

**Burnett Mary Regional Group
for
Natural Resource Management**

**Community Issues for
Sustainability**

By

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Introduction

The Burnett Mary Regional Group for Natural Resource Management (BMRG) recognises that natural resource management involves not just effort to improve water quality or reduce soil erosion. It means sustainable local economies and vibrant social situations for communities as well as the improved condition of the environment. The condition of natural resources supports the economic and social life of communities and the future of the region depends on achieving a long term balance between the social, economic and environmental condition.

Many of the barriers to achieving this balance are social and community issues, not just technical or biophysical. The region has particular social and economic issues that need to be managed while attempting to improve the condition of natural resources. For example, rapid urban development on the coast contrasts with retaining population and services in inland parts of the region. The region is also influenced by broader social and economic trends such as the ageing population, increased casual and part time work, and a shift to services in the economy. Actions to better sustain natural resources need to take these community issues into account.

In turn, the social and economic situation of the region can determine how effectively natural resources can be maintained. For example, improving the condition of natural resources depends on landholders and others being economically able to adopt sustainable practices. Community leadership, trust and cooperation and the ability to link with “outside” organisations can also strongly influence the ability to achieve sustainable development.

This paper outlines the key social and economic characteristics of the region that need to be managed. They also influence how sustainable development can best be progressed in the region. It also discusses broader issues that support sustainable development and how these can be fostered in the Burnett Mary Region. Finally, it outlines the assessment of the social and economic impacts of the BMRG Regional Plan for sustainable natural resource management.

The social and economic profile of the region has already largely been described in other technical papers, in particular:

Saunders, M. 2004 Community Development Technical Paper, Burnett Mary Regional Group.

Curtis, A. and Herreria, E 2003 Queensland Burnett Mary Catchment: Social Profile, Social Sciences Program June 2003.

This paper does not duplicate these previous descriptions. Rather, it fills gaps in data and deals specifically with social and economic characteristics that are particularly important for achieving sustainable development in the region.

Key Issues in the Burnett Mary Region

The key characteristics and trends in the region influencing sustainability are:

- Population growth concentrated mostly in eastern and coastal parts of the region,
- An ageing population with a distinct “youth gap” – a reduced proportion of young people (15-29 years),
- Little cultural diversity,
- Increasing educational attainment,
- Relatively high levels of home ownership,
- The economy is diversifying with employment shifting into retailing and health and community services,
- Higher unemployment and less workforce participation than in Queensland as a whole.

Population Growth in the Eastern Part of the Region

The population of the region is expected to steadily increase from 269,000 in 2004 to 330,000 by 2019 (figure 1). This equates to an average annual increase of 1.54% compared to Queensland as a whole of 1.83%.

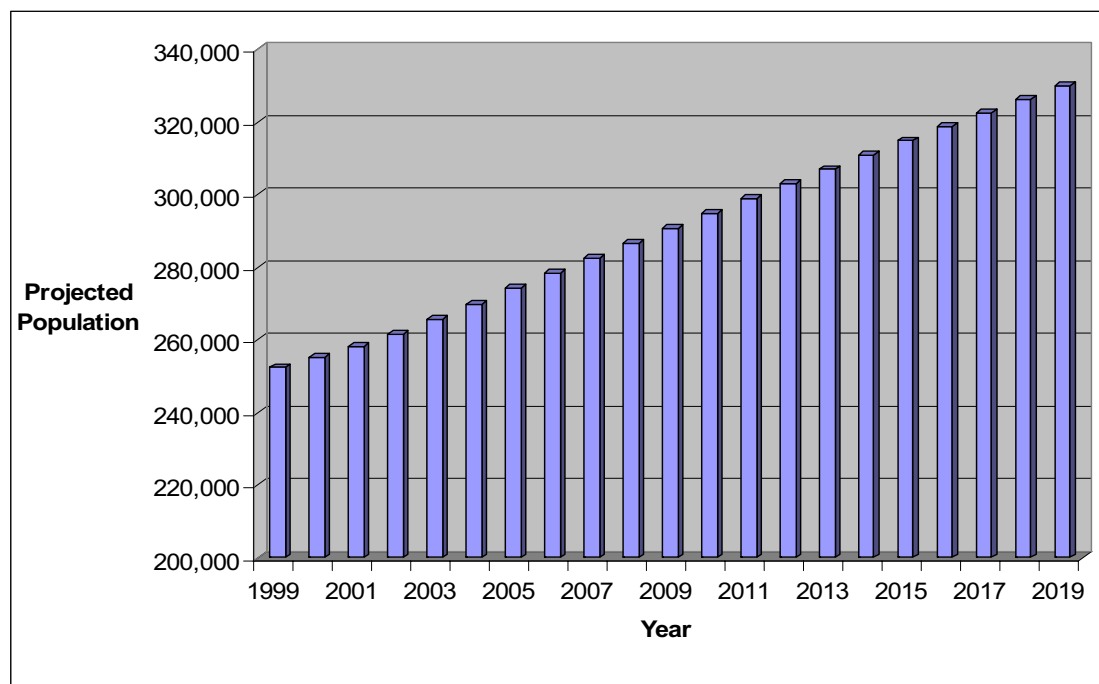


Figure 1. Actual population (from 1999 to 2004) and projected population (to 2019) of the Burnett Mary Region (Source: QRBIS database QESR, Queensland Government).

While the region has a relatively dispersed population, population growth is expected to be concentrated in eastern and coastal areas while several inland shires will continue to struggle to retain population and services (figure 2.)

