DRO 1 Sustainability

The region grows and changes in the most sustainable way; generating prosperity, maintaining and enhancing quality of life, and providing high levels of environmental protection.

- Population growth
- Ecological footprint
- Ecosystem services
- Genuine progress indicator
- Quality of life

The SEQ region contains the largest concentration of urban development in Queensland and has one of the highest rates of population growth in Australia. In June 2007 the estimated resident population of SEQ was around 2.87 million, or just over 68% of the state's population. Sustaining quality of life for the growing population is increasingly challenging.

A healthy, happy and capable community is essential to a sustainable society. The quality of life in SEQ is high; residents rated their personal wellbeing slightly higher than the average Australian. Residents are satisfied with the economic performance of the region, but indicate that there is scope to improve environmental and social conditions. Many residents also feel that life in SEQ is getting worse rather than better, indicating that there is potential to improve wellbeing.

SEQ's high qualify of life depends on the provision of ecosystem services (such as clean water and air) that are derived from the processes and functions of ecosystems. It is important to maintain or improve the local provision of ecosystem services in SEQ. Approximately one-third of the region provides a high level of ecosystem function.

The ecological footprint provides useful information on the impact of our average consumption patterns on our ecological support systems. It provides information on whether our average pattern of consumption is sustainable in a local, regional, national and global context. The average ecological footprint for the population of SEQ for the year 2003–04 was 7.27 global hectares (gha) per person. This suggests that SEQ residents are using more than their share of resources and contributing disproportionately to global over-consumption compared with the average global citizen (2.2 gha per person).

The genuine progress indicator (GPI) provides information on the sustainability of economic activity in Queensland. On a per capita basis, the state's GPI reached a peak in 1999 of $29 271 and declined between 1999 and 2005. This suggests that extra social costs (increasing poverty and debt) and environmental costs (land degradation and energy consumption) associated with a higher level of consumption may exceed the value of the benefits from additional economic growth.

A range of simple and effective actions can reduce our footprint and increase our GPI without reducing our standard of living. These include:

- not buying items that we do not really need
- turning off lights and appliances to reduce electricity use
- recycling and reusing products rather than discarding them
- rehabilitating degraded ecosystems
- preserving essential ecosystem functions.

Population growth

The measure of population size for the SEQ region and projected growth to 2026

Interpretation

Status assessment

Grey

Where do we want to be?

The draft SEQ Regional Plan contains an indicative population estimate for 2031 based on population projections current at the time of preparation. This population estimate is not intended as a population target for the region and should not be used as a benchmark for evaluating actual population growth.

What is happening?

The SEQ region contains the largest concentration of urban development in Queensland and houses over two-thirds of the state's resident population. By the end of June 2006, SEQ had a provisional estimated resident population of around 2.8 million residents, just over 68% of the state total (Department of Local Government, Planning, Sport and Recreation [DLGPSR], 2007).

In keeping with Queensland's status as Australia's fastest growing state, the population of the SEQ region has increased significantly since 1976 (Figure 1.1). For the intercensal period 2001–06, the population of SEQ increased by an annual average of 66,300 people, significantly more than any other region in the State.. Put into perspective, the region's average annual growth represents the equivalent of a new regional centre larger than Rockhampton (population 62,610) for each year since 2001.

Despite the growing size of SEQ's population, its share of Queensland's growth is actually declining compared to other parts of the state. Between 2001 and 2006, some 74% of the state's growth occurred in the south-east corner, considerably less than for 1996–2001 (81%). By contrast, all of the other east coast regions (Far North, Northern, Mackay, Fitzroy and Wide Bay-Burnett) recorded an increased share of the state's population growth in 2001–06 compared to 1996–2001.

Why is it happening?

Queensland's resident population growth over the past three decades can be attributed to a number of factors. The combined attractions of benign climate, informal lifestyle, job growth and relative affordability have provided strong incentives for people to move to the state from interstate and overseas.

In 2005–06, net migration from overseas was the largest component of Queensland's population growth, making up 38% of total increase (provisional data). Natural increase (the number of births less the number of deaths) accounted for 34% of the state's total population growth in 2005–06, more so than net interstate migration (29%).

Because of its size, the SEQ region generates most of Queensland's population growth in terms of natural increase, and attracts most of the state's net overseas and interstate migration. In addition, the concentration of high-skilled jobs, education facilities and cultural attractions attracts job seekers and young people to SEQ from regional and rural areas of Queensland.

Why is it important?

Population growth should not only be considered in terms of absolute numbers, but also in terms of the underlying demographic changes. Communities are dynamic in nature—babies are born, people move into and out of the area, they age, and eventually they die. The net outcome of these flows shapes the size and profile of the community, its level of economic and social activity, and its long-term sustainability.

Over time, all people age. Communities with a low rate of natural increase are susceptible to losing the critical mass of younger people needed to replenish their future labour forces unless younger migrants can be attracted to the area. Similarly, inwards migration of retirement-aged people to an area (such as 'sea change' or 'tree change' communities) may lead to a decline in the relative proportion of working-age people required to service the community's needs.

What does it mean for sustainability?

Population growth brings with it the need to provide additional infrastructure and services, particularly the essential requirements of a modern city such as housing, water supply, sewerage and waste disposal, transport networks, and energy. It also requires the additional provision of social services including but not limited to health, education, law enforcement, recreation and cultural activities.

If population growth occurs at a rate that exceeds the provision of essential services, the result is likely to be a loss of environmental amenity for the area. This may be experienced in a number of dimensions, such as changes to the physical environment, increasing social pressures or direct economic costs. Common examples of negative physical impacts associated with growth pressures include a loss of valuable biodiversity; increased air, water or noise pollution; and traffic congestion. Social and economic consequences may be experienced in terms of diminishing housing affordability or growing crime rates.

On the other hand, population growth also brings positive benefits to the community, including increased investment, generation of new jobs and business opportunities. A larger population also provides efficiencies of scale that influence the availability, price and quality of goods and services.

Growth due to inwards migration further contributes to the creation of social and cultural diversity within the community. Around one in six people (or 18% of the population) resident in the SEQ region at the time of the 2006 Census lived overseas or in a different statistical division of Australia in 2001.

Society's response

Unlike some other nations, Australia does not sanction imposed birth control or place restrictions on where people choose to live. With the exception of overseas migration, where the Australian Government sets migrant-intake quotas, there are few means by which population size and location can be directly controlled by government.

The alternative to controlling growth is to ensure that it is properly managed by ordering future development and planning the timely provision of appropriate infrastructure. The key to meeting these requirements lies in the availability of accurate and relevant demographic data, monitoring the supply and release of land that is available for urban development, and maintaining up-to-date population projections.

Data

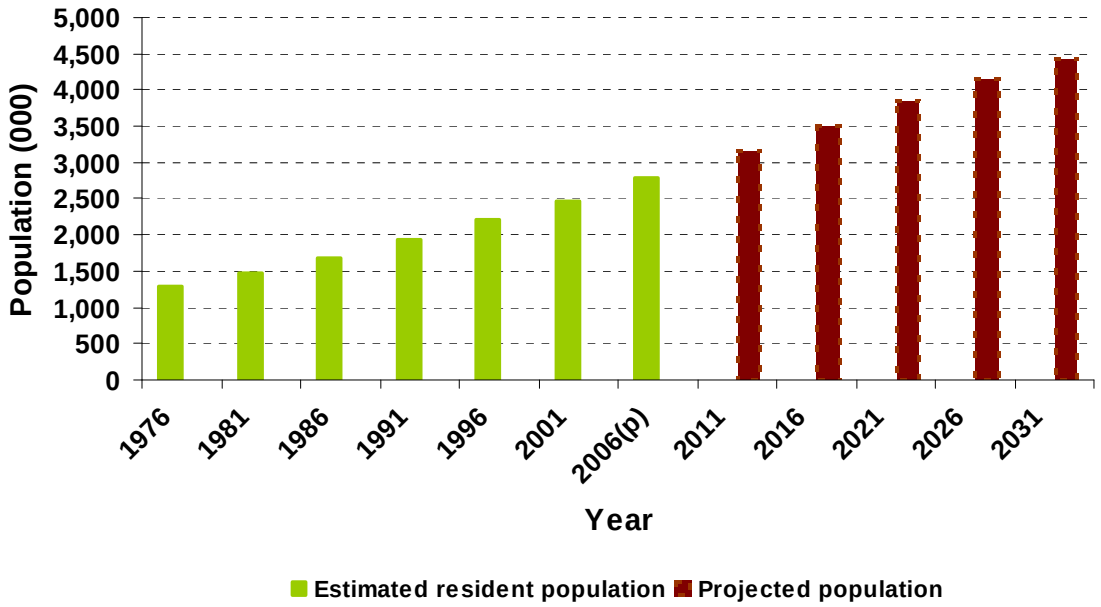

Figure 1.1: Estimated resident population and projected population for SEQ region, years to 30 June 1976 to 2026

Indicator author

Peter Hutson, Department of Infrastructure and Planning

Source dataset

The information is derived from Estimated Resident Population (ERP) data for years 1976 to 2006, tabulated from the Australian Bureau of Statistics (ABS) source data (ABS, 2007) and projected populations for local government areas in the SEQ region (medium series) published by the Queensland Government (Department of Infrastructure and Planning, 2008).

All ERP data provided is based on the census results for the nominated years. In the case of 2006 ERP data, this result is provisional at the time of writing.

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Ecological footprint

The ecological footprint measures the area of productive land required to support the resource demands and absorb the wastes of a given population.

