There is growing demand, however, for questions of citizenship, social wellbeing and social equity to be recognised in their own right. Disadvantage in rural areas, according to this view, is not bad simply because it acts as a brake on the economic efficiency of rural industries, but because people in rural areas have as much right as others to share in the benefits of Australian society. A notable element of research reports in the area of social equity and social wellbeing is their value-laden stance. Studies lament that important issues are neglected, they express concern that detailed technical or behavioural research fails to appreciate the big picture, and call for a willingness to engage with large-scale structural influences on rural social life. A key question is 'what is the relationship between initiatives to improve economic efficiency, and the quality of people's lives?'

5.1 Social equity

The sense of quiet desperation that lies behind phenomena as diverse as high suicide rates in rural areas and a resurgence of political support for economic nationalism presents a challenge for research and policy. Some researchers (eg Lawrence *et al.* 1998) connect the sense of helplessness to macro economic and social forces over which communities feel they have little influence. The prevailing neoliberal view is that the pursuit of economic efficiency and growth is a more secure route to social wellbeing than is political regulation or intervention. Against this trend, some welfare organisations have produced statements emphasising the need for governments to take account of issues of equity as well as efficiency (Society of St Vincent de Paul 1998; Australian Catholic Social Welfare Commission 1998).

Although the extent, nature and causes of rural disadvantage need to be better theorised, some researchers have attempted to document the reality of this disadvantage (Anscombe and Doyle 1998; Doyle 1998; Sarantakos 1998). Nevertheless, poverty in rural areas is

surprisingly sparsely dealt with in recent research in Australia, despite arguments that rural poverty is both more widespread and enduring than urban poverty (McClinton and Pawar 1997). There is a need for research on this subject. Longitudinal studies would provide information about how far people move into and out of poverty, and the extent to which they experience persistent poverty. Although some commentators underline the responsibility of the state to take measures to buffer the rural population from the effects of global market forces, others emphasise the need for action research with the goal of alleviating poverty by initiatives at the local level (McClinton and Pawar 1997).

In Europe, the term ‘social exclusion’ is being used alongside, or instead of, ‘poverty’. It goes beyond measures of income to a more thoroughgoing analysis of the effects of unemployment, of the retreat of the state as guarantor of welfare, and of consequent social dislocation (Shucksmith and Chapman 1998; Strobel 1996; Healy 1998b; Gaventa 1997; Bessis 1995; Atkinson and Hills 1998). Exclusion has three dimensions that are relevant to research into rural communities and rural social issues: economic, social and political. The economic dimension refers to the lack of adequate income, and is generally explored through the concept of poverty, although there is little current research reported in the field in rural Australia. The social dimension refers to the marginalisation associated with unemployment or detachment from family, given the high importance of interpersonal relationships and work as a basis of social integration. The political dimension refers to the marginalisation of particular groups based on attributes such as gender, ethnicity, or religion. Research on the marginalisation of such groups is confined primarily to Indigenous Australians, and stands apart from mainstream research into rural communities and rural social issues.

A survey of priorities for rural research into social disadvantage in Europe (Shucksmith and Chapman 1998) provides insights that are applicable to Australia. Here, as in Europe, we still have only a poor understanding of the relative influences of structural and other factors on social disadvantage. There is also need for research to understand how these factors affect different people, households, and social groups in different ways. A better understanding of the strategies that affected groups adopt to survive hardship will guide policy making and local community initiatives designed to prevent or overcome hardship, or at the very least to mitigate its effects. Likewise, various respondents to our e-mail survey mentioned the need for research on ways of improving the poor quality of life of groups of people excluded from the social benefits of economic activity.

Related issues which respondents to our e-mail survey identified as research priorities include

- the effects on local communities and their economies of having high proportions of pensioners and beneficiaries, as occurs in some areas
- in-migration of ‘welfare migrants’ into particular towns and regions
- the impact of transient populations on social infrastructure
- ways of generating more employment opportunities in country towns and rural areas
- the attrition of networks of voluntary workers and organisations.

Recommendation 24: Issues of social equity need to be incorporated into priorities for research into rural communities and rural social issues

- There is a particular need to identify categories of people who have a significantly poorer quality of life because they are systematically disadvantaged in one way or another, and to explore ways in which this disadvantage can be reduced
- Longitudinal research is needed to assess the extent to which poverty is episodic or persistent among various segments of the population in country areas and to analyse the structural influences on such poverty
- There is a need to assess the impacts of welfare service policies and programs on disadvantage and quality of life in rural areas.

5.2 Social capital, community development and capacity building

Social capital, a concept that is currently attracting a good deal of scholarly interest, appears to be an essential element of resilient rural communities. Although there is much controversy surrounding the term, Falk and Harrison (1998b) define social capital as ‘the networks, norms and trust which constitute the resources required for individuals, workplaces, groups, organisations and communities to strive for sustainable futures in a changing socioeconomic environment.’

Some rural communities appear to be responding more positively to rapid change than others. Economic indicators at a macro level, or even at the lowest level to which they can be meaningfully applied, may not be able to provide a full explanation of the differences. Putnam (1993) has used the concept of social capital to analyse differences in economic vitality between northern and southern regions of Italy. His influential work concludes that civic association and interaction in community organisations facilitate economic advancement and the ability to cope with change.

Although Putnam’s emphasis on social networks and civic association seems important for an understanding of rural growth or decline (Putnam 1993), Eva Cox (1998) selects the element of trust from his analysis as being the most salient for Australia. In the absence of trust, people are likely to follow strategies that limit the pooling of resources, and instead promote ways of acting that are damaging to social wellbeing. From Cox’s perspective, an understanding of the conditions under which social capital, especially trust, grows is important to understanding what produces vitality in rural communities. Action research designed to enhance social capital could help communities and individuals to adapt positively to change, rather than simply reacting negatively to it.

Social capital also relates to the issue of social cohesion, the absence of which is connected to symptoms of stress such as suicide and poor mental health (Wall 1998). By implication, suicide, vandalism and destructive drug use are indicators of low social capital and subvert the attempts by communities to deal constructively with change. Although there are many dimensions of social capital, encompassing social cohesion, levels of trust and level of networks developed, a central component is ‘the ability of people to work together in groups and organisation’ (Fukuyama, cited in Wall 1998). If this is capable of explaining the greater success of some countries or regions, community development to generate and maintain similar networks and traditions would seem worth considering.

Social capital relates, too, to the more familiar issue of decline of social infrastructure in rural towns and regions. The usefulness of using social capital rather than infrastructure as the key concept in the analysis of rural networks is that it is multilayered, focusing on autonomy, tolerance and trust as well as services themselves. There are undoubted problems of operationalising the concept of social capital (Falk *et al.* 1998; Falk and Harrison 1998b; Flora 1998), but the process of a community identifying the relevant indicators of social capital contributes to the very phenomenon being measured.

The focus on social capital has the potential to promote the integration of ecological, economic and social dimensions of rural communities as networks are created to deal with underlying problems such as unemployment or land degradation (Geno 1998). The relative importance accorded to each of the dimensions will influence policymaking. Where economic goals take priority, it is more likely that competitive individualism will guide the allocation of resources in rural communities, whereas a greater prominence given to environmental goals is more likely to build community networks. Rural policies may increase or diminish levels of social capital, depending on the extent to which they encourage trust and cooperation on the one hand, or work against them on the other.

One aspect of social capital is the positive appreciation and acceptance of diversity, and the capacity to relate to others who are different from oneself. Several respondents to our e-mail survey mentioned the need for research on diversity within rural communities, including an examination of the ways in which differences in lifestyle, ethnicity or sexuality are dealt with.

A major theme of current research is 'learning communities', a phrase in the title of a recent conference (Falk 1998). Here the emphasis is on the need for rural communities to adapt to changing circumstances, by marshalling internal human resources such as networks, and by becoming better integrated to the larger world through, for example, the internet. There is some disagreement about the contribution of learning and the internet to the resolution of social problems. Proponents emphasise the ability of individuals and communities to tap into their own resources or those of 'hyper' communities (Bruce 1998), while critics point out that education is limited in its ability to influence broader structural factors such as markets.

Researchers such as Vanclay and Lawrence (1995) and Lawrence *et al.* (1998) caution against omitting political economy from the analysis of problems facing rural communities. Behaviourist approaches that emphasise motivation and learning may fail to explain why some communities are faring better in responding to change than others. The dilemma facing rural communities is that they may feel there is little they can do about macro forces, while strategies that ignore the larger picture may be able to achieve too little.

<p>Recommendation 25: It is recommended that research be conducted to</p> <ul style="list-style-type: none">▪ identify the conditions under which social capital and adaptive capacity grow or decline in rural communities▪ analyse the significance of such growth or decline in relation to economic performance and social wellbeing▪ assess the impacts institutions and institutional reform on rural communities and rural industries.
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Recommendation 26: Research that equips communities to initiate local responses to global changes should complement other forms of research. In particular,

- current research into community development needs to be supported and extended
- research is needed to identify the conditions required for vibrant rural communities able to support satisfying lives for a growing diversity of people.

5.3 Social indicators

A central problem for research into issues of social equity, poverty and social exclusion is the availability of appropriate social indicators. There is much anecdotal evidence from rural networks and conferences about problems such as poverty and hardship, social disadvantage, and declining social infrastructure. There is a need for both better conceptualisation of relevant trends, and adequate ways of measuring them.

The term ‘social indicators’ has moved in and out of fashion, but the underlying objective of finding ways to chart social changes with precision has remained constant. Social indicators vary in their availability, in the way they are updated to provide time series, and in their focus. Compared with the variety of economic indicators, there are relatively few social indicators to chart changes over time (Stayner 1998a). The predominance of indicators related to primary production has the potential to skew research towards such production and away from broader issues of social fabric and social wellbeing.

Where social indicators are available, they are often not suitable for small area analysis. Geographical Information Systems (GIS) provide a way to analyse the impact of a declining social infrastructure at the small area level. Although much of the GIS work applied to communities in Australia is directed at urban communities, the need to make use of GIS techniques to deal with rural communities is providing some impetus to its growth. A team led by Graeme Hugo at the University of Adelaide has recently been working on ways to improve small area analysis techniques (Hugo *et al.* 1999). GIS allows a more refined analysis of the impact of the closure of agencies such as post offices (White *et al.* 1997) by overlaying them onto other variables mapped by GIS. The significance of GIS and small area analysis is that it should become possible to understand better the dynamics of uneven development, under which some towns in a particular region grow while others decline (Tonts 1998; Castleman 1998).

The use of social indicators is experiencing some resurgence, particularly in an attempt to pick up effects missed by economic indicators. Indicators of economic growth such as GDP are criticised for including funds spent on environmental repair of past damage, or the transfer of private activity, such as caring for children, into the cash economy. Economic indicators, on the other hand, give a default value of zero to other externalities such as an increased crime rate or more time spent in travel to work. There is a growing movement to complement conventional economic measures with other indicators that are either at least partly economic, such as the Genuine Progress Indicator (Halstead 1998), or non-economic, for example life expectancy (Eckersley 1998).

A significant limitation of some indicators is their national, rather than local, focus. This has been addressed in the United States by a movement to generate indicators at the community, regional or state level. Since indicators require negotiating agreement on the concept of what is being measured, there is a new opportunity for extending participatory processes, especially

at the community level (Halstead 1998). One example of this process is the form of Social Impact Assessment through which communities attempt to come to grips with the social impacts of specific changes (Vanclay and Bronstein 1995; Lawrence and Hungerford 1994; Passfield *et al.* 1996). The form of social indicators proposed by Eckersley allows comparisons over time in macro analysis, while Social Impact Assessment allows much more focus at the community level.

The renewed search for indicators that can answer the question 'Is life getting better?' represents a paradigm shift in the making (Hyman 1994). With the evidence that the quality of life for some segments of the population has been declining since the 1970s despite rising per capita GDP, quality of life is now assuming a greater importance (Hamilton and Saddler 1997). This is represented in the concern over rural suicide, diminished access to education, reduction of social networks, greater pressure on time, insecurity over work and income, and the like (Cox 1998). It also presents a particular challenge for rural communities where much of the sense of crisis is to do with quality of life, but the bulk of indicators are to do with economic performance. A paradigm shift in indicators towards quality of life issues would reflect the position that improving economic efficiency of agricultural production is by no means a guarantor of improving quality of life for people living in rural areas. Central to the movement towards a broader set of indicators is a renewed discussion by communities of what it is that they value and want to preserve in their communities (Hard 1998), and even what community itself might mean (Everingham 1998). Respondents to our e-mail survey identified as priority areas indicators of community wellbeing and factors associated with community agency, that is actions that contribute intentionally to whole community wellbeing.

Recommendation 27: There is a need to develop social indicators addressing all aspects of rural social life. Such indicators would support research and policy-making that takes account of issues of social equity, social integration and social wellbeing. Research directed toward the development of indicators at the local level also has the potential to inform efforts toward community and regional development.

5.4 Social Impact Assessment

Social Impact Assessment can add significant value to rural planning and development processes. Social Impact Assessment in Australia, however, has mainly been applied as a predictive tool within impact assessment processes established under Commonwealth and State statutes (Dale *et al.* 1997). Unfortunately, it has rarely been applied (e.g., as a component of Strategic Environmental Assessment) as a tool to refine proposed policies or plans, thereby ensuring that potential social and cultural impacts are identified, averted or mitigated. In regional planning in Australia, there are few well documented examples of Social Impact Assessment being applied either to refine entire draft regional plans or key initiatives arising from the planning process (e.g., proposals to restructure one industry or sub-region).

Building on the work of Taylor *et al.* (1990), one can define Social Impact Assessment as anticipating and describing the social effects of change, so that they can be appropriately managed as early as possible, in order to distribute the benefits and costs of change equitably. Ideally, it should be a proactive rather than a reactive process. In Queensland the Social Impact Assessment Unit (1994: 8) considers Social Impact Assessment to be a specific form of social assessment that potentially can be applied to policies, plans and development proposals alike. Social Impact Assessment processes tend to rely on the typical impact assessment procedures of defining the proposal, understanding the social environment, predicting potential impacts, designing strategies to avoid or mitigate these impacts and monitoring and responding to these impacts and the effectiveness of management strategies put into place (see Social Impact Assessment Unit 1996: 3). Because of the nature of social problems, it relies both on quantitative and qualitative social data. It also relies on an understanding of the values and aspirations of various interest groups to enable it to identify and manage impacts.

Traditionally, Social Impact Assessment has been applied as a technical tool to inform centralised decision makers responsible for land or resource use decisions. In keeping with more recent developments in planning theory, however, many authors are increasingly seeking to apply Social Impact Assessment as a framework for empowering different interests within communities to participate effectively in the highly political arena of resource development decision making (Craig 1991; Dale and Lane 1994). Application of Social Impact Assessment in this framework has the potential to allow disempowered interests a more effective role in centralised decision making, or alternatively, to facilitate access of these interests to information relevant to their negotiations over land and natural resource management issues.

In relation to natural resource use, Social Impact Assessment has tended to be applied to identify the impacts of radical restructure of regional industries arising from national or State resource use inquiries or resource assessment processes. This has particularly been the case in the forest sector (e.g., see Social Research Consultancy Unit 1993; Manidis Roberts 1996). Its application, however, has tended to be after the major decisions have been made, rather than

broader social assessment being an integral part of the assessment processes used to determine options for land use change. This relegates Social Impact Assessment to ‘mopping up’ the impacts of significant land use change rather than being more centrally used in empowering affected communities and interest groups to negotiate more equitable land use outcomes.

In relation to Indigenous concerns, it is important for Social Impact Assessment techniques and procedures to ‘acknowledge that Indigenous interests are not limited to cultural heritage’ (Queensland Department of Families, Youth and Community Care 1996). Failure to recognise these broader interests can result in conflict during regional planning and subsequent development approval processes. As a result, the Social Impact Assessment Unit established by the Queensland government has proposed the adoption of an Indigenous Land Interest Model within land use planning and assessment processes. The model seeks to protect the cultural and intellectual property of indigenous people and provide a stronger framework and more equitable environment for negotiations over resource management. The model provides a better structure for integrating social, economic and cultural impact assessment processes. The basic elements include: (i) funding being provided under contract to Indigenous organisations for carrying agreed research and assessment work programs; (ii) *a priori* negotiation of research and assessment work programs; (iii) control of the appointment of technical experts in ways that suit proponents, planning agencies, Indigenous groups and competition policy; (iv) retention of culturally sensitive information by Indigenous groups; and finally (v) a framework for facilitating direct negotiation between planners, development proponents and Indigenous groups over land and natural resource use (see Queensland Department of Families, Youth and Community Care 1996).

The recent increase in the application of Social Impact Assessment to natural resource management problems has driven, in part, the renewed interest in social indicators. In Australia, social profiling (with local indicators) was built in as a fundamental part of the modelling based approach to Social Impact Assessment in the Coronation Hill Inquiry in the early 1990s (Lane *et al.* 1997). This work more recently resurfaced in the Regional Forest Agreement Processes, predominantly because of the influence of DPIE’s Social Assessment Unit (Coakes 1997). Coakes and Fenton have been instrumental in developing and applying community sensitivity indexes to determine the social impact of allocation decisions, and this work has further evolved through Mark Fenton’s application of Town Resource Clustering in Forest, Fishing and Water resource dependent communities.

The use of indicators as a basis for modeling community capacity for change is currently being tested at the regional and national level via Theme 6 of the National Land and Water Audit. These projects are focused on the development of indicators of capacity for communities to adopt sustainable practice or to respond to resource use changes. The Theme 6 demonstration project is being run in the Fitzroy Basin. Lockie *et al.* (1999) have recently completed a sub-consultancy that will provide the theoretical grounding for the work. This work is based on the fact that, while the interconnectedness of social, economic and environmental factors in solving intractable natural resource management problems is now recognised, our understanding of the linkages between these factors remains poor (Dale and Bellamy 1998). While there is a substantial literature in the agricultural extension field regarding the adoption of production-oriented innovations, there is far less understanding of the overall role of social factors in the development of sustainable natural resource management systems at the farm, catchment and regional level.

One of the main problems is that there is no generally agreed body of guiding theory principles and procedures for considering social issues in a way that assists planning for natural resource management at any level. This is still the case regardless of the long history of natural resource management planning activities across Australia. The key emerging paradigm for integration of social issues in such planning, however, is focusing on the capacity of communities and individuals to cope with change (e.g., see Vanclay and Lawrence 1995, Coakes 1997). Capacity to change must be fundamentally accounted for in any process leading to change. This understanding is needed at the regional scale if: (i) likely socio-economic impacts of market or government-led change are to be identified and mitigated; and (ii) more proactive approaches to the development of sustainable management regimes are to be effectively adopted nationally. Underpinning this field is an emerging but significant literature focused on modelling the capacity of regional and local communities to cope with change.

The use of key indicators is fundamentally important to any attempt to model community response to change (either for predictive, impact assessment or evaluative purposes). There is a growing body of literature focused on the development of indicators in the use of such models (Coakes 1997; Lane *et al.* 1997). In line with the current focus in the literature, there is an increasing tendency to focus on four clusters of indicators as a basis for modeling. These deal with: (i) community health and vitality; (ii) institutional vitality and integration; (iii) political efficacy; and (iv) economic viability/ resource sustainability (see Lane *et al.* 1997).

Recommendation 28: Further practical research is needed to promote and test the potential value of Social Impact Assessment in mitigating the social changes arising from broadscale resource use policy (e.g. national competition policy) and planning (e.g., water allocation management planning). Particular emphasis is needed on the development of appropriate indicators to model change, and on negotiatory structures required to identify and mitigate negative broadscale and community impacts.

5.5 Integration of social, environmental and economic aspects of sustainability

Since the Australian biologist Charles Birch (1976) wrote *Confronting the Future* more than twenty years ago, the sustainability of Australian production systems has emerged as a key issue for rural policy. With the relative prominence of agriculture in the Australian economy, and the fragility of the soils and waterways, the loss of productive capacity through erosion and salinisation has brought about some 'greening' of Australian agriculture, both through policy and through changes of practices among producers. There has been less impact on policy and practice in relation to other concerns such as the displacement of complex native ecosystems by monoculture, or the long term unsustainability of increasingly intense agriculture (Schapper 1996). There is an urgent need for research to ensure the sustainability of both primary production and the natural ecosystems on which it depends.

Biophysical research on environmental issues stemming from current developments in agriculture is, by nature of the task, focused on specific problems. Social science researchers are now investigating the systemic problems of agriculture that policy must address. These problems are being shaped not simply by national or regional factors, but also by the force of world markets operating in a global economy. Social science researchers are urging more analysis of the trajectory of Australian agriculture with respect to sustainability, and the need for innovative policy to govern rural production (Vanclay and Lawrence 1995; Schapper 1996; Jacobs 1997).

