



Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW

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Executive Summary

The NCLLS region supports a diverse agricultural sector that has been historically underpinned by the beef, dairy and sugar industries. While these industries are likely to persist in the region, more intensive horticultural industries such as the rapidly emerging blueberry enterprise have the potential to increase the socio-economic status of the North Coast region. The region is endowed with relatively reliable rainfall, expansive areas of rich alluvial soils, a diversity of landscapes that support different types of produce, ready access to Sydney, Brisbane and overseas markets via road (and in the longer term possible rail and shipping), and a surplus of potential employees. The opportunities for agricultural expansion via rationalisation and prioritisation within and between sectors seem substantial for this region.

The primary role of the North Coast Local Land Services (NCLLS) is to deliver agricultural sustainability; biosecurity, emergency response to rural crises; and natural resources management outcomes for the region. To deliver these outcomes effectively the NCLLS needs to work closely with the community and the primary production industry. In doing so the NCLLS needs to have a thorough understanding of the socio-economic profile of the region's communities and industries so that it can tailor its services to best meet the changing needs of the community and industries. It must also understand the status of current industries in view of their ongoing contribution to the agricultural economy.

This report provides a socio-economic snapshot of the region's communities and an analysis of the significant agricultural industries in order to inform the investment and resource allocation decisions of the NCLLS.

The socio-economic snapshot finds that the NCLLS region has lower than NSW average growth in population and below average regional productivity. The population is considerably older than the NSW average and the related dependency ratio (dependent persons as a proportion of the productive sector of the population) is much higher than the NSW average.

The region's communities fall into distinct northern, central and southern sub-regions or social ecological landscapes (SELs), which exhibit very different socio-economic traits. The Northern SEL has the highest population and Gross Regional Product (GRP), but employment numbers are falling and GRP is contracting. By contrast the Southern SEL has the lowest but the fastest growing population. GRP is also the lowest but growing at more than five times the NSW average. There is matching rapid growth in the number of employed people which is growing at nearly three times the state average. The Central SEL has a population between those of Northern and Southern but it is growing at the slowest rate in the region. Conversely the number of employed people is growing at the fastest rate in the region and is four and a half times the NSW average. GRP in Central SEL is steady.

The industry analysis finds that the region is very diverse with twenty different agricultural industries each contributing in excess of \$2 million to the regional economy. Of these, seven industries contribute over \$30 million annually and three industries (blueberries, sugar and macadamias) produce nearly the entire NSW output.

An analysis of agricultural industries determined a priority order and growth status for all industries contributing more than \$2 million annually to the region. It is intended that the indicators and methods used in this process be revisited and adjusted by NCLLS when new/improved information becomes available, and to better reflect the organisation's priorities. The initial prioritisation and analysis yielded the following results:

| Priority Ranking | Agricultural Industry(s) | Growth Status |
|------------------|--|---------------|
| 1 | Blueberries | Key emerging |
| 2 | Poultry | Key emerging |
| 3 | Vegetables (other) | Growing |
| 4 | Eggs | Key emerging |
| 5 | Beans | Key emerging |
| 6 | Beef | Stable |
| | Oilseeds | Growing |
| 7 | Orchard Fruit (other) | Stable |
| 8 | Nurseries (combined indoor & outdoor) | Stable |
| 9 | Dairy | Stable |
| | Pasture cut for hay/silage and cultivated turf | Stable |
| | Avocados | Stable |
| | Macadamias | Stable |
| 10 | Bananas | Stable |
| | Cut flowers | Declining |
| 11 | Cut flowers | Declining |
| 12 | Sugar cane | Declining |
| 13 | Tomatoes | Declining |
| 14 | Pigs | Declining |

NB: Comparative indicator information was not available for the region's oyster industry therefore it was not included in the industry prioritisation process

The industry analysis included interviews with industry representatives and review of information from the industry peak bodies, to provide insights on the issues currently facing industry and forecasts and growth trajectories which are not easily ascertained through analysis of ABS and ABARES data.

The report provides the following six (6) recommendations to the NCLLS:

1. Regular socio-economic surveillance monitoring

It is recommended that the NCLLS establish a regular surveillance monitoring program to provide current information on the performance and resilience of regional communities and the agricultural industry sector. Regular monitoring will ensure the NCLLS is in the best position to respond quickly and appropriately in the provision of support to industry and the community to facilitate production and NRM outcomes across the region.

2. Regular analysis of significant regional agricultural industries

It is recommended that the NCLLS, in collaboration with industry, regularly analyse the significant agricultural industries in the region to determine:

- agricultural industries which are a priority for the NCLLS due to their significance for the region;
- growth trends for significant agricultural industries.

This analysis will support and justify the funding and resource allocation decisions of NCLLS and help inform the design of support programs that recognise the different issues impacting industries in different phases of development.

3. Regional strategic land use planning

It is recommended that the NCLLS work with government and industry stakeholders to facilitate strategic land use planning across the region which includes consideration of:

- Land use needs of emerging and growing agricultural industries and where these are best located
- Opportunities to convert low return land uses in declining industries to high return land uses in emerging / growing industries
- Growth of non-agricultural land use for infrastructure, urban and industrial development and environmental purposes
- Compatibility of neighbouring land uses, building on synergies and minimising conflicts.

4. Bioclimatic analyses

Recent climate change research undertaken by CSIRO and OEHL has provided spatial information about the projected shift in bioclimatic regions from 1990 to 2050 under different climate change scenarios. These spatial datasets provide an exciting opportunity for NCLLS to predict what future industries could emerge in the region. For example, if a bioclimatic class currently associated with the Gympie region is forecast to occur within the Coffs Harbour region by 2050, an investigation of the current agricultural profile of that Gympie region might provide evidence of land use options for the Coffs region in future. A similar analysis of key biosecurity risks might also be considered. It is recommended that NCLLS undertake such analyses to underpin its forward planning agriculture sector opportunities and risks, as well as climate change adaptation, biosecurity and agricultural sustainability

5. Developing and promoting best management practice in key emerging industries

It is recommended that NCLLS work with key emerging industry to develop and promote best management practice guidelines or codes of practice to assist producers and the industry. These guidelines will ensure that production is optimised whilst minimising any negative environmental, social or economic impacts.

6. Build understanding of the region's socio-economic profile

It is recommended that NCLLS continue to build its understanding of the region by identifying key knowledge gaps and actively seeking opportunities to collaborate on research to fill these gaps. Current knowledge gaps include:

- What is the extent of off-farm income across agricultural industries in the region?
- How reliant is agricultural industry viability on income generated off-farm, and which industries are most reliant?
- What are the major non-agricultural opportunities for the region and how may these impact on communities and other industries in terms competition for land use, labour and other resources?
- How can we compare priority regional industries for which we do not have comparative indicators, such as the oyster industry?

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Abbreviations

| Abbreviation | Description |
|--------------|---|
| ABARES | Australian Bureau of Agricultural and Resource Economics and Sciences |
| ABS | Australian Bureau of Statistics |
| LLS | Local Land Services |
| NCLLS | North Coast Local Land Services |
| SEL | Socio Ecological Landscape |

Glossary

Agricultural business

A business that is engaged in agricultural activities.

Broadacre crops

Crops that are typically grown on a broad scale. They include cereals for grain, cotton, hay, legumes for grain, oilseeds, sugar cane for crushing and other broadacre crops.