Indicator type

State

Interpretation

Status assessment

Red

Where do we want to be?

Ideally, the amount of land required to support the global population should be less than or equal to the amount of productive land available. An intermediate target for SEQ would be to reduce the footprint by 25% by the year 2026 to 5.5 global hectares (g ha) per person, in line with the reduction needed to avoid global overshoot.

What is happening?

The ecological footprint measures the area of productive land required to support the resource demands and absorb the wastes of a given population. This includes the land required for raw materials and crops, and the land required to absorb carbon dioxide emissions as a result of consumption. It accounts for all resources that are consumed in SEQ, regardless of where they are produced.

The average footprint for the population of SEQ for the fiscal year 2003–04 was 7.27 g ha per person. This is slightly higher than the average footprint of a Queensland resident of 7.19 g ha per person, and approximately the same as the Australian average. This constitutes 12.4% of the total land area of SEQ, although this is likely to be an underestimate as variations in the productive capacity of the land have not been taken into account. There was some variation in the footprint within SEQ, with the inner Brisbane and Northwest inner Brisbane statistical subdivisions having the highest per capita footprints (8.9 and 8.3 g ha per capita respectively), and Beaudesert, Gold Coast North, Logan and Caboolture having the lowest footprint of 6.6 g ha per person (Figure 1.2).

The Global Footprint Network have estimated that the world's biologically productive land and sea surface area is approximately 11.2 billion g ha (Global Footprint Network, 2008), or about 1.8 g ha available per person. The world average footprint of 2.2 g ha per person is therefore 25% higher than the productive capacity of the globe (WWF, 2006). This means that, on average, it would take one year and three months to regenerate the amount consumed in one year. On a global scale, resources are being used faster than they are replenished; that is, the world is living on natural capital rather than the interest. Australia's contribution to this is high; in estimates of the ecological footprint of 147 countries, Australia was ranked as having the sixth highest ecological footprint per capita (Global Footprint Network, 2008). Figure 1.3 shows the per capita ecological footprint of several countries from this study.

Why is it happening?

The ecological footprint is based on consumption patterns: both 'real land' used in production (e.g. water, forests, pasture, arable land, built land, etc.), and 'energy land' (i.e. the land required to absorb the carbon dioxide produced through consumption of goods and services). In Queensland, 54% of the total footprint is due to 'energy land', with home electricity making up 20% of energy land and fuel for transport 8%. Forests account for nearly half of the 'real land' component of the footprint, reflecting the use of timber in housing construction and furniture (Figure 1.4).

The footprint can also be calculated for specific commodities or consumption activities (Figure 1.5, Table 1.1). In Brisbane, residential building construction and electricity supply contributed most to the ecological footprint, followed by retail trade and beef cattle. The high footprint per capita of residential building construction is likely to be a result of the rapidly increasing population. Residential building construction was also the highest contributor to the footprint in Queensland, while electricity use was the highest contributor for Australia. The slightly lower contribution of electricity use in Brisbane and Queensland compared with Australia is likely to be a result of the lower dependence on heating in Queensland.

The ecological footprint of commodities can also be looked at by consumption category (Figure 1.6). In Queensland, the consumption of food and services have the highest ecological footprint of 23% and 21% of the total respectively. Mobility and energy use had lower footprints of 11% and 12% respectively.

In SEQ and across Queensland and Australia in general, the total footprint is currently less than the total area of land available due to the large land area and relatively low population density. However, on a global scale, Australians use more global resources on a per capita basis than is equitable.

Why is it important?

The ecological footprint is an important indicator of the overall impact of the population on ecological support systems. It provides useful information on whether our average pattern of consumption is sustainable in a local, regional, national and global context. It also provides information on which aspects of consumption have the highest level of impact on ecological resources.

What does it mean for sustainability?

The ecological footprint shows that the people of SEQ are using more resources than is sustainable on a global basis, and that the region is contributing to global overconsumption. At a regional level, although we are currently using less than the total productive capacity of the region, we need to be aware of our relative impact on global ecological resources.

Society's response

It is possible to reduce our footprint without reducing our standard of living, but a concerted effort must be made to do so. European countries have a substantially lower footprint than Australia. The best and easiest way to reduce our individual footprint is to not buy things that we do not need. For example, a study on household consumption suggests that in 2004 an average Australian household spent $1226 on items that were either never used or underused (Hamilton et al., 2005).

The total amount spent in Australia in 2004 was estimated at $10.5 billion, an amount that exceeds spending by Australian governments on universities and roads. Reductions can also be made in resource use. For example, there are substantial gains that could be made through reductions in electricity use through simple measures such as turning off lights and appliances when not in use—leaving appliances on standby accounts for approximately 10% of household energy use (Australian Conservation Foundation, 2007)—and increasing the efficiency of appliances. Some structural changes may be required to facilitate a reduction in resource use; for example, better design of buildings can reduce the need for lighting, air-conditioning or heating.

Better land use design can reduce transport emissions by reducing the need for car trips, especially for short or routine journeys. The SEQ Regional Plan aims to help achieve this through better integration of land use and public or active transport options. In general, use of resource-efficient technology, a reduction in consumption (including eliminating waste) and investing in replenishing natural capital and bio-productivity are important measures that can be undertaken to reduce our ecological footprint. Switching to renewable sources of energy, particularly solar and wind, will also help to reduce regional carbon emissions.

The state government has recently announced the Solar Homes Program to purchase and install 1000 solar systems in urban areas throughout Queensland to increase the number of houses directly using renewable energy. Public awareness of the need to reduce consumption is increasing, particularly in light of growing understanding of the likely impacts of climate change and peak oil.