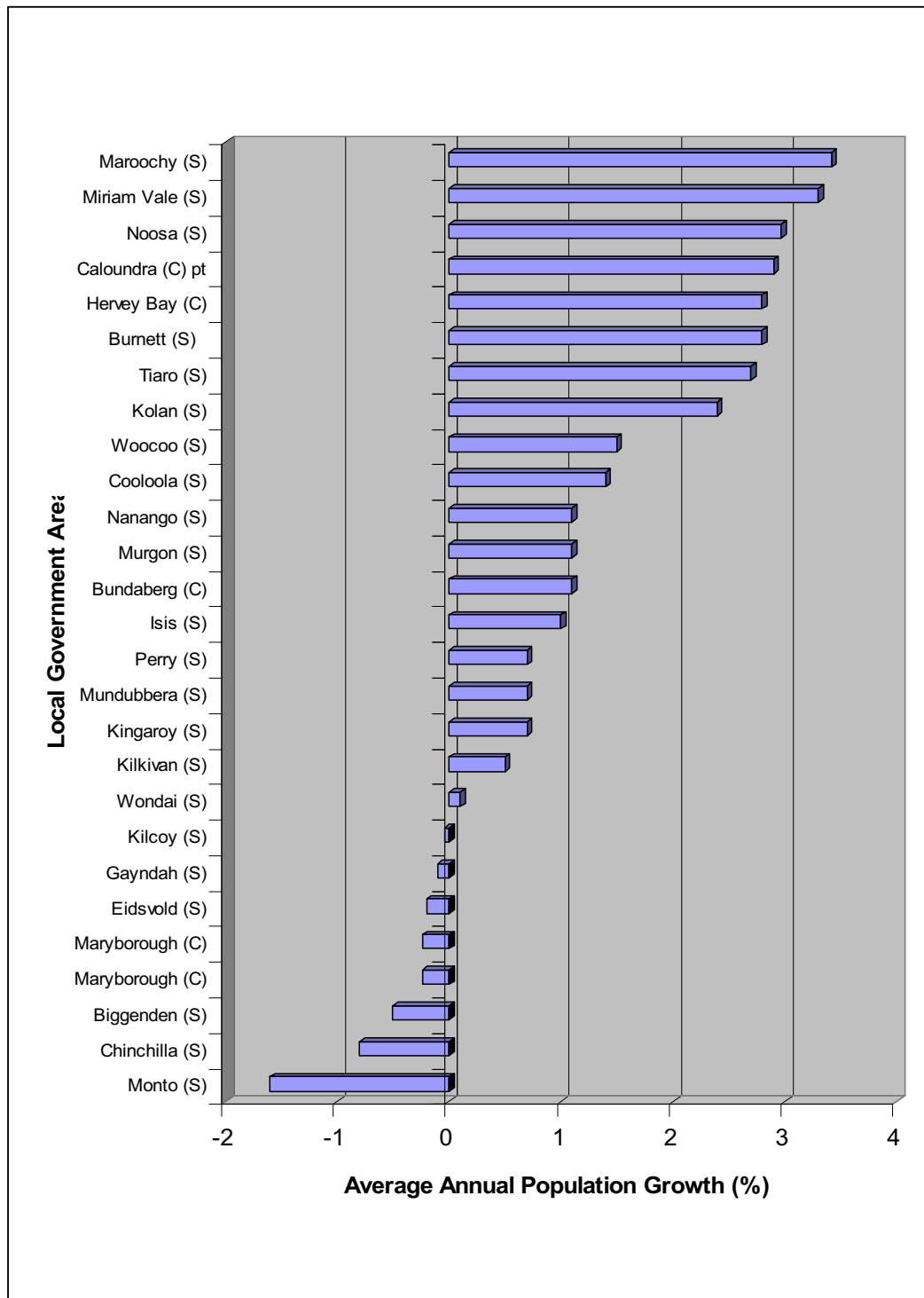


Figure 2. Expected average annual population growth in the local government areas of Burnett Mary Region (Source: QRBIS database QESR, Queensland Government).

Significant growth is expected in the parts of the Sunshine Coast hinterland within the Burnett Mary Region; and in Miriam Vale Shire, Hervey Bay City, Burnett Shire and Tiaro Shire.

An Ageing Population

The expected growth in population will also be concentrated in older age groups. The number of people in every age cohort over the age of 55 years is expected to increase by 3-5% per year (figure 3). Younger age groups are expected to grow far less rapidly and the number of people under the age of nine is expected to decrease.

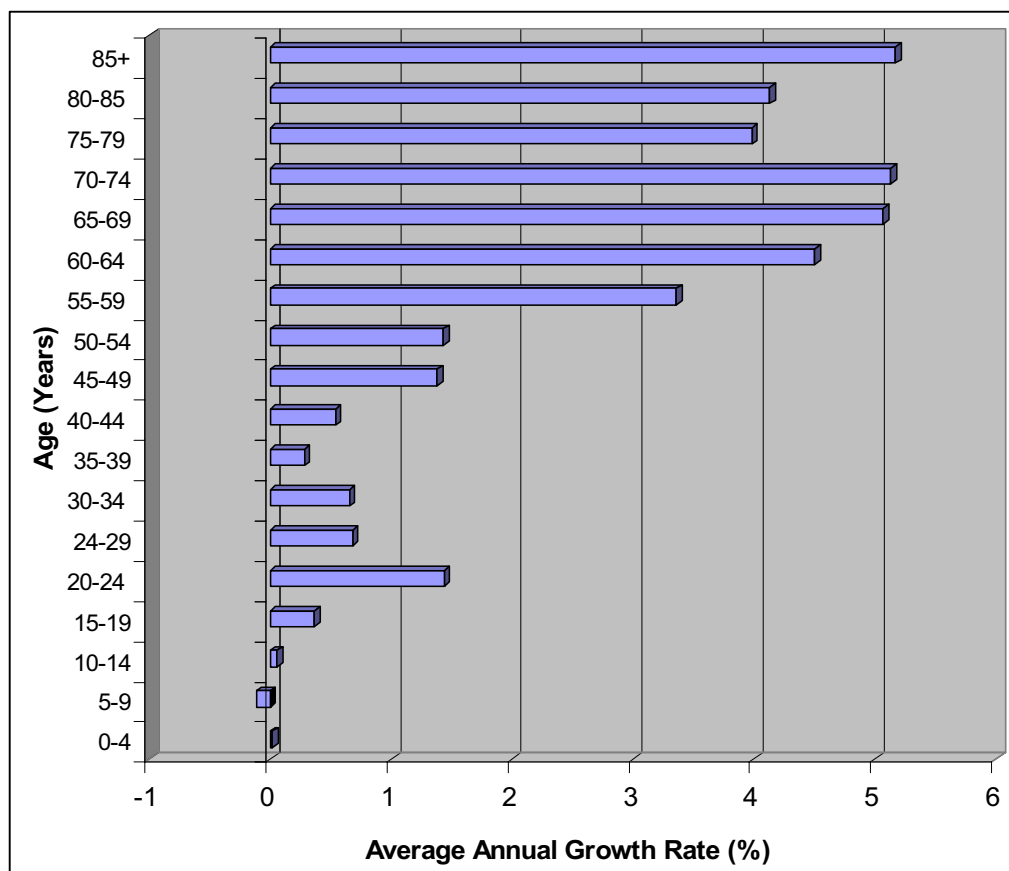


Figure 3. The ageing of the population in the Burnett Mary Region – the expected average annual population growth rate in age cohorts from 1999 to 2019 (Source: QRBIS database QESR, Queensland Government).