Historically, Commonwealth and State agencies have intervened in various ways to support agricultural production, through infrastructure development, marketing arrangements, extension services, and financial concessions of one sort or another. During the 1980s and 1990s, there has been some contraction of state involvement in agriculture, a trend which may diminish the ability of rural producers to adopt sustainable practices. State agencies continue to use extension services to promote environmental programs to combat land and water degradation. These have been an important way of ameliorating the effects of past unsustainable agricultural practices, but may not be sufficient to prevent the continuation of current unsustainable practices. Some writers such as Haworth (1996) are beginning to argue that the goal of environmental programs must not simply be sustainable agriculture, but sustainable ecosystems whose worth goes beyond their value to agriculture.

Landcare and water catchment programs have emerged as an alternative to top-down state intervention. Landcare embodies a philosophy of rural communities taking responsibility for the natural resources from which they earn their living, and from which their children will earn theirs. Many producers feel that they are on a 'treadmill' that impels them towards more intensive agriculture, with increasingly costly inputs required to yield the produce for markets over which they have no influence (Haworth 1996). In this climate, Landcare provides producers with the feeling that they are able to do something at the local level about their own environment. Critical analysts of Landcare conclude that the achievements of Landcare are limited, and that it has done too little to promote radical changes away from unsustainable agricultural practices (Lockie 1996; Lockie and Vanclay 1997).

There is a synergism between the goal of developing social capital in rural communities and the use of voluntary networks such as Landcare to achieve environmental goals. Voluntary activity tends to be limited to the regions the volunteers work and live in. Many of the adverse environmental effects of rural production, however, are exported to surrounding regions. This is illustrated by an American case study, based on smaller state jurisdictions, of agriculture as the major source of water pollution. Much of the pollution affects producers, regions and jurisdictions beyond those in which it is produced, providing little direct motivation for voluntary groups to curb its effects (Ervin 1998). Research is needed on techniques of internalising the costs of all productive activity, rather than externalising some of them to other parties or other sectors of the economy. Several respondents to our e-mail survey identified the challenge.

Research at different levels is required to guide state or national responses to the intensification of agriculture under the influence of global markets. Land continues to be cleared for agriculture in Australia as farmers respond to new opportunities without having to calculate the effects beyond their own enterprises (Eckersley 1998; Schapper 1996). There is, indeed, some possibility that the rate of land clearing is greater than the rate of revegetation coordinated by Landcare and other groups (Haworth 1996). Although the impact of the rate of clearing on national goals of greenhouse gas emissions is a biophysical question, the policy connections between the two areas are in urgent need of research.

Land clearing is part of the 'treadmill' that rural producers feel is driving them towards more intensive agriculture. It is not simply the clearing of the land that is an issue for sustainability of both agriculture and natural ecosystems, but the use the land is put to. The constant trend to monoculture is associated with requirements for intensive inputs (Altieri 1998), as producers rely on patented plant varieties, and associated regimes of fertiliser, together with chemicals for weed and pest control. There is doubt as to whether this is sustainable in the long run (Ervin *et al.* 1998). Where there are pressures to 'overfarm' in order to provide a much-

needed cash flow, it is all the more difficult for producers to adopt strategies that are sustainable in the long term.

Conventional accounting systems and uncertainty of the effects create a dilemma for the rural sector similar to that facing other sectors of the economy. The dilemma is how to avoid the possibility of an adverse environmental impact when (a) the impact is uncertain, and (b) the impact does not have a direct effect on the economic accounting of the producer. The precautionary principle sets out a position for such circumstances. The principle (enunciated in the Commonwealth's Intergovernmental Agreement on the Environment) states:

where there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the Precautionary Principle, public and private decisions should be guided by (1) careful evaluation to avoid, wherever practical, serious or irreversible damage to the environment; and (2) an assessment of the risk-weighted consequences of various options.

(Butteriss and Sinden 1994)

Economic models are able to compare, within limits, the benefits and costs of different options. A study of waste disposal in rural communities (Butteriss and Sinden 1994) indicates that in direct costs and benefits to a municipality, recycling and other management initiatives can produce benefits once a threshold population has been passed. When, however, the effects of better management on health are taken into account, benefits accrue no matter how small the community. The economic costs, however, are borne by the community. If communities, like producers, make their decisions about whether to implement strategies for an improved environmental outcome only within a narrow economic accounting framework, they may be dissuaded from implementing them.

The Productivity Commission in reviewing Australia's progress towards meeting its commitments to ecologically sustainable development, proposed 'a duty of care to the environment'. This

would require resource managers to take all 'reasonable and practical' steps to prevent their actions causing foreseeable harm to the environment. ... What is reasonable and practical is determined by applying the test of what a 'reasonable person' would require. This test is widely understood and applied in many areas of regulation, including occupational health and safety. ... The duty of care should apply to all those who own, manage or use natural resources, without exception. In particular, the duty should apply to all landholders and should do so regardless of their legal title to the land.

(Productivity Commission 1999b)

The Productivity Commission proposes that a duty of care for ESD would require Commonwealth departments and agencies to take all reasonable and practicable steps to ensure that in preparing their policy proposals, all foreseeable and potentially significant adverse impacts on economic or social development, or the environment, now or in the future, are minimised.

While the Productivity Commission's report is directed to government agencies, it is clear that it also has wider implications. In the long term, the sustainability of rural communities

depends upon an integration of economic, environmental and social policies and practices (see Mobbs and Dovers 1999). This poses a challenge for policy-makers, researchers and research funding agencies, because each has a limited sphere of responsibility and competence. There is therefore a danger that larger and more complex issues will be neglected. Addressing these issues will often require collaboration between agencies, drawing upon experience and expertise from various fields of study.

Dale and Bellamy (1998) look critically at past and contemporary approaches to regional resource use planning in Australia and overseas, so as to chart a course for more effective approaches being taken in resource management in the future. They suggest that, to deliver effective outcomes, regional resource use planning must move more towards approaches that facilitate equitable negotiations among regional stakeholders. To achieve this, regional resource use planning needs to include at least three primary elements, namely (i) the application of technically sound and innovative social, economic and environmental assessment methods to underpin these negotiation processes; (ii) the establishment and maintenance of appropriate institutional and support arrangements to facilitate them; and (iii) the operation of clear mechanisms to enhance the participation of constituents within those stakeholder groups represented in the negotiations which constitute the regional planning arena.

With these elements in mind, Dale and Bellamy (1998) show that there has been and still is significant activity and a wealth of institutional arrangements in place that encourage regional approaches. Grave deficiencies, however, are evident in these practices and arrangements when viewed against the core regional planning elements and against measures of accountability, efficiency, effectiveness and equity.

Most are largely centralised planning processes that have focused on non-integrated themes of economic or social development or conservation in protected areas. Further, there have been few formal evaluations of these practices and arrangements and little adaptive management. There remains a dire need for R&D to focus on evaluating the strengths and weaknesses of current regional resource use planning systems in ways that facilitate and underpin appropriate reforms.

In relation to technical aspects of regional resource use planning, Dale and Bellamy (1998) find that information technologies have been overused for spatial representation and data management, and underused for interpretive analysis and to assist negotiation. There is also a need for an improved understanding of the social, cultural and ecological processes that underpin the way regions function, resulting in a better understanding of the relationship between human service delivery, economic efficiency and sustainable management. Regional aspects of economic assessment need further refinement, with a greater focus on sectoral viability, more robust systems for valuing economic resources, and stronger systems-based approaches to economic modeling that can be applied effectively across spatial and temporal scales.

Regional resource use planning in Australia remains a largely centralised process of governance, often with only limited mechanisms for facilitating equitable negotiation among key resource users. The focus of planning has often been on the development of regional structure plans used by centralised authorities to regulate land use, rather than developing frameworks to negotiate solutions to the conflicting interests of regional stakeholders. Consequently, such planning has generally not been effective in reaching binding agreements

between stakeholders and in managing conflict when development proposals are presented for assessment by regulatory agencies.

The current institutional arrangements in place for regional planning often entrench these inequities. In other situations, more flexible institutional arrangements support negotiatory processes in principle, but are not taking full advantage of the legal and political opportunities for negotiation. Effective monitoring and evaluative regimes that continue to build the negotiatory spirit among key stakeholder groups once initial regional planning has been completed are rarely put into place. As a result, substantial R&D effort is needed to explore the more effective institutional arrangements and conditions for facilitating negotiations that result in binding stakeholder agreement over regional aspects of resource management. There is a need to redefine the organisational context within which such planning occurs, establishing improved mechanisms for negotiation that still meet the needs of government-based planning agencies.

While most regional resource use planning activities expound and practise various forms of consultation with the general community, few have been committed to spreading decision making power across stakeholder groups. Greater emphasis on improving the participation of constituent members within stakeholder groups is necessary if agreements negotiated at the regional level are to be credible and durable. It is also necessary in creating a culture of support for change towards sustainable resource management systems in regions. Emphasis needs to be placed on improving mechanisms (e.g., participant funding, etc.) for resourcing stakeholder groups to carry out representative functions and on developing improved techniques to empower individuals and groups to develop their own planning and negotiation skills.

In the light of Dale and Bellamy's (1998) assessment of Australian and overseas experience, Dale has proposed the following priorities for social research in regional resource use planning:

- a. If regional resource use planning action is to match the supportive political rhetoric which underpins it, R&D must focus on better conceptualising ESD at the regional level. This will require equitable negotiations among key stakeholders aimed at reaching consensus on what a sustainable region actually constitutes (e.g., what constitutes an adequate and representative reserve system, what are equitable resource allocations, what pastoral practices do not constitute sustainable production, what indicators should be used to monitor sustainability). This requires a strong R&D emphasis on working towards regionally acceptable characterisations of sustainability.
- b. Specific research is needed to determine the most effective ways of linking resource use planning processes at different scales (e.g., from regional to catchment to property level). Research into regional approaches should not be at the expense of, and in isolation from continuing improvements in planning and management at these other scales. Research and development activities need to identify ways for regional resource use planning to complement rather than duplicate resource use planning activities at more local scales.
- c. In establishing future R&D priorities, equal attention should be given to technical assessment, negotiatory and intra-group participatory aspects of regional resource use planning. To date, however, most of the R&D effort in rangelands has focused on technical assessment issues in a centralised management context. Some initial redistributive effort may be needed to patch existing gaps in available knowledge.

- d. Given the wealth of regional planning activity in this country and the lack of evaluative research, greater priority should be placed on R&D which evaluates current processes before substantial investments are made to new approaches within rangelands. These activities should be established in ways that maximise adaptive planning and management reforms. At the same time, strong evaluative components should be built into any R&D activities seeking to experiment with regional approaches to planning.
- e. A key R&D priority should be the development of more effective tools and frameworks for analysing and supporting resource use trade offs in multi-objective and multi-use contexts. These will need to encompass a variety of complementary environmental, economic and social assessment techniques or methods that can be matched flexibly to a particular problem or issue, that can account for interactions among land uses and that are able to accommodate the historical and socio-political contexts in which resource use and management decision-making is embedded.
- f. Given that desirable environmental responses to changes in resource use and management may take a long time to become evident at a regional scale, it is important to identify indicators of sustainability that reflect improvements in decision-making processes as well as resource or environmental condition. These indicators need to be assessable in a timely and cost effective manner. In turn, they need to be linked to tools or techniques that facilitate the evaluation of the suite of appropriate resource use options and their implications for ESD.
- g. R&D support for integrated, adaptive systems approaches to regional resource use planning should place priority on the development of information technology tools or procedures that facilitate collaborative learning processes (e.g., through providing an arena for bargaining and negotiation among multiple actors). Such tools and procedures should be designed to: (i) foster the exploration and recognition of differing perspectives of the various regional groups toward resource use and management issues; (ii) provide equitable access to information; and (iii) recognise and clearly communicate uncertainties relating to information and the underlying assumptions of alternative resource use options and their implications for ESD. In this context, a key research priority is the development of a better understanding of the contribution that technical information (i.e., scientific, policy and management) can make to regional resource use planning, decision-making and policy development.
- h. In relation to technical aspects of regional resource use planning, some redistributive effort should be put into building our understanding of social and cultural aspects of regional development. Particular emphasis should be placed on understanding the social processes which underpin the way regions function, integrating cultural heritage considerations into land management and better understanding the relationship between human service delivery, economic efficiency and sustainable management.
- i. R&D priorities in regional resource use aspects of economic assessment need further refinement, but should at least focus on regional aspects of sectoral viability, more robust systems for valuing economic resources and stronger systems-based approaches to economic modelling which can be applied effectively across spatial and temporal scales.
- j. Substantial R&D effort is needed to explore the most effective institutional arrangements and conditions for facilitating negotiation among stakeholders that can result in binding agreement over regional aspects of resource management. In particular, there is a need to

redefine the organisational context within which planning occurs, and to establish mechanisms for improving the basis for negotiation that are likely to be adopted by contemporary planning agencies.

- k. Substantial R&D effort is needed to explore cost efficient ways to establish equitable mechanisms to support stakeholder groups to establish and maintain a clear mandate from their constituents during regional negotiations. Particular emphasis should be placed on improving mechanisms (e.g., participant funding, etc.) for resourcing stakeholder groups to carry out representative functions and developing improved techniques to empower individuals and groups to develop their own planning and negotiation skills.

Given the growing importance of regional planning processes, it is clear that R&D programs need to be linked firmly into these processes. To this end, the Land and Water Resources Research and Development Corporation (LWRRDC) has embarked on supporting a program of research that involves a paradigm shift in R&D in rangelands so that research priorities and projects reflect the needs identified by the regional planning process. The rationale for this research is that if we accept the move to regional planning of resource use, at least for the political medium term, then we need to find some way to integrate and coordinate the broad spectrum of policy and action that exists across all levels of responsibility. We also need to ensure that this process moves beyond a purely coordinating function, to one that involves commitment to specific roles and responsibilities for implementing and monitoring planning decisions at the regional level that reflect societal values and expectations relating to natural resource use and environmental management. Finally we need to change individual, group and institutional behaviours in ways consistent with sustainable development objectives and improve understanding of societal processes that influence them.

Recommendation 29: There is a need for research on the integration of social, environmental and economic dimensions of sustainability at farm, catchment, local community and regional levels, including the answering of questions such as the following

- what institutional arrangements (laws, policies and programs) create the best circumstances for ecologically sustainable regional development?
- what are the appropriate mechanisms to encourage people's involvement in decision making about resource use at the local/regional level?
- how can the social sciences assist communities and policy makers understand and address the problems of institutional and market failure?
- as responsibility for catchment management is devolved to the local/regional level, what are the needs of stakeholder groups in relation both to state support and to social science-based research?
- what role do women play in natural resource management and how might their presence and influence be strengthened?
- what is the meaning of sustainability for Indigenous Australians, and how can an Indigenous perspective be incorporated into sustainability programs?

- what are the most reliable indicators of sustainability, and how can they be employed at the local/regional level, and in guiding policy?
- what methodologies can be applied, or developed, to ensure that there is integration between the physical and social sciences in sustainability research?

Recommendation 30: There is a need for research on strategies that support rural producers' efforts to pursue sustainable practices despite economic pressures that may impede them. Questions here would include

- in what ways does the economic performance within farming relate to, or affect, sustainable resource use?
- what state interventions might move agriculture towards greater sustainability?
- what group-based and other educational processes best 'engage' rural producers and in so doing lead to appropriate changes in farming practice?

6. Education and learning

There are three principal reasons why issues of education and learning can be considered priorities for research into rural communities and rural social issues. The first is that education, broadly defined, is an important component of agricultural producers' ability to respond in innovative ways to changing markets and technologies. The second is that pursuit of educational opportunities in metropolitan centres is one of the main reasons why people leave rural communities, thus taking potential future contributors to those communities away. The third reason is that the knowledge and skills of their members influence the resilience of rural communities, and their ability to respond to changing economic and social conditions.

Consideration of education as an issue ought not to be restricted to formal education and qualifications. Informal education as it relates to knowledge and information to guide good decision-making has a very significant part to play on farms and in rural communities (Bamberry *et al.* 1997). Education in this latter sense complements formal education, although it raises the problem of knowledge that is not validated by formal qualifications. The Centre for Research and Learning in Regional Australia, at Launceston, has made the study of informal learning processes a key part of its research program, with the goal of understanding how we can build on such processes in order to achieve rural vitality (Falk and Harrison 1998a; Falk and Harrison 1998b; Kilpatrick *et al.* 1998). Various studies funded by RIRDC have given attention to informal learning processes among farmers. See, for example, Reeve and Black (1998) and Kilpatrick and Johns (1999).

Issues of rural education were a major component of a conference convened by the Rural Education Research and Development Centre, James Cook University of North Queensland, in 1994 (McSwan and McShane 1994). Kilpatrick and Bell (1998) have recently completed a review of vocational education and training in rural and remote Australia.

6.1 Formal—secondary academic

It is commonly reported that there are lower rates of participation and/or achievement in secondary education in rural and remote areas than metropolitan parts of Australia (Young 1994). The agricultural workforce is less well educated than the whole of the Australian workforce, with fewer than fifty per cent of those employed in agriculture having completed more than four years of secondary education. By contrast, almost seventy per cent of the Australian labour force has completed at least four years of secondary education (Human Rights and Equal Opportunity Commission 1999). Some confusion remains about the nature of the differences between rural and urban areas, and how far the differences really are rural/urban differences rather than socioeconomic status or ethnic differences. The NFF regards education as a high priority issue, and has sponsored research on participation rates and achievement in education (Harrison 1997).

Competing concepts and measures are a significant problem in the study of educational differences. The distinction between rural and remote populations, for example, may be greater than between rural and urban, thus making a simple rural/urban distinction imprecise. Moreover, different measures may lead to different conclusions. 'Apparent retention rate to Year 12' refers to the ratio of students in Year 12 to the number originally entering secondary school. A slightly different measure is 'completion rate to Year 12 as a percentage of the eligible population by age'. Harrison (1997) reports that the two measures produce somewhat

different results. Department of Employment, Education, Training and Youth Affairs figures on 'completion rate to Year 12 as a percentage of the eligible population by age' indicate significant differences between urban, rural and remote populations, with 71 per cent, 64 per cent, 58 per cent respectively of the relevant age group completing year 12 (Harrison 1997).

An understanding of the reasons for lower participation rates of the rural and remote population in secondary and post-secondary education will guide responses to it, as policy analyses show (McGinness 1996). Although rates of participation and achievement may be lower in rural than urban areas, socioeconomic status seems to be a contributing factor (Young 1994). Many of the problems that characterise rural education are also experienced in lower socioeconomic urban areas (Cameron-Jackson 1995). These problems include negative community attitudes to education (Bourke 1998), high staff turnover, inadequate preparation of teachers for teaching in schools where there are low levels of basic literary skills, limited sociocultural opportunities and restricted employment opportunities. Young (1994), using a research design that calculates the independent contribution of different factors, concludes that socioeconomic status and aboriginality explain many of the differences in educational outcomes between urban and rural areas.

Students who do not complete high school are doubly disadvantaged. Not only do they leave school without reaching an important educational milestone, but also their chances of undertaking higher education at a later stage are much reduced. Developing good policy to respond to this significant problem depends on clarifying the factors at work among different segments of the population and in different regions. Only then will policy be able to address educational inadequacies that hamper the development of strong, vibrant rural communities.

Explanations for less successful participation in education in rural and remote areas fall into five main categories (Harrison 1997):

- a. First, for many people in rural and remote areas, there is simply inadequate access to full secondary schooling. In some areas, there are no high schools offering Year 12 at all. Travelling to the nearest school may be too difficult to endure over many years, and boarding is too expensive for many. Where distance education is available, it may not adequately meet the needs of students. These problems are considerably more pressing for children whose families are transient (Eddy 1998b; Thompson and Danaher 1994). Although at least one agency identified educational access for transients as a research priority, it is one on which little research is reported. In remote areas, lack of access presents a significant logistical and policy problem, for which high technology solutions may have something to offer.
- b. Second, where there is access to schools offering Year 12, only a restricted range of subject choices may be available. This affects both those wishing to go on to university, and those whose preference is for vocational education. Imaginative solutions may be required, including approaches based on telematics (Oliver and Lake 1996). Research priorities identified by agencies included problems of rural educational disadvantage, and problems with imposition of metropolitan 'one size fits all' education models on rural areas
- c. Third, the high turnover of staff in rural, and especially remote, schools poses particular problems for education. In some cases, more than half of the staff is new both to the school and to teaching. There are similarities between high teacher turnover and problems in attracting other professionals such as lawyers, doctors and social workers to rural areas.