Dependency Ratio

The ratio of the economically-dependent proportion of the population to the productive part. The economically-dependent proportion is recognised to be children who are too young to work and individuals that are too old, that is, generally, individuals under the age of 15 and over the age of 65. The productive part makes up the gap in between (ages 15-64), or the labour force. This ratio is important because as it increases, there is increased strain on the productive part of the population to support the upbringing and pensions of the economically dependent.

Gross Regional Product

The monetary value of all the finished goods and services produced within a region in a specific time period, usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

Gross Value of Agricultural Commodities Produced

The value placed on recorded production at the wholesale prices realised in the market place.

Index of Economic Diversity

Measures economic or industrial diversity within a region by determining the degree to which the region's industry mix differs from that of the nation. When the index value is close to one, the industrial profile of a region mirrors that of the national economy and is considered more diverse.

Livestock Slaughterings and Other Disposals

Values are published as one figure but include two distinct components:

- Value of livestock slaughtered.
- Value of net exports, i.e. the total value of livestock intended for slaughter in adjacent states and territories where available (at present these can only be identified between the Northern Territory and adjacent states) and livestock exported overseas whether for slaughter or breeding, minus the value of imports of livestock.

Local Business

Companies whose registered place of business is within the region.

Location Quotient

A location quotient (LQ) is an analytical statistic that measures a region's industrial specialization relative to a larger geographic unit (usually the nation). The formula for computing location quotients can be written as:

$$LQ = e_i/e / E_i/E$$

Where:

e_i = Local employment in industry i

e = Total local employment

E_i = Reference area employment in industry i

E = Total reference area employment

It is assumed that the base year is identical in all of the above variables.

Participation Rate

The proportion of the resident population aged 15 and over in the labour force.

Per Capita Income

Also known as income per person, is the mean income of the people in an economic unit such as a region or country. It is calculated by taking a measure of all sources of income in the aggregate and dividing it by the total population.

Productivity

Productivity is a key component of economic growth and is a measure of the efficiency of production within a region. Dividing the GRP of a region by total hours worked will measure the labour productivity within that region, i.e. the average amount of output produced by an hour worked by a person within that region.

Working Population

The number of persons whose place of employment is within the area.

1 Introduction

1.1 Overview

The North Coast of NSW supports a diverse range of agricultural enterprises within a recognised region of high biodiversity, scenic beauty, and a fast growing urban population. The established charter of the new North Coast Local Land Services (NCLLS) will address four major areas of primary industry on the NSW North Coast including: agricultural sustainability; biosecurity, emergency response to rural crises; and natural resources management. In order to deliver all facets of this charter, NCLLS aims to achieve a thorough understanding of factors that are driving change within industry, community, and environment, and how these drivers interact to provide future opportunities for agricultural growth and ecological sustainability across the region. Such understanding will enable the NCLLS to tailor its services and how they are delivered, to best meet the future needs of adaptive communities and industries.

To assist the NCLLS in targeting investment to sectors of rural community, primary industry and natural environment that offer the greatest potential for wealth creation and achievement of ecological sustainability, a characterisation of the socio-economic landscape of the NSW North Coast region was undertaken to provide key information on areas of growth and contraction, opportunities and risks.

1.2 Project scope

Eco Logical Australia was engaged by NCLLS to provide key socio-economic information for the NSW North Coast region, captured in two broad parts:

1. A socio-economic snapshot; and
2. An analysis of socio-economic information for 'priority' primary industries.

Data were compiled for the NCLLS region in its entirety, and for the three socio-ecological landscapes (SELs) that make up the region, namely the Northern, Central and Southern SELs (**Figure 1**). Each SEL in the region comprises three or more Local Government Areas (LGAs). **Table 1** lists the area of each SEL and their relevant LGAs.

Table 1: LGAs represented in Northern, Central and Southern SELs of the NCLLS region

| Northern | Central | Southern |
|---|---|--|
| Area | | |
| 10,770 km ² | 12,730 km ² | 8,532 km ² |
| Local Governments | | |
| Ballina (492 km ²) | | |
| Byron (567 km ²) | Bellingen (1,542 km ²) | <i>Bellingen (58 km²)</i> |
| <i>Clarence Valley (870 km²)</i> | Clarence Valley (9,552 km ²) | Nambucca (1,419 km ²) |
| Kyogle (3,582 km ²) | Coffs Harbour (1,174 km ²) | Kempsey (3,375 km ²) |
| Lismore (1,287 km ²) | <i>Nambucca (71 km²)</i> | Port Macquarie-Hastings (3,680 km ²) |
| Richmond Valley (2,654 km ²) | <i>Richmond Valley (392 km²)</i> | |
| Tweed (1,317 km ²) | | |

Note. LGAs in *italics* have the majority of their area in a different SEL.