The median age of the regional population is 40 years compared to 36 years and 35 years for non-metro Queensland and Queensland as a whole respectively.

With a farmers' median age of 52 years, the farmers' population within the region is substantially older than the total REGIONcatchment population and slightly older than the farmers' population in non-metro Queensland (51 years).

A Youth Gap

Another key issue in the region is a “youth gap” – a much reduced proportion of people between 15 and 29 years in the region. Figure 4 compares the age structure of the Burnett Mary Region with that of Queensland. It shows a considerable “gap” in the proportion of 15-29 year olds in the region. This is largely due to young people pursuing education, travel or employment outside the region.

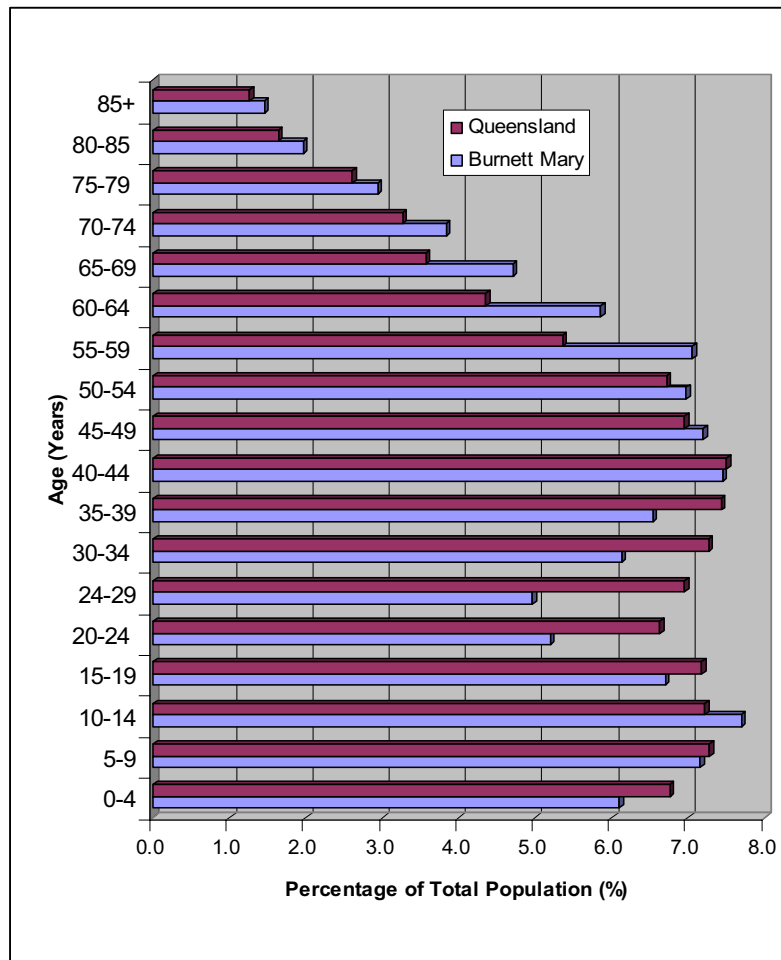


Figure 4. The percentage of the population in each age cohort for the Burnett Mary compared to Queensland as a whole (Source: QRBIS database QESR, Queensland Government).

Differences between the eastern and western parts of the region

A key aspect of sustainable development is the marked differences between areas within the region – Burnett East, Burnett West and the Mary (figure 5). Population growth is higher in the eastern areas of the region. There is a gradient of relative socio-economic disadvantage from the Mary to the Burnett west. This means that residents of the Mary area tend to have more employment, higher incomes and higher skilled jobs than western areas. There is a similar trend in the proportion of individuals with higher incomes.

People in the Burnett (west and east) have higher dependence on NRM based industries such as agriculture and forestry compared to residents of the Mary area. In the region as a whole 13.2% of people are employed in NRM based industries, well above the level in non-metro Queensland (8.4%).

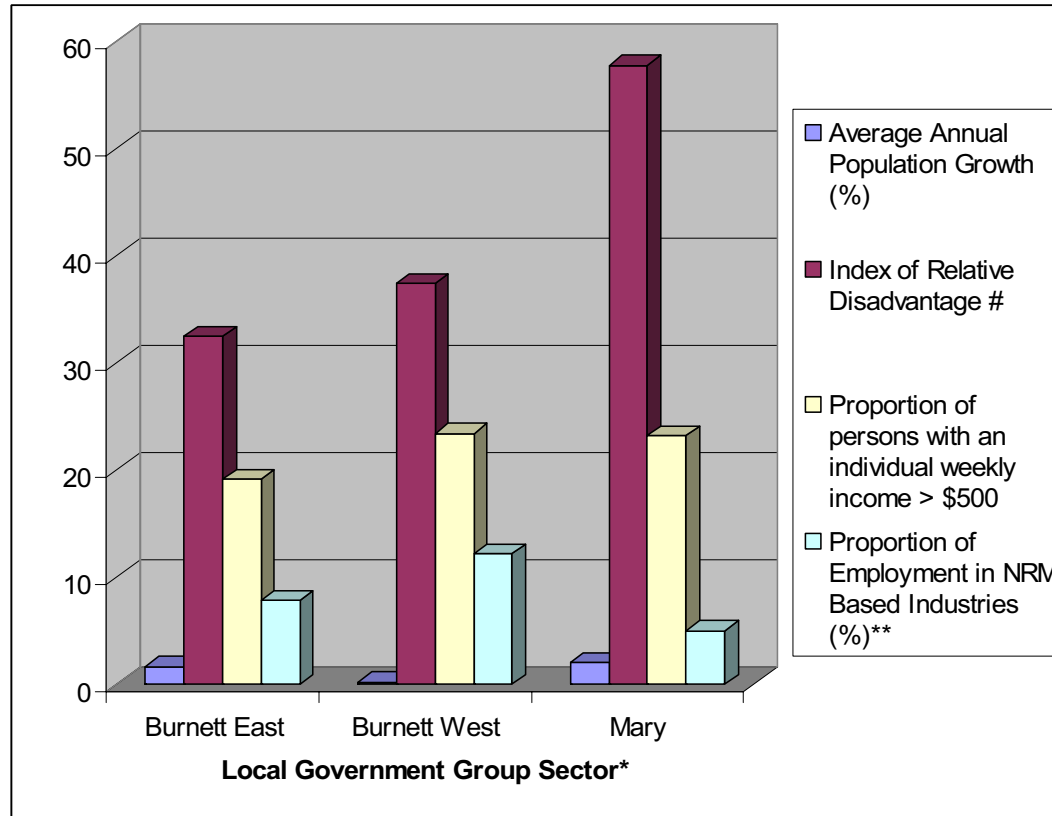


Figure 5. Key differences between the three main areas within the region (Source: QRBIS database QESR, Queensland Government).