The factors at work seem to include lack of opportunities for rewarding employment of spouses, unavailability of suitable housing, and separation from family, friendship and professional networks. Some of these could be reasonably easily remedied while others are quite intractable, and call for imaginative and ground-breaking solutions.

- d. Fourth, students' willingness to continue with education is diminished by what they see as poor employment prospects even if they were to complete a higher qualification (Gidley and Wildman 1996; Young *et al.* 1997). Solutions to the problems do lie not only with schools and teachers, who are often not the major influence in children's choices to leave school early. Family advice and expectation, and other factors such as the availability of work, seem more important (Stevens and Mason 1994). Research agencies with an interest in youth identified the link between education and employment opportunities as a priority for research.
- e. Fifth, lower rates of completion in rural areas may be explained by limits to the resources that parents and others in the community can call upon to assist the education of children, especially in post-compulsory education (Harrison 1997). It is here that the links between socioeconomic status and ethnicity, rather than living in rural areas, may be an important area to explore.

Recommendation 31: There is a need for research on education indicators for different segments of the rural population. Aggregated figures for rural regions or schools are inadequate to identify the precise nature of educational problems to be remedied by policy.

Recommendation 32: There is need for research into the social and economic implications of different success rates and educational outcomes for rural and urban participants in the formal education system.

6.2 Formal—secondary vocational

Compared to students in metropolitan areas, secondary students in rural areas have fewer vocational subjects to choose from, in the same way that they have fewer subjects for university matriculation to choose from. A smaller proportion of rural students applies for or accepts places in tertiary institutions than is the case for urban students. For many rural students, a primary reason for continuing on at school is to develop vocational skills, and for them, the lack of vocational subjects is a compounding problem. The transition from rural high schools to further education or work is a research priority for agencies such as the Centre for Research and Learning in Regional Australia, University of Tasmania.

Recommendation 33: Research into the integration of vocational education into secondary schools in rural areas, and the prospects of vocational education's improving educational outcomes, is a matter of high priority. The research needs to be supported by analyses of the dynamics of decision making about leaving school.

6.3 Formal post-compulsory

Lower participation by rural students in post-compulsory education is explained more by the rate at which places offered at university or TAFE are declined or deferred, than by students not qualifying for them in the first place. Students who leave their home districts to travel to

cities to study are more likely to be successful if they have social networks on which they can rely. Students who have boarded in city schools are more likely to have those networks and to succeed in study at university (Young *et al.* 1997). Some studies have drawn attention to the effect of competition that is much keener in city than rural schools. Students in rural schools may not have as competitive a peer group within which to develop skills, and in addition are unable to gauge their likelihood of university selection without such competition, and thus lack the confidence to proceed to university. Students boarding at city schools have an advantage here in addition to others mentioned. Young (1997), in replicating in Australia a British study into factors affecting whether students choose a career in science, concludes that many of the rural-urban differences are in fact social class differences, mediated through the use of private schools.

Distance education has grown rapidly as a way of providing tertiary education for the rural population. This is the only way in which residents of many rural areas can continue their education, especially in Western Australia, Tasmania and the Northern Territory where large rural regions are served by neither universities nor TAFE colleges (Harrison 1997). There is surprisingly scant research on how well distance education meets the needs it is servicing, and how it can overcome problems of access, although universities carry out some evaluations to guide course development (Purnell and Cuskelly 1996).

Recommendation 34: The lower rates of transition to post-compulsory education for rural and remote students present a challenge for researchers. Research is required into access and participation issues in relation to post-compulsory education through distance education, and providing courses that meet the needs of the rural population.

6.4 Education and rural productivity

One reason for research interest in education has been the impact of education on farming success (Bambray *et al.* 1997; Kilpatrick 1996). The relationship between farmer education and farm profitability is a complex one, and difficult to interpret. Farmers with higher qualifications appear to have higher incomes than farmers with lower qualifications. The relationship might in some instances be spurious; farmers with non-agricultural qualifications may be using those qualifications to earn part of their income off-farm (Kilpatrick 1997). When considering only farm businesses where someone in the household has agricultural qualifications, the gross operating surplus is higher than for other farm businesses. Studies of qualifications on farms have not always considered the education of women in farm households, a problem of gender blindness that is encapsulated in the phrase ‘the man on the land’ (Gunn 1994). For this reason, the NFF recommends that ‘farm business management units’ acquire agricultural qualifications (Kilpatrick 1996). Survey respondents called for additional research on ways of shifting reliance upon production of high volume, standardised, low value goods to diversification into production of small volumes of non-standardised, high quality, high value goods.

A further difficulty in interpreting farmer education is the mismatch between skills and accredited qualifications. Recognition of prior learning (RPL) is one way of assisting farmers to convert some of their experience into qualifications on which they can build (Napier and Scott 1995). Since higher qualifications tend to be associated with a greater willingness to be innovative and to take up further training opportunities, further research, especially qualitative, is needed to understand the relationships between skills, knowledge and formal qualifications (Dunn *et al.* 1998). The RPL process relies upon audits of farmer competencies to help decide which forms of training to promote, but such audits do not easily evaluate

higher order abilities such as decision making based on complex information (Bamberry *et al.* 1997). Only when these matters are clarified will initiatives to improve farmer education result in more profitable farm enterprises able to respond to changing technologies and markets.

As a report was recently made to RIRDC on issues for research and development in farmer education and training (Synapse Consulting 1998), we are not presenting further recommendations on this matter.

6.5 Education as human capital

Education is important not only for the profitability of individual enterprises, and for the quality of life of individuals, but also because it develops skills and knowledge for whole communities. While reduced commodity prices for primary products do threaten the viability of rural communities, an improving base of agricultural production does not of itself prevent the erosion of rural communities (Ling 1994). Education, both formal and informal, is necessary not only for its contribution to the agricultural industries, but because of its role in helping communities respond to rapid economic change (Kilpatrick 1998). The term 'learning communities' is being widely used to refer to the ability of communities to chart their own futures. This is in contrast to a mentality of dependence on initiatives undertaken by distant governments, or of waiting for commodity prices to improve. A recent national conference on 'Learning communities, regional sustainability and the learning society' attracted a large number of research papers and commentaries (Falk, 1998; Falk *et al.* 1998).

In the long term, there is reason to hope that education will do much more than promote the economic activity of rural industries. It will also have a part to play in reducing social inequalities between rural and metropolitan areas, and within rural areas themselves. Education has the potential to combat unemployment and the social exclusion that emerges when entire groups of people, for example young unemployed, are marginalised (Gidley and Wildman 1996; Healy 1998b).

Recommendation 35: The role of education in economic development, in building vibrant rural communities, and in providing opportunities and promoting demand for life-long learning should be a priority area for research.

6.6 Summary

The Human Rights and Equal Opportunity Commission has recently been conducting a national inquiry into school education in rural and remote Australia. Through its findings, the inquiry aims to understand the extent and nature of educational problems in rural areas. These problems include the availability and accessibility of primary and secondary schooling, the quality of educational services, and the compliance of education available to special needs groups with their human rights. A select, annotated bibliography on rural and remote education in Australia is contained at the following location on the Human Rights and Equal Opportunity Commission website:
http://www.hreoc.gov.au/human_rights/rural/education/briefing/bibliography.html

There are links between the low university participation rates in rural areas and the ability of rural areas to attract teachers, doctors, nurses, social workers and members of other professions. There is a sense of rural decline being compounded by young people's abandoning education either because they see no employment at the end of their training, or

because there are simply too few opportunities for them to do what they want. The development of 'learning communities', with formal and informal networks of farmers and others, is a notable development, with towns and regions eager to learn from what is occurring elsewhere. Problems include providing a full initial education to young people to the end of their secondary school, and then ensuring opportunities for lifelong learning. These may take a variety of forms. The current choices between limited local education, distance education or leaving the district may be broadened by developments in educational technology or hybrid forms of distance and face-to-face education. There is scope for modular education and training, based on accumulative short courses which can be taken as and where possible. The bringing together of recognition of the existing skills and knowledge of people in rural industries through Recognition of Prior Learning, opportunities to build on that knowledge through training courses, and the bringing together of that knowledge in networks of learning are all areas that need to be investigated systematically.

Education influences the skills developed in rural areas, the ability of these areas to attract and keep a skilled workforce, and the distribution of social disadvantage between rural and urban areas in Australia.

<p>Recommendation 36: Because education is so central to issues confronting rural communities, research into access to, and success in, education at primary, secondary and post-secondary levels deserves to be a high priority for further research.</p>

7. Rural health

Recent evidence suggests that, on average, rural Australians suffer more from serious disease, illness and injury, and die earlier than those living in urban areas of Australia (Grimson 1998; National Rural Health Policy Forum and the National Rural Health Alliance 1999). The further one travels from metropolitan to rural and remote areas, the higher mortality and illness levels rise (Australian Institute of Health and Welfare 1998; Strong *et al.* 1998).

In March 1999, the National Rural Health Policy Forum and the National Rural Health Alliance published *Healthy horizons 1999-2003—a health framework for rural, regional and remote Australians*, with the support of the Australian Health Ministers' Conference. This framework is designed to guide Commonwealth, State and Territory governments in developing strategies and allocating resources to improve the health and wellbeing of people in rural, regional and remote Australia. It also sets out broad parameters which should guide future research and suggests that the National Health and Medical Council should coordinate and initiate rural health research. It argues for broad level research into the social, economic, environmental and political factors underlying health status, as well as community led research on local health needs. Much emphasis is given to the way in which rural health issues should be approached, namely, in a way which empowers rather than burdens local communities. Communicating the results of research through appropriate media and networks is also seen as essential, as is the development of indicators of health status and related risk factors. Such indicators are intended to

- reflect diversity of conditions and people in rural, regional and remote areas;
- measure changes in health and wellbeing, and
- provide guidance for the allocation of the workforce, research and funding to areas with poorer health outcomes.
- (National Rural Health Policy Forum and the National Rural Health Alliance 1999: 15).

In March 1999, the Commonwealth government announced the appointment of Dr John Best to undertake 'a comprehensive stocktake of current Commonwealth programs and services so that we can achieve better coordination across current strategies and identify strategies for the future' (Wooldridge 1999). The issues to be investigated included

- the accessibility and flexibility of rural health care;
- the involvement of local communities in determining approaches;
- the development of more innovative ways of service delivery;
- the progress of rural health workforce initiatives; and
- the formulation of more effective ways to promote and monitor the health of rural communities.

Although some of the findings were presented to the Regional Australia Summit (Best 1999), the final report of the stocktake had not been made public at the time when the present report was being written. It appears that practical outcomes of the stocktake include the funding made available in the 2000-2001 federal budget and beyond for extra rural doctors and allied health professionals and also the extension of the number of university departments of rural health.

Another recent development has been the appointment of Dr Carla Patterson (Queensland University of Technology) to coordinate the Rural Health Research Project for the Rural Health Research Committee of the National Health and Medical Research Council. The Terms of Reference for this project were as follows

1. Identify all organisations and institutions conducting and sponsoring rural health research in Australia
2. Compile an inventory of rural health research being conducted in Australia, indicating where and by whom the research is being conducted, and its source and level of financial support
3. Liaise with the Australian Institute of Health and Welfare and the Australian Bureau of Statistics to establish conditions with adverse health outcomes especially affecting people in rural Australia
4. Classify the inventory described in 2 according to both the five National Health Priorities and also according to those conditions identified in 3
5. Prepare a critical appraisal of the scope and coverage of rural health research, identifying gaps, overlaps and opportunities for improvement of the strategic focus of research.

In addition to items 1-4 above, overall Terms of Reference for the project were to

- Develop a strategy and agenda for rural health research.
- Develop mechanisms for translating research into policy and action to improve health in rural and remote communities.

The findings from that project were endorsed by a meeting of health ministers in June 2000 and should be released before long. That report should provide both a more extensive examination of current research than we have been able to achieve, and detailed recommendations on priorities for future rural health research. The health ministers have allocated funding for a continuation committee to oversee initial implementation of the report's recommendations and for the establishment of a rural and remote health clearinghouse.

Recommendation 37: In view of the funding and coordinating role now being played by the Rural Health Research Committee of the National Health and Medical Research Council, it is recommended that rural health should not be a major area for funding from RIRDC, with the exception of research into farm occupational health and safety, and selected intersectoral issues.

Recommendation 38: The health-related research priorities identified below should be regarded as provisional and subject to revision if the review recently undertaken for the National Health and Medical Research Council establishes that a particular issue has already been adequately researched.

What are the factors which current research indicates contribute to the health inequalities between metropolitan and rural Australians? This is a contentious matter, depending as it does on both limited available evidence and theoretical differences between researchers. The

Australian Institute of Health and Welfare (AIHW) (1998) cites access to health facilities, lower socioeconomic status, harsher environments, poor infrastructure and occupational hazards as possible contributors to the relatively poorer health profile in rural and remote areas. Alongside these structural inequalities, the AIHW suggests that rural attitudes to illness, less attention to health promotion, and greater levels of risky behaviours may also be factors. However, because of the limitations of existing databases, further research is needed to assess the relative importance of structural and other factors affecting rural health.

The AIHW proposes to continue to monitor and report on the health of people living in rural and remote areas of Australia and to this end a Rural Health Information Workshop was held in Adelaide in March 1999. Information needs identified by participants included

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- common data standards and a national minimum data set for health status of rural, remote and metropolitan populations
- small area data for communities that can be aggregated up to a national level
- recognition that some health data are available at the local level from local governments and the community consultation process
- indicators for social and economic determinants of health in rural and remote areas
- a clearing house for rural health data
- coordination of reporting requirements for health data collections
- record linkage of administrative data collections under the provisions of a recognised national privacy protocol
(Australian Institute of Health and Welfare 1999)

Recommendation 39: Primary research is required on the structural factors (such as socio-economic disadvantage) affecting rural health. This research should focus on those groups, and those geographic regions, where health status is demonstrably worse.

We have grouped our examination of health-related issues into the following key areas: intersectoral collaboration, health services and the health workforce, hospitals and acute care, road accidents, farm safety, aged care, mental health, suicide, Indigenous health, health of people from non-English speaking backgrounds, women's health, men's health, problems of alcohol and other drugs, consultation, and the economy and health. These areas are based upon national health priorities and upon factors identified by many as contributing to rural health inequalities.

The details we provide about current research projects are drawn largely from data provided by respondents to our e-mail survey. They are illustrative rather than exhaustive in their coverage.

7.1 Intersectoral collaboration

According to peak rural health bodies, the task of identifying rural health needs and delivering efficient health services depends on greater intersectoral collaboration. The National Rural Health Alliance (NRHA), the peak national rural multi-professional health and consumer

organisation, has called for better Federal, State and local government relations in health. The aim is for a commitment to a fair share of health service resources as an urgent priority for joint government and community action in rural Australia (National Rural Health Alliance 1998d).

Healthy horizons, the recently released framework for improving the health of rural, regional and remote Australians, speaks of the need for flexible and coordinated services, involving collaboration between all levels of government, health services, professional groups, educational institutions and community organisations (National Rural Health Policy Forum and the National Rural Health Alliance 1999).

The NRHA has also called for the creation of a Commonwealth government Office of Rural Communities, to provide an integrated response to the problems facing rural communities, including issues related to the delivery of health and other services. A similar call has also come from rural women in Australia (Commonwealth of Australia 1996). An Office of Rural Communities is seen by the NRHA as a critical focal point for the development of integrated policies and programs in relation to health, education, telecommunications, aged care, transport, education and social and community services (National Rural Health Alliance 1998e). Further, the Alliance proposes that rural impact statements should be included with all submissions to Cabinet on new policies and programs affecting country people. Embedded in the call for an Office of Rural Communities is a call for more responsive government, including greater intersectoral collaboration.

The need for an integrated approach to rural health issues has been identified in other research, including a report by the Society of St Vincent de Paul. Their research concluded that integrated rural policies are needed to address the health, educational and social needs of diverse rural communities (Society of St Vincent de Paul 1998).

Recommendation 40: There is a need for policy oriented research which examines the multifaceted way in which local, State, and Commonwealth agencies need to interact with community based agencies for the better delivery of health care services. Case studies of intersectoral collaboration in health would be useful. One specific example might be the way in which education and health professionals could cooperate with respect to the health education and health promotion needs of young people. Another suggestion is evaluation of transport provision in rural communities, and the way in which cooperative transport arrangements between all health and community service organisations might be utilised more effectively and efficiently.

7.2 Health services and health workforce

Although all three tiers of government are involved in the health care system in Australia, the prime responsibility for delivery of hospital care rests with State and Territory governments. Specialist and base hospital services are available in larger centres, with more sophisticated and specialised treatment available in the largest regional cities and capital cities. However, the nucleus of delivery of health care in rural areas is the general practitioner, often supported by the small community hospital and other providers.

Research sponsored by the National Farmers' Federation has identified two key issues relating to the delivery of health care services: firstly, the continuing rationalisation of services; and secondly, workforce maldistribution, shortages and other difficulties (Harrison 1997). Addressing issues of rationalisation is often difficult when there is only fragmented

information on the extent to which services have changed or will change (in terms of numbers, types and locations of delivery outlets). Harrison has, however, concluded that some indicators point to rationalisation as a key governmental policy which has had, and will continue to have, detrimental effects on the delivery of services in rural communities.

Added to this are shortages of health care providers and the difficulties in recruiting and retaining providers. These have been long term, ongoing, key issues for rural and remote communities, particularly small communities. While the general practitioner, as the key provider of primary health care, has been the subject of research and government and private sector policy and planning, other areas of the workforce have received far less attention.

1.1.1 Health services

Inadequate, inaccessible and diminishing health services emerged as a major concern of participants in *Bush talks* consultations held around rural Australia during 1998 (Human Rights and Equal Opportunity Commission 1999). Inadequate health services affect not only the local, permanent residents but also those who are transient (Eddy 1998a). In communities with few health services, the workload for rural women, upon whom the burden of caring for the sick, elderly and disabled largely rests, increases. In addition to the lack of basic health services in some communities, many rural people have very limited access to counselling and other mental health support services (Aoun and Stone 1997).

In rural and remote areas there exists a hierarchy of health care services, with most major rural towns and centres relatively well provided with comprehensive primary and specialist care facilities, while many smaller rural communities lack even the most basic health care services (Humphreys *et al.* 1996). In these smaller settings, which include Indigenous communities, it has been suggested that health service provision needs to focus on a single site, address a range of health related issues, involve planning among all sectors of government, industry and the local community, make the most of information technology and incorporate ambulance services (Harvey *et al.* 1995; Eddy 1998a). These type of services have been referred to as Multipurpose Services/Integrated Health Services and Multi-Purpose Centres (Snowball 1995; Humphreys *et al.* 1996; McGinness 1996).

The Multi-Purpose Centre (MPC) concept was first initiated by the Commonwealth government in 1989-90 to address the problem of health service viability and provide equity of access for Australians living in rural and remote areas. Consisting of at least three services (such as nursing home, acute hospital care, and specialist medical service), the MPCs were funded by Commonwealth or State government grants, and directed at the particular needs of the local community (McGinness 1996).

As a development of the MPC concept, a joint Commonwealth/State Multi-Purpose Services (MPS) program was announced in 1992-93 and aimed to bring together a range of health and aged care services in rural and remote Australia. This program allows the pooling of funds from separate programs. Services include transport, community aged care packages, hostel care, nursing home care, home and community care, and hospital and community health services (McGinness 1996). The Multi-Purpose Services program is cited in *Healthy horizons* as an innovation that can assist with the goal of developing a needs-based, flexible funding arrangement for rural, regional and remote Australia (National Rural Health Policy Forum and the National Rural Health Alliance 1999). Current health status and health workforce data provide evidence that previous models of funding have had shortcomings. The MPC/MPS model is one alternative available.

Examples of current health services research includes work by Wainer, Strasser and Harvey (Monash University Centre for Rural Health) on the process of change in health service delivery in small rural communities, and research by Robinson (Edith Cowan University) on primary health care indicators for the Bunbury Health Service in Western Australia. Other work by Bamford and Dunne (1999) has attempted to quantify access to health services through the use of an index of remoteness – the Accessibility/Remoteness Index for Australia (ARIA). This index could provide a basis for calculating a more equitable distribution of health services in rural and remote areas.

Recommendation 41: It is recommended that research be conducted into different ways of funding health services other than the traditional funding mechanisms currently available.

Recommendation 42: Research into the effectiveness and efficiency of Multi-Purpose Centres in delivering appropriate, acceptable, accessible and affordable health services is required. Related to this is the need for research into the possibility of local control in the purchasing of health services.