Data

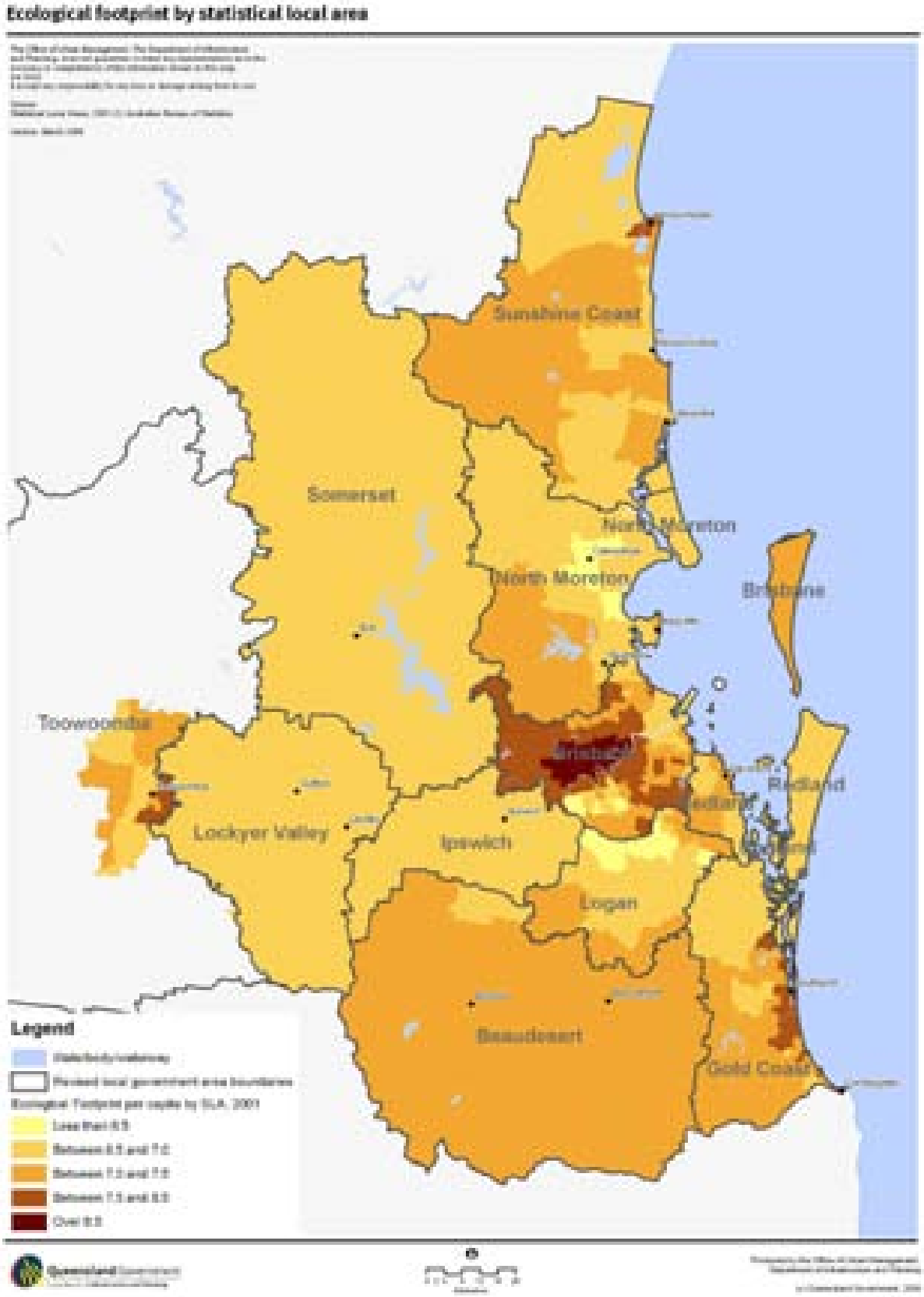

Figure 1.2: Per capita footprint (g ha) by Statistical Local Area in SEQ

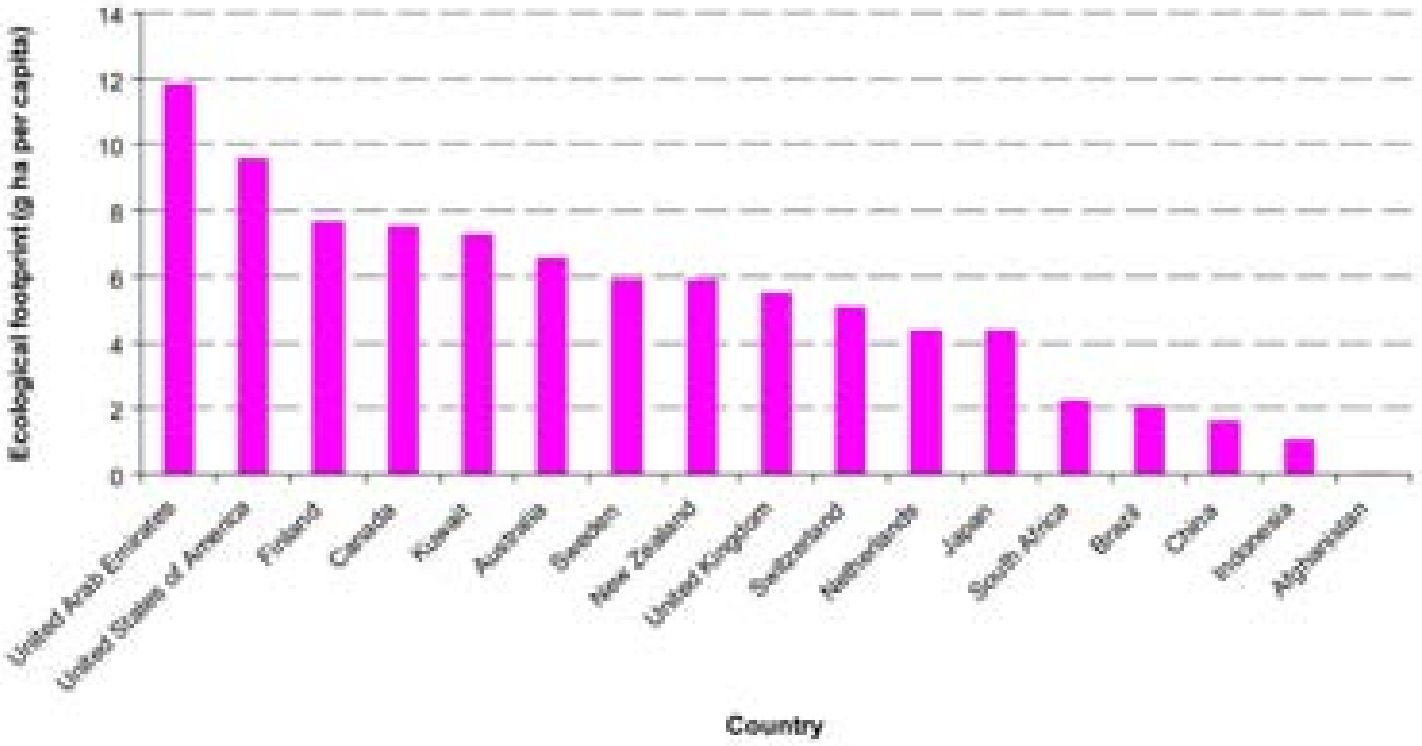

Figure 1.3: National ecological footprint for several countries

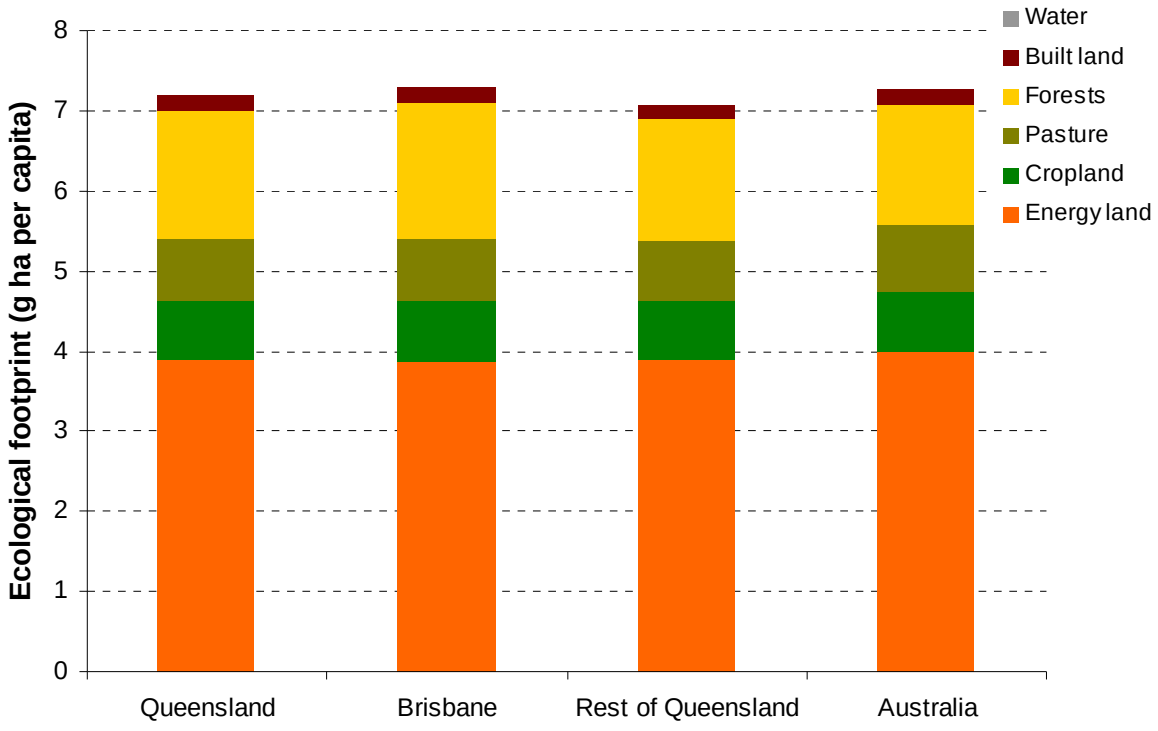

Figure 1.4: Ecological footprint by land type and location

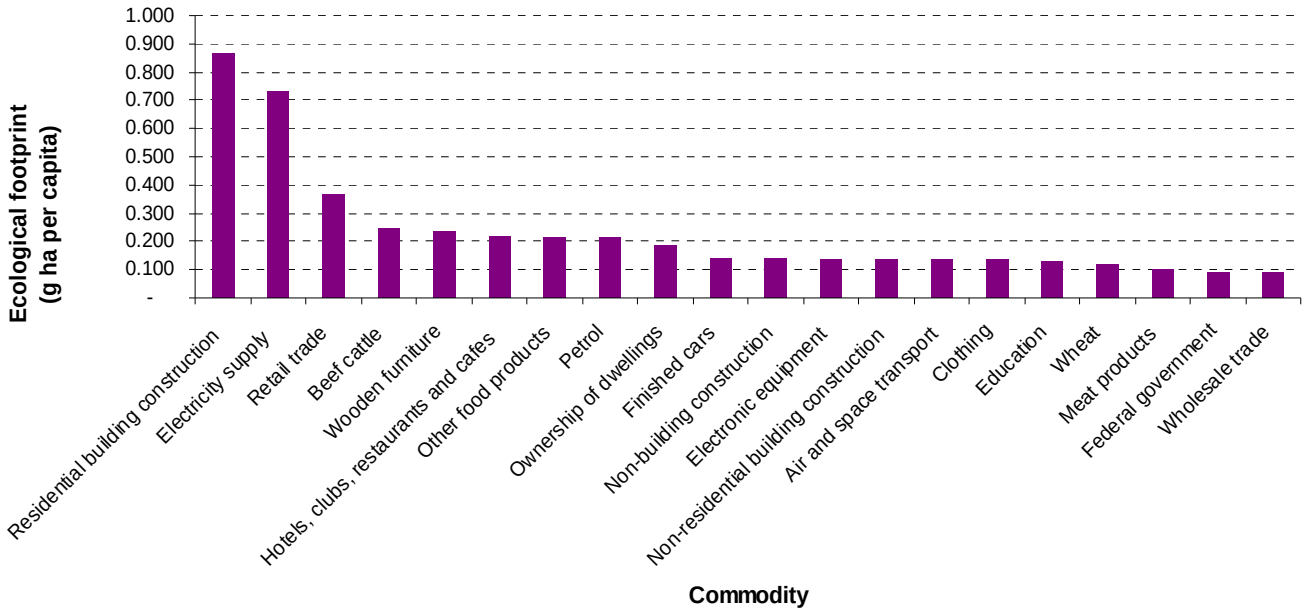

Figure 1.5: Ecological footprint of the top 20 ranked commodities for Brisbane

Table 1.1: Top 20 ranked commodities contributing to the ecological footprint by location