* The local government areas in each local government group sector are:
 Burnett East: Biggenden, Bundaberg, Burnett, Isis, Kolan, Miriam Vale;
 Burnett West: Cherbourg, Chinchilla, Eidsvold, Gayndah, Kilkivan, Kingaroy, Mundubbera, Murgon, Monto, Nanango, Perry, Wondai;
 Mary: Cooloola, Caloundra, Hervey Bay, Kilcoy, Maroochy, Maryborough, Noosa, Tiaro, Woocoo.

The index of relative disadvantage is derived from a combination of levels of income, educational attainment, unemployment and the skill level of jobs. The higher an area's index value the less disadvantaged the area is compared to other areas.

** NRM based industries are deemed to be agriculture, forestry and fisheries. While other industries depend on natural resources, these industries are deemed to be most directly involved.

In western areas of the region, services generally have to be accessed from eastern centres. Western shires also appear to more socially “traditional” with a higher proportion of couples with children and separate houses.

Rural communities in the west of the region face the challenge of maintaining community leadership and participation with reducing population and resources. In larger eastern centres, community participation may be more limited by motivation and commitment than population and resources. Issues in the west of the region involve maintaining infrastructure and services. Community development issues in larger centres include managing the community impacts of increasing population, social cohesion, and appropriate housing.

These differences have implications for natural resource management and sustainable development. Not only does the nature of the environment and NRM issues vary particularly from the coast to inland areas, but social and economic issues also vary. In inland areas, the greater dependence on NRM based employment and the relatively limited economic capacity may mean that the potential economic impacts of achieving more sustainable production may need to be mitigated to ensure continued short term viability. While there may be less economic capacity to manage change, the social cohesion of these areas may be particularly important to people learning about and implementing NRM practices.

Increasing Educational Attainment

The level of formal education together with informal knowledge and skills is important to the ability of residents to achieve sustainable natural resource management. While people in the region have extensive skills and experience, they have lower levels of formal educational attainment compared to the state population. For example, 8.3% of Queenslanders people have a bachelor degree compared to 4.9% for Burnett Mary residents (figure 6). However, in line with national trends, the level of educational attainment has been steadily increasing. Since 1991 the proportion of residents with a bachelor degree has almost doubled and the percentage of people in the region with school only has steadily reduced.

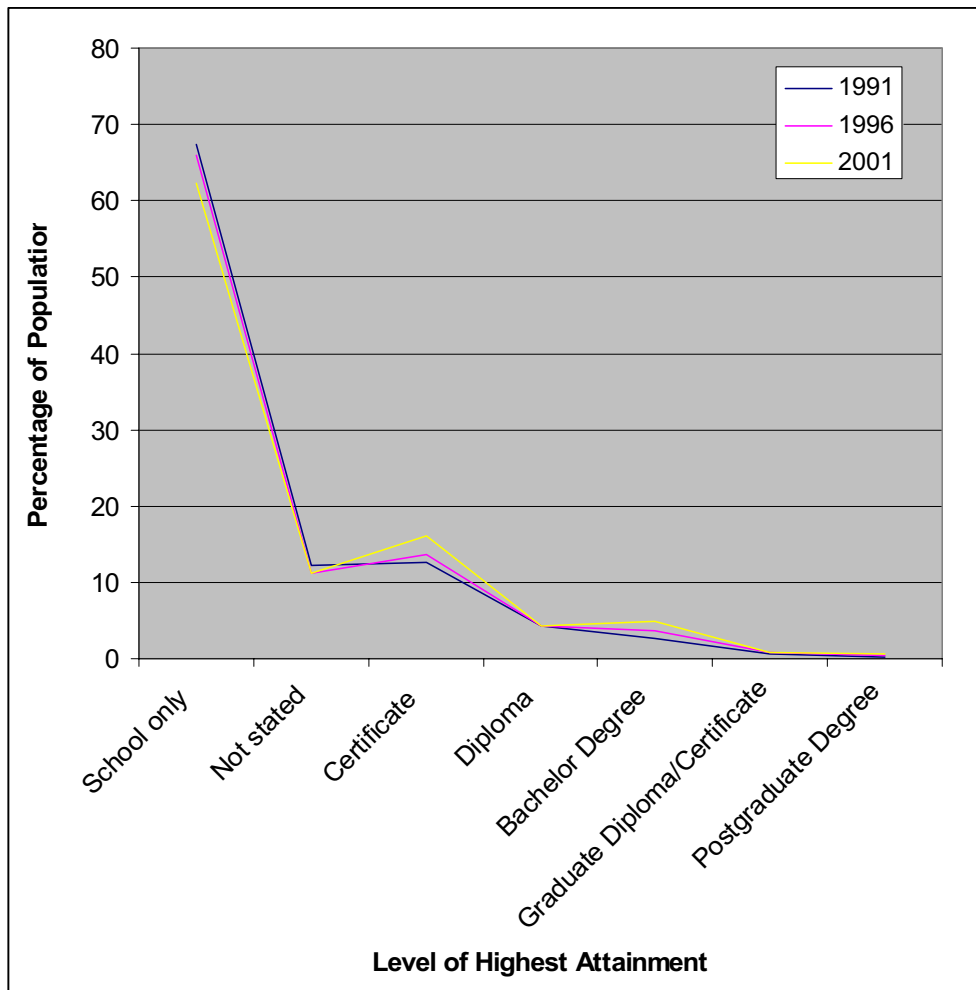


Figure 6. The level of educational attainment of residents of the Burnett Mary region (Source: QRBIS database QESR, Queensland Government).

Relatively “Traditional” Family Arrangements

In the region, a lower proportion of people live in families comprising “a couple with children” (42%) than in the state (44.9%). The proportion of persons living in single parent families in the region is marginally higher (11.3%) than for Queensland (11.0).