Recommendation 43: Research into the decision-making processes of health and community service personnel, and particularly their assessment of the impact of their decisions on rural communities, may assist rural communities to understand rural health and community services decisions.

Recommendation 44: *Bush talks* calls for health care to be considered within a human rights framework. Research is needed to assess the extent to which this applies, and how such changes might be implemented. As part of this research, successful rural and remote community initiatives and the factors contributing to their success should be identified.

1.1.2 Health workforce

Much concern with rural health services has focused upon the many levels of the workforce which contribute to the delivery of health. Attention to both the medical and non-medical workforce is needed because of the risk factors affecting health outcomes. Nurse practitioners and health workers, in particular, play an important role in health care delivery in remote areas (National Rural Health Alliance 1998d; Strong *et al.* 1998).

The Australian Institute of Health and Welfare (1998) reports that the number of general practitioner consultations per 1,000 persons is lower in rural and remote areas than in capital cities. While some of this disparity may be explained by lower demand from rural and remote people, doctor supply is also a factor. Thirty per cent of Australia's population lives in rural or remote areas as defined by the RRMA index, but only 15 per cent of medical practitioners work in these areas (Australian Institute of Health and Welfare 1998: 45). Another issue is the number of doctors in rural areas who will not bulk bill patients (Human Rights and Equal Opportunity Commission 1999). It is not surprising, then, that much attention has been directed to the scarcity of medical practitioners – both general practitioners and specialists –

in rural areas. The reasons why general practitioners are not attracted to or do not remain in rural and remote areas may vary but can include inadequate remuneration, limited education services for children, lack of social amenities, higher practice costs, heavy and persistent workloads and poor housing (Harrison 1997; Campbell *et al.* 1996; Grimson 1998). Exacerbating this is the difficulty in attracting locums (Grimson 1998). A shortage of medical specialists, in fields such as orthopaedics, dermatology, paediatrics, psychiatry and urology makes access to medical services more difficult and expensive in rural and remote locations than in metropolitan areas (Aoun and Stone 1997; Human Rights and Equal Opportunity Commission 1999).

One indication of the severity of the problem, as perceived by the Royal Australian College of General Practitioners, was highlighted in *The West Australian* (24 April, 1999) in an article headed 'Cash and cars lure planned for rural GPs'. Citing figures indicating a need for an additional 60 doctors in rural Western Australia, the Royal Australian College of General Practitioners has asked for 15 extra students per annum to be trained as GPs in WA. The plan would also include a State government commitment of \$500 000 over three years for the additional training places; \$750 000 a year to fund incentives such as cash, cars, accommodation and free travel for GPs; and \$360 000 to pay locums a bonus fee.

Various other recommendations have been made which attempt to redress the general shortage of medical practitioners in rural areas. One is that Medicare Provider Numbers should be allocated on the basis of need and a proportion be set aside for those prepared to work in rural areas for a period of time (Grimson 1998). In addition, there is support from the NFF for the principle of doctors in rural areas being paid a higher Medicare rebate because of the extra demands associated with rural practice (Grimson 1998). Another suggestion, which has now been implemented, is for an 'area of needs scheme' for the recruitment of doctors. Where a medical position has not been filled, a foreign doctor may gain temporary medical registration in order to meet that need (Grimson 1998; National Rural Health Policy Forum and the National Rural Health Alliance 1999). After five years service in rural areas, such doctors may become eligible for permanent registration.

Other health personnel in short supply in rural areas include pharmacists, speech pathologists, occupational therapists and dentists (Human Rights and Equal Opportunity Commission 1999). Attracting and retaining nursing staff has also been difficult, especially given reports of violence against nurses in remote areas (Bradshaw *et al.* 1998). To maintain skill levels of nurses who choose to remain in the country, there is a need for further development of training and practice activity for Advanced Nursing Practice in remote areas, in collaboration with other health providers (National Rural Health Alliance 1998d). Many of the health workforce generally realise they are not well equipped to deal with issues such as Indigenous health, youth health and aged care (Aoun and Stone 1997).

The rural health workforce is aging (Lippert 1998; Harvey *et al.* 1995). In addition, health care workers face isolation, lack of infrastructure support and lack of support personnel. Because of their isolation from professional peers, they are at risk of losing their skills, and many are less confident with emergencies but more likely to face them (Campbell *et al.* 1996; Grimson 1998). In these circumstances, fear of litigation may be exacerbated.

This rather dismal picture is summed up in a report published by the National Farmers' Federation:

... rationalisation of services and shortages in health care providers has been shown to have a pervasive effect in country areas as reductions in key services have impacts on others and social and economic impacts on communities and industries, including the agricultural industry. What we have seen is that current policies are likely to lead to the exacerbation of problems being experienced in rural and remote communities. Further, in the push for centralisation and regionalisation of services, the real needs of rural people receive scant consideration despite the very significant economic power they wield.

(Harrison 1997)

Commonwealth Government initiatives which aim to address these problems include the Rural Health Support, Education and Training (RHSET) Program which commenced in 1990 and funds projects for

- the development of innovative and cost-effective programs to overcome barriers to rural health and community services workforce recruitment and retention
- meeting identified education and training needs and requirements of the health workforce in rural areas, with an emphasis on special skills training to help health care providers meet the particular demands of rural and remote practice
- increasing opportunities for rural placements during education of the rural health and community services workers.

(McGinness 1996: 213).

A formal review of the RHSET program was undertaken in 1996.

Another Commonwealth initiative is the Rural Incentives Program for General Practitioners, introduced in 1992, and redeveloped in 1998 as the Rural Workforce Agency program, now administered at State level. This is designed to attract and retain GPs in rural and remote Australia. Incentives include: relocation grants, training grants, assistance with continuing medical education and locum-relief funds, grants for GPs in remote areas, support for undergraduate experience in rural practice, and family support grants.

We understand that Dr John Best included an examination of both the RHSET program and the Rural Workforce Agency program in the review he recently undertook for the Commonwealth government.

Current research on health workforce issues cited by respondents to our survey includes work by Murray on violence and personal safety in rural general practice; a study by Duffy and Timmermann on health management training for rural and remote health professionals; and an exploration of legends and myths of rural general practice by Wainer, Carson and Stringer.

Recommendation 45: Investigations should be undertaken as to why some areas appear to have ongoing problems of recruitment and retention of health professionals even though those areas appear to be similar in other respects to areas which do not have problems of the same magnitude.

7.3 Hospitals and acute care

In some respects, rural hospitals play a more diverse role in the community than metropolitan hospitals. As well as offering basic medical services, obstetrics and emergency care (provided by the local GP), some rural hospitals also provide nursing home accommodation. Specialist medical services are usually located in regional urban centres, requiring some clients to travel long distances. The small rural hospital is also an important employer in many towns, thereby contributing to the economic viability of the town (McGinness 1996; National Rural Health Policy Forum and the National Rural Health Alliance 1999).

Calls have been made for commitments to the retention of rural hospitals and their acute beds, so that acute care needs of rural people are addressed (National Rural Health Alliance 1998d). *Bush talks* (Human Rights and Equal Opportunity Commission 1999) records cutbacks in hospital services in many towns. The report cites *The Land* which claims that 5,000 hospital beds had been eliminated in New South Wales in the period from 1988 to 1995. Thirty hospitals, mostly from rural areas, had withdrawn all or some services, or been privatised. In an attempt to mitigate the effects of such closure, some downgraded rural hospitals are now being staffed by nurses with upgraded qualifications. These nurses provide routine aspects of health care and call on advice from a larger hospital when they need to deal with more complex cases.

Any analysis of hospital services in rural areas should take account of the functions now being performed by Multi-Purpose Centres and Multi-Purpose Services as described earlier in this chapter, as well as of the roles now being played by nurse practitioners.

Monash University Centre for Rural Health is currently conducting research on a number of hospital related projects, including: the delivery of acute care in small rural communities with shrinking hospital resources (Hall and Kelly); measuring consumer satisfaction with Emergency Department nursing care in Australia (Davis and Duffy); and a special cooperative audit of rural surgery (David Birks and Rob Birks).

Recommendation 46: Unless it has already been undertaken, research on the health economics of rural hospitals compared to other health service options should be pursued. This work needs also to take account of the contribution rural hospitals make to local social infrastructure.

7.4 Death or injury from road accidents

Death rates (expressed per 100,000) from road accidents increase significantly from capital cities (males 13.5, females 5.7), to large rural centres (males 18.7, females 7.1) and remote centres (males 32.5, females 9.6) with rates in 'other' rural and remote areas even higher (Australian Institute of Health and Welfare 1998: 43). Road accidents are consequently a major concern for rural and especially remote communities. Higher risk taking behaviour may contribute to these excess deaths. It may also be that the greater number of kilometres travelled, state of the roads and greater speeds are factors. Most jurisdictions are examining ways in which road trauma can be reduced.

The Northern Territory, for example, has the highest level of serious casualty accidents in Australia and there is recognition that rural and remote areas require approaches which may be different from those in urban areas. The Northern Territory Road Safety Strategy, covering vehicle safety, road environment, road users, road trauma and road safety management, is one

example of government and communities working towards joint solutions (Northern Territory Government 1993). The Australian Institute of Health and Welfare's research has also noted that lower road quality adds to rural health disadvantage (Strong *et al.* 1998).

Recommendation 47: Research into rural male perceptions of road risks and ways to promote less risky behaviours would be valuable.

7.5 Farm safety

Farm injury has been recognised as a major problem for agriculture in Australia, with work-related deaths among the highest in the country (Fragar 1996). While on-farm injuries result in between 20 and 60 presentations to rural hospital emergency departments per 100 farms per annum, prevention of farm injury has been constrained by various factors. These include lack of relevant information regarding injury causation, lack of appropriate education and training in occupational health and safety, limited applicability of previous occupational health and safety legislation, and the scarcity of the necessary management tools for farmers to manage risk (Fragar 1996).

Occupational risk factors on farms, identified by various researchers and the Farmsafe program, include injuries involving

- trauma (tractors, machinery, animals, aircraft)
- ergonomic problems (repetition task, poor design, overload in manual handling)
- biological attacks (stings, bites, infection, organic dusts, Zoonoses such as Brucellosis, Hetospirosis, Q Fever etc)
- physical complaints (electricity, noise, vibration)
- chemical exposure (pesticides, herbicides, veterinary products)
- psychological difficulties (isolation, stress, solitary work, hours and conditions)
- attitudinal stresses (employer, employee)
- lifestyle issues (social isolation, alcoholism)
- delivery of Safety-Medical-Rehabilitation services (small industry, geographic spread, on-the-job mobility, tendency to self-regulation, poor access to support system, limited workers' compensation coverage)
- (Fragar 1996; Low *et al.* 1996; Department of Primary Industries and Energy 1988).

Added to this is the high risk to children's safety on farms (Preece 1995). This is due to the fact that the farm is both an industrial workplace and a home, so children cannot be kept away as is commonly the case in other industries. Research carried out in the Central West Health Region in NSW established that child deaths (aged 0-5 years) were caused primarily by drowning and ingestion of chemicals. This was twice the rate recorded for children aged 6-10 years, for whom the main cause of death was vehicle accidents and falls. Further, an increased number of accidents occurred when children on farms were on school holidays, particularly

over spring and summer months. In response to these type of issues, innovative programs to provide mobile children's services and on-farm child care are being trialed in part of rural eastern Australia (McGowan 1999).

A number of projects addressing farm safety have been completed or are under way in Australia. The National Rural Public Health Forum, held in 1997, concluded that much would be achieved for farm safety work in the future if there was a greater emphasis on rural public health promotion, education, local area monitoring and implementation, national resource allocation, and security of funding. In particular it was noted that in the case of farm safety work, public health promotion should target both farm residents and visitors, expanding the issue from 'farm safety' to 'rural safety' and not limiting projects to injury prevention; that strategies should be based on a concept of continuing learning, using all forms of existing media and extending into quality assurance and best practice processes; and that attempts should be made to ensure integrated funding approaches are undertaken by funding bodies, government and industry, including the resourcing coordinators, to integrate related forms of activity within a given geographic area project (National Rural Health Alliance 1997b).

The Rural Industries Research and Development Corporation, in a joint venture with the International Wool Secretariat, the Grains Research and Development Corporation and the Meat Research Corporation, has established a strategic plan for a Farm Occupational Health and Safety Program for the period 1998–2001 (Rural Industries Research and Development Corporation 1998).

Objectives of the plan are:

- to improve the mechanisms for the uptake of recommendations for health and safety on farms
- to develop a national network of databases, with comprehensive case data on farm-related deaths, injuries and illness, and the circumstances and experiences surrounding these
- to develop specific hazard profiles for each commodity group
- to ensure that the health and safety impact of all R&D projects in agriculture is an integral part of the design of new technology
- to increase Australian investment in farm health and safety R&D
- to improve the use of available resources through national coordination
- to ensure that farm health and safety R&D projects deliver measurable benefits and contribute to future needs for the farming community.

Because of the recency of the review that led to the adoption of this plan, we are not making any further recommendations for this area.

7.6 Aged care

The National Rural Health Alliance (National Rural Health Alliance 1998f) has noted that the trend towards both rationalisation and privatisation of health and other services in rural and remote communities has had a disproportionate effect on the elderly. Their lower incomes,

restricted mobility and poorer health status make them more vulnerable in a context of reduced health services.

Whilst it should be recognised that the 'ageing process is natural and should not be medicalised or assumed to be equated with illness, senility or dependence' (National Rural Health Alliance 1998f), shortages of GPs, nurses and allied health workers in rural and remote communities make access to health care services more difficult and expensive for older people in rural and remote areas than elsewhere. Added to this, according to the NRHA, is the non-existence of geriatric and psycho-geriatric services in many rural areas, the high cost or lack of public transport to regional medical centres, and the social isolation affecting rural older people, especially women.

The health of aged people in rural areas should not, however, be considered only in terms of access to medical and health services. There needs to be recognition at all levels of government and within the community of the link between older persons' active social engagement in their community and their continued physical and mental wellbeing (Lippert 1998). The common practice of movement of elderly people for care to a bigger town, often means a loss of remaining social networks (Cheers 1998; Lippert 1998). This issue was highlighted also in submissions to *Bush talks*:

Older persons' funding is a significant issue. I think in adult services 85 per cent of the budget goes to clinical services, whereas in aged services 93 per cent goes to clinical services and only 7 per cent to community based services. I see in our travels, people over 65 being isolated, not getting good access not only to psychiatric services but housing services and carer support services. I think that the geographic factors are accentuated for people over 65. They are usually less likely to have a car (Bendigo, Vic).
(Human Rights and Equal Opportunity Commission 1999)

The National Rural Public Health Forum in 1997 noted that aged care reform for rural and remote areas should focus on

- maximising flexibility in how the available money may be allocated at the local level
- improvement in residential care
-
- improvements in community care packages
- improvements in access.

(National Rural Health Alliance 1997b).

The key to improvements identified by participants in the Forum was increased 'trust, communication and good-will' between the service providers and the elderly people for whom the services were designed.

At a more general level, Sorensen and Epps (1993a: 31) have noted that

Any process of rapid change creates winners and losers. The big losers in the re-drawing of rural Australia are the elderly inhabitants of numerous small, isolated, and frequently declining communities places whose service functions have been superseded by larger and more accessible towns or cities.

Many poorer or older people are tied to a particular locality almost irrespective of the economic opportunity provided by that place. These narrow spatial horizons arise from their dependence on long established social networks among friends and relatives; feelings of obligation to those around them; insufficient financial resources to move to a new location; lack of awareness of alternative lifestyles; fear of unfamiliar surroundings, and innate conservatism.

Responding to this situation is one of the challenges facing governments and rural communities as they move into the 21st century.

Recommendation 48: There is a need for research on the implications for rural communities of the ageing of the Australian population. Such research should include, but not be limited to, an examination of the health-related needs of the elderly in rural areas.

7.7 Mental health

Mental health is identified in *Healthy horizons* as one of eight priority areas for rural health (National Rural Health Policy Forum and the National Rural Health Alliance 1999). Australia's *National Mental Health Strategy* was initiated in 1992, the *National Mental Health Report* being published in 1996, the *National Survey of Mental Health and Wellbeing* in 1997 and the *Second National Mental Health Plan* in 1998. The current plan covers the period to June 2003.

Too frequently mental health tends to be defined in terms of specific conditions such as schizophrenia or a propensity for suicide (National Rural Health Alliance 1997a). As the National Rural Health Alliance has noted, the spiritual wellbeing of individuals and their communities is just as important. Substance abuse, for example, was cited as often due to low self-esteem, alienation and anomie, which are signs of poor mental health. In its review of the National Rural Health Strategy, the NRHA supports the establishment of a proposed new peak body for mental health. This body has now been formed.

Informants to *Bush talks* (Human Rights and Equal Opportunity Commission 1999) cited a number of critical shortages in mental health services – counselling, psychiatric, hostel, in-patient – particularly services appropriate for young people. Summing up the frustration of many, one submission states:

Mental health services are abysmal in the bush, almost non-existent, as is detox for alcoholism, which is rife, marriage counselling, respite, palliative care, legal services, etc, etc. These are of course all related (E Stafford, Kuranda Qld).

(Human Rights and Equal Opportunity Commission 1999)

An added health risk relates to the Australian agricultural sector. Farms continue to suffer economic pressures which (directly and/or indirectly) produce stress among farm family members (Gray and Lawrence 1996). Current research by Doyle, Kaine, Sandall and Crosby (Rural Development Centre, University of New England) is exploring sources of such stress.

Recommendation 49: As mental health is a National Health Priority Area, research into the social and cultural contexts of rural mental health, and into health promotion strategies and their evaluation should receive urgent attention.

Recommendation 50: Research into the establishment of self-help networks for specific illnesses such as depression and other mental illness, eating disorders, and the like would be valuable. The issue here is the extent to which geographic and social isolation inhibit the development and maintenance of such networks.

7.8 Suicide

Suicide rates in Australia have increased substantially since the 1960s, but in rural areas this increase is as much as 12 fold in towns of less than 4,000 people, while in metropolitan areas it has doubled (Dudley *et al.* 1998). *Healthy horizons* notes the need to reduce suicide and attempted suicide, particularly among young people in rural, regional and remote Australia (National Rural Health Policy Forum and the National Rural Health Alliance 1999). Research has found that overall methods of suicide are changing, there being, for example, an increase in incidents of hanging and carbon monoxide poisoning, but in rural areas suicide by firearm is the most common method (Dudley *et al.* 1998). Cross and McManus (Centre for Health Promotion Research at Curtin University of Technology) are currently evaluating a firearms injury prevention project.

Baume and Clinton (1997) have noted that factors contributing to suicide in young people can be categorised into two main groups – those relating to structural factors and those relating to personal vulnerability. The structural factors include unemployment, media representations of suicides, the greater availability of the means of lethal methods of self-harm, as well as problems in accessing and using mental health services, and the limited skills of primary healthcare professionals in rural areas in detecting and managing depression. Overall it was recognised that many complex factors, such as the interactions between structural, personal vulnerability, cultural and social crisis, are implicated in the rising suicide rate in young people, particularly young males. Also identified as being at risk were young gay men and lesbians in rural areas where anti-gay sentiments were strong. The Human Rights and Equal Opportunity Commission is coordinating a National Program on the Human Rights of Young Gays and Lesbians in Rural Australia and this is an area which will require systematic research, both in determining the extent to which discrimination exists, and to evaluate attempts to eliminate it (Human Rights and Equal Opportunity Commission 1999).

Baume and Clinton (1997) found that the continued evaluation of risk for suicide is imperative to prevent death and to bring to an end what is emerging as enduring patterns of self-destruction. They also surmised that the likelihood of success will depend on how well prevention and intervention programs can target young males in rural areas. Overall they concluded that there is an urgent need for research aimed at identifying more clearly how knowledge of contributing factors could be best taken into account in the design, implementation and evaluation of suicide prevention strategies and services for those left in suicide's aftermath. With respect to the legacies of suicide, some research has been undertaken (Fraser 1994). This research examines the traumas facing families of those who have committed suicide, surrounded as it is with taboos and stigmas.

Research on the success of suicide intervention programs has been limited, but indicates the importance of high intervention approaches (Aoun and Gregg 1998). This has implications both for health services funding and health workforce issues. Current research includes that of Eddy (Family Action Centre, University of Newcastle) on the prevention of youth suicide, targeting young people in the Nynген/Warren and Hunter regions in NSW; Rural Youth

Suicide National Trials by Dunn (Gilmore Centre, Charles Sturt University); and a national project by Balsamo (Victoria University of Technology) examining youth suicide prevention in rural and remote Australia.