Rank	Brisbane	Queensland	Australia
1	Residential building construction	Residential building construction	Electricity supply
2	Electricity supply	Electricity supply	Residential building construction
3	Retail trade	Retail trade	Retail trade
4	Beef cattle	Petrol	Hotels, clubs, restaurants and cafes
5	Wooden furniture	Beef cattle	Petrol
6	Hotels, clubs, restaurants and cafes	Hotels, clubs, restaurants and cafes	Beef cattle
7	Other food products	Wooden furniture	Other food products
8	Petrol	Other food products	Wooden furniture
9	Ownership of dwellings	Ownership of dwellings	Air and space transport
10	Finished cars	Air and space transport	Ownership of dwellings
11	Non-building construction	Non-building construction	Non-building construction
12	Electronic equipment	Electronic equipment	Electronic equipment
13	Non-residential building construction	Non-residential building construction	Non-residential building construction
14	Air and space transport	Finished cars	Clothing
15	Clothing	Wheat	Finished cars
16	Education	Education	Education
17	Wheat	Clothing	Wheat
18	Meat products	Meat products	Meat products
19	Federal government	Federal government	Fresh meat
20	Wholesale trade	Wholesale trade	Federal government

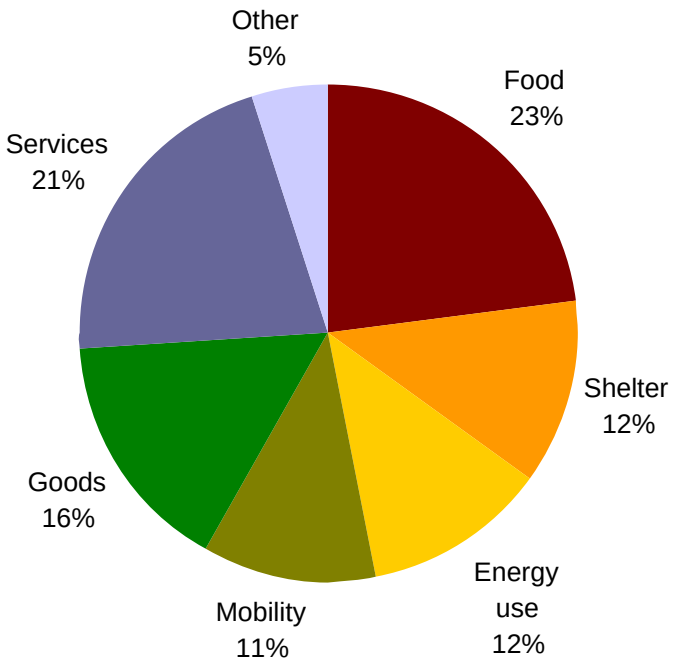

Figure 1.6: Ecological footprint by consumption categories for Queensland

Indicator author

Dr Melanie Cox, Department of Infrastructure and Planning (based on Wiedmann et al., 2007)

Related indicators

Greenhouse gas emissions

Other data and links

Global footprint network <www.footprintnetwork.org>

Source dataset

The information is derived from the project *The Footprint of Consumption in Victoria and Queensland*, undertaken by the Centre for Integrated Sustainability Analysis at the University of Sydney and the Stockholm Environment Institute at the University of York. Details on the method are available in Lenzen and Murray (2001), <www.isa.org.usyd.edu.au/publications/documents/GFN-UnivSyd_report_on_Vic_eco-footprint.pdf> (Global Footprint Network and University of Sydney, 2005), and <www.sei.se/reap>.

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Wiedmann, T.; Wood, R.; Barrett, J. & Lenzen, M. 2007. *The Ecological Footprint of Consumption in Queensland.* Report to the Queensland Environmental Protection Agency. Stockholm Environment Institute, University of York and the Centre for Integrated Sustainability Analysis, University of Sydney.

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Ecosystem services

Ecosystem services are the benefits people obtain from ecosystems.

Interpretation

Status assessment

Amber

Where do we want to be?

The SEQ Regional Plan requires that the capacity of the region's ecosystems to supply ecosystem services is maintained or enhanced.

What is happening?

Ecosystem services are produced from the normal functioning of ecosystems. Ecosystem functions are the biological, geochemical and physical processes and components that take place or occur within an ecosystem. Different types of ecosystems perform different functions. Ecosystem services are the benefits that people obtain from ecosystems (Figure 1.7). Ecosystem functions provide varying levels of ecosystem services. For example, rainforest ecosystems provide the function of nutrient regulation (among many other functions), which contributes to the ecosystem service of water quality, contributing to human wellbeing. A continued flow of ecosystem services relies on ecosystems that are in good condition and well functioning.

Nineteen ecosystem functions have been mapped for SEQ by combining existing data layers that provide the best representation of each of the functions. The sum of all the ecosystem functions in SEQ was compiled by identifying where each of the 19 functions spatially overlap. Data layers used in this process were developed at various times, but may be taken to represent the 2004 ecosystem functions benchmark. The same process was used to construct maps of the historical provision of ecosystem functions, using data layers from 1991. Historical information was not available for all data layers, so comparison between time periods is not exact. Of the 68 data layers used in the 2004 assessment, 40 do not change over time (e.g. geographical features such as mountains, floodplains or islands), and historical data for 1991 was only available for 14 of the remaining 28 data layers. Maps of ecosystem function in 1991 and 2004 are shown in Figure 1.8 and Figure 1.9, and the difference between these two years is shown in Figure 1.10.

The maps identified that few areas in SEQ are not providing at least one ecosystem function. Recent mapping shows that approximately 32% of the region is providing at least 14 of the 19 functions. The most functions are provided in areas that have existing vegetation and are more likely to be provided in areas of low or higher elevation.

The comparison of ecosystem function in 1991 and 2004 is shown in Figure 1.10. Ecosystem function increased over 572 465 ha and decreased over 1,347,141 ha.

Why is it happening?

The improvements in ecosystem function between 1991 and 2004 are linked to improvements in ground cover in grazing areas. The reasons for the improvements in ground cover are likely to vary across the region but could include an increase in rainfall events between 1991 and 2004, lower stocking rates and improved management of grazing land. The impacts of drier conditions since 2004 on ground cover are not known. Decreases in ecosystem function appear to be primarily a result of clearing of woody vegetation. During the period of 1991–2004, a number of forest reserves were also harvested, of which some have since been replanted and some are now used for other purposes.

Why is it important?

Ecosystem services provide the basis for human life and wellbeing. Without ecosystem services such as water supply, water quality, air quality and climate regulation, we would not be able to enjoy the life we do now. While some of the benefits from ecosystem services can be transported to be consumed in places distant from where the services are produced (e.g. food is often transported for consumption elsewhere), others are only beneficial over a limited area (e.g. the pollination of crops). It is therefore important to maintain or enhance the local provision of ecosystem services in SEQ.

What does it mean for sustainability?

Ecosystem services are produced from the processes and components of ecosystems (ecosystem functions). Maintenance or enhancement of ecosystem functions and the condition of ecosystems are therefore essential for the continued provision of ecosystem services on which humans depend for wellbeing.

Society's response

Many of the existing initiatives aimed at protecting and managing natural ecosystems such as farm forestry, voluntary conservation agreements, farm management systems and property management planning will help to ensure the continued provision of ecosystem services. As our understanding of the link between ecosystem condition and ecosystem services increases, it may be possible to manage ecosystems to enhance ecosystem function for maximum ecosystem service provision.

Data

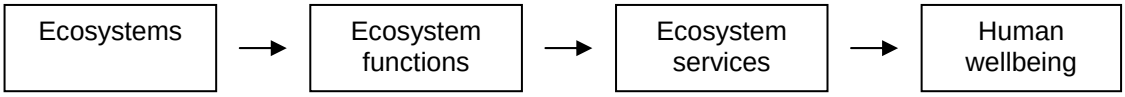

Figure 1.7: The relationship between ecosystems, ecosystem functions, ecosystem services and human wellbeing