Less culturally diverse

A considerably higher proportion of the region’s population were born in Australia (83.5%) compared to the Queensland average (76.2%).

Please refer to Saunders (2004) for a detailed description of housing in the region

Economic Characteristics

A Gradually Changing Economy

Most people are employed in retailing, primary industries, manufacturing and health and community services (figure 7). This pattern has been consistent over time but in line with broader trends, the proportion of employment in manufacturing and agriculture is decreasing in favour of employment in retailing, and health and community services.

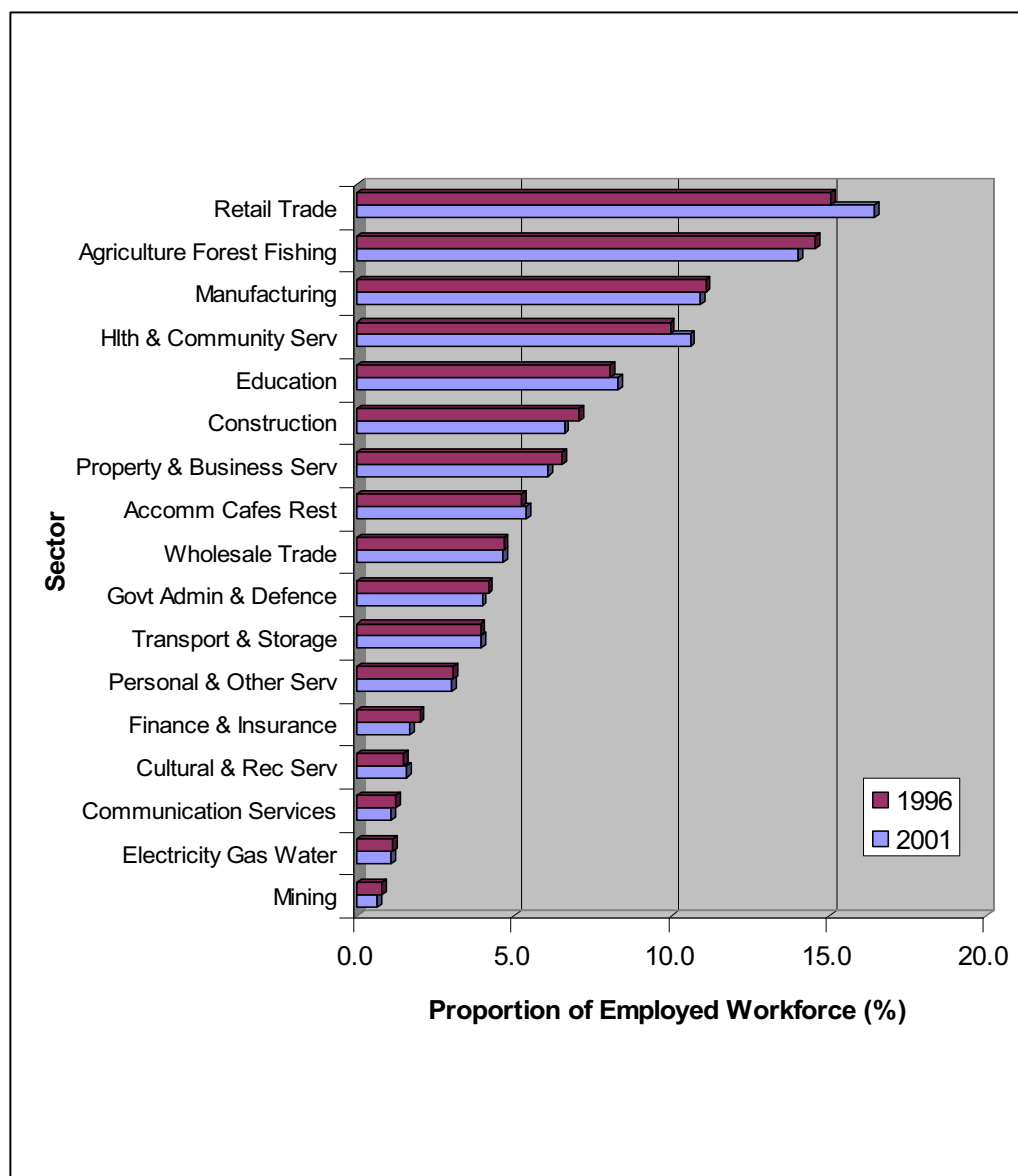


Figure 7. The proportion of the employed workforce in various sectors of the Burnett Mary economy (Source: QRBIS database QESR, Queensland Government).

Lower Labour Force Participation

Compared to the state, the region has a lower level of participation in the workforce (figure 8). The unemployment rate in the region (11.5%) is double that of the state (5.6%). Youth unemployment (19.5%) is higher than the average for Queensland (14.9%). The labour force participation rate and employment to population rate are also relatively low compared to the Queensland non metro area and the State as a whole (Curtis and Herreria, 2003)

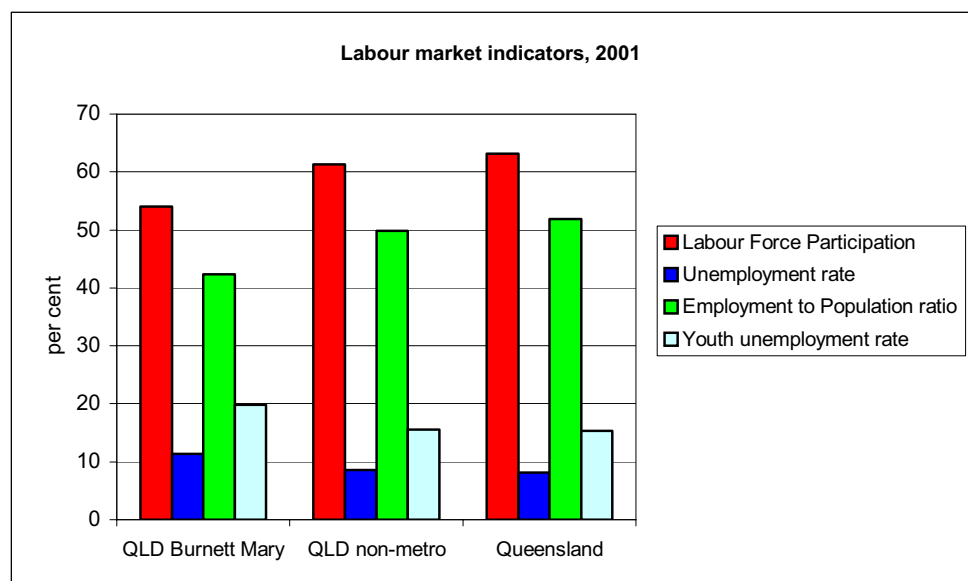


Figure 8. Labour market indicators for the Burnett Mary region compared to the state (From Curtis and Herreria (2003)).