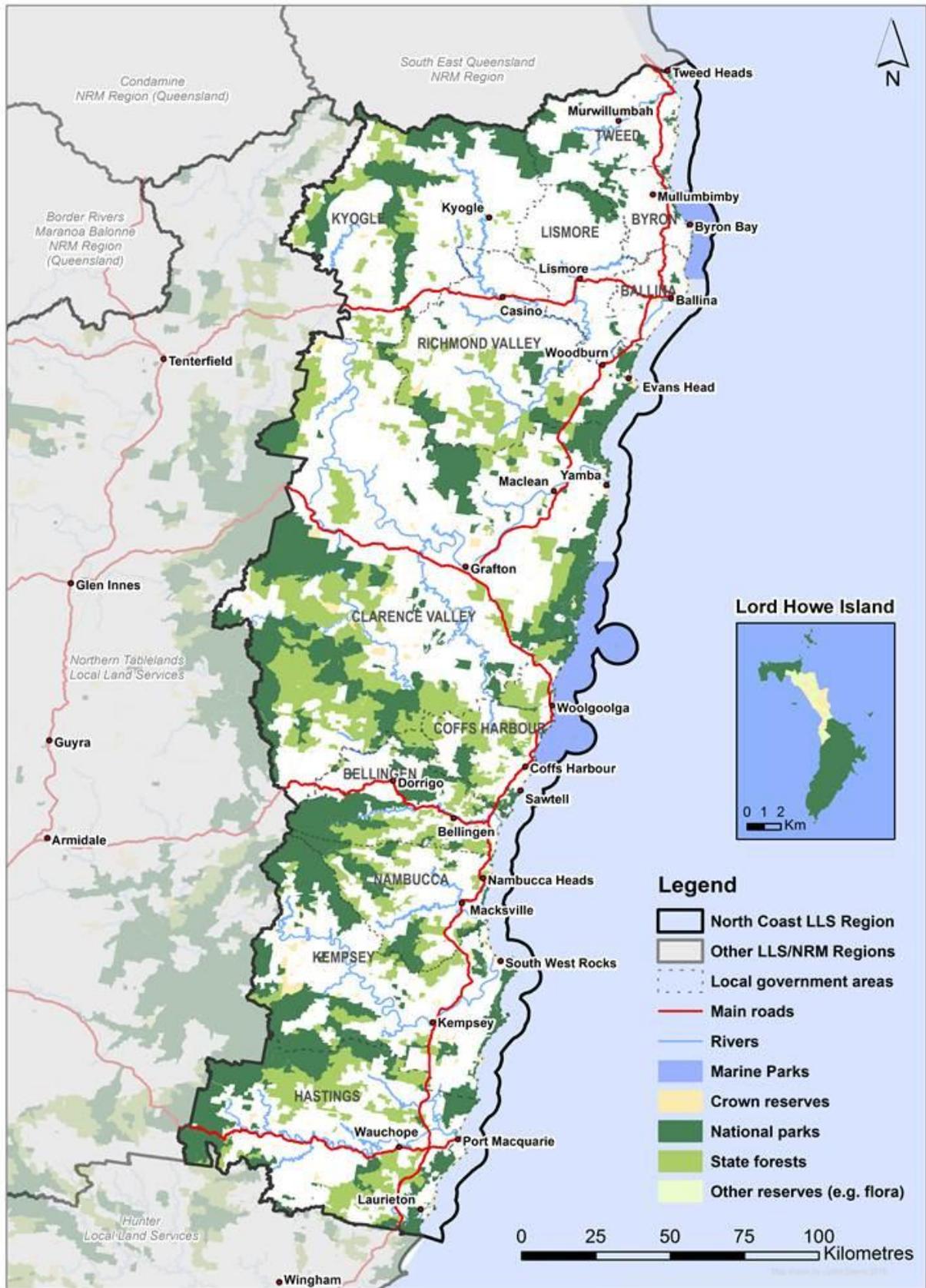


Figure 1: North Coast LLS

2 Approach

2.1 Socio-economic snapshot

Key socio-economic data for the NCLLS region were drawn from two major sources: 2011 Census data; and web-based data available from the Australian Bureau of Statistics (ABS) and the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES). Various indicators and metrics were drawn together for the NCLLS region and for each SEL in the region. These are listed in **Table 2**. Most of the SEL data were amalgamated from data compiled at the finer LGA level.

Table 2: Key socio-economic indicators and metrics captured for the NCLLS region

| Indicator | Key metrics |
|----------------------------|---|
| Business ¹ | Gross regional product; economic diversity; productivity; location quotients; number of businesses; industry turnover; value of agricultural industries (e.g. hay/silage, sugar, broadacre crops, fruit and nut crops, vegetables, livestock (beef, dairy, poultry, sheep, pigs, other)); industry multipliers. |
| Income ¹ | Per capita income; average wage and salary income; median household income. |
| Labour market ¹ | Employed persons; participation rate; employment growth; employment capacity; employment by occupation; unemployment rate; rate of volunteerism. |
| Land area and holdings | Land area of farms; number of farms; area of holdings for individual commodity types (e.g. hay/silage, sugar, broadacre crops, fruit and nut crops, vegetables, livestock numbers (beef, dairy, poultry, sheep, pigs, other). |
| Population (demography) | Resident population; population density, annual change; projected population; average age; age distribution; dependency ratio; country of birth; indigenous population; number of households; dwelling statistics; internet use. |
| Socio-economic indices | Relative socio-economic advantage; index of economic resources; index of education and occupation |

1. Includes breakdown for agri-businesses

Snapshot summary

The key economic indicators listed in **Table 3** and provided in **Section 3.1.1**, provide a summary of the socio-economic profile for the NCLLS region. This summary can be used by the NCLLS to engage stakeholders across the region and can form the basis of a regular socio-economic surveillance monitoring program.

Table 3: Snapshot socio-economic comparative indicators

| Indicator | Key metrics |
|---------------------|---|
| Population | Number, growth rate, long-term trend, projected, average age, dependency ratio |
| Labour market | Employed number, growth, participation rate |
| Business investment | Gross regional product, growth, long-term trend, GRP per capita, productivity, economic diversity, number of business, growth, turnover |
| Income | Per capita income, growth, long-term trend, average salary, growth, long-term trend |

2.2 Agricultural industry analysis

The agricultural industry analysis involved analysis of the agricultural sector in the region, profiling and prioritising the region's significant agricultural industries.

2.2.1 Agricultural industry sector analysis

The agricultural industry sector analysis used key indicators for the Agriculture, Forestry and Fishing sector in the North Coast region to determine the overall performance and resilience of the sector. This analysis compared data from the three SELs with the regional and NSW state averages.

The comparative indicators used in the agricultural industry sector analysis are listed in **Table 4** and provided in **Section 3.2**. Summary outcomes can be used by the NCLLS to engage stakeholders across the region, and as the basis for a regular analysis of the performance and resilience of the agricultural industry sector in the region.

Table 4: Agricultural industry comparative indicators

| Indicator | Key metrics |
|---------------------------|--|
| Business numbers | Number, % of total business numbers, industry turnover, average turnover |
| Contribution to GRP | Industry contribution to GRP(\$), growth, long-term growth, average growth, % of total GRP, industry productivity, aquaculture contribution to GRP, fishing contribution to GRP, forestry contribution to GRP |
| Employment | Working population, % of total working population, resident employed population, % of total resident, working population as % of resident workforce, working population as a % of resident workforce %, local residents employed in industry, local employed residents as % of industry working population %, industry location quotient |
| Land areas and holdings | Area of agricultural holdings, number of establishments, average holding |
| Gross value of production | Agriculture total \$, Breakdown for crops/livestock slaughtering/livestock products/aquaculture/fishing/forestry |

2.2.2 Agricultural industry profiling

Profiling the agricultural industry involved a comparative assessment of ABS and ABARES data for all regionally significant agricultural industries to determine:

- Relative priority of agricultural industries
- Growth status of agricultural industries.

The mechanism for profiling the region's agricultural industries is intentionally simple, robust and repeatable and intended to support NCLLS investment decisions and provide a justification of expenditure decisions to internal and external stakeholders. The profiling of industries should also enable NCLLS to tailor and target their industry support programs to best effect.

2.2.3 Agricultural industry profiling matrix

The agricultural industry profiling process uses a simple matrix (**Table 25**) to compare and prioritise industries and to ascertain their growth status. This process is only the initial stage in a more detailed industry profiling process. It provides an example of how industry data can be interrogated to provide some quantifiable inputs that support a more rigorous assessment of regional priorities utilising all the available data and information.

This profiling process, including the initial indicator set and prioritisation process, has been designed on the premise that growing industries are of potential higher significance to the NCLLS and the region than stable or declining industries. This premise is based on the following assumptions:

- NCLLS has existing relationship and programs for established industries
- Stable and declining established industries are supported by regulation, policy/codes, best management practices, peak industry groups and advisory support
- Stable and declining industries do not have a growing ecological footprint in the region
- Emerging industries have a growing economic, social and environmental significance to the region through increasing returns, growing employment and expanding ecological footprint
- Emerging industries have significant potential to generate social and environmental issues due to lack of supporting regulation, advisory assistance or best management practices and the increased likelihood of land use conflict associated with rapid growth in area.
- Emerging industries also have the potential to generate positive environmental outcomes with appropriate planning and stewardship.

NCLLS can modify the matrix (**Table 25**) through the inclusion of additional or different indicators, adding weightings to indicators and/or changing the thresholds for the indicators.

Matrix indicators

The matrix is purposefully simple so that it can be readily updated when new data become available. The minimal set of indicators selected provides scope for the addition of other indicators which the NCLLS determines will add value to the profiling process.

The initial indicators have been selected to provide both a measure of the significance of the industry to the region and its trajectory in terms of growth.