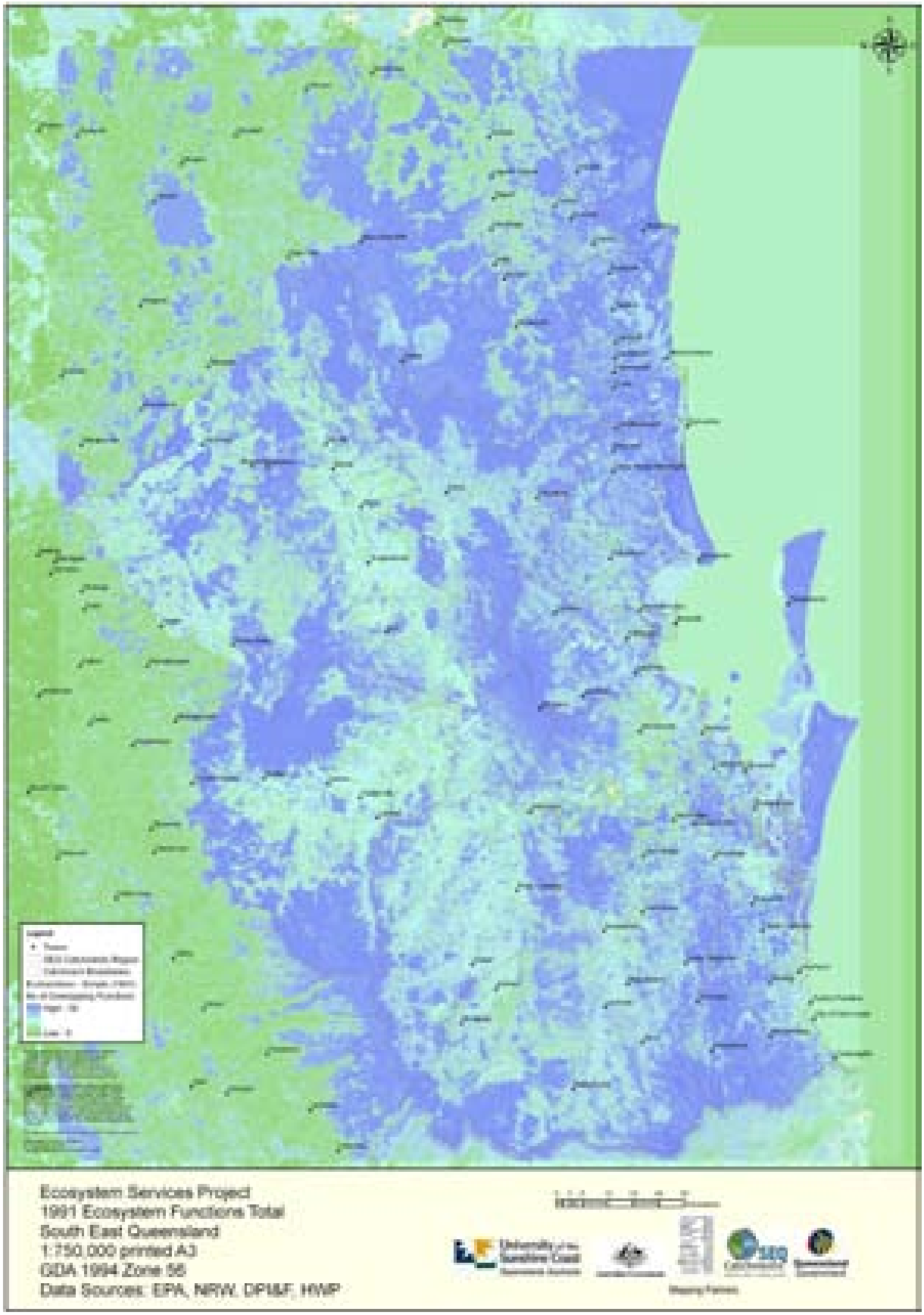

Figure 1.8: Total ecosystem functions 1991

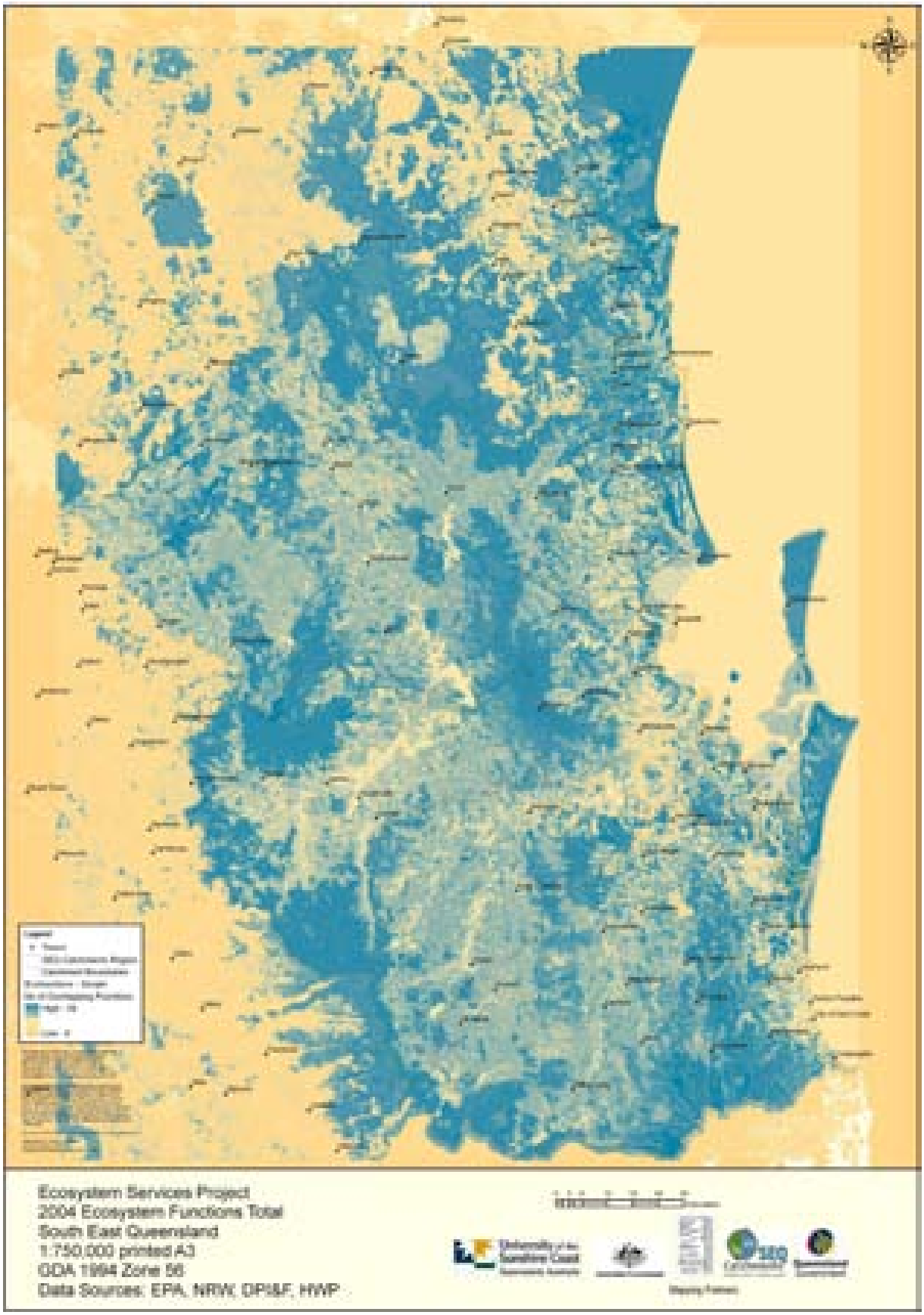

Figure 1.9: Total ecosystem functions 2004

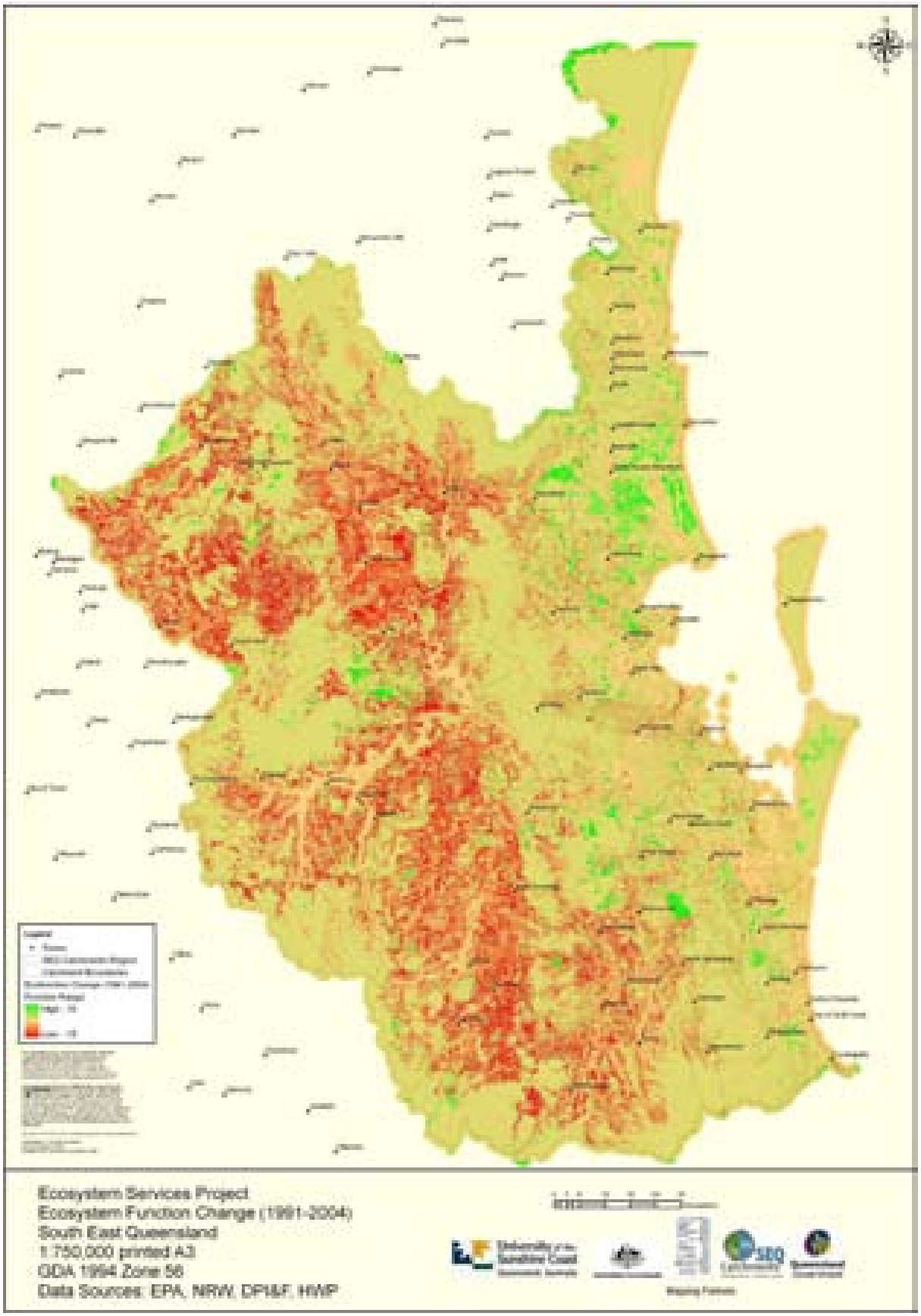

Figure 1.10: Difference between ecosystem functions 1991 to 2004

Indicator author

Melanie Cox, Department of Infrastructure and Planning; Michael Petter, Shannon Mooney & Simone Maynard, SEQ Catchments

Related indicators

Ecological footprint

Other data and links

The Millennium Ecosystem Assessment provides an analysis of changes in the world's ecosystem services <www.maweb.org/en/index.aspx>

Source dataset

Data derived from the SEQ Ecosystem Services Project, coordinated by SEQ Catchments.