Lower Income

Median family income in the region (\$26659 per annum) is significantly lower than the state average (\$34977 per annum). This extended across all LGAs with no shire more than 90% of the state median income (Saunders, 2004).

Economic Restructuring

Key industries in the region, such as the sugar industry, face major economic change. Industries in the region must increasingly compete in a global marketplace and meet community expectations of affordable high quality produce from “clean, green” production systems.

Natural assets are expected to form a stronger part of the economic future of the region as the base for tourism, sustainable agriculture, alternative primary industries, amenity, and basic necessities such as residential water supplies.

The above issues show some of the key characteristics of the region that need to be considered in achieving sustainable development. There are also some important changes occurring in accessing services, engaging with communities and in community capacity in the region that influence sustainable development as described below. Much of this information is based on community feedback via local roundtable meetings and other community consultation by the Burnett Mary Regional Group.

Community Services

Some key changes in services to support communities are as follows.

Meeting service demand: The areas of rapidly increasing population, largely on the coast and in urban centres, will require services to meet the population demand. Particular services, such as aged care, will need to be expanded to meet growth in specific demographic demand. Direct service delivery, particularly in rural areas, has generally declined as public services have tended to concentrate in major centres and as businesses have also moved from smaller centres.

Changes in service delivery: The nature of how services are delivered has changed, such as greater use of information technology to access information and services, multipurpose health services and community banking. Multipurpose “shopfronts” for government services such as Rural Transaction Centres and Queensland Government Agent offices have been established in smaller communities.

Community responsibility: There is a trend towards greater community responsibility in service provision with government partnering or “subcontracting” service provision to community groups. People in the region have raised the trend towards devolution of responsibility for service provision from state and federal government to local government.

Community Engagement

There are increasing expectations by government agencies and others to engage with communities and for community ownership and community-based action to be developed. A range of avenues are available for people in the region to engage with government and others on NRM issues.

Yet, a proportion of people in the region feel disaffected from community participation and engagement, particularly with government. Many rural residents feel dissatisfied with government responses to the impact of economic and social change. Some people feel over-consulted and have had poor engagement experiences in the past, such as in the case of consultation on vegetation management. There has also been a lack of follow up and continuity in many engagement processes. Controversial issues such as water reform, vegetation management, and the regional forest agreement have also disenchanted some regional people. “Consultation fatigue” and disengagement has been due in part to community members perceiving limited influence on issues.

There needs to be effective avenues for the broader community and BMRG to engage with each other. In managing the regional plan, BMRG needs to have the capacity to manage the potentially conflicting views in the community about NRM, and the likely conflict involved in changing natural resource use practices.

Community Capacity

Activities that foster community capacity are not new in the region. For decades, community members across the region have participated in their community and conducted a range of local activities that have fostered local communities and social cohesion. However, sustainable development approaches can benefit from greater coordination, resourcing and continuity. Arrangements need to also include incentives for collaboration, communication and joint action.

There is a solid base of community participation in traditional organisations in the region. However, rural communities are experiencing a reduced number of “drivers” or leaders. In the eastern more urban centres in the region there is an opportunity to engage a broad range of people in leadership roles, and engage with older people who may have more time to participate in community activities that support sustainable natural resource management. Broad changes in society are leading to a trend away from traditional forms of community participation. People are tending to postpone participation in their community until they retire and to participate in events rather than organisations.

Attitudes

Changing natural resource management practices depends on changes in the decisions and behaviour of NRM managers and by the urban population. This behaviour change involves individual and collective changes in attitudes and values. For example, urban “consumers” need to recognise the true cost of goods and services including environmental costs. The broader community and governments also need to understand that public dollars will need to be spent “upstream” to achieve NRM outcomes.

Confidence: Community members need to develop confidence in the NRM planning process. Some people have been disengaged by some previous consultation experiences and may have little trust and respect for NRM planning. Trust needs to be rebuilt through arrangements that support continuity in relationships, demonstrated action on the ground and government support for community planning.

Ownership: There appears to be general support for greater community ownership of issues such as NRM, but people are suspicious of responsibility being transferred to communities without communities having genuine control. People have a strong interest in retaining local community based action such as Waterwatch.

Knowledge and Skills

Changing natural resource practices will require additional knowledge and skills ranging from conceptual understanding to specific applied skills. This largely involves opportunities to enhance existing knowledge and skills.

Access to expertise: There is considerable local and professional knowledge about natural resource management in the region. This is largely based on the experience of regional landholders and NRM specialists with expertise relevant to the region. Regional people have noticed a tendency towards reduced presence of agency staff in the region and key individuals being more thinly spread. There is also a trend towards less face to face access to individuals with expertise.

NRM Knowledge and Information: While the condition and processes of some natural resources in the region have been researched, there are knowledge and data gaps with regard to many natural resource systems in the region. While it is unrealistic to expect that all research needs will be addressed, a key issue is ensuring that the region accesses research based in major research centres such as Cooperative Research Centres.

Skills and Learning: Managing the complexity of sustainable NRM practices within social and economic constraints; and balancing social, economic and environmental issues more generally, will require considerable skills and expertise. There is a need for ongoing formal training, informal learning, knowledge sharing and action research ranging from conceptual understanding to specific applied skills.

There are clearly a wide range of social, demographic and economic changes influencing sustainable development in the Burnett Mary region. There are also several community and human issues that affect the capacity of individuals, industries and community organisations to engage in and achieve more sustainable NRM practices. What then are the ways in which sustainable development can be achieved? The following section outlines some of the principles and approaches involving communities in sustainable development.

Community Approaches to Sustainable Development

The community aspects of achieving a more sustainable balance between social, economic and environmental condition are very complex. Many interacting factors influence the implementation of sustainable natural resource management practices both in terms of natural resource management decisions, and in terms of consumer behaviour and social attitudes. Personal attitudes, social networks, economic capacity, institutional arrangements, planning and decision making, and conflict management are all aspects of achieving sustainable use of natural resources.