Recommendation 51: Rural suicide, especially among young people, is widely acknowledged as a pressing concern. There needs to be recognition of the very different contexts in which suicide among, for example, Indigenous youth, gay and lesbian youth, and young males of Anglo-Australian background takes place. There is a need for applied research such as evaluation research of alternative prevention programs for each of these target groups.

7.9 Indigenous health

Indigenous people constitute a higher proportion of rural, and especially remote, populations than of metropolitan populations and their poor health exacerbates the health inequalities apparent in comparisons between city and country dwellers. The uneven quality of Indigenous health statistics has been identified by the Australian Institute of Health and Welfare (1998) as inhibiting the planning of health programs and services. The Australian Bureau of Statistics has a standard procedure for identifying Aboriginal and Torres Strait Islander peoples, which is based on self-identification. The Commonwealth definition includes three components; descent, self-identification and community acceptance. Administrative data collections throughout Australia vary in the way in which Indigenous status is recorded. This means that reports of health inequalities between Indigenous and non-Indigenous Australians are most likely under-estimations.

Given that caution, the differences in health profile of these two groups are more alarming. Estimates of life expectancy at birth, 1991-96, in the western sections of Australia (comprising the Northern Territory, South Australia and Western Australia) for Indigenous males and females were 53.7 and 58.9 years, respectively. For eastern Australia (New South Wales, Queensland, Australian Capital Territory, Victoria and Tasmania) the figures were 59.2 and 63.6 years. Combined, the life expectancy for Indigenous males is 56.9 years and for Indigenous females, 61.7 years. This compares to life expectancy for the Australian population of 75.2 years for males and 81.1 years for females (Australian Institute of Health and Welfare 1998: 29).

Age-specific mortality rates for Indigenous people in Western Australia, South Australia and the Northern Territory (the only places where health statistics are adequate) are higher than those of other Australians for every age group, but particularly among those aged 25-34. Overall death rates are higher for Indigenous people than other Australians. Most 'excess' deaths of Indigenous people are due to circulatory diseases, respiratory diseases, injuries and endocrine diseases (including diabetes). Indigenous infant mortality rates are 2-4 times higher than the national average. Rates of hospitalisation were over 50 per cent higher among Indigenous people than among other Australians in 1995-96. For males the most common causes were injuries and respiratory diseases, while for females the causes were pregnancy and childbirth, injuries and respiratory diseases (Australian Institute of Health and Welfare 1998: 32-33).

Risk factors common among Indigenous people (as well as the general population) include obesity, cigarette smoking and excessive alcohol consumption. While alcohol is widely acknowledged among Indigenous people as a severe health risk, smoking is less likely to be prioritised as it is not accompanied by the widespread social disruption common to excessive

alcohol consumption (Saggers and Gray 1998). *Bush talks* (Human Rights and Equal Opportunity Commission 1999) cited lack of access to dialysis as a severe problem for many Indigenous communities. For instance, in the Northern Territory, dialysis is available only in Darwin and Alice Springs.

Also cited in *Bush talks* was the lack of knowledge of Indigenous cultures among health professionals:

There is no doubt that Aboriginal 'social and cultural' factors and 'location' do influence the health of our people. There is no doubt that factors such as the remoteness of Aboriginal communities, cultural divisions between 'men's business' and 'women's business', and the fact that many of our people speak English as a second (or third or fourth) language, pose problems for Western-oriented service delivery (Central Australian Aboriginal Congress, Alice Springs, NT).

(Human Rights and Equal Opportunity Commission 1999)

Improving Indigenous health has been a stated priority of both State and Commonwealth governments for more than two decades, with many national reviews indicating both the extent of the problems and the possible solutions (National Aboriginal Health Strategy Working Party 1989; Royal Commission into Aboriginal Deaths in Custody 1991; National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families (Australia) 1997; Swan and Raphael 1995).

In terms of improving health services, there is agreement that these should be based on Indigenous culture and be planned, managed and staffed by Indigenous people, utilising community controlled health services wherever possible (National Rural Health Policy Forum and the National Rural Health Alliance 1999).

While most commentators acknowledge the role inadequate and inappropriate health services play in poor Indigenous health, poverty is widely identified as the most significant factor (Gray and Saggers 1998). This has implications for research priorities. Indigenous health research has also been a priority area of the National Health and Medical Research Council and other State and Commonwealth agencies for many years, and both biomedical research and applied health research have been conducted. Contemporary research in Indigenous communities is dependent upon researchers working collaboratively with local communities, on issues deemed priorities by the local communities. Not surprisingly, research on demand for, and supply of alcohol is increasing, with work by Brady (1995; 1998), d'Abbs *et al.* (1996), Saggers and Gray (1998) and others.

Other current work cited by our informants includes research on Indigenous injury prevention by a team led by Craig (University of Queensland); Aboriginal health issues for the Pilbara region by Hicks and remote community-based domestic violence initiatives by Simmons (both from the Hedland College Social Research Centre).

Future research will need to address the structural inequalities underlying Indigenous health and work with local communities on participatory projects that address both epidemiological priorities such as obesity, smoking and alcohol (see Australian Institute of Health and Welfare 1998) and community priorities. In a submission to the Standing Committee on Industry, Science and Technology on the effects of research and development of certain public policy reforms, it was claimed:

In terms of overcoming for example the fundamental health problems facing the Indigenous population of the country, implementing what is already known is of far greater importance than doing basic research. Why implementation is not occurring is itself a subject requiring urgent investigation by social scientists and public health professionals.
(Adams 1999)

Recommendation 52: Research with community controlled Indigenous health services needs to examine ways in which the recommendations of reports such as the Royal Commission into Aboriginal Deaths in Custody, *Bringing them home*, and *Ways forward* can be implemented at a local level.

7.10 Health of people from non-English speaking backgrounds (NESBs)

There appears to be a lack of good primary research on the health of NESB people in rural areas of Australia. Small groups of many different NESB people living in relative geographic isolation present a challenge for health services, and with an ageing population these issues are being accentuated. It has sometimes been suggested that there is no need for provision of specific health services for NESB people in rural areas, because they have either been living there for a long time and do not now need special services, or because newer Asian immigrants have extended family linkages and are self-sufficient in this respect (Van Der Veen 1998). A case study in Rockingham (Central Qld), however, described the majority of local ethnic organisations as being small in size and having limited articulation, loose structure and little political clout (Than 1998). Ethnic groups, it was concluded, remain invisible and underuse services through lack of information.

As the provision of English language classes is the most important settlement need, questions of access (funding for classes with small numbers in rural areas, public transport, childcare, flexible hours) need to be addressed (Van Der Veen 1998). Further, service providers need to have greater cultural awareness, with the need for trauma services in some regions being vital. A project by the Central Queensland Multicultural Association Inc. is addressing some of these issues. They have gained a grant to appoint a community worker to promote awareness and understanding of services, as well as to ensure that there is consultation with ethnic communities in the planning of service provision (Than 1998).

The needs of NESB people were highlighted at the recent National Rural Health Conference, with a recognition that there are almost no interpreters/translators available in smaller rural communities and that cross-cultural communication education is needed for health workers dealing with migrant populations, as there are few supports in rural/remote areas to assist workers (National Rural Health Alliance 1999).

Recommendation 53: There is a need for some basic research to document the extent to which people from non-English speaking backgrounds are hindered in accessing mainstream health services in rural Australia. Local level evaluations of ethnic-specific services should be funded, to determine the effectiveness of these programs.

7.11 Women's health

In recent years it has been recognised that there are some differences between men and women in rural Australia in terms of health status, health-related behaviours and concerns. For example, in the case of rural women, there is a need for access to cervical and breast cancer screening and also for those escaping domestic violence. (National Rural Health Policy Forum and the National Rural Health Alliance 1999). Compared to women living in metropolitan areas, rural women are more likely to be overdue for cervical cancer screening (Harris *et al.* 1998), and strategies to assist women facing domestic violence are less likely to be available. (McGinness 1996). The latter issue is considered elsewhere in this report.

A recent study of mid-life rural and remote area women has revealed that while these women rate their health as similar to that of women in urban areas, they are less likely to visit GPs and specialists, and more likely to consult alternative practitioners. Further, they are more likely than urban women to have had gynaecological surgery (such as hysterectomy, prolapse repair and tubal ligation) and to have problems associated with alcohol and being overweight (Brown *et al.* 1998).

Lack of access to female GPs has been identified by rural and remote women as an issue, although it is argued that it is a female doctor's 'culture of practice', rather than essential questions of gender, which is seen as most important, particularly for younger women (National Rural Health Policy Forum and the National Rural Health Alliance 1999; Bryson and Warner-Smith 1998). In recognition of this need, the Commonwealth government has committed \$8 million over four years for a 'fly-in-fly-out' female GP service to rural and remote areas without access to a female GP.

With the ageing of the population in rural and remote Australia, older women will comprise an increasing proportion of the population, with consequent pressures on aged care services (National Rural Health Policy Forum and the National Rural Health Alliance 1999). Research on the health and social needs of older women will become increasingly important.

The physical and mental health of younger women in rural Australia is compromised by factors such as limited access to child-care, and subsequently access to employment and/or community participation. Better access to both medical care and social supports is seen as important for this group (National Rural Health Policy Forum and the National Rural Health Alliance 1999).

Women's increasing participation in all aspects of rural life has two implications for health services. Their health needs will change with their changing life styles (for example, with greater participation in all aspects of farm work), and they are likely to take a more prominent role in community owned and operated health services (National Rural Health Policy Forum and the National Rural Health Alliance 1999).

Current research listed by our informants includes work by Croker (James Cook University) on the outcomes of health delivery services to birthing women in rural and remote areas of North Queensland; an Honours level evaluation by Cooper (Edith Cowan University) of a post-natal depression program at Bunbury Primary Health Service; and another Honours project by Wendt (University of South Australia) on the influence of domestic violence in the Barossa district.

Recommendation 54: Research on the health and social needs of rural aged women and ways in which these needs may be met is required. For young women, applied research on their abilities to participate meaningfully in their communities would be valuable.

7.12 Men's health

Many aspects of men's health problems in Australia are broad public health issues such as life style, health risk behaviour and poor health care service utilisation (Huggins 1997; National Rural Health Policy Forum and the National Rural Health Alliance 1999). However, as Allan Huggins of the Men's Health Teaching and Research Unit of Curtin University, points out, the underpinnings of men's health are quite complex and are associated with issues of male socialisation, models of masculinity within Australian culture, and other issues relating to psycho-social, economic and geographic imperatives. Figures quoted by Huggins (1997) give an indication of some health differentials relating to males in rural and remote Australia as defined in the RRMA system of classification

- Rural and remote males experience 15 per cent greater rate of mortality when compared to men in metropolitan areas
- The differential for avoidable deaths is 47 per cent greater for males in rural and remote areas compared to those in metropolitan areas
- Australian rural and remote males under 14 years of age have 171 per cent greater rate of accidental drowning and 53 per cent greater rate of motor vehicle traffic accident compared with girls
-
- For the 25-64 year age group, males have a 252 per cent greater rate of suicide and 170 per cent greater rate for motor vehicle traffic accidents than females in rural and remote areas
-
- There is some tentative evidence and speculation of a higher rate of suicide amongst young gay men compared with other young men, although there has been a reluctance for official studies to examine this issue.

Another concern for health professionals is the evidence that GP consultation rates for men, compared to those for women, decline sharply with distance from metropolitan areas (Australian Institute of Health and Welfare 1998).

Ways to overcome what appears to be a crisis in rural men's health status are relatively few and far between. One suggestion is that just as women use health articles published in the popular print media for their health information, there could be a similar impact for men from similar publications in the male market (Naphine 1998). Another suggestion, presented at the 5th National Rural Health Conference in 1999, offers the 'MAN model' as a pathway to men's and boy's health (Denner 1999). The proposal is to develop partnerships between health providers, community groups and community organisations in order to focus on the health needs of men, families and boys (National Rural Health Policy Forum and the National Rural Health Alliance 1999). This approach has been successfully piloted in five rural centres and a Rural Health Support, Education and Training (RHSET) grant has been obtained to expand into other regions. Other current research on rural men's health promotion includes work by Hall (Monash University Centre for Rural Health).

Fletcher (1995) has pointed out that the women's health movement does not necessarily provide a useful model for tackling men's health problems. Noting that men in Australia have not been asked about their health concerns or how they would improve existing health services (except on rare occasions), Fletcher concludes that there is a need to put this issue on the research agenda. Work by Hall, Gough and Wainer (Monash University Centre for Rural Health) is examining statewide support for community development initiatives for rural men's health promotion. Fletcher has also identified the need for detailed research into the health concerns and needs of sub-groups (eg. Aborigines, single fathers, men 65+). An important aspect of this proposal would be the elaboration of a social view of men's health as well as multidisciplinary investigations into risk taking, health literacy and male occupation patterns as likely starting points for investigation (Fletcher 1995). Research along these lines is being conducted by Ho and Davidson (Central Queensland University), who are examining the effect of psychosocial factors on the motivation of men to adopt good health behaviours. Another project by Hall (Monash University Centre for Rural Health) is studying the incidence and correlates of risk-taking behaviour in Victorian rural youth.

Recommendation 55: Qualitative research on rural male health concerns and their relationship to health concerns identified by epidemiologists would be valuable. For example, to what extent do rural men regard so-called 'risky' behaviours, such as excessive drinking, and smoking, as 'real' threats to their health and to what extent do their beliefs influence their health care seeking behaviour?

7.13 Alcohol and other drugs

In the paper *Drugs and Alcohol in Rural Australia*, the National Rural Health Alliance (1998c) reported that the death rates for men involved in road traffic accidents in 'other rural areas' and 'remote centres' are 108 per cent and 154 per cent respectively higher than in capital cities, with alcohol playing a significant role in many injuries. Less is known about the use in rural areas of drugs other than alcohol, although polydrug use (the mixture of drugs, both legal and illicit) is increasing in Australia. Further, the use of marijuana is increasing, particularly among young men. A study in rural Tasmania (Edwards 1999) found that young people listed drugs and alcohol as issues they felt needed to be addressed in their State.

The NRHA recommends that communities in rural Australia consider the following strategies when addressing drug and alcohol issues in their region:

- Seek funding to design a three-stage community-based harm minimisation model on the prevention of injury and road accidents as a result of drinking and smoking marijuana, and using other drugs in a mixture with alcohol
- Trial the model in a number of communities
- Examine other models, eg The Australian Drug Foundation's 'Sporting Clubs Alcohol Project'
- Ensure strategies have credibility with young people
- Target the relationship between other injury (such as workplace injury) and substance use in rural and remote areas

Recommendation 56: Research is needed into the effectiveness of various strategies for dealing with drug and alcohol problems in rural areas.

7.14 Consultation

The National Rural Health Alliance has called for assurances that local people will be genuinely consulted about their own health needs and will have access to appropriate levels of funding that can be applied in a locally flexible way (National Rural Health Alliance 1998d; Australian Institute of Health and Welfare 1998). Involving rural communities in public health was also a major issue raised at workshops at the National Rural Public Health Forum in 1997 (National Rural Health Alliance 1997b). A communiqué from the conference called for collaborative work between funding bodies and communities, with partners having an equal voice and both being accepted as legitimate participants. As *Healthy horizons* states, health targets and goals determined through genuinely collaborative community action are more likely than otherwise to be relevant to community needs; they facilitate ownership, continuity and success in improving health outcomes (National Rural Health Policy Forum and the National Rural Health Alliance 1999).

The National Rural Health Alliance (1997a: 141) has identified various ways in which policy makers and planners could enable communities to decide what 'health' is to them and what services are required to meet defined needs. These include

- encouraging local community leadership
- polling the community to identify health service needs and issues
- providing appropriate education, training and information on planning, consultation, decision-making and models for the provision of health services
- providing appropriate resources for community involvement
- implementing the provisions of the Ottawa Charter at the local level.

Recommendation 57: Research on ways in which meaningful consultation can produce better health outcomes in rural areas needs to be undertaken. This includes a review and evaluation of consultation protocols. Case studies of community initiated and maintained health services and programs should be conducted.

7.15 Economy and health

The relationship between health and socioeconomic status is well documented, and low socioeconomic status and poor employment levels are cited as contributing factors to relatively poorer rural health (Australian Institute of Health and Welfare 1998). The precise way in which socio-economic status affects, for instance, risky health behaviours such as excessive drinking, smoking, and poor nutrition is still imperfectly understood although widely acknowledged. Rural health research, therefore, has to take account of the interconnectedness of rural economies and the health of the population. As with Indigenous health, improving health services will not, in itself, be sufficient to raise the health profile of rural dwellers.

In recognition of the link between poor health and socio-economic disadvantage, a call has been made for research programs and policies addressing the socio-economic disadvantages of living in rural, regional and remote areas (National Rural Health Policy Forum and the National Rural Health Alliance 1999: 42). Humphreys (1999) adds geographic isolation to the

equation. He argues that policies and programs designed to bring about improvements in the health status of rural and remote residents have been limited by the absence of systematic statistical data about health status and its relationship with place of residence.

Recommendation 58: Research which assists in the disaggregation of rural health disadvantage would be useful. That is, to what extent do factors such as socio-economic disadvantage and geographic isolation contribute to poor health status?

8. Further infrastructural issues in rural communities

Responses to our e-mail survey highlighted diminishing infrastructure as one of the major areas of concern in rural communities. The term is often not defined precisely, although it is generally used to refer to the services and facilities available. It can include telecommunications, banking services, transport systems, public housing, shops, civic associations and community networks, as well as the educational and health services discussed in previous sections of this report (National Institute of Economic and Industry Research 1998). This chapter discusses a number of these areas that affect the quality of life of people in Australia's rural regions.

8.1 Telecommunications

Over the last three years, a strong emphasis on the use of computer technology, particularly the internet, as the answer to rural decline has emerged in research and commentary on rural and remote areas of Australia. Three main constraints to effective electronic information systems in rural communities have been identified: high telecommunication prices, restricted access to education, training and user-support services, and inadequate technical capability of the telecommunications infrastructure (Buckeridge 1996).

The report *Rural®ional.au/for all* (Rural and Regional Working Party 1997) found that many rural people, already faced with dwindling farm profitability and declining levels of community services, believe that a lack of sufficient investment in basic telecommunications infrastructure is likely in the future deregulated market environment, and that any benefits of the so-called information superhighway will bypass them. Nevertheless, the study concluded that online services in rural Australia can build stronger local communities and provide a major boost to the competitiveness of rural industry through

- cutting the expense and inconvenience of government red tape
- providing better and more timely information to rural businesses on markets, business inputs, education and training services
- providing new opportunities for producers to market their products
- enabling producers and businesses to reduce costs through directly accessing suppliers
- providing opportunities for rural producers and businesses to communicate with each other, and to share strategic information and advice.

In *The role of the internet in rural communities*, Easdown (1997) identified ten major topics for research and development. Grouped under three headings, these topics were

- A. Building Rural Communities
- Identifying technical possibilities and limitations of rural telecommunications infrastructure.
- Fostering community initiatives for economic development using the internet.
- The potential for rural industries to alter services as a result of the internet.

B. Enhancing Farm Operations

- Longitudinal case studies of on-farm computer and internet use.
- Value-adding to existing uses of farm computers through e-mail and file transfers.
- The potential to foster niche marketing of rural products and services.

C. Networking and Professional Development

- Analysis of the role of existing Web-based rural bulletin boards.
- The role of listservers and bulleting boards in fostering rural networking.
- Development of agriculture search engines/information forwarding services.
- The value of the internet to enhance rural distance education.

Work in many of these areas has now been undertaken through funding from RIRDC, Networking the Nation and other government and industry resources.

RIRDC has commissioned extensive research on actual and potential use of the internet by farmers, as is indicated by the following publications

- Buying and selling online: the opportunities of electronic commerce for Australian farm businesses (Groves and Da Rin 1998a)
- Online education and training for Australian farmers: the role of the internet in farm education and training (Groves 1998)
- The 'third revolution' and rural Australia: an exploration of the economic and social impacts of farm internet use (Groves and Da Rin 1998b)
- The internet organisation: a study of the demand for and supply of internet content in rural Australia (Da Rin and Groves 1998).

This research has identified areas for the development of appropriate public policy strategies, including

- action to ensure availability of necessary telecommunication infrastructure, in a least-cost manner, with appropriate pricing policies
- involvement of government agencies in community initiatives to raise awareness and to aggregate local demand where that is necessary for the commercial viability of services – but with safeguards against the development of monopoly power

- provision of public access points
- development of internet services across a wide range of public services, such as health, education and training, and justice
- practical support for community initiatives, including both funding support and direct involvement of regional departmental networks in the development and implementation of regional initiatives.