Genuine Progress Indicator

A measure of the component of economic activity that contributes positively to wellbeing

Interpretation

Status assessment

Amber

Where do we want to be?

The GPI should increase over time. This would mean that the rate of production is sustainable and making a positive contribution to wellbeing.

What is happening?

The Genuine Progress Indicator (GPI) is an alternative to the Gross Domestic Product (GDP), which attempts to provide a more complete assessment of economic welfare by subtracting economic activity that detracts from wellbeing (e.g. loss of natural resources, expenditure on health remediation, cost of crime), and adding items that contribute to society (e.g. volunteer work, housework). Gross Domestic Product and variants (Gross State Product and Gross Regional Product) are commonly used as indicators of economic welfare. These indicators focus on economic activity without taking into account the social and environmental costs associated with growth, include all economic activity regardless of social benefit, and fail to take into account non-market activities that also contribute to production. For example, resource-intensive industries have traditionally calculated profits without taking into account negative impacts such as the loss of natural resources. The GDP includes costs associated with accidents, although these are negative impacts on society; volunteer work is not counted in the GDP despite the significant social and environmental benefits derived from volunteers. Overall the GDP is analogous to a firm's annual sales volume, while the GPI is analogous to the profit of a firm (i.e. revenue minus the costs incurred).

The GPI is not available for SEQ, as the base data are only produced at state and national level. The GPI for SEQ is expected to be similar to those for Queensland, and SEQ production is a large proportion of Queensland's production. Queensland's GPI is detailed in Lawn (2006a).

The Queensland GPI increased by 76.6% between 1985 and 2005, from $59,548 million to $105,174 million (Figure 1.11). This represents an annual growth rate of approximately 3% per year. Real GSP increased at a faster rate over the same period, from $69,880 million in 1985 to $150,559 million in 2005, an increase of 115.5% or approximately 4.1% per year. On a per capita basis, the GPI rose from $22 689 per person in 1986 to $26 533 per person in 2005, an increase of 16.9% or 0.8% per year. However, this increase was not constant; GPI reached a peak in 1999 of $29,271 per capita and declined between 1999 and 2005 (Figure 1.12).

Why is it happening?

The decrease in per capita GPI after 1999 was a result of an increasing disparity in incomes between the rich and poor; increasing debt; and a number of environmental costs, including non-renewable resource depletion, land degradation, energy consumption, and vegetation clearing. This suggests that the social and environmental costs associated with a higher level of consumption may exceed the value of any additional benefits. In addition there was a significant contribution made by volunteer and unpaid household labour to the GPI.

Why is it important?

The GPI provides a better indication of the welfare benefit of expenditure and consumption than the Gross State Product (GSP). It also provides an indication of which benefit or cost items could be improved to increase the GPI. The GPI provides a measure of the sustainability of economic activity; it takes into account depletion of capital to provide a measure of the income received from production that can continue into the future.

What does it mean for sustainability?

The GPI is an important indicator as it integrates a number of measures of economic growth into a single index. It also includes several benefits and costs that are not normally included in economic statistics, but which are important components of wellbeing.

Society's response

A number of responses are already in place that will contribute positively to GPI. These include a decrease in vegetation clearing under the *Vegetation Management Act 1999*, and actions to increase energy and water use efficiency. The SEQ Regional Plan will also help to restrict losses of agricultural land through the establishment of the urban footprint as a key tool to manage urban development in SEQ. Environmental rehabilitation schemes such as work undertaken by SEQ Catchments and the Healthy Waterways partnership and various local government initiatives such as Brisbane City Council's O2 tree planting program will also help to minimise adverse impacts on the GPI from environmental damage. Since the GPI was calculated for 2005, unemployment in Queensland has continued to decrease and investment in public infrastructure has increased substantially with the introduction of the SEQ Infrastructure Plan and Program (State of Queensland, 2007), suggesting that the GPI may have improved in the last few years.

Data

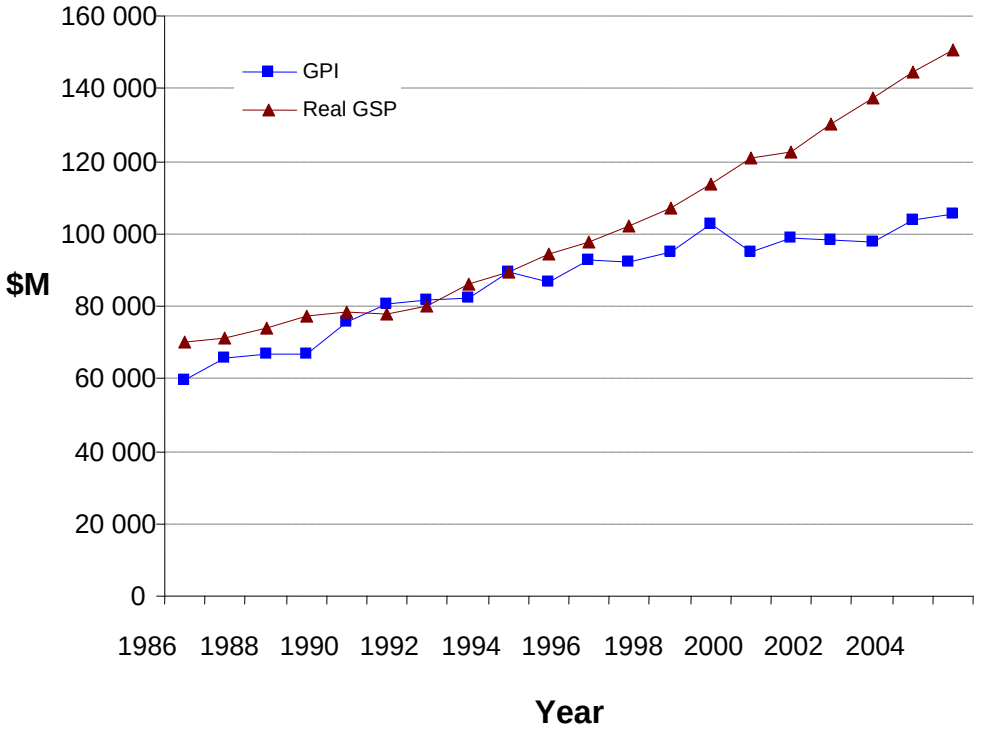

Figure 1.11: Genuine Progress Indicator (GPI) and Real Gross State Product (GSP) for Queensland from 1986 to 2005

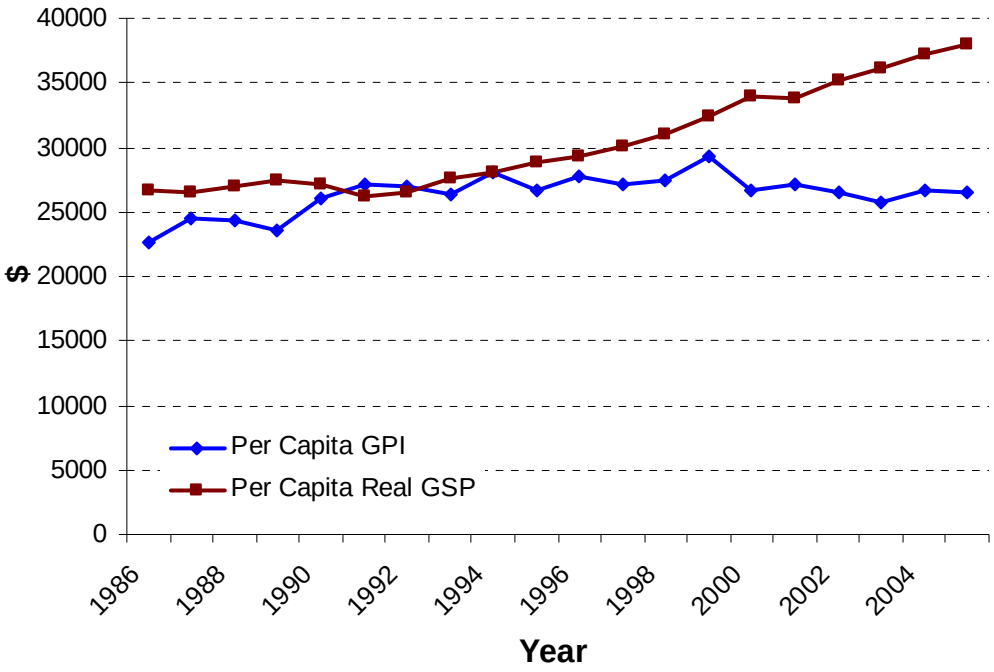

Figure 1.12: Per capita Genuine Progress Indicator and per capita Real Gross State Product for Queensland from 1986 to 2005

Indicator author

Dr Melanie Cox, Department of Infrastructure and Planning (derived from Lawn 2006a, 2006b)

Source dataset

The source datasets are described in detail in Lawn (2006b)

References

Lawn, P. 2006a. *A Genuine Progress Indicator (GPI) Study of Queensland 1986–2005.* Report prepared for the Queensland Environmental Protection Agency. Flinders University, Adelaide.