The initial indicators and the reason for selection are listed in **Table 5**.

Table 5: Agricultural industry profiling indicators

| Indicator | Reason for inclusion |
|-------------------------------|--|
| Turnover volume | Indicates the economic significance of the industry. NB: Minimum threshold for a regionally significant industry is >\$2M |
| Turnover growth | Indicates if an industry is growing / stable / declining in economic terms |
| Growth in area under land use | Indicates growth in area of land use as a percentage of total land used for that industry. Identifies if industry is growing / stable / declining. Gives an indication as to the potential environmental significance of an industry (i.e. industry footprint on the region and how fast this is growing). |
| Growth in production | Indicates increasing / decreasing rates of production for each industry. Identifies if industry is growing / stable / declining in the region |
| Growth in employment | Indicates increasing / decreasing rates of industry employment. Identifies if an industry is growing / stable / declining in the region. Gives an indication as to the growing social significance of an industry. |

Matrix thresholds

The thresholds selected for each indicator are designed to categorise the data into groupings that reflect the terms used to describe them. For example the thresholds for the 'stable' category are generally expressed as +/-10%.

All indicators have five (5) thresholds. This enables simple metrics to be used. for example the assignment of a value to each column in the matrix to derive a cumulative score per industry.

The adjustment of thresholds is one of the ways in which the matrix can be 'fine-tuned' over time and / or in response to changing NCLLS priorities.

Determining priority industries

The matrix adopts a two part process to determine the priority agricultural industries for the region:

- *Part 1 – Economic significance threshold:* industries must have a regional turnover in excess of \$2 million per annum to be considered significant. Industries below this threshold have not been included in the Agricultural industries profiling matrix in **Table 25**. (NCLLS may decide to include all agricultural industries for which data has been collected in future analysis).
- *Part 2 – Cumulative scores:* are calculated for each industry that exceeds the economic significance threshold, by allocating a priority value of 1-5 to each column across the five socio- economic indicators in the matrix. (1 is allocated to the column with the lowest value and 5 to the highest). Each industry is then scored across all indicators to produce a total priority score. A higher score represents a higher priority regional industry.

The scoring system facilitates the weighting of indicators in response to changing priorities, and can be used with other scores derived from separate data analysis for finer scale targeting. For example the 'Turnover growth' and 'Employment growth' scores may be weighted to identify the priority agricultural industries for promotion in areas of falling employment and diminishing GRP, such as the Northern SEL.

Determining industry growth categories

Industry growth categories have been developed which are consistent with the types and diversity of industries in the region, supported by the available indicators and data, and will provide NCLLS with useful information to tailor support to match the circumstances of industries in each category. Industry categories may be fine-tuned or changed over time as determined by the NCLLS.

To allocate agricultural industries to respective growth categories the same simple scoring system as used for prioritising industries has been utilised, except in this instance the 'turnover value' is not considered as it does not relate to a growth trend.

For each industry the four growth indicators are scored 1-5 from which a total growth score is derived. These total growth scores were then grouped into four classes as per the rule set outlined in **Table 6**. The metrics used in this industry classification may be changed by the NCLLS in response to changing priorities and new or improved information.

Table 6: Agricultural industry growth categories

| Growth Category | Rules |
|-----------------|--|
| Key Emerging | Growth score equal to / or greater than 17 |
| Growing | Growth score of 15-16 |
| Stable | Growth score between 10-14 |
| Declining | Growth score less than 10 |

2.2.4 Priority agricultural industry analysis

The priority agricultural industry analysis focussed on priorities determined through review of industry sector performance and discussion with NCLLS. Current priority industries correlate strongly with those industries contributing more than \$10 million dollars per year into the regional economy.

The priority industry analysis considered both quantitative and qualitative information derived from the latest literature, and also drew on feedback from relevant peak body members. This approach recognises the currency issue of quantitative information derived through periodic ABS and ABARES census activities and the need to consider trends and emerging issues impacting industry. The current 'Priority' industries and the rationale for their inclusion in this project are provided in **Table 7**.

Table 7: Priority industries in the NCLLS region

| Industry | Reason for inclusion |
|-------------|--|
| Beef | Largest agri-business contributor to NCLLS economy |
| Dairy | Traditional industry and significant driver of rural economy |
| Blueberries | Key emerging and rapidly expanding industry in Central SEL, with potential to overtake beef as lead industry over the next decade. Replacing the contracting banana industry in many places. |
| Macadamias | Traditional industry and significant driver of rural economy |
| Sugar | Traditional industry and significant driver of rural economy. Challenges with ecological sustainability |

| Industry | Reason for inclusion |
|------------|---|
| Avocados | Significant regional agricultural industry representing nearly 50% of NSW production. Growing competition from imports |
| Poultry | Important intensive agricultural industry currently nearly exclusively domestically driven market. Continually expanding world demand for poultry. |
| Vegetables | Important local industry. High diversity of vegetables grown given the region's variable climate and landscapes. |
| Nurseries | Includes cultivated plants, cut flowers and turf, all of which contribute to a significant and emerging industry. |
| Oysters | Traditional industry and significant driver of aquaculture and fisheries business. Reliant on maintenance of catchment health via appropriate land use |
| Bananas | Traditional regional industry representing over 75% of NSW industry and experiencing considerable pressures and risks from other domestic markets and disease |

A representative of the above industries was contacted (where available) in March or April 2015 to compile key information about the industry status, including challenges and opportunities. Information was also sourced from publicly available industry information. Representatives contacted are listed in **Table 8**.

Table 8: Industry representatives contacted or information sources for this project

| Industry | Representative / Information Source |
|-------------|---|
| Beef | Jen Peart, Markets Coordinator, NLRs, MLA |
| Dairy | Internet |
| Blueberries | Internet |
| Macadamias | Joylon Burnett, CEO, Australian Nut Industry Council |
| Sugar | Internet |
| Avocados | Internet |
| Poultry | Internet |
| Vegetables | Internet |
| Nurseries | Internet |
| Oysters | Tim Gippel, Senior Policy Officer, Aquaculture, Port Stephens Fisheries Institute |
| Bananas | Alix Perry, Business Manager, Australian Banana Growers Council |

2.3 Snapshot presentation and workshop

A workshop was held to present and discuss the data compiled for the socio-economic snapshot and industry analysis to key NCLLS staff. The workshop was held on the 17th of April at the NCLLS Office in Coffs Harbour. The aims of the workshop were to:

- Introduce the socio-economic data available for the region;
- Present a socio-economic snapshot of the NCLLS;
- Present the preliminary analysis of some of the priority industries in the region;
- Clarify the industries for subsequent analysis by the project;
- Clarify the content of the final report.

The workshop agenda included:

- Project background – why the LLS needs to fully understand the socio – economic profile of the region;
- Summary of the region using a sub-set of key socio – economic indicators;
- Introduction to the data – what sources were used, what the indicators mean and what are the limitations of these data and information sources;
- Socio-economic snapshot – presentation of all key indicator data sets broken down to SEL level and compared with whole of NSW values;
- Industry analysis - detailed analysis of priority agricultural industries for the region derived from industry statistics and interviews with peak industry bodies;
- NCLLS priorities – discussion to identify what are the priority agricultural industries for the region.