The National Farmers' Federation, through its non-profit company, Farmwide, is undertaking various projects in this field, including

- Online Services Project – which established internet connections to 1,000 farms
- Farmwide Regional Access Network (FRAN) – which builds on the previous project, including trials of high bandwidth technology and projects focusing on video-conferencing, online learning and direct online trading and banking
- Internet access for communities – fifteen rural and regional communities are being offered local internet Point of Presence (POP) as part of the FRAN Project
- Farmwide Satellite Trial – a trial of satellite telecommunications technology, involving 400 satellite installations Australia wide.

(Farmwide 1999)

Evaluations of these projects will be undertaken to assist in further relevant development of appropriate telecommunications to rural and remote areas of the country.

The involvement of regional departmental networks, as referred to by Groves, has happened to some degree through the Community Information Network (CIN) pilot project undertaken by the (then) Department of Social Security between 1994 and 1997. The CIN project was a research tool designed to test whether information technology would improve the living standards of people on low incomes. It involved two components, an internet website and a publicly accessible network of computers. An evaluation of the pilot found that access to networked information technology 'can have a significant, positive effect on individual's living standards – particularly for people on low incomes' (Scott *et al.* 1997: 109). In a further examination of this project, Barlow (1996) found that community access points may well be appropriate in urban and suburban areas, but may not be sufficient to meet the needs of rural and remote communities as most are not geographically bounded localities with everyone in easy reach of the centre.

The use of telecommunications to deliver rural health services may have the potential to overcome some of the well documented health care disadvantages that exist in rural and remote communities in Australia (Australian Rural Health Research Institute 1996). Key issues have been the lack of access to the same level of health services provided in urban communities, as well as the lack of education, training and ongoing support for those health providers working in remote areas. 'Telehealth', a term used to encompass the full range of health applications for communications and information technology, is an approach currently being explored around Australia (Project for Rural Health Communications and Information Technology 1996).

Action research focusing on rural women's perspectives on communications issues, undertaken by the Queensland University of Technology, has revealed the need for development of 'soft' technologies to ensure that both social and economic development occurs in an integrated way in regional, rural and remote communities (Grace 1998). The project created a 'vibrant online community' (Grace 1998: 157) that facilitated links between women in rural and remote parts of Australia with urban women and women in other countries. The resulting online communication was embedded in a research project methodology characterised by community development processes and enabling ongoing daily communication among participants separated by vast distances. Overall the research demonstrated that community participation in information technology applications requires processes of awareness raising, knowledge and skills creation to accompany the provision of access. It concluded that, while relevant government policies and strategies emphasise the importance of consultation with rural communities in policy formation, as well as the role of rural community initiatives in the stimulation of demand for advance communication technology, insufficient advice has been offered about how this is to be accomplished.

A special report in the *Australian Financial Review* has addressed the predictions that new information technologies would enable Australian workers to leave the corporate office in droves, that productivity and work satisfaction would rise and other benefits would develop (Eiszele 1998). The practice, however, does not match the theory. Despite many organisations, including government departments, having formal telecommuting policies, this alternative way of working is not widespread. The reason for its unpopularity, the author found, lies in the detail – from the lack of technological support to the absence of much-needed social interaction. Consequently telecommuting or teleworking has been 'oversold' before many issues have been resolved. Claims of greater productivity from employees, as well as savings for employers, had not been properly evaluated. Moves in this direction have been initiated. In the northern NSW town of Armidale, a company has been established to cater specifically for the needs of remote workers in rural Australia. TeleTask Pty Ltd is an initiative of the Commonwealth government's Networking the Nation program and acts as an employment consultant, finding work for teleworkers.

Recommendation 59: It is recommended that research be instigated to collect case studies of rural communities that have successfully developed community-based internet services for socially and economically beneficial purposes. Analysis of these cases could provide useful pointers for other communities.

Recommendation 60: There is a need for research to provide a picture of the current use of telework in Australia, and the potential of telework to enhance employment opportunities in rural communities.

8.2 Banking services

When investigating trends in the delivery of banking services in rural and remote communities from 1991 to 1996, a study funded by the National Farmers' Federation found that there had been little previous research on this issue and that the process of withdrawal of banking services from many such communities was being undertaken without a 'focus on the needs of the rural sector' (Harrison 1997: 50). The principal drivers for closures appeared to be the banks' own commercial considerations (business efficiency and cost effectiveness), with decisions to close branches being based on the profitability of individual branches.

Whilst electronic banking was perceived by banks as a mechanism to maintain services, rural and remote communities did not have the same confidence in technology based solutions, particularly given that technology cannot presently handle the full range of services required by those clients (Harrison 1997). The report concluded that there should be further research into the impact of bank closures on the sustainability of rural communities.

Further research has been undertaken since the 1996 study. This has included *Economic and social impacts of the closure of the only rural bank branch in rural communities* (Beal and Ralston 1997), which covered five towns in NSW and two in Queensland, and *The effect of bank branch closures on country towns* (The West Australian Consultancy Centre and David Hides Consulting Group 1997), covering six towns in Western Australia. These studies have revealed that, following bank closures, residents and businesses experience difficulties accessing credit, exhibit a decreased propensity to save and are more likely to shop or conduct business in those neighbouring towns that retain full banking services. Consequently towns which have experienced bank closures are likely to suffer from contracting local economies, further service withdrawal and depopulation. Fairly similar conclusions have been drawn from research in rural Tasmania (Edwards 1999).

The Centre for Australian Financial Institutions, which conducted the first survey mentioned in the previous paragraph, repeated the research in the same towns in 1998, resulting in the report *Banking in the bush: the transition in financial services* (Ralston 1999). The results indicated that, while the initial impact of branch closure was significant to the economy, 'changes over the intervening period appear to have been for the better as communities make the transition to living without a local bank branch' (Ralston 1999: 27). Although post office agencies appeared to be well patronised for transactions services, giroPost was little used. Given the evidence of under-utilisation, the report pointed out that further research was warranted to establish the reason why. Overall, although there was evidence to suggest that some towns still lose retail spending through those who travel elsewhere to bank, the number of trips for this purpose had declined substantially. In conclusion it was noted that:

The presence of self-service methods and local face-to-face services play an important role in keeping cash circulating within the community. Until rural residents take greater advantage of such methods, loss of business and local turnover will continue, and community development and confidence will suffer. It is evident that the awareness and behaviour of residents is vitally important for the future of rural communities.
(Ralston 1999: 29)

The Australian Bankers' Association (1999) has welcomed the results of the latest study, which it sees as demonstrating that the impact of bank closures has not been as great as residents feared two years earlier.

The extra financial burdens placed on rural people as a result of closures have been documented in other studies. The Society of St Vincent De Paul (1998) has pointed out that when banking services are withdrawn, customers who want to transfer loans from one bank to another are charged a fee of up to \$2,000. Other research has shown that non-metropolitan areas have borne a disproportionate share of reduction in access to banking services (Cooney 1998). Evidence presented to the Human Rights and Equal Opportunity Commission (1999) lends further support to the conclusion that bank closures have created difficulties for some people in various rural areas.

While most studies have yielded important insights into the economic impacts of bank branch closures, a recent inquiry by the House of Representatives Standing Committee on Financial Institutions and Public Administration (1998) has highlighted a continuing lack of research on the social and planning issues associated with changes in rural financial services. Of particular concern to the Committee was the absence of information on the different impacts of bank branch closures on various social and demographic groups within communities, such as the aged, the poor or young people.

Concern about the effects of bank closures in rural communities has been expressed through other mechanisms as well. For example, in Western Australia a Regional Financial Services Taskforce examined the issues and reported them in *The withdrawal of banks from country towns* (Trenordan 1998) and subsequently fed the information into the previously mentioned Western Australian research. This report found that while potential alternatives to face-to-face banking did exist, an absence of research on the ability and/or willingness of rural communities to adopt such services hampered effective regional and local planning and policy making.

The National Farmers' Federation provided a submission to the Inquiry conducted by the House of Representatives Standing Committee on Financial Institutions and Public Administration, pointing out that 75 per cent of Australia's agricultural produce is exported and that any deficiencies in our financial system, compared with such systems in competitor countries, will be reflected in a reduced trade performance and a loss of income to Australia (Ritchie 1997). The Australian Local Government Association (1997) similarly made a submission to the Inquiry, pointing out that the availability of banking services is a particularly important element of the sustainability of small towns.

Initiatives currently being examined and/or undertaken to assist rural communities that have suffered bank closures include

- CreditCare – a cooperative project between the Commonwealth Government, the state government of NSW and Credit Union Services Corporation;
- The Pharmacy Guild's proposal to form a partnership with a bank to form 'GuildBank'
- Victoria's local government \$4 billion 'people's bank' proposal to manage funds and superannuation services
- Community Banks – A proposal currently being investigated in Western Australia to establish community owned banks - where a locally-based entity representing all or part of the local community purchases from Bendigo Bank the right to run a banking branch
- Use of Rural Transaction Centres to provide access to financial transaction services.

The recently released report of the House of Representatives Standing Committee on Economics, Finance and Public Administration (1999), *Regional banking services: money too far away*, found that in the course of its Inquiry there had been pronounced changes in the attitude of banks to the problems created by the closure of branches in rural areas. This included many of the banks acknowledging that they do have social responsibilities. While welcoming this development, the Committee commented: 'Although many have now made undertakings to maintain face-to-face services in communities in which they are currently represented, there are many communities for whom such commitments are being made too

late' (House of Representatives Standing Committee on Economics, Finance and Public Administration 1999). The Committee identified a number of principles that it considered should underpin formulation of policies or strategies aimed at ensuring that regional and remote communities have continued access to adequate financial services. It also considered it imperative that this access be closely monitored, noting that this would require systematic collection of data on an on-going basis.

Recommendation 61: Even though there have been several recent studies on withdrawal of financial services from small towns, there is a need for on-going monitoring of the situation and for an examination of the outcomes of various alternative provisions. This research should identify the impacts on particular sections of the community, such as farmers, local businesses and other citizens.

8.3 Universal service obligations and community service obligations

Related to various other issues is the question of whether particular organisations are fulfilling universal service obligations (USOs) and community service obligations (CSOs) in rural areas. USOs relate to services that government agencies or other organisations are required to make available to all citizens of Australia, no matter where they happen to live. CSOs relate to goods and services that specific organisations are required to provide on a non-commercial or partly non-commercial basis. Requirements that mail, electricity and telecommunications services be provided in rural and remote areas at similar rates to metropolitan areas are examples of CSOs, as also are requirements that transport and health services be provided at concessional rates for low income or socially disadvantaged people. CSOs are one way in which various equity goals can be achieved.

Although USOs or CSOs have often been the responsibility of government agencies, the full or partial privatisation of some government enterprises like the Commonwealth Bank or Telstra has highlighted the question of whether such organisations still have statutorily imposed USOs or CSOs and, if so, whether they are fulfilling these, especially in rural areas. It also raises the question of how CSOs should preferably be funded, delivered and monitored, and of their relationship to welfare payments. These issues have been examined in general terms by the House of Representatives Standing Committee on Financial Institutions and Public Administration (1997). The Committee did not examine the extent to which CSOs are being adequately fulfilled in rural areas in particular. It did, however, recommend that all governments should implement effective monitoring programs for CSOs and ensure that those programs become outcome oriented.

A recent publication by the National Rural Health Alliance (1998b) examines the meaning, the history, the benefits, the limitations and the costs of CSOs, also raising the question of whether CSOs should be extended to the banking sector, to higher education and to private health service providers.

Recommendation 62: Although there is a need for on-going monitoring of the extent to which universal service obligations and community service obligations are being fulfilled in rural areas, such monitoring should usually be undertaken by the relevant regulatory or welfare agencies rather than RIRDC.

8.4 Housing

There has been relatively little research on housing in rural Australia. At the time of the 1996 Census, 95 per cent of families in rural areas (as defined by the Australian Bureau of Statistics) lived in separate houses, compared with 81 per cent in major urban areas and 89 per cent in other urban areas. Fifty per cent of rural families fully owned their home, compared with 43 per cent in major urban areas and 39 per cent in other urban areas. The proportions of families purchasing their homes were fairly similar across all areas, at about 30 per cent. Consequently, lower proportions of rural families (17 per cent) were renting than was the case for families in major urban areas (24 per cent) and other urban areas (28 per cent). On average, rural families spent less per week on rent (\$77 median) than did families in major urban areas (\$168) and other urban areas (\$127). Rural families also spent less per week on mortgage payments (\$171 median) than did families in major urban areas (\$192), but slightly more than families in other urban areas (\$163) (Australian Bureau of Statistics 1998c: 43-44). While these figures indicate that housing tends to be cheaper in non-metropolitan than metropolitan areas, they are not necessarily indicative of the quality of housing, or of its affordability in relation to average incomes in the different areas. Nor do they indicate the extent to which the housing needs of specific categories of persons are being met.

The two most detailed studies of housing in rural areas are the *Rural Centres Housing Study* compiled by Econsult *et al.* (1989) for the Australian Housing Research Council, and *Housing and Services in Rural and Remote Australia* prepared by Trevor Budge & Associates *et al.* (1992b) as a background paper for the National Housing Strategy. Both these studies were designed to examine housing problems in rural areas and to assess the extent to which government policies could help to alleviate these problems. Both studies included an examination of the broader demographic and structural changes affecting rural communities. However, neither study addressed issues associated with housing on farms. The reason given for this omission in the first study was that ‘solutions to on-farm housing problems lie in the area of farm viability rather than housing assistance programs’ (Econsult (Australia) in association with Phillips MPW Australia 1989: ix). The second study stated simply that on-farm housing was a ‘separate but important topic’ (Trevor Budge & Associates with Graeme Hugo and June D’Rozario & Associates 1992b: xiii).

The *Rural Centres Housing Study* was based around three case studies (Dubbo, Swan Hill and Bundaberg) together with an analysis of data from the 1981 Census and the ABS 1984 Household Expenditure Survey. Both Dubbo and Bundaberg have populations in excess of 20,000, which puts them beyond the primary focus of the present report. Nevertheless, most of the conclusions of the *Rural Centres Housing Study* were confirmed in *Housing and Services in Rural and Remote Australia*, which was based on an examination of 22 towns, all but three of which had populations below 20,000. The second study made use, too, of Census data from 1981 and 1986 plus other surveys, including the *Victorian Rural Housing Study* that was undertaken by Trevor Budge & Associates (1992a) at the same time as the national study. A later study by Beer *et al.* (1994) contained information on housing in regional cities with populations larger than 20,000, arguing that the pressing housing issues in small country towns are not always the same as those in cities of 20,000 or 30,000 people. Despite some exceptions, one can conclude from these studies that housing in rural Australia, when compared with that in metropolitan areas, tends to be

- less expensive in land cost but more expensive in construction cost for a similar dwelling

- of more variable quality, less well maintained and renovated, due to lower capital gain expectations and higher maintenance costs
- often linked in its monetary value to local labour market conditions and degree of access to key services, particularly health and medical services
- generally less expensive to purchase, but not necessarily much more affordable as a proportion of average household income for the locality
- less readily available for rent
- less likely to be appropriate and obtainable to meet the specific needs of persons such as the aged, single persons, lone parents, people in itinerant occupations, the disabled, low income families, the unemployed, women and children seeking refuge from domestic violence, and young people who have left home for work, education or other reasons.

It is likely that some of the above generalisations apply also to on-farm housing when compared with housing in metropolitan areas, although systematic research would be needed to confirm this and to provide a fuller picture of the situation on farms. A recent report by Garnaut and Lim-Applegate (1998) gives details of the number of households directly associated with farming, whether living on-farm or off-farm. It does not give information on the number of on-farm households that had no family, business or employment relationship with the farm business, such as individuals renting a house on-farm. Nor does it provide data about the adequacy of on-farm housing, even for farm operators.

Trevor Budge & Associates *et al.* (1992b) refer to the entrapment of households in small towns heavily dependent on servicing broadacre farming. Often the family home is a household's only major asset. If located in a declining country town, it may act as an impediment to movement to a larger centre with better employment opportunities. Retirees in declining centres also often find it difficult to sell their home in order to buy a smaller new dwelling there or elsewhere.

Reference has already been made to the relative lack of housing for people with special needs in rural communities. Coorey (1990) has documented the particular problems faced by victims of domestic violence in country towns and rural areas. Although a refuge had been established in the small town she studied, 'everyone' seemed to be aware of its location. Often women were followed by their partners when spotted around town no matter where they had sought shelter. Consequently the refuge was occupied mainly by women from neighbouring towns. The lack of adequate accommodation was given as one reason why women in country towns and rural areas would not leave a relationship in which they were victims of domestic violence.

An important policy issue that is only slowly being addressed is the fact that many Indigenous people in rural and remote locations still have inadequate shelter, often lacking basic services, such as adequate water supplies, that most other Australians take for granted (Human Rights and Equal Opportunity Commission 1999).

Homelessness is often thought of mainly as a phenomenon associated with large cities. A recent study in and near Horsham in Victoria examines factors contributing to the experience of homelessness for a growing number of people in a non-metropolitan setting (Baker 1996). This prompts questions about the availability and allocation of public housing in rural areas.

An example of a policy issue relating to this is whether applicants who have been on the waiting list for public housing in one locality but who have moved to another locality for work-related or other reasons, go to the bottom of the waiting list in the new locality.

Housing stress is concerned with the extent to which housing needs are met and the extent to which the cost of housing impinges on the ability to meet other needs. The then Commonwealth Department of Health, Housing and Community Services funded research by King (1994) to develop indicators of housing stress. Despite that work and the prior work done in the early 1990s for the National Housing Strategy, the federal government appears to have retreated from an active interest in issues of housing other than housing for Aboriginal people and Torres Strait Islanders. This does not mean that the more general problems identified in previous studies of rural housing have necessarily disappeared. These problems have simply been given less visibility at the national level, being left largely to the States or Territories and local government.

Recommendation 63: There is need for research to assess the extent to which current policies at federal, state/territory and local levels are alleviating or aggravating housing stress in rural areas, and to identify initiatives that could help to reduce housing stress.

8.5 Transport

Transport systems in Australia are graphic reflections of the Australian colonial past in which separate colonies, linked by sea, developed ports as urban hubs from which transport infrastructure branched out into the rural hinterland. Road and rail networks are used to transport primary produce to markets and to bring manufactured goods to rural areas, as well as to maintain social relationships and provide access to various services. Transport linkages and services are also essential to the development of tourism and recreational activities in rural areas. Despite the economic and social importance of transport to and from rural areas, Witherby (1993) has argued that the existing system is 'encumbered by excessive and poorly targeted regulation, limited competition, fragmented policy and management, and piecemeal reform'. Though not confined to rural transport, a recent inquiry conducted by the House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform (1997) concluded that Australia's transport planning has, at best, been patchy and that the Commonwealth needs to take a leadership role in the development of a national strategic plan covering all forms of transport. To avoid past mistakes and to build appropriately for the future, such a plan should be informed by research that takes account of the needs both of urban and of rural communities.

The macro issues in transport include such questions as the economic, social and environmental impact of various transport systems, the balance between public transport and private transport, and the respective responsibilities of federal, state and local governments and of the private sector in planning, constructing, maintaining and operating transport infrastructure and transport services. Decisions on transport infrastructure, such as the location and quality of roads, can have profound effects on the wellbeing of rural communities. Good means of access to regional centres is important because many services are located there. Road conditions influence the efficiency, effectiveness and costs of service delivery.

Although the Commonwealth accepts responsibility for the funding, project approval and performance outcomes of the national highway system, the States/Territories act as the Commonwealth's agents in managing and delivering road projects on the national highway.

The national highway system represents only 2.3 per cent of Australia's total road network, but it includes many of Australia's long-haul freight routes and is the main artery between the major population centres (House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform 1997). With some exceptions, other roads are primarily the responsibility of State/Territory or local governments. Local government is responsible for about 80 per cent of all non-urban roads but usually receives some financial assistance from higher tiers of government for road building and maintenance.

In addition to freight requirements, there are diverse needs for passenger travel in rural areas. For example, there is long-haul and short-haul travel. Some travel is work-related. Some is undertaken to access goods or services, either locally or further afield. Some is primarily for social or recreational purposes. As it is difficult to provide public transport for relatively small numbers of people scattered over a wide area, it is not surprising that the private car dominates passenger travel in rural Australia (Witherby 1993). Where public transport does exist in rural areas, it is sometimes geared to the needs of tourists rather than local people (Cheers 1998).

While it is probably true to say that decisions on the national highway system are dictated more by the needs of people in the major cities that they link than by the needs of people living in the country (Witherby 1993), it would be wrong to assume that no benefit accrues to country people when improvements are made to these highways. The outcomes for country people will sometimes be mixed. On the one hand, people in regions through which the highways pass will have faster and safer access to the major cities. On the other hand, increased road traffic brings extra hazards to the towns and rural areas through which it passes.