Many authors support the principle of balancing economic, social and environmental condition. Flora (1997), Putnam (1993), Norton (1997) and Flora et. al. (1992) argue for communities to enhance at least five forms of “capital” – physical, financial, social, human and environmental. Other authors support the inclusion of cultural capital – the attitudes, mindset, multiculturalism and artistic life of communities.

There is extensive literature on the components of how communities can better achieve this balance and foster greater social, economic and environmental vitality. While much of this discussion is focused on the social and economic vitality of communities, many of the principles can also relate to communities sustaining their natural resources. These

components of sustainable communities gives insight into possible directions for the Burnett Mary Region.

Lackey et.al. (1987) summarised many of the factors that build community sustainability in suggesting seven characteristics based on the work of several others:

1. Local groups with well developed problem solving skills and a spirit of self reliance (Kaufman, 1959),
2. Broadly distributed power, commitment to the community and wide participation in civic affairs (Warren, 1983),
3. Leaders with vision and residents with a strong sense of community loyalty (Sanders, 1953).
4. Collaboration and consensus on goals and priorities (Cottrell, 1983),
5. Citizens with problem solving skills and the ability to acquire resources (Iscoc, 1974),
6. Government that provides enabling support (Glick, 1983),
7. Ability to manage community conflict (Schoenberg and Rosenbaum, 1980).

Others generally support these characteristics (Goudy, 1977; Rutter, 1981; Heartland Centre, 1996)

Shaffer (1989) identified the following components of community vitality:

- A slight level of dissatisfaction – motivation and enthusiasm based on a feeling that “things could be better”,
- Belief and expectation of self help – a belief in the future of the community and a conviction that realising that future depends on the action of community members,
- Local Leadership – committed formal and informal leaders that can enthuse and support others, foster “shared leadership”, accept criticism, and act as local champions for community development efforts,
- Collaboration – a strong culture of cooperation and participation,
- Willingness to experiment and take advantage of opportunities,
- Cultivate Allies – actively seek, inform, and network with outside supporters,
- Work hard and stay with the process, especially when there is a setback,
- Focus on specific actions without losing sight of the “weird and wonderful”.

Luther and Wall (1998) developed 20 “clues” to community vitality. Some key ones are:

- Evidence of community pride,
- Emphasis on quality of business and community life,
- Willingness to invest in the future
- Participatory approach to decision making
- Cooperative community spirit
- Realistic appraisal of future opportunities
- Acceptance of women in leadership roles
- Active economic development programs
- Willingness to seek help from outside
- Well maintained infrastructure
- Conviction in doing it themselves
- Deliberate transition of power to young people

The Coalition for Healthier Communities (1999) identified the following components from extensive community input on the attributes of a sustainable healthy community. Such a community:

- Shapes its future;
- Cultivates leadership everywhere;
- Creates a sense of community;
- Connects people and resources;
- Knows itself;
- Practices ongoing dialogue; and
- Embraces diversity.

Flora and Flora (1995) listed eight characteristics of successful communities:

- Acceptance of controversy,
- Ability to depersonalise politics,
- Surplus income to invest
- Willingness to take risks
- Ability to define community more broadly
- Network ability
- Emphasis on academics
- Flexible dispersed leadership

The Aspen Institute (1996) described the components of community capacity building as the following outcomes:

- An expanded, diverse, inclusive citizen participation base,
- An expanded leadership base,
- Strengthened individual skills,
- A widely shared, understood and agreed local or regional vision for the future,
- A strategic community agenda (i.e. a widely agreed strategic plan),

- Consistent, tangible progress toward community goals,
- More effective community organisations,
- Better use of resources.

Other approaches focus community action on building various aspects of community capacity such as leadership, human resources, community organisation, local institutions as well as economic development (Burgess, 1996). Stephens (2001) stressed planning and prioritisation and integration of approaches. Kretzmann and McKnight (1993) and McKnight and Kretzmann (1990) focus on enhancing community assets emphasising:

- Communities understanding existing assets such as community organisations, businesses, schools, or associations,
- Creating effective organisations to conduct community work,
- Implementing a process of community decision making and action,
- Building links to outside organisations.

Lackey et. al. (1987) gives the most concise summary of the characteristics of vibrant communities as follows:

- Attitudes and values - a positive community vision and community pride,
- Capacities – knowledge and skills, ability to perform functions,
- Organisational arrangements that foster community participation,
- Leadership – shared community-wide leadership and skilled individual leaders.

Specific NRM approaches

A limited number of authors have addressed social and community issues specifically with regard to natural resource management. Aitken (2001) clustered social issues into six overlapping categories:

1. Understanding communities as a basis for achieving sustainable natural resource management outcomes,
2. Structuring and supporting partnerships,
3. Institutional arrangements for natural resource management
4. Supporting community and institutional capacity for natural resource management
5. Addressing the social impacts of resource use and change
6. Awareness and action to facilitate social change.

In identifying directions for future research and development in natural resource management, Mobbs and Dovers (1999) raised the following issues:

- Building long term capacity and skills,
- Addressing underlying causes of natural resource decline rather than symptoms,
- Embracing qualitative understanding rather than generating “answers”,
- Developing broader policies as well as addressing urgent concerns.

Ross (1999) suggests social components of sustainability in identifying areas of potential social research in natural resource management. She suggested the following topics:

- Perceptions, values attitudes, beliefs and knowledge,
- Communication and learning,
- Group processes,
- Gender and ethnicity,
- The nature of individual decision making,
- Collaborative planning.

Common Threads

Several common threads that emerge from all of the above views of the community issues that support sustainability appear to fall into eight areas:

1. Attitudes, Values and Motivation – an appreciation of the importance of natural resource management and enthusiasm to participate in sustainable personal and community outcomes,
2. Capacity, Knowledge and Skills – developing individual knowledge and skills, accessing information and expertise and adopting a learning approach to sustainable practices,
3. Organisational Arrangements – effective organisations that are streamlined and leverage community and “outside” input,
4. Economic Capacity – having the income and resources to implement change, adapt the economy to be sustained into the future and balance economic needs with social and environmental needs,
5. Leadership - shared community-wide leadership and skilled individual leaders and “champions”.
6. Participation – broad active participation of community members and other partners both in planning and action,
7. Planning and Decision Making – the ability to anticipate change, develop a community vision and direction, and plan action,
8. Collaboration and Partnership – building collaboration between community members and organisations and linking with external partners.