Outcomes from the workshop guided the development of industry prioritisation framework and the options and recommendations contained in this report. These outcomes are summarised in **Section 3.3**.

3 Outcomes

3.1 Socio-economic snapshot

The socio-economic snapshot includes two parts.

1. A 'Snapshot summary' uses a subset of key socio-economic indicators to provide an overall picture the regions performance and resilience.
2. A more detailed description of regional socio-economic indicators.

3.1.1 Snapshot summary

Table 9 lists a number of key socio-economic indicators for the communities of the North Coast region. This analysis compares the data from the three SELs with the regional and NSW state average.

Table 9: Comparative Indicators

| Indicator | Northern SEL | Central SEL | Southern SEL | North Coast | New South Wales |
|---|--------------|-------------|--------------|-------------|-----------------|
| Population | | | | | |
| Estimated resident population, 2014 | 242,116 | 136,417 | 126,779 | 505,312 | 7,518,472 |
| Annual growth, 2013-14 (%) | 0.9% | 0.5% | 1.1% | 0.8% | 1.5% |
| Average annual growth, 2009-14 (%) | 0.7% | 0.6% | 0.9% | 0.7% | 1.3% |
| Projected population, 2031 | 275,300 | 157,150 | 141,950 | 574,400 | 9,228,350 |
| Average annual growth, 2014-31 (%) | 0.8% | 0.8% | 0.7% | 0.8% | 1.2% |
| Average age, 2013 (years) | 41.9 | 41.8 | 43.8 | 42.3 | 38.3 |
| Dependency ratio, 2013 (%) | 61.7% | 63.5% | 73.3% | 64.9% | 51.6% |
| Labour Market | | | | | |
| Employed persons (estimated), Dec Qtr 2014 | 93,572 | 60,759 | 47,810 | 202,141 | 3,615,845 |
| Annual growth, yr to Dec Qtr 2014 (%) | -8.7% | 2.7% | 1.7% | -3.1% | 0.6% |
| Unemployment rate, Dec Qtr 2014 (%) | 8.2% | 7.1% | 7.0% | 7.6% | 5.7% |
| Labour force, annual growth, yr to Dec Qtr 2014 (%) | -8.3% | 4.0% | 3.3% | -2.2% | 0.7% |
| Participation rate, 2013 (%) | 57.4% | 57.8% | 43.2% | 54.0% | 62.3% |
| Business Investment | | | | | |
| Gross Regional Product, 2013/14 (\$ million) | 10,962.5 | 6,840.4 | 5,534.5 | 23,337.5 | 492,352.0 |
| Annual growth, 2012/13-2013/14 (%) | -3.0% | 0.0% | 10.9% | 0.9% | 2.1% |
| Average annual growth, last 5 years (%) | 0.1% | 2.0% | 5.2% | 1.8% | 2.1% |
| GRP per capita, 2013/14 (\$) | 44,772 | 49,363 | 43,293 | 45,645 | 65,798 |
| Productivity, 2013/14 (\$GRP/hr worked) | 58.84 | 58.25 | 60.94 | 59.15 | 65.40 |

| Indicator | Northern SEL | Central SEL | Southern SEL | North Coast | New South Wales |
|---|-----------------|----------------|-----------------|----------------|--------------------|
| Index of Economic Diversity (Australia = 1) | 0.835 | 0.809 | 0.758 | 0.834 | 0.980 |
| No. of businesses, June 2013 | 21,377 | 10,543 | 9,458 | 41,378 | 689,076 |
| Annual growth, 2011/12-2012/13 | -2.9% | -2.7% | -3.1% | -2.9% | -3.0% |
| Total industry turnover, 2012/13 (\$ million) | 7,076.2 | 3,764.1 | 3,328.4 | 14,168.7 | 279,926.2 |
| Annual growth, 2011/12-2012/13 | -2.3% | -3.2% | -0.2% | -2.1% | 0.2% |
| Average industry turnover, 2012/13 (\$'000) | 331.0 | 357.0 | 351.9 | 342.4 | 406.2 |
| Annual growth, 2011/12-2012/13 | 0.6% | -0.5% | 3.0% | 0.9% | 3.3% |
| Income | | | | | |
| Per capita income, 2010/11 (\$) | 19,992 | 18,532 | 18,476 | 19,215 | 28,846 |
| Annual growth, 2009/10-2010/11 (\$) | 6.4% | 4.9% | 7.2% | 6.2% | 8.1% |
| Average annual growth, 2005/06-2010/11 (\$) | 4.6% | 4.6% | 4.1% | 4.5% | 4.5% |
| Average wage & salary income, 2010/11 (\$) | 40,223 | 39,723 | 40,937 | 40,256 | 53,916 |
| Annual growth, 2009/10-2010/11 (\$) | 4.5% | 4.5% | 4.5% | 4.5% | 6.0% |
| Average annual growth, 2005/06-2010/11 (\$) | 4.8% | 4.8% | 5.0% | 4.8% | 4.4% |

3.1.2 Population

Population trends on the North Coast of NSW are shown in **Table 10** and illustrated in **Figure 2**. The estimated resident population of the North Coast region was 501,078 in June 2014, an increase of 4,234 persons from the level recorded in June 2013 (501,078). This represented annual growth of 0.8%, which was lower than the average for NSW (1.5%). Over the past five years, the North Coast region has experienced an increase in population of 18,458 persons, representing average annual growth of 0.7%.

Over the period to 2031, the population of the North Coast region is expected to increase by 69,088 persons – or an average annual rate of 0.8% – to approximately 574,400 persons. The growth rate for the North Coast region is below that forecast for NSW (1.2%).

Table 10: Estimated Resident Population

| Indicator | Level 2014 | Ann % chg | 5-Year Ann % chg | Level 2031 | Avg ann % growth 2014-31 |
|-----------------|---------------|--------------|---------------------|---------------|-----------------------------|
| North Coast | 501,078 | 0.8% | 0.7% | 574,400 | 0.8% |
| Northern SEL | 239,952 | 0.9% | 0.7% | 275,300 | 0.8% |
| Central SEL | 135,676 | 0.5% | 0.6% | 157,150 | 0.8% |
| Southern SEL | 125,450 | 1.1% | 0.9% | 141,950 | 0.7% |
| New South Wales | 7,409,337 | 1.5% | 1.3% | 9,228,350 | 1.2% |