Lawn, P. 2006b. *A Genuine Progress Indicator (GPI) Study of Queensland 1986–2005 Instruction Manual: GPI calculations and data sources*. Report prepared for the Queensland Environmental Protection Agency. Flinders University, Adelaide.

State of Queensland. 2007. *South East Queensland Infrastructure Plan and Program 2007–2026.* State of Queensland (Department of Infrastructure), Brisbane.

Quality of life

Subjective measure of the level of satisfaction of people living in SEQ with their life as a whole and life in SEQ

Interpretation

Status assessment

Green

Where do we want to be?

The goal is that people living in SEQ will be satisfied with their personal life and with life in SEQ. The average personal wellbeing index and the regional wellbeing index for life in SEQ should be 75% or greater and stable or increasing. 75% is the average value for populations in western nations, with scores generally ranging from 70–80%.

What is happening?

A representative sample of people living in SEQ were asked to rate how satisfied they are with several aspects of their personal wellbeing and with their life in SEQ. Satisfaction with personal relationships, standard of living, personal safety, life as a whole, achievements, health, future security and connection with community were aggregated to form the personal wellbeing index. Satisfaction with overall life in SEQ, the economic situation, social conditions and the state of the environment were aggregated to form the regional wellbeing index for SEQ.

The average overall score for the personal wellbeing index was 77 (out of a possible 100). Of the eight domains of quality of life, residents of SEQ were most satisfied with their personal relationships, and least satisfied with the extent to which they feel part of their community (Figure 1.13). This is the first survey of the personal wellbeing index in SEQ, so there is no previous data available for comparison. However, the personal wellbeing index has been regularly measured across the whole of Australia since 2001 (Figure 1.14). During this time, the personal wellbeing index for Australia has varied between 73 and 77 points. The average score for SEQ is therefore at the high end of the national averages over the last six years.

The average overall score for the SEQ regional wellbeing index was 69 (out of a possible 100). Residents of SEQ were most satisfied with their overall life in SEQ, then with the economic situation, and least satisfied with the state of the environment (Figure 1.15). Results from the national wellbeing survey were similar, with a much higher rating for satisfaction with life as a whole and the economic situation, and the lowest level of satisfaction for the state of the environment. Since 2001 the average score for the National Wellbeing Index has varied between 57 and 63 (Figure 1.16). However, a direct comparison between the National and Regional Wellbeing Indexes is not possible as the National Wellbeing Index contains additional items that are not relevant at the regional scale.

SEQ residents were also asked if they thought life in SEQ was getting better or worse. Overall, 28% of respondents thought that life was about the same, with 40% of respondents saying it was getting worse, and 32% saying it was getting better (Figure 1.17).

Why is it happening?

In the five years of monitoring the personal wellbeing index across Australia, the average score has varied only from 73 to 77. Cummins et al. (2007) theorise that the average wellbeing score for a population is maintained around 75, and that the normal range of wellbeing for individuals is between 60 and 90. Where individuals have low wellbeing, factors such as income or personal support can help them to raise their wellbeing, or provide a buffer against sources of stress. Of the respondents in SEQ, 9% reported a personal wellbeing index of less than 60, and 11% reported a personal wellbeing index of greater than 90.

Analysis of the long-term wellbeing data for the Australian population can provide some information, but there is not a good understanding of the factors that influence personal wellbeing. One theory suggests that the effect of external factors (including the local environment, public policy, services etc.) is modified by individual characteristics, expectations and situation to influence domains of subjective wellbeing (Hagerty et al. 2001). External factors that influence wellbeing include education, perceived empowerment, health services, contact with the natural environment, and others. Individual characteristics and choices that influence wellbeing include family situation, personal health, expectations, job choice, etc. One survey of happiness in Australia found that a large majority of respondents (59%) rated partner and family

relationships as the single most important factor in determining their happiness (Hamilton and Rush, 2006). A summary of these theories is shown in Figure 1.18.

A detailed analysis of wellbeing in SEQ is not possible from just one survey. However, one interpretation of the data could be that although satisfaction with some aspects of life in SEQ is less than ideal, residents' satisfaction with aspects of their personal lives is maintaining overall wellbeing at above average levels.

Why is it important?

Satisfaction with life and regional liveability are important components of the overall wellbeing of the community. The survey results also provide an indication of some of the factors that are of concern to residents in terms of their life in SEQ. Repeated surveys of wellbeing will help to further inform decision makers of the areas of quality of life that could be improved in the region.

What does it mean for sustainability?

A healthy, happy and capable community is an essential component in a sustainable society. Without a good level of wellbeing, people are not able to respond or adapt to changes in their environment or circumstances.

Society's response

The personal wellbeing index and the life in SEQ index are summaries of people's satisfaction with life in SEQ. The results suggest that residents are relatively satisfied with the economic performance of the region, but that there is scope to improve the state of the environment and social conditions within the region. Strategies that encourage social interaction in neighbourhoods and participation in community events and organisations could help to improve residents' satisfaction with community connection. The fact that a greater number of survey respondents thought that life in SEQ is getting worse suggests that there is scope to improve the wellbeing of SEQ residents.

Data

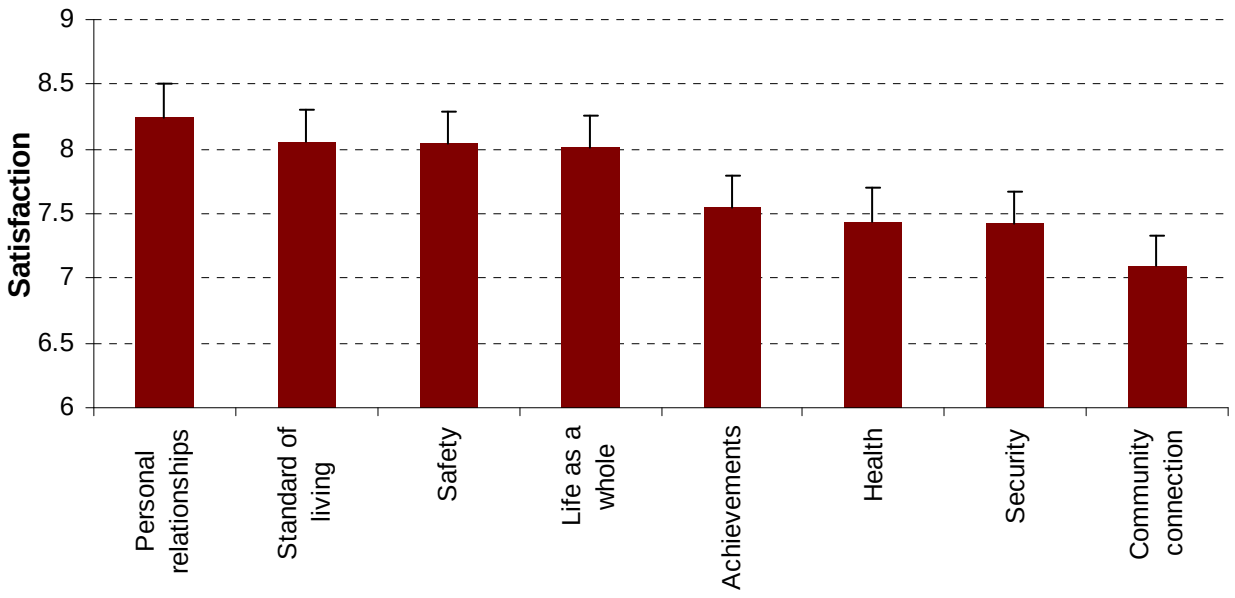

Figure 1.13: Average satisfaction (+95% confidence interval) with domains of subjective personal wellbeing

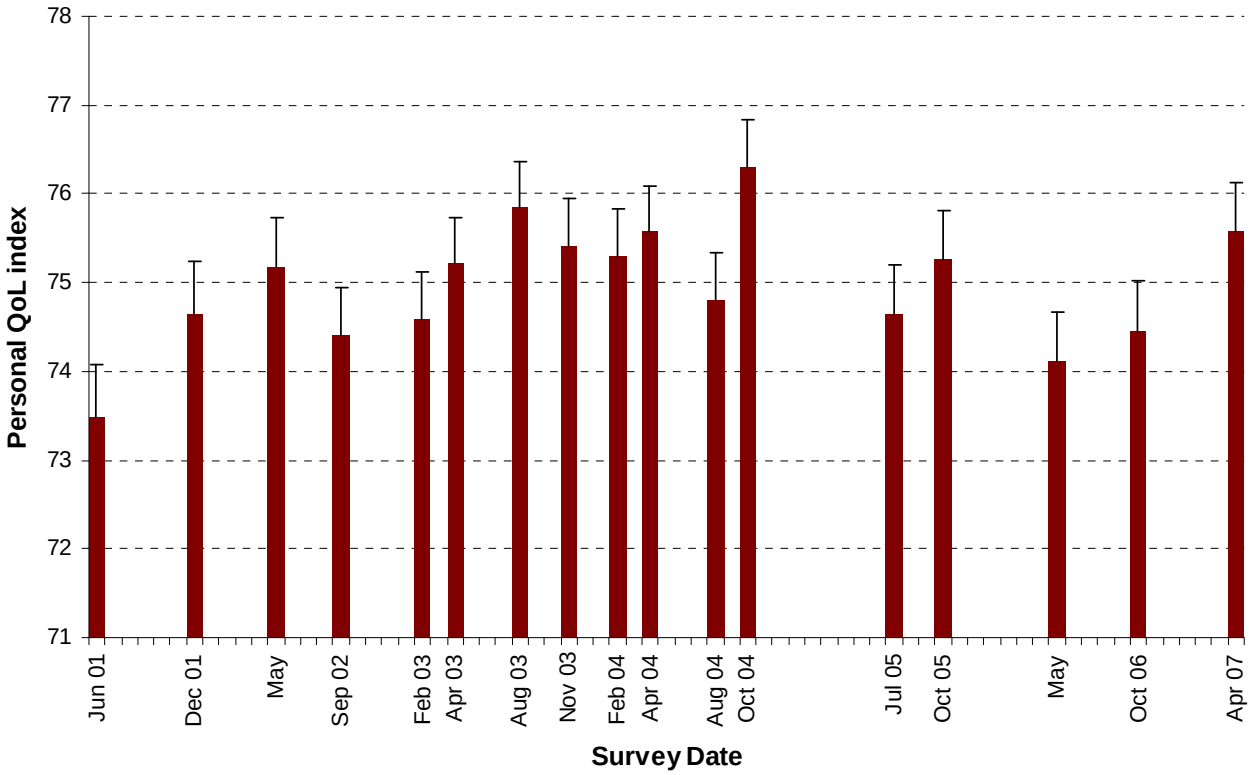

Figure 1.14: Average Personal Wellbeing Index (+ 95% confidence interval) for the Australian population