The National Natural Resource Management Taskforce (1999) raised similar broad approaches particularly with regard to leadership, skills and knowledge, and access to information. Many of these community aspects of achieving sustainability are particularly relevant to the Burnett Mary Region.

Addressing Community Issues in the Burnett Mary Region

The Regional NRM plan produced by the Burnett Mary Regional Group has taken into account the social and economic shifts, and the particular community issues influencing sustainability in the region described above. Part of the plan includes a range of strategies to address these community issues and trends. For example, the need to management population impacts in the eastern areas of the region, and the economic capacity of many landholders to adopt sustainable natural resource management practices have been reflected in the plan's strategies.

While the plan as a whole aims to improve the sustainability of natural resources while taking the social and economic condition of the region into account, the strategies cannot address every issue or demographic and economic trend in the region. However, they have been designed to target action to make progress on key issues. The strategies are aligned under four main headings as follows:

1. Community Development and Capacity Building

- Engaging community members in regional NRM planning & implementation,
- Increasing the level of community ownership of NRM,
- Supporting the social and economic capacity of communities,
- Assisting stakeholders and communities to make transitions involved in NRM practice change.

2. Knowledge, Research and Training

- Landholders and other NRM stakeholders accessing appropriate training and skilling to support sustainable NRM,
- Advocating for research to be conducted to address key knowledge gaps in the region,
- Extending research information and existing knowledge.

3. Institutional Arrangements

- Increasing the participation of state and federal agencies with BMRG and NRM groups in the region,
- Ensuring an equal partnership with state and federal agencies reflecting the legal status of BMRG,
- Streamlining of structures and processes,
- Increasing the role of local government as a partner in natural resource management,

- Increasing the level of partnerships with R and D organisations, universities and other organisations,
- Increasing the level of partnerships with Industry groups.

4. Cultural Heritage

- The development of communications between Indigenous people and other land users and managers,
- The indigenous community, government agencies and regional community working together effectively,
- Recognition and respect for the special values that Indigenous people have for land, sea and river country.

These strategies each involve a series of actions to improve particular social and community issues. More details of the strategies and actions are provided in the BMRG Regional Plan itself.

The strategies are aligned to the “common thread” community approaches to principles of achieving sustainability (table 1).

Assessing the Social and Economic Impact of NRM Actions

The social and economic issues in the region have also been taken into account in assessing the impact of not only the community strategies described above, but also strategies to specifically address natural resource condition. Many of the social and economic impacts of the BMRG plan can't be easily measured, and to put a dollar figure on impacts would take very detailed feasibility studies. Therefore the best way to assess impacts at this stage of planning was to describe likely impacts on factors such as employment, social cohesion and production. This was done at three levels.

Level 1 – Screening of Management Action Targets (MATs)

All management action targets in the plan were initially “screened”. The aim was to broadly identify the management actions that would be expected to have most social and economic impacts. This was done by an experienced person in social and economic impact with knowledge of the region. Estimates of the social costs and benefits, economic costs and benefits and environmental costs and benefits on a high, medium, low scale were undertaken.

While all actions would have a social, economic and environmental impact, this initial screening was done to identify the “wheat from the chaff” in terms of social and economic impact. For example, changes to the management of riparian zones were identified as having higher social and economic impacts. Actions such as liaison with research providers were seen as having less likely direct social and economic impact.

Level 2 – Assessment of Resource Condition Targets (RCTs)

After the initial screening, resource condition targets (RCTs) were then assessed in more detail. Likely impacts were described against a range of criteria such as expected social costs and benefits, economic costs and benefits, distribution of impacts across stakeholders, and the impact of “doing nothing more”.

The impact of achieving RCTs was also assessed against an agreed set of priority social and economic issues for the region as follows:

- Retaining or increasing the population of the region (in the western rural section of the region),
- Managing impacts of population increase (in the rapidly developing eastern coastal section of the region),
- Improving social cohesion, and community skills, and attitudes,
- Potential employment and social impacts for young people,
- Retaining or increasing employment in the region,
- Increasing Gross Regional Product – the amount and value of production
- Sustainability of business income – whether the RCT would affect income and cash flow for businesses that may be affected.

The expected impacts on environment condition were also assessed using the following criteria.

- Key expected changes in resource condition,
- Contribution to long term environmental condition,
- Impacts beyond the region.

Impacts were described and also estimated with a score ranging from -3 (major negative impact) to +3 (major positive impact).

Categories

The description of the impacts of each RCT was then used to categorise RCTs into five different categories as follows:

1. **Win/Win** – RCTs that had environmental benefits as well social and economic benefits.
2. **Economic Mitigation** – RCTs that had environmental benefits but economic costs. In order to gain the environmental benefits the economic costs would need to be mitigated.
3. **Social Benefits** – RCTs that have social and environmental benefits but little direct economic implications (either cost or improvement).
4. **Social Contention** – RCTs that involve environmental improvements but also potential conflict and social difficulties.
5. **Environmental Benefit Only** – where achieving an RCT leads to an improvement in environmental condition with few social or economic implications.

For example, actions that involved training or skilling in natural resource management would be a win/win because it would not only help landholders make better natural resource management decisions but also potentially improve their economic management as well. An “economic mitigation” example would be if actions reduced access to riparian zones then environmental condition would be improved but there would be economic costs for some landholders. This would require mitigation in order to achieve the environmental benefits.

Level 3 – Re-screening of Priority MATs

The resource condition targets and management action targets in the regional plan were prioritised through a separate process to the social and economic assessment. The RCTs and MATs that were prioritised as “critical” or “high” were reviewed again with regard to their social and economic impact. This was done to ensure that the implications of priority MATs were assessed adequately, and that any changes that may have occurred

during the development of the regional plan were taken into account in the social and economic assessment.

Conclusion

In order to achieve a balance between social, economic and environmental condition in the region some key characteristics and trends need to be addressed such as differences between western and eastern areas and changing economic composition. A range of other community issues are also important such as access to services, developing knowledge and skills, attitudes and values and community engagement.

Some key approaches to social and community issues in supporting sustainability can help guide actions in the region such as developing attitudes and values, fostering knowledge and skills and having effective organisational arrangements. These approaches, together with the main trends and issues in the region have been taken into account in developing strategies in the BMRG Regional Plan. They have also been incorporated to some extent in assessing the social and economic impacts of planned actions.

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