Source: ABS 3218.0, NSW Planning & Environment

Population North Coast

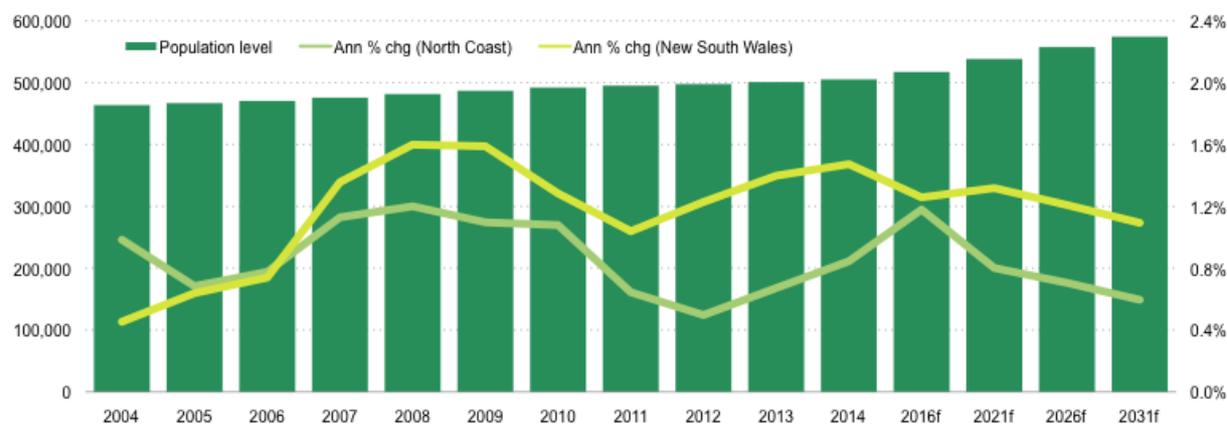


Figure 2. Population increase on the NSW North Coast

3.1.3 Age Distribution

Age distribution statistics on the North Coast of NSW are shown in **Table 11** and illustrated in **Figure 3**. According to medium population forecasts, the average age of the North Coast region, which was 42.3 years in 2013, is expected to increase by 3.3 years to 45.6 years in 2031. By comparison, the average age for NSW was 38.3 years in 2013, rising by 2.3 years to 40.6 years by 2031. Between 2013 and 2031, there will be an anticipated increase in the total population share of the North Coast region in the 35-39 years and all age brackets from 65 years and older.

Table 11: Age Distribution

| Age group | North Coast | | | | | New South Wales | | | | |
|----------------------|-------------|------------|---------------|------------|---------------|-----------------|------------|---------------|------------|---------------|
| | Level 2008 | Level 2013 | % chg 2008-13 | Level 2031 | % chg 2013-31 | Level 2008 | Level 2013 | % chg 2008-13 | Level 2031 | % chg 2013-31 |
| 0-4 | 5.7% | 5.6% | -0.1% | 5.2% | -0.5% | 6.5% | 6.6% | 0.0% | 6.2% | -0.4% |
| 5-9 | 6.3% | 6.1% | -0.1% | 5.8% | -0.3% | 6.3% | 6.3% | 0.0% | 6.2% | -0.1% |
| 10-14 | 6.9% | 6.4% | -0.5% | 6.2% | -0.3% | 6.4% | 6.0% | -0.4% | 6.1% | 0.1% |
| 15-19 | 6.7% | 6.4% | -0.4% | 5.6% | -0.8% | 6.7% | 6.3% | -0.4% | 5.9% | -0.4% |
| 20-24 | 4.8% | 4.8% | 0.0% | 3.8% | -1.0% | 7.0% | 6.8% | -0.1% | 5.8% | -1.0% |
| 25-29 | 4.4% | 4.4% | 0.0% | 3.7% | -0.7% | 7.1% | 7.2% | 0.1% | 6.0% | -1.1% |
| 30-34 | 4.9% | 4.7% | -0.2% | 4.4% | -0.2% | 6.9% | 7.1% | 0.2% | 6.4% | -0.7% |
| 35-39 | 6.2% | 5.3% | -0.9% | 5.3% | 0.0% | 7.4% | 6.7% | -0.7% | 6.7% | 0.0% |
| 40-44 | 6.5% | 6.4% | 0.0% | 6.0% | -0.5% | 6.9% | 7.1% | 0.1% | 6.8% | -0.2% |
| 45-49 | 7.7% | 6.5% | -1.2% | 6.0% | -0.4% | 7.2% | 6.5% | -0.7% | 6.6% | 0.1% |
| 50-54 | 7.6% | 7.6% | 0.0% | 5.7% | -1.8% | 6.6% | 6.7% | 0.2% | 5.9% | -0.8% |
| 55-59 | 7.1% | 7.6% | 0.5% | 6.3% | -1.3% | 5.9% | 6.1% | 0.2% | 5.7% | -0.4% |
| 60-64 | 6.5% | 7.1% | 0.6% | 6.8% | -0.3% | 5.3% | 5.4% | 0.1% | 5.4% | 0.0% |
| 65-69 | 5.2% | 6.5% | 1.3% | 7.1% | 0.6% | 4.0% | 4.8% | 0.8% | 5.1% | 0.3% |
| 70-74 | 4.5% | 4.8% | 0.4% | 7.1% | 2.3% | 3.2% | 3.5% | 0.3% | 4.8% | 1.3% |
| 75-79 | 3.9% | 3.9% | 0.0% | 6.0% | 2.1% | 2.7% | 2.7% | 0.0% | 4.0% | 1.3% |
| 80-84 | 2.9% | 3.0% | 0.1% | 4.6% | 1.6% | 2.1% | 2.1% | 0.0% | 3.2% | 1.1% |
| 85+ | 2.4% | 3.0% | 0.5% | 4.4% | 1.4% | 1.8% | 2.1% | 0.3% | 3.1% | 1.0% |
| Avg age (yrs) | 41.1 | 42.3 | 1.2 | 45.6 | 3.3 | 37.6 | 38.3 | 0.7 | 40.6 | 2.3 |
| Dependency ratio (%) | 60.6% | 64.9% | 4.3% | 86.3% | 21.4% | 49.3% | 51.6% | 2.3% | 63.1% | 11.4% |

Source: ABS 3235.0, NSW Planning & Environment

Change in Age Distribution

2013-2031

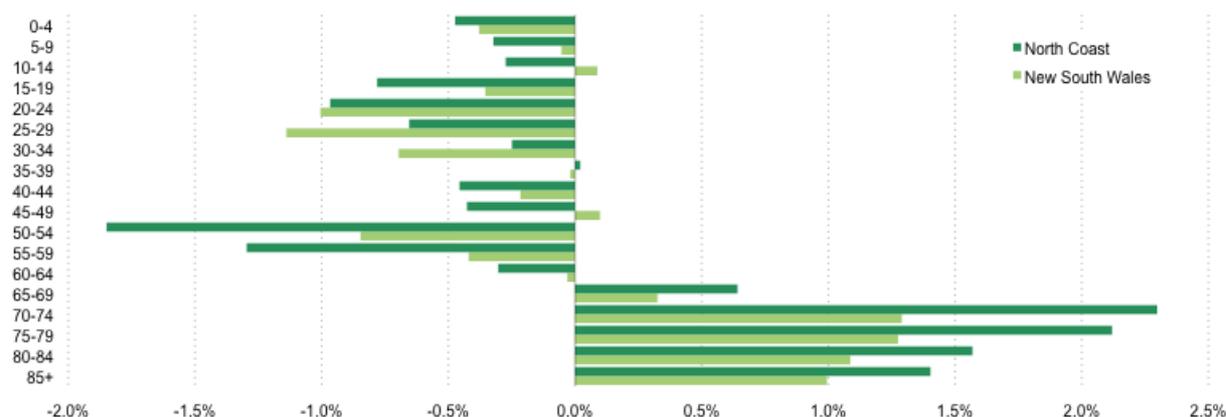


Figure 3. Forecast age distribution changes (2013-2031) on the NSW North Coast

3.1.4 Gross Regional Product

Gross Regional Product (GRP) statistics on the North Coast of NSW are shown in **Table 12** and illustrated in **Figure 4**. GRP of the North Coast region was estimated at approximately \$23.3 billion in 2013/14, representing real annual growth of 0.9%. The North Coast region contributed approximately 4.7% of the Gross State Product for NSW in 2013/14 (\$492.4 billion). The largest contribution was made by the Health Care and Social Assistance sector, with approximately \$2.4 billion, or 10.2% of the total GRP, followed by the Retail Trade (7.0%), Construction (6.8%) and Education and Training (6.5%) sectors.