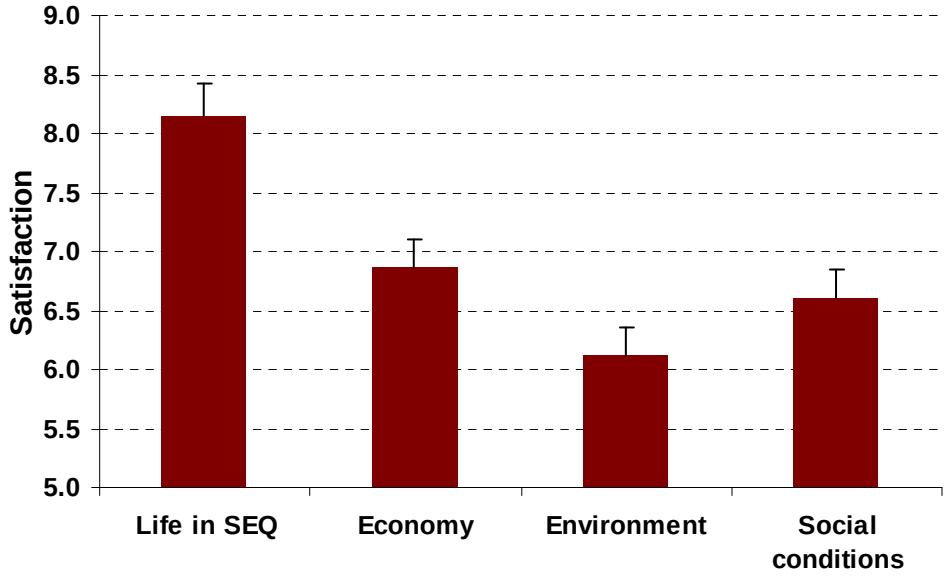

Figure 1.15: Average satisfaction (+95% confidence interval) with aspects of life in SEQ

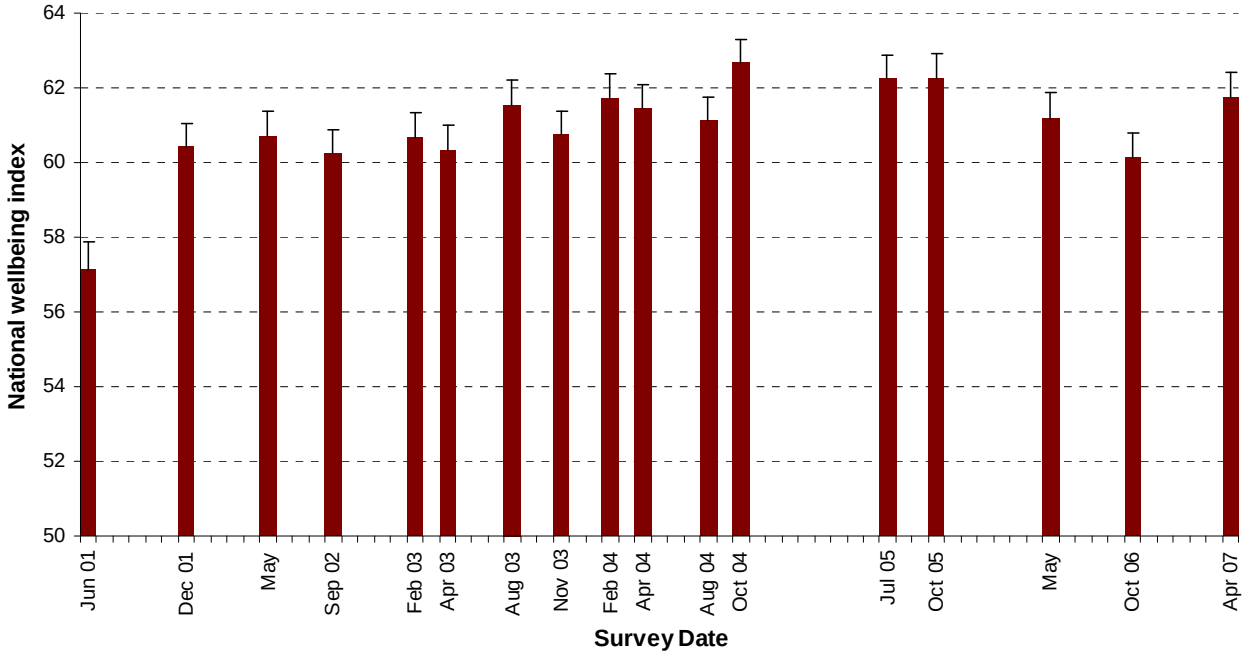

Figure 1.16: Average national wellbeing index scores (+95% confidence interval) for the Australian population

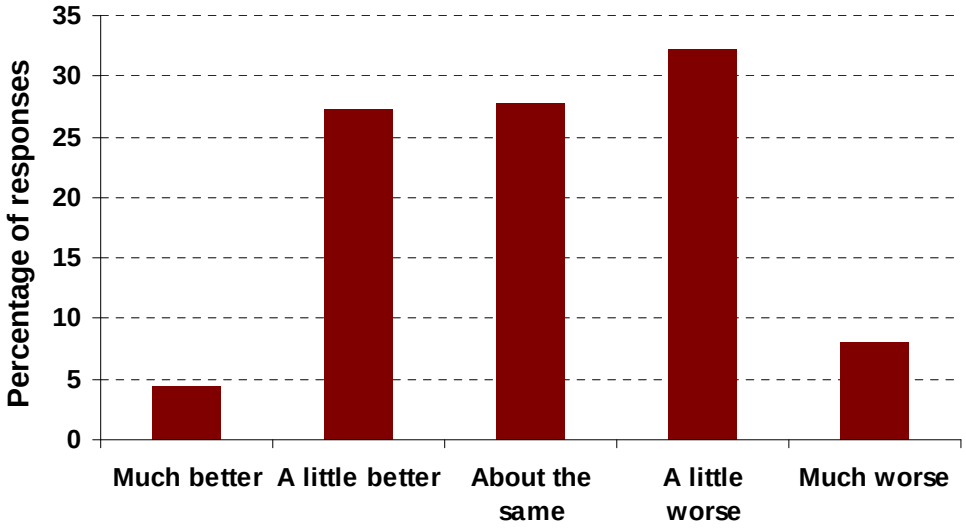

Figure 1.17: Percentage of respondents believing that life in SEQ is getting better or worse

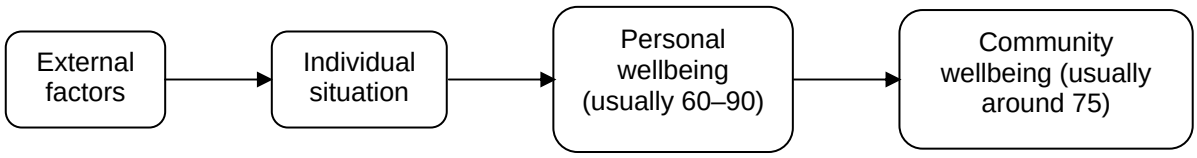

Figure 1.18: Summary of theories on factors impacting wellbeing

Indicator author

Dr Melanie Cox, Department of Infrastructure and Planning

Related indicators

Health status, Mental health

Other data and links

Australian Unity Wellbeing Index reports and data are available from <www.acqol.deakin.edu.au/index_wellbeing/index.htm>

Source dataset

The personal wellbeing index and regional wellbeing index, adapted from the Australian Unity Wellbeing Index developed by the Australian Centre of Quality of Life, Deakin University, were calculated from data compiled in the 2007 Queensland Social Survey conducted by Central Queensland University for the Department of Infrastructure and Planning (DIP). Data are held by DIP.

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Hagerty, M.R.; Cummins, R.A.; Ferriss, A.L.; Land, K.; Michalos, A.C.; Peterson, M.; Sharpe, A.; Sirgy, J.; & Vogel, J. 2001. Quality of Life Indexes for national policy: Review and agenda for research. *Social Indicators Research* 55(1): 1–96.

Hamilton, C. & Rush, E. 2006. *The Attitudes of Australians to Happiness and Social Wellbeing.* The Australia Institute, Canberra.