The reduction of those hazards by the construction of bypasses may have different effects in different places. The economic impacts on small towns appear to depend in part on the potential for tourism. In Berrima, NSW, tourism increased as a result of the construction of a highway bypass. This increase was attributed to the fact that the historic features of the town could now be enjoyed without the noise and distraction of heavy traffic. By contrast, a town without the historic attractions of Berrima may experience an economic slowdown after the construction of a bypass (Bureau of Transport and Communications Economics 1996). As about 30 such bypasses are planned for construction over the next 20 years at a cost of \$1.5 billion (Bureau of Transport and Communications Economics 1997), studies should be made of the likely social and economic impacts of these bypasses and of ways in which any negative impacts can be mitigated.

In 1994, the National Roads and Motorists Association commissioned the Australian Council of Social Service to assist with a study of the relative equity in the provision and cost of transport in urban and rural areas, and in particular the nature and extent of transport disadvantage in rural areas. Amongst other things, the study found that in non-metropolitan regions there were very limited alternatives to the private motor vehicle. It also found that there were regional variations in the condition of roads after wet weather, in the variety and frequency of public transport alternatives, in the degree of integration of land use and transport planning, and in the impact of transport on other essential services like health and welfare (Finlay 1996).

Other studies have confirmed and amplified some of these findings. For example, *Bush talks* found that rural residents who are unable to drive – such as people aged less than 18, the aged, people with disabilities and those unable to afford their own car – often have difficulty

accessing medical and welfare services when these are located a long distance from the community where they live. Without a driver's licence and one's own vehicle, young people in rural areas find that their employment opportunities are very restricted – much more so than do young people in metropolitan areas (Human Rights and Equal Opportunity Commission 1999). In some circumstances, young rural women who rely on males for transport to and from social occasions are expected to 'pay' for the transport by means of sex (Hillier *et al.* 1996). Lack of public transport or of one's own motor vehicle has been identified as a significant factor impeding escape from domestic violence in rural areas (Coorey 1990).

Responding to problems such as these involves a trade-off between considerations of equity and efficiency. Even in metropolitan areas, public transport struggles to remain economically viable as an alternative to the use of private cars. It is virtually impossible to establish and maintain high frequency public transport services in small towns and rural areas. However, as noted in Section 7.1, studies should be made of ways in which cooperative transport arrangements between all health and community service organisations might be utilised more effectively and efficiently.

Recommendation 64: Further research is needed on ways of mitigating actual or potential negative social impacts of

- the lack of adequate public transport in rural areas
- the construction of bypasses

8.6 Tourism, recreation and leisure

Tourism, recreation and leisure activities constitute the world's largest industry. In 1994, this industry was worth \$US3.4 trillion, and generated one in every nine jobs (Richardson 1995). Despite the economic downturn of the late eighties and early nineties, the growth of inbound tourism to Australia was one of the highest in the world (Hall 1994).

The global phenomenon of the 'attraction of the rural' (Sorensen and Epps 1993b) helps explain the significant increase in tourism, recreation and leisure activities in rural Australia. The growth has generally been welcomed because it adds diversity to rural economies where the agricultural sector is providing fewer employment opportunities. However, in recent years a growing body of comparative literature has indicated that tourism, recreation and leisure activities may have some negative as well as positive consequences for rural communities (see Sorensen and Epps 1993b; Butler *et al.* 1998b; Prosser 1996; Faulkner *et al.* 1998).

Researchers and commentators have identified various issues that need to be taken into account in assessing the benefit of these developments for rural communities. Some communities may not be able to develop tourism, recreation and leisure opportunities because they do not have the right location or knowledge, or the inclination (Fennell and Weaver 1997; Jenkins *et al.* 1998; Kearsley 1998; McKercher and du Cros 1998; Weaver 1997). Support for local initiatives through the provision of information and training (Butler and Hall 1998b) may provide greater benefits to rural communities than government sponsorship of particular tourist projects. In this way, small enterprises can adapt quickly to changing demands of the tourism market (Epps and Sorensen 1993b). Other researchers have identified issues further removed from the economic success of ventures in tourism, recreation and leisure, but of potentially greater impact on rural communities. These include questions of

environmental, economic and social sustainability, the commercialisation of culture, and intrusions on local social space (Carroll *et al.* 1991; Craik 1991; Hall 1994; Hall and Jenkins 1998; Kearsley 1998; MacMillen and Lafferty 1991; Jenkins *et al.* 1998; Hall and Macionis 1998).

The nature of rural tourism is changing from a passive appreciation of the rural to an active use of the rural setting for explicit recreational activities. Where once tourism, leisure and recreation were an adjunct to rural life, now they are ‘...highly active and dominant agents of change and control of that landscape and of associated rural communities’ (Butler *et al.* 1998a: 3). Marketing strategies that aim to change the rural environment to fit the image of the tourist (Butler and Hall 1998a; Jenkins 1993) may raise community awareness of environmental and social consequences of tourism. This can lead to heightened tensions between the various types of activity, as well as between rural residents and tourists (Epps and Sorenson 1993a; Butler *et al.* 1998a). The market strategies involve a mythologising of the rural, a cultural and political construction of a rural reality for a growing market of consumers for whom novelty is paramount (Butler and Hall 1998b).

The marketing of tourism has used appeals both to ‘authenticity’ of rural cultural and environmental images and to ‘sustainability’ (Dewailly 1998: 134). Terms such as ‘ecotourism’, ‘nature-based tourism’ and ‘cultural tourism’ are indicative of these marketing strategies. These concepts fit legitimately with some definitions of ‘sustainability’ and ‘sustainable development’ (Butler and Hall 1998b). The goal of ecotourism is worthwhile, as the definition of the term by the Queensland Tourism and Travel Commission shows

Ecotourism occupies a specialist niche within tourism. It includes forms of tourism that are consistent with natural, social, cultural and community values and that promote cultural and environmental interaction in authentic natural settings.

(Queensland Tourism and Travel Commission 1999)

The promotion of ecotourism often reveals a lack of appreciation of the competing priorities that must be managed, and the extent, nature and complexity of its social impact. This trend is, however, changing with more recent publications taking a critical look at the direction of tourism, recreation and leisure policy (Butler *et al.* 1998b; Hall *et al.* 1997; Jenkins and Hall 1997). Recent publications also show a growing interest in and awareness of social impact issues (Braithwaite 1998; Carlson 1998; McKercher and du Cros 1998). Political and business sponsorship of ecotourism and ‘authentic experiences’ can undermine their legitimacy (Lawrence *et al.* 1997). The commercialisation of particular ecological and species ‘products’ may work against both ecological diversity and social sustainability (Richardson 1995) and as a result make ‘the tourism product of particular regions unsaleable’ (Hall 1994).

Governments and business have recognised the tensions between tourism, recreation and leisure and ecological sustainability, and have initiated or required environmental impact studies. In such studies, problems are defined primarily in technological terms, and technical solutions are sought. With this approach, policy makers may overlook social impacts on local communities, while offering the promise of growth, sustainability, and new forms of enterprise to the business sector.

There is a need for further study of the social impacts of tourism, leisure and recreation, in particular the effect on employment in rural communities, the consequences for local culture, and the impact of increased demand on accommodation and services for local populations.

Rural employment opportunities in tourism, leisure and recreation may not be as plentiful as commonly assumed. Employment is often of part-time, short-term, unskilled labour complementing skilled core groups who may not even be local people. This may support a 'youthful image' but does not provide a career path for young workers (Gill 1998; Hall 1994; MacMillen and Lafferty 1991; Saeter 1998). There is little research in Australia on farm tourism (Oppermann 1998). Some overseas research suggests that success in this sector is dependent on farmstay operators being well informed about the activities, such as birdwatching, that draw visitors to farm accommodation (Weaver 1997; Fennell and Weaver 1997).

Promotion of cultural and heritage attractions can result in commercialisation and devaluation of a culture, resulting in social breakdown. This may apply particularly to aboriginal people, but is relevant to any rural community with a strong commonly held sense of place and identity. The commercialisation of real or imagined cultural traditions in a competitive financial environment encourages the trivialising of local culture for financial gain and may result in significant cultural restructuring as well as economic restructuring (Butler and Hall 1998a). The techniques of anthropology have much to offer the new and undeveloped area of the impact of tourism on local cultures (Young 1998; Hall 1994; March 1998; Pearce 1998; Schuler 1998; Janiskee and Drews 1998).

Other impacts include the effects of rising prices on local lifestyles. Gill (1998) refers to the 'ripple effect out from the resort', where growth in land prices is matched by increased revenue demands for infrastructure development. This is associated with increasing demand for accommodation, increases in rents and housing prices, rises in living, leisure and retirement costs, and increased pressure on local community facilities. Crime may also increase (Jackson and Schmierer 1996). Economic growth based on tourism, leisure and recreation may provide only minimal economic gains for the local labour pool while intruding into Indigenous or community social space (Jenkins 1999).

Who should pay for research into the effects of tourism, leisure and recreation? There is competition for research funds to explore ways of promoting new forms of tourism. Local industry bodies are well placed to pay for research into new economic opportunities, and already pay for environmental impact research as part of applying for permits, but give advertising and promotion a much higher priority.

There has also been a rapid growth of organisations dedicated to environmental impact studies. The International Centre for Ecotourism Research (ICER), based at Griffith University, is one such organisation. The Johnson Centre at Charles Sturt University is also doing research in this field. (Johnstone Centre 1999a; Johnstone Centre 1999b). Its focus area is eco-systems in the Murray-Darling Basin, rural Australia and rural areas in the Asia Pacific region.

The formation of the Cooperative Centre for Sustainable Tourism (crcTourism) has united Griffith University, University of Queensland, James Cook University, Southern Cross University and Northern Territory University in a cooperative multidisciplinary approach to ecotourism research (Cooperative Research Centre for Sustainable Tourism 1999). The CRC research agenda covers the areas of environment, planning and business, as well as being involved in regional tourism research through the Centre for Regional Tourism Research.

Much less research has been done on the social impacts of tourism, recreation and leisure activities in rural areas than on the environmental and economic impacts. This deficiency should be corrected.

Recommendation 65: There is need for research that examines the impacts of tourism, recreation and leisure activities on rural communities, including the impacts on

- local employment opportunities
- local amenities and services, such as health care and recreational facilities
- the pricing of housing and land for local residents
- social structure and culture
- Indigenous communities

9. Other research issues

9.1 Indigenous issues

Indigenous people make up a greater proportion of the population in rural and remote Australia than in metropolitan areas, and issues relating to their lives and futures are linked with those of other rural Australians. In the past there has been little official recognition of this, but a number of recent developments have contributed to the far greater visibility of Indigenous issues in the bush. These include the impact of the Mabo and Wik decisions on farming and pastoral areas and the rural downturn which has been associated with politically conservative attempts to scapegoat Indigenous people in rural areas as the undeserving poor. We have incorporated Indigenous issues into many sections of this report, but it is important to acknowledge that there are additional Indigenous-specific matters that merit research.

There is a wealth of literature on virtually every aspect of Australian Indigenous lives, including very comprehensive Web-based materials (see the ATSIC Homepage and linked sites on <http://www.atsic.gov.au>). Employment, education, health, housing and land and heritage have been comprehensively researched and existing inequalities between Indigenous and non-Indigenous Australians in all these areas have been acknowledged in many national reviews, the most comprehensive of which was the Royal Commission into Aboriginal Deaths in Custody (1991). More recently, issues affecting the material and emotional wellbeing of Indigenous people have been aired during the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families (National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families (Australia) 1997).

There is a growing literature on Indigenous land and heritage issues and on potential and actual conflicts with other land occupiers in rural Australia (Sullivan 1995; Clarke 1997; Finlayson 1997; Martin 1997; Smith 1998). While the difficulties in mediating the different needs of Indigenous and non-Indigenous Australians attract much publicity, there are also significant attempts at reconciliation between these groups, over land, a national apology and other unresolved issues. Those involved with the Australians for Reconciliation movement include many rural based individuals and organisations.

Indigenous issues are minimally addressed in McGinness's (1996) review of social issues for rural and remote Australia, which mentions poor Indigenous health but declines to examine it on the basis that it is comprehensively covered by others. The education needs of rural Indigenous Australians receive more attention, and the Broadcasting for Remote Aboriginal Communities Scheme is cited. However, overwhelmingly, the issues discussed in that review are those faced by non-Indigenous rural Australians.

Perhaps not surprisingly, much more attention is paid to Indigenous issues in *Bush talks*, conducted by the Human Rights and Equal Opportunity Commission (Human Rights and Equal Opportunity Commission 1999). As well as dealing with health, education and housing needs, which are discussed elsewhere in this report, *Bush talks* describes a wide range of disadvantages faced by Indigenous Australians, particularly with respect to employment. Indigenous people spoke about the injustice of attempts to eliminate Indigenous-specific services. As one of them put it:

If we were to shut down all the Aboriginal programs and services, how would that help the under-privileged non-Aboriginal people? It wouldn't. It's a drop in the ocean. There are so many more under-privileged non-Aboriginal people than there are Aboriginal people in total, even though more of us are disadvantaged. What they [under-privileged non-Aboriginal people and their supporters] should be arguing for is to improve delivery of services to them, not take it away from *us* (Geraldton, WA).
(Human Rights and Equal Opportunity Commission 1999: 30)

The Web sites of pastoralist and grazier associations reveal that the possibility of native title coexisting with pastoral leases still deeply concerns some pastoralists. The opinion is sometimes expressed that these rural producers are paying the price for the rest of Australia's act of recognition of native title and reconciliation with Indigenous Australians. The situation is exacerbated by competing Indigenous claims over some areas of country (a situation representative bodies are seeking to resolve). In some places, concerns are expressed about the authenticity of claims of continuous association by Indigenous people. These issues will need to be resolved at law.

The historical association between primary producers and Indigenous Australians in various places is of long standing. In some parts of the country, Indigenous Australians were once an important part of the farm work force. Indeed, working in the pastoral industry was a means by which Indigenous people could maintain their association with country. Their participation in the pastoral industry was curtailed as a result of mechanisation (which affected rural labour generally) and also after the legislation requiring equal wages to be paid to them. More recently, some Indigenous communities have themselves engaged in various kinds of primary production (e.g. emu farming, running cattle stations, wild flower gathering).

In the current economic climate, there may be little opportunity within agriculture to alleviate Indigenous unemployment in rural areas. However, it is interesting to note the ways in which members of the mining industry are now talking with Indigenous elders and developing schemes for Indigenous employment within that industry (Council for Aboriginal Reconciliation 1997). Exploration of Indigenous ideas about land rehabilitation might be an area for positive interaction between the wider rural community, primary producers and Indigenous Australians, as well as a subject for action research.

Recommendation 66: Although there are many agencies funding Indigenous research, there is a case to be made for mainstream rural funding agencies indicating their commitment to rural reconciliation through the funding of research on case studies of primary producers and Indigenous Australians working successfully together. These case studies should examine the bases of such successful collaborations.

9.2 Women

Until recently Australian rural women have been largely absent from studies of rural issues, rural decision-making bodies and the popular image of agriculture (James 1989). The preconception of rural life as a predominantly male domain is false, as women have always played a major role in rural work, on the farm and in communities, and will continue to do so. Their contribution, however, becomes more visible in times of war, recession and drought when the range of tasks they perform expands and/or becomes more widely acknowledged.

Over the past five years there has been a ‘coming out’ of rural women in Australia (Haslam-McKenzie 1997). Through various mechanisms — including meetings with the Prime Minister and Federal Ministers; state, national and international conferences; workshops; consultations with State and Commonwealth governments; social research; formation of new rural and agricultural women’s networks and organisations and departmental reports/action plans — the status of Australian rural women is slowly changing (Women in Agriculture, International Conference Committee Inc 1994; Standing Committee on Agriculture and Resource Management 1998a; Standing Committee on Agriculture and Resource Management 1998b; Rural Women’s Unit 1996; Rural Industries Research and Development Corporation 1998a; Rural Industries Research and Development Corporation 1998b; Haslam-McKenzie 1998d; Alston 1995a; Alston 1998a). Farm women in particular have moved from a position as invisible actors in agriculture, accorded little recognition for their enormous contribution to families, industry and communities (Alston 1995b), to a position where they are being recognised as significant contributors to life in rural areas (Beilin 1998).

The 1994 Conference in Melbourne and the subsequent appointment of a Rural Women’s Unit by the Commonwealth government has seen observable changes at both grassroots and governmental policy levels, including the emergence of Australian Women in Agriculture Ltd. and The Foundation for Australian Agricultural Women. Further visibility was gained when 140 Australian women joined 1,200 women from around the world to examine rural women’s contribution to agriculture and their local economy, environment and social structure at the 2nd International Women in Agriculture Conference, held in Washington DC during 1998 (Haslam-McKenzie 1998a). The recent reports *National forum on women in agriculture and resource management* (Department of Primary Industries and Energy 1997), *Missed opportunities – harnessing the potential of women in Australian agriculture, Volumes 1 and 2* (Rural Industries Research and Development Corporation 1998a; Rural Industries Research and Development Corporation 1998b) and *A vision for change: national plan for women in agriculture and resource management* (Standing Committee on Agriculture and Resource Management 1998b) have also highlighted the needs and aspirations of rural women.

The *Missed opportunities* report has quantified women’s contribution to agriculture by stating that 32 per cent of Australia’s farm work force is female, with more than 70,000 women defining themselves as farmers or farm managers. The report concluded that women’s contribution amounted to at least 28 per cent of the market value of farm output or a gross figure of \$4 billion annually. Added to this, women contribute to the overall viability of farming through off-farm work totalling about \$1.1 billion, their voluntary work in rural communities is estimated at \$0.5 billion and their contribution in unpaid household work is about \$8 billion per year. The report identified the following barriers to women’s expanded leadership in the agricultural sector:

- organisational culture – attitudes and communication channels
- family unfriendly workplaces – lack of flexibility
- self-perceptions among women that their skills and abilities are not adequate for the task
- absence of role models and mentoring

- lack of recognised experience – due to failure of organisations to apply ‘merit’ principles, while valuing a narrow set of traits
- lack of access to training.

A recent report *Farmers at work: the gender division* (Garnaut *et al.* 1999) has recognised that much of the work of farm women and men is aimed not simply at earning an income but also at maintaining the home, contributing to a healthy family environment and, to a lesser extent, seeking the wellbeing of the community. In relation to off-farm work, the report found that the majority of women with off-farm employment occupied managerial or professional positions, whereas the largest group of men with off-farm work did labouring jobs, mainly for other farms. Further, more than half the farm women with off-farm employment worked in the education, health or community sectors. As a result of this study ABARE is currently undertaking further work, based on labour supply theory, on the off-farm employment decisions of farmers.

Leadership and involvement at decision making levels in agriculture-related organisations has emerged as a significant area of current research. Very few women have achieved leadership positions in such organisations, despite their qualifications, skills, experience and contributions to the industry (Alston 1998c; Claridge 1998). Although twice as many farm women as farm men hold tertiary qualifications, recent figures suggest that only 8 per cent of industry leadership positions and 17 per cent of AFFA sponsored Board positions are held by women. Some research has examined the ways in which gender and power relations and the culture of farm organisations act to restrict women’s access to leadership positions, notwithstanding the outspoken support for gender equity from some industry leaders (Alston 1998c). By offering public support for gender equality and then by failing to facilitate women as leaders, farm organisations appear able to absolve themselves of any further need to work for change. Alston concluded that the absence of women in leadership is not a reflection of lack of interest but of obstruction by those who hold the power to determine who shall lead the industry.

Fisher and Hutchinson have added to this debate by pointing out that rural women find it just as difficult to move into influential or leadership positions as do their counterparts in business and the public sector, but

...this is not from any lack of discussion or consideration by the rural leadership or governments, rather it stems from narrow views of what constitutes merit and a natural tendency to favour the way things are over change.

(Fisher and Hutchison 1997: 47)

Fisher and Hutchinson concluded that while considerable progress has been made in involving women in organisations in rural Australia, there are still real impediments. Impediments also exist for rural non English speaking background (NESB) women in relation to rural leadership. Research undertaken during 1997–1998 indicates that one of the major difficulties facing NESB communities in rural Australia is their low numbers in comparison to the mainstream community (Wilkinson 1998). Added to this is the range of ethnic diversity in rural areas and, particularly for first generation NESB women, the language barrier. Given the entrenched power structures within NESB agricultural communities, opportunities for NESB women, apart from being behind the scenes of power, seem very slim.