Table 12: Gross Regional Product

| Industry | North Coast | | | New South Wales | | |
|--|---------------------|------------|-----------------|---------------------|------------|-----------------|
| | Level (\$M) 2013/14 | % of total | Annual % change | Level (\$M) 2013/14 | % of total | Annual % change |
| Agriculture, forestry & fishing | 771.4 | 3.3% | -21.7% | 6,617 | 1.3% | -21.0% |
| Mining | 131.4 | 0.6% | 6.3% | 11,118 | 2.3% | 7.1% |
| Manufacturing | 1,403.0 | 6.0% | -4.0% | 32,764 | 6.7% | -3.2% |
| Electricity, gas, water & waste services | 928.6 | 4.0% | 2.9% | 11,895 | 2.4% | -1.6% |
| Construction | 1,594.9 | 6.8% | 0.9% | 25,158 | 5.1% | 1.8% |
| Wholesale trade | 674.3 | 2.9% | -8.1% | 20,760 | 4.2% | -6.3% |
| Retail trade | 1,632.4 | 7.0% | 2.8% | 22,288 | 4.5% | 4.1% |
| Accommodation & food services | 1,036.4 | 4.4% | -1.7% | 13,507 | 2.7% | -1.0% |
| Transport, postal & warehousing | 895.0 | 3.8% | -0.7% | 22,668 | 4.6% | -0.7% |
| Information media & telecommunications | 431.2 | 1.8% | -5.4% | 18,938 | 3.8% | -0.9% |
| Financial & insurance services | 1,119.0 | 4.8% | 5.0% | 60,064 | 12.2% | 6.2% |

| Industry | North Coast | | | New South Wales | | |
|---|---------------------|---------------|-----------------|---------------------|---------------|-----------------|
| | Level (\$M) 2013/14 | % of total | Annual % change | Level (\$M) 2013/14 | % of total | Annual % change |
| Rental, hiring & real estate services | 846.0 | 3.6% | 12.0% | 15,104 | 3.1% | 14.0% |
| Professional, scientific & technical services | 1,004.0 | 4.3% | 0.3% | 35,003 | 7.1% | 0.6% |
| Administrative & support services | 815.7 | 3.5% | 13.9% | 16,273 | 3.3% | 11.8% |
| Public administration & safety | 1,326.8 | 5.7% | 5.3% | 25,268 | 5.1% | 5.3% |
| Education & training | 1,512.8 | 6.5% | 0.6% | 23,842 | 4.8% | 2.0% |
| Health care & social assistance | 2,377.1 | 10.2% | 4.2% | 31,179 | 6.3% | 4.2% |
| Arts & recreation services | 234.6 | 1.0% | 1.8% | 4,894 | 1.0% | 3.8% |
| Other services | 562.3 | 2.4% | 5.3% | 9,767 | 2.0% | 6.3% |
| Gross Regional Product | 23,337.5 | 100.0% | 0.9 | 492,352 | 100.0% | 2.1 |
| Real GRP per capita (\$) | 45,645 | | | 65,798 | | |

Source: Lawrence Consulting

Gross Regional Product
North Coast (\$ million), 2013/14

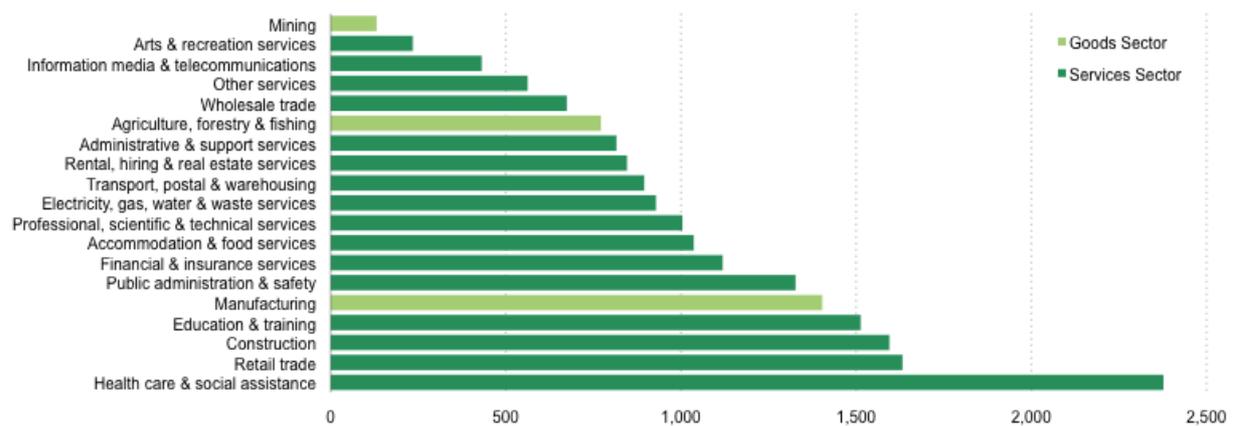


Figure 4. Gross Regional Product on the NSW North Coast

3.1.5 Productivity

Dividing the GRP by total hours worked will measure the labour productivity within a region (i.e. the average amount of output produced by an hour worked by a person within that region). The resultant productivity metric is a key component of economic growth and is a measure of the efficiency of production within a region. Productivity statistics for the North Coast of NSW are shown in **Table 13** and illustrated in **Figure 5**.

The North Coast region recorded total industry productivity (or industry value added per hour worked) of approximately \$59.15 in 2013/14, which represented an annual increase of 0.8%. The North Coast region recorded a lower total industry productivity average than NSW (\$65.40) in 2013/14.

Table 13: Productivity

| Industry | North Coast | | New South Wales | |
|---|---|-----------------|---|-----------------|
| | Level (\$value added/hr worked) 2013/14 | Annual % change | Level (\$value added/hr worked) 2013/14 | Annual % change |
| Agriculture, forestry & fishing | 40.07 | -21.6% | 37.56 | -21.4% |
| Mining | 142.79 | 4.2% | 137.59 | 4.8% |
| Manufacturing | 67.27 | 4.3% | 63.98 | 4.3% |
| Electricity, gas, water & waste services | 149.04 | -11.9% | 142.03 | -12.2% |
| Construction | 45.39 | -5.3% | 42.90 | -5.4% |
| Wholesale trade | 78.27 | -1.6% | 74.42 | -1.4% |
| Retail trade | 41.35 | 6.6% | 39.36 | 6.3% |
| Accommodation & food services | 37.63 | 5.4% | 36.95 | 5.6% |
| Transport, postal & warehousing | 66.94 | -0.4% | 62.69 | -0.3% |
| Information media & telecommunications | 151.73 | 20.1% | 130.57 | 19.6% |
| Financial & insurance services | 203.68 | 4.3% | 180.92 | 4.2% |
| Rental, hiring & real estate services | 137.79 | 1.8% | 129.80 | 1.8% |
| Professional, scientific & technical services | 70.70 | 2.1% | 63.01 | 1.9% |
| Administrative & support services | 94.14 | 19.6% | 88.99 | 20.2% |
| Public administration & safety | 68.49 | -1.3% | 65.44 | -1.4% |
| Education & training | 51.15 | -2.0% | 50.80 | -1.9% |
| Health care & social assistance | 44.67 | 0.1% | 43.58 | 0.2% |
| Arts & recreation services | 49.84 | 5.8% | 49.18 | 6.2% |
| Other services | 36.32 | -4.3% | 34.49 | -4.4% |
| Total industry | 59.15 | 0.8% | 65.40 | 1.9% |

Source: Lawrence Consulting

Industry Productivity

North Coast (\$value added/hr worked), 2013/14

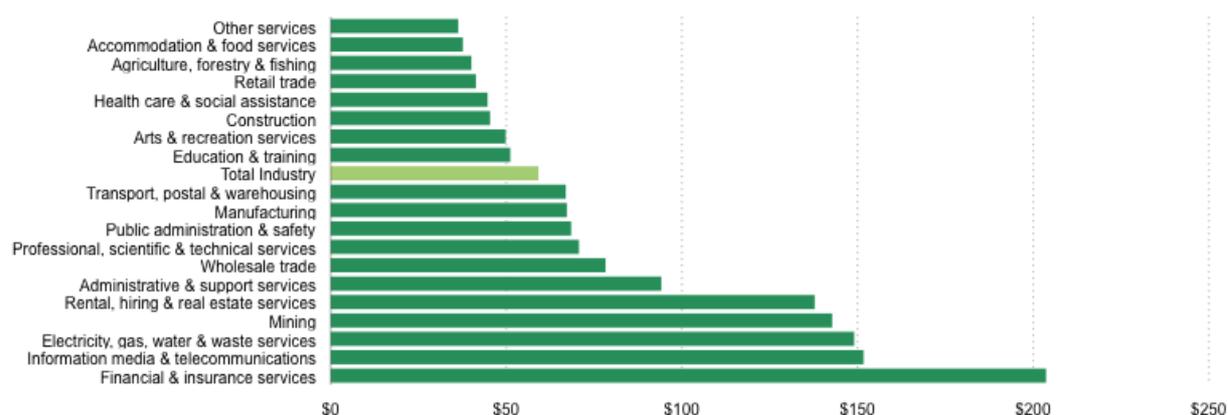


Figure 5. Industry productivity on the NSW North Coast

3.1.6 Business diversity and turnover

Number of businesses within the North Coast of NSW per industry sector are shown in **Table 14** and illustrated in **Figure 6**. The most recent Australian Business Register indicated there were 41,378 local businesses (i.e. companies whose registered place of business is within the region) operating in the North Coast region in June 2013, which represented a small annual decrease of 2.9%. In terms of business numbers by industry, the Agriculture, Forestry & Fishing sector was the largest, with 17.8% of total businesses, followed by Construction (16.7%), Rental, Hiring & Real Estate Services (9.0%), Professional, Scientific & Technical Services (7.9%) and Retail Trade (7.5%).

Table 14: Businesses by Industry

| Industry | Count June 2013 | % of total | Total turnover (\$M) | % of total | Avg. turnover (\$'000) |
|--|--------------------|---------------|-------------------------|---------------|---------------------------|
| Agriculture, forestry & fishing | 7,377 | 17.8% | 1,160.1 | 8.2% | 157.3 |
| Mining | 79 | 0.2% | 37.1 | 0.3% | 469.3 |
| Manufacturing | 1,626 | 3.9% | 838.9 | 5.9% | 515.9 |
| Electricity, gas, water & waste services | 68 | 0.2% | 49.3 | 0.3% | 725.0 |
| Construction | 6,905 | 16.7% | 2,244.8 | 15.8% | 325.1 |
| Wholesale trade | 1,108 | 2.7% | 685.0 | 4.8% | 618.3 |
| Retail trade | 3,090 | 7.5% | 2,139.2 | 15.1% | 692.3 |
| Accommodation & food services | 1,999 | 4.8% | 1,219.6 | 8.6% | 610.1 |
| Transport, postal & warehousing | 1,914 | 4.6% | 648.6 | 4.6% | 338.9 |
| Information media & telecommunications | 321 | 0.8% | 99.3 | 0.7% | 309.4 |
| Financial & insurance services | 2,246 | 5.4% | 401.2 | 2.8% | 178.6 |

| Industry | Count June 2013 | % of total | Total turnover (\$M) | % of total | Avg. turnover (\$'000) |
|---|--------------------|---------------|-------------------------|---------------|---------------------------|
| Rental, hiring & real estate services | 3,716 | 9.0% | 1,002.5 | 7.1% | 269.8 |
| Professional, scientific & technical services | 3,286 | 7.9% | 945.5 | 6.7% | 287.7 |
| Administrative & support services | 1,248 | 3.0% | 375.7 | 2.7% | 301.1 |
| Public administration & safety | 96 | 0.2% | 38.4 | 0.3% | 399.7 |
| Education & training | 523 | 1.3% | 185.7 | 1.3% | 355.1 |
| Health care & social assistance | 2,337 | 5.6% | 1,145.0 | 8.1% | 490.0 |
| Arts & recreation services | 580 | 1.4% | 119.8 | 0.8% | 206.5 |
| Other services | 1,803 | 4.4% | 644.6 | 4.5% | 357.5 |
| Non-classifiable industry | 1,056 | 2.6% | 188.5 | 1.3% | 178.5 |
| | | | | 0.0% | |
| Total industry | 41,378 | 100.0% | 14,168.7 | 100.0% | 342.4 |
| Annual % change | -2.9% | | -2.1% | | 0.9% |

Source: Lawrence Consulting

Local Businesses by Industry

North Coast, June 2013

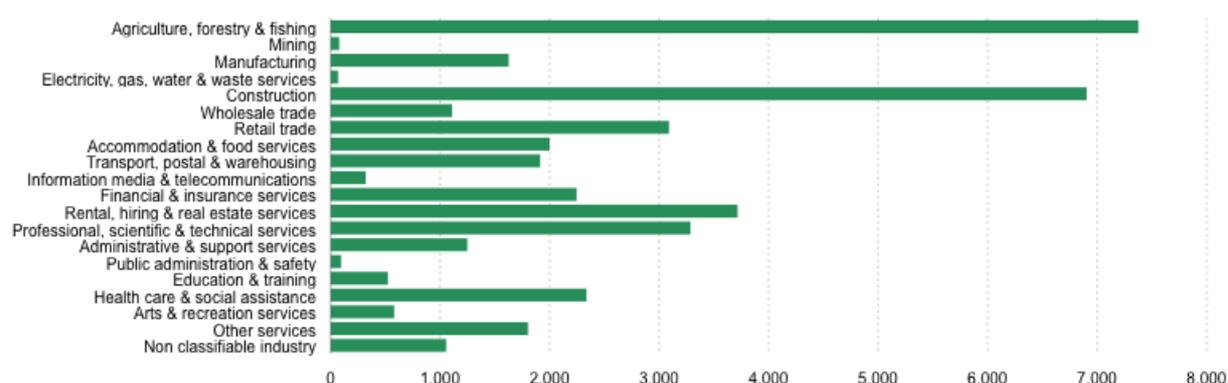