Research in rural Western Australia has found that the key issues raised by rural women were farm business viability, community sustainability, farm and business succession, health and education provision, ageing rural population, availability of labour, disposable income and stress (Haslam-McKenzie 1998b). Further, many women were concerned about the long term viability of their communities and how rural communities might be more inclusive of all ages and new ideas.

An examination of research literature relating to rural women points to a strong leaning towards research into women in agriculture and a deficiency of research into rural women who are not on farms. Exceptions to this generalisation include: *The good old rule: gender and other power relationships in a rural community* (Poiner 1990) and *A man's town: inequality between women and men in rural Australia* (Dempsey 1992).

Reasons why non-farm rural women have not been included in research to the same extent as farm women may include the source of research funding. Most funding has come from farm-related organisations, whether government or private. Consequently, in the overall picture, non-farm rural women have been rendered even more invisible than farm women.

A vision for change — national plan for women in agriculture and resource management (Standing Committee on Agriculture and Resource Management 1998b), identified issues such as the following as priorities for further research

- The relationship between off-farm work, farm viability and regional development
- The relative participation in industry and government decision-making by men and women
- Women's participation in various types of programs and training, including field days
- Use made by women and men of information technology and telecommunications as a way of accessing, managing and disseminating information; and the training needs relating to this
- Membership of women in industry and sector networks, including networks specifically for women
- Participation by women and men in rural community infrastructures
- Roles of women and men in regional development
- The part played by women in rural business legal structures, including ownership, decision-making, insurance, division of labour, and income tax arrangements
- Roles of ethnic and minority women in businesses in the agriculture and resource management sector
- Indigenous women's involvement in small enterprise in the rural sector, including both obstacles and advantages.

Research on some of these issues has recently been reported in *Leading women in agriculture* (Alston 1998b) and *Let's walk the talk inside the department* (Wilkinson and Alston 1998). Pini's (1998) feminist critique of some aspects of the discourse in documents such as *Missed opportunities* and *A vision for change* should also be noted.

Recommendation 67: Research should be commissioned to identify the needs of non-farm women in rural and remote areas of Australia.

Recommendation 68: In the research agenda on issues affecting farm women, there should be a place for consideration of matters of equity, not simply efficiency.

9.3 Youth

Government agencies in Australia, like those in many other countries, generally define youth as comprising persons aged between 12 and 25. This is a life-stage when people are making the gradual transition from childhood to adulthood. Ideally, this entails the development of increasing independence, the movement from school to post-secondary education and/or work, and taking on various adult rights and responsibilities. There may be variations from person to person both in the speed and the smoothness with which these transitions occur (Looker and Dwyer 1998). For example, with current levels of youth unemployment, the transition from school to work is problematical, especially for young people with very limited educational attainments (Looker and Dwyer 1988).

Some of the issues faced by young people in rural areas are similar to those faced by their counterparts in large urban areas, while others are different either in degree or in kind. Thus, while youth unemployment is a matter of concern in both the country and the city, the educational and employment opportunities for young people are generally more limited in rural than in metropolitan areas (Quixley 1992; Bourke 1998; Wyn *et al.* 1998). Consequently, there tends to be an out-migration of young people from rural areas, many never to return (Vincent and Visser 1996; House of Representatives Standing Committee on Employment, Education and Training 1997).

Because of their size and location, small towns and rural communities tend to amplify some of the problems faced by young people. Recent research by Wyn *et al.* (1998) and a study currently being undertaken by researchers from Edith Cowan University and the Centre for Small Town Development (Black *et al.* forthcoming) have identified some recurring concerns among young people in rural areas. These include the following:

- a. *Education.* One of the main reasons why young people initially leave country areas is to gain access to education. This is especially the case for young people from small and remote country towns and rural communities. Access to relevant education and training is a major concern for many young people in rural areas. Educational issues were discussed in detail in Chapter 6 above.
- b. *Employment.* Employment patterns in rural communities have changed substantially during the 1980s and 1990s. Many of the industries that previously provided employment opportunities for young people in rural areas, such as railways, banks, post offices and other government agencies, have reduced their work-force. Such work as is available for

young people in rural communities is often seasonal, part-time or casual. See Quixley (1992) and Chapter 4 above for further discussion of employment-related issues.

- c. *Accommodation.* The most detailed study of the housing needs of young people in rural and remote communities was made by Quixley (1992) as part of her examination of the barriers they encounter in accessing education, employment and training. In many areas there is a scarcity of affordable public or private housing that young people can rent.
- d. *Expectations.* Many young people find that the social attitudes and expectations in small country towns and rural communities are too restricting for them. Larger cities provide a degree of anonymity, an opportunity to stretch one's wings and to participate in various youth subcultures. Many young people in country areas feel that there is little room for them to let off steam or to do the kinds of things their city-based peers enjoy. This poses a real challenge to policy makers and parents who wish to ensure that young people in rural areas are not unduly disadvantaged. This is important not only for young people who remain in rural areas but also for facilitating the return of young people after they complete their post-secondary education.
- e. *Lifestyle and recreation.* A common complaint of young people in rural areas is that there are too few recreational and entertainment options available to them. The lack of such facilities can contribute to feelings of isolation and discontent, and to an image of rural life as being boring for young people. Studies of the outcomes of initiatives to address this issue would be useful.
- f. *Transport.* Closely related to the sense of isolation among some young people in rural areas is the lack of good public transport. This limits the access of young people to education, employment, entertainment and community services (including health services). For people under the age of 18 who are living outside of towns and provincial centres, lack of public transport means that they are reliant on others for access to various social events, health services and other facilities. This can be problematic when parents are insensitive to young people's needs or where young women are dependent on older males to provide such transport (Green and McDonald 1996; Hillier *et al.* 1996). For further examination of this issue, see Section 8.5 above.
- g. *Health and wellbeing.* At various points in the examination of rural health (Chapter 6 above), reference was made to specific issues affecting rural youth. These included the incidence of suicides among young men in rural areas (Section 7.8), the availability of mental health services appropriate for young people (Section 7.7), specific health needs of younger women (Section 7.11), and issues relating to the use of alcohol and other drugs (Section 7.13). A recent study by Hartigan and Clarke (1996) also indicated that young people, especially adolescent males and young men, constitute an important target group for farm injury prevention.
- h. *Participation.* Attempts to address the concerns of young people in small towns and rural communities have often been paternalistic and patronising. Young people and various youth organisations may be consulted for their views on various topics but rarely are they invited or encouraged to become active participants in planning and decision-making at a community level. This is part of the broader issue of patterns of leadership and decision-making in country towns and rural communities. The development of the ABC radio program *Heywire* is one recent initiative to give a voice to young people in rural and regional Australia.

There is also the issue of the extent to which young people are involved in decision-making at a farm level, especially those who have returned to the farm after completing post-secondary education. Little research has been undertaken on this, despite the fact that it is likely to affect the uptake of innovations on farms.

RIRDC has recently commissioned a review of research on rural youth (Bryant and Hoon 1999). This review contains various recommendations for future research in this field.

Recommendation 69: In addition to the recommendations under other headings and in the review by Bryant and Hoon, further research is needed on

- ways in which the needs of young people in rural areas can be more adequately met
- ways of involving young people in decision making on farms and in various community organisations.

9.4 Farm succession

Kaine *et al.* (1997) and Voyce (1997) note that in Australia agriculture remains a family business. Garnaut and Lim-Applegate (1998) support this claim and add the point that farm businesses are highly dependent on family labour. For example, in 1994-95, family members provided 85 per cent of all labour on broadacre and dairy farms. The issue of how the transmission of the farm occurs (indeed whether it occurs), when it should occur, and who the successor should be, may affect both the productivity and the economic viability of the farm. The question of farm succession is, therefore, of considerable importance.

The family farm is considered to have peculiar problems but also special advantages because there is the overlapping of two social institutions, the family and the farm business. Research by writers such as Gamble, *et al.* (1995), Alston (1997), Kaine *et al.* (1997) and McGowan *et al.* (1997), indicates that:

- Decisions are influenced not only by business concerns but also by familial interests and feelings. A sound financial judgment about how to develop the farm, what changes to make, and what level of indebtedness to incur, may be affected by family concerns about providing for children's education, acquiring a retirement property for the current farm operator, buying properties for non-inheriting children, and so on.
- The life cycle of the family places strains on farm finances at particular periods in that cycle (*e.g.* when the children need to go away to secondary school or for tertiary education). These demands of family may not fit with the demands of the farm business to expand, diversify or adopt new technologies.
- There is a commitment in many farm families to ensure that the farm is passed on as an inheritance, that is, there is a commitment to perpetuate both the life style and the farm business. There are some indications that a shift may be occurring from regarding farming as an inheritance to seeing farming as a business to be bought and sold.
- The wish to hand the farm as a viable entity affects the investment made in care for the property. If there is a successor, the current farm operator is more likely to engage in land conservation practices and make capital investments in new technology.

- The dominant inheritance pattern in Australia has been for a son, most often the oldest, to inherit the farm (Voyce 1996; 1997). Farm families have attempted to address the problem of inequity of preferencing one heir over other potential successors, both male and female, in various ways:
 - providing children not inheriting the farm with an alternative livelihood by buying them land elsewhere
 - giving non-inheriting children tertiary training which provides them with the means to make an alternative livelihood
 - utilising the labour of the inheriting son without giving him full remuneration for the value of his labour. His work is treated as down payment on the farm. At the same time there is a burden of duty placed upon the future inheritor both to contribute financially to the education of siblings and to provide support and care for ageing parents.
- (Voyce 1997).

These strategies have had to be balanced against the danger of threatening the financial viability of the farm business for the successor. This has meant that equity among offspring has not always been achievable, particularly as there is also a need to provide the retiring farm operator and spouse with a livelihood in retirement.

This summary of findings agrees with that contained in *Issues of New Zealand farm succession* (Ministry of Agriculture and Forestry 1998) which lists three universal conditions which must be fulfilled in managing farm transfer

- retaining an adequate retirement income
- being fair to all children
- managing succession so that successors and the farm business are not burdened by indebtedness.

In those parts of rural Australia where there is increased indebtedness or a decline in farm business incomes, the issue of succession has become problematic. Smailes (1997) found during the prolonged drought conditions in South Australia that farm operators in the sheep and wheat areas were sceptical about handing on the farm which had become such an onerous inheritance. Similar comments are reported in the research of Liepins (1997) and Haslam-McKenzie (1998c).

Furthermore, the exodus of young people from some rural communities, together with the training of rural young people in non-rural skills, may lead to their deciding that they do not wish to return to the rural area where their parents live. This may deprive parents of successors. In families in which children have been given tertiary education, there may even be a tacit agreement by parents that their successors should not return to farming. Barr and Cary (1992) describe instances where older farm operators are essentially trapped retirees without successors willing to carry on and with a depreciating asset which they are unable to sell at a price which will allow them to reaccommodate themselves near their children (a first preference) or even in their local town. The Barr and Cary example is a case where children of parents from non-English speaking backgrounds have been educated out of small scale farming.

Despite the importance of the issue, there is a reluctance within many farm families to discuss issues of farm succession and inheritance (Gamble *et al.* 1995; Kaine *et al.* 1997; McGowan *et al.* 1997). The increase in rates of divorce has made many farm operators reluctant to discuss farm succession with daughters-in-law and to transfer the farm to the chosen successor, lest the farm be sold or divided upon a divorce between the successor and his spouse (Voyce 1997). However, except for encouraging farm families to discuss issues of succession in a timely fashion and to seek professional advice where necessary, it is difficult to see how public policy can do much to change this situation.

Overall, the issue of farm succession has been relatively well researched. The reluctance of many farm families to discuss succession issues is well documented. Researchers such as Gamble and Blunden have made recommendations for extension and advisory programs to address these issues. Consequently, we are not recommending that further research on this subject should be commissioned now.

9.5 Disasters and risk management

The labelling of events such as droughts, bush fires, locust plagues, hail storms, floods and cyclones as either ‘disasters’, requiring government response, or, alternatively as ‘risks’ to be born by primary producers, will depend above all upon the social negotiations about who should bear any costs resulting from what has occurred (West and Smith 1996). There has been a significant shift in the way in which drought, for example, is being viewed by government agencies. Whether this reflects the dominant view in the wider Australian society and reflects ‘their’ sense of equity is still an open question. Whereas drought used to be regarded as something natural and disastrous for which agricultural producers should receive some compensation, current government policy requires amongst other things that agricultural producers manage risk by appropriate best practice, so that they are able to live through adverse natural occurrences (even if in straightened circumstances). It assumes that agricultural production should be market-driven and that the costs of wrong timing and over-production should be carried by the primary producer; likewise, how much stock to carry and what kinds of enterprises to engage in must be decided with awareness of cyclical adverse natural occurrences.

Whilst there is not a large literature dealing specifically with the social effects of such occurrences upon rural communities, there are some comments about negative outcomes related to drought. Garnaut and Lim-Applegate (1998) suggest that a trend in family farm businesses of dispensing with permanent employees and using mainly family members and relatives can be traced back to the severe drought beginning in 1982. Smailes (1997), carrying out research in South Australia, found that farm families in the inland, broad-acre farming regions, many of whom had been subject to near continuous crisis conditions for more than a decade since the mid-1980s, had lower average incomes than the population at large. He describes the situation of some as that of poverty, attributing this to agricultural restructuring processes aggravated by natural causes such as drought, excess rain, frost, and mice plagues. In this particular study, individual farm operators in the poorest circumstances queried whether farming enterprises were something to hand on when encumbered with heavy debts. Whilst debts were not viewed as caused solely by the drought, drought conditions made the servicing of debt difficult for some people.

The most comprehensive study of the ways in which drought is viewed by governments and by farming communities is that undertaken by Stehlik *et al.* (1999). This study also provides an analysis of the impact of prolonged drought in the 1990s upon farm families and rural

communities. Further research on drought related topics is being carried out by post-graduates at Charles Sturt University and Central Queensland University. The Centre for Disaster Studies at James Cook University pursues research into both 'natural' and 'anthropogenic' disasters. The main focus of its current work is on cyclones and on disaster relief measures.

The report of the recent review of the Rural Adjustment Scheme (McCull *et al.* 1997) notes the importance of risk management strategies for farmers, and provides a brief analysis of the wide variety of risks that need to be considered. It also suggests that additional research effort could be directed toward managing risks, including price and climate risks, and the development of risk management instruments. An examination of the Australian Rural Research in Progress database reveals that several studies in this direction have been completed in recent years and that others are currently underway. Before recommendations could be made for further research on risk management, a detailed review of existing work in this field for particular agricultural industries would be needed.

Recommendation 70: It is recommended that RIRDC, in conjunction with other rural R&D corporations, conduct a review of the adequacy of existing risk management instruments for farmers.

9.6 Crime

There has been relatively little research on crime in rural Australia. In an important pioneering work, O'Connor and Gray (1989) studied crime in Walcha, a local government area comprising a town of about 1600 people together with a similar number of people in the surrounding pastoral region on the northern tablelands of New South Wales. O'Connor and Gray found that although the inhabitants of Walcha thought of their community as being largely free of crime, Walcha's crime rate was fairly similar to the national average. Because of the relatively homogeneous and tightly knit nature of the Walcha community and its distance from larger towns, such crimes as did occur were not usually regarded as being a serious threat to the community. Any anxiety about crime was associated mainly with suspicion of outsiders, such as itinerants or people visiting the town for special events like the annual agricultural show (Gray and O'Connor 1990).

Other studies such as those of Devery (1991), the New South Wales Bureau of Crime Statistics and Research (1997), the Crime Research at the University of Western Australia (1998), Hogg and Carrington (1998) and Jobes *et al.* (1999) have shown that there are significant differences between rural communities in crime rates, and that some types of crime are, on a per capita basis, more frequent in a few especially problematic rural areas than in major cities. In 1996, for example, the murder rate in the Far West of New South Wales was 3.7 per 100,000 compared to 1.7 per 100,000 for the State as a whole (Hogg and Carrington 1998: 164-165). Likewise, in 1996 the rate of violent crimes against persons was higher in three of the non-metropolitan regions of Western Australia – the Kimberley, Pilbara and Gascoyne regions – than in Perth or in the other non-metropolitan regions of that State (Crime Research Centre, University of Western Australia 1998). Furthermore, in almost all non-metropolitan regions of Western Australia, proportionately more women than men become victims of violent crime. This contrasts with the situation in Perth and similar metropolitan areas, where official statistics suggest that males are victimised in violent crimes more frequently than females (Crime Research Centre, University of Western Australia 1998). Although some domestic and sexual violence remains unreported in both city and country areas (Ferrante *et al.* 1996), there is no reason to believe that such hidden violence is less prevalent per capita in the country than the city; indeed, Hogg and Carrington (1998) suggest

that rates of hidden violence are higher in rural communities than in metropolitan areas. A related issue is that of child abuse, on which Lonne *et al.* (1997) have provided some information for rural Australia.

The National Campaign Against Violence and Crime (NCAVAC) is a Commonwealth government initiative to develop, implement and promote programs, policies and projects that prevent violence and crime. This approach involves partnerships with a range of stakeholders, including Commonwealth agencies, State and Territory governments, local governments, non-government organisations, academic institutions, community groups and the business sector. The National Anti-Crime Strategy (NACS) is a shared initiative of State and Territory governments and is also supported by the Commonwealth. The task of the NACS is to harness Australia's crime prevention expertise and ensure that all agencies and officials cooperate to develop and promote best practice in crime prevention. The prevention of domestic violence has been identified as a priority area by the NCAVAC and the NACS.

In November 1997, the federal government allocated \$25 million over three and a half years for an initiative entitled Partnerships Against Domestic Violence. Various research and intervention projects have been funded as part of this program, some specifically focusing on rural and remote areas. The Department of Transport and Regional Services is supervising a project that aims to consolidate the existing research on the incidence and nature of domestic violence in rural and remote communities, to analyse data from the Supported Accommodation Assistance Program in order to identify victims' needs and extent of access to services, and to prioritise issues for research or intervention. Several projects deal with Indigenous communities in rural and remote locations. Indermaur *et al.* (1998) have developed a pilot program specifically to help young people in rural towns break the cycle of domestic violence. Acknowledging that it may be some years before their full impact can be assessed, it is important that there be on-going evaluation of programs designed to eliminate, or deal with the outcomes of, domestic violence in rural or remote areas.

Data from Western Australia indicate that rates of motor vehicle theft and of burglary of dwellings are generally lower in non-metropolitan regions than in Perth. However, there are some exceptions to this. For example, the rate of burglaries is substantially higher in Geraldton, a coastal town with a population of about 25 000, than in the Perth metropolitan area. To take another example: although, in 1996, the rate of motor vehicle theft per 1000 population was lower in the Kimberley region (6.9 per 1000) than in Perth (9.5 per 1000), the rate of motor vehicle theft per 1000 registered vehicles was much higher in the Kimberley region (40.4 per 1000) than in Perth (17.2 per 1000) (Crime Research Centre, University of Western Australia 1998). Differences such as these, whether in Western Australia or elsewhere, merit further analysis and explanation. The Regional Development Council in Western Australia has recently commissioned a three-year extension of the above mentioned study of regional differences in the incidence of crime.

An earlier study by Devery (1991) analysed the impact of various forms of social and economic disadvantage on proven offender rates in the various rural and urban regions of New South Wales. While that study, like others based on official statistics and ecological correlations, leaves some questions unanswered, it provides a well-argued defence of its conclusions. More recent data from New South Wales have been analysed in a somewhat similar fashion by Jobes *et al.* (1999). These publications, together with the work of Lincoln and Wilson (1994), Harding *et al.* (1995), Hogg and Carrington (1998) and Tyler (1998), should be carefully studied by anyone proposing to analyse and explain the incidence of various types of crime in different parts of rural Australia.

At a conference on Crime in Rural Communities, held at the University of New England in March 1999, the following issues were examined: the problem of drugs, alcohol and crime in rural areas; crime and aboriginality; crime and underlying social problems in rural communities; community-based crime prevention strategies; policing in rural communities; and methodological issues in mapping rural crime.

Recommendation 71: Without implying that major crime is a widespread social problem in most rural communities, there is scope for further research in this area. For example, little if any research has been done on white-collar crime (such as fraud, tax evasion, insider trading, illegal conduct by corporations, commercial misrepresentation, and the like) in rural areas. The relationship between economic or social deprivation and crime needs further analysis for rural Australia. So, too, do various proposals for preventing or dealing with crime. However, it is unlikely that RIRDC would wish to fund research into such issues, as they are not sufficiently close to RIRDC's core concerns. They fall more into the province of the Australian Institute of Criminology and of law and justice agencies at State/Territory and Commonwealth levels.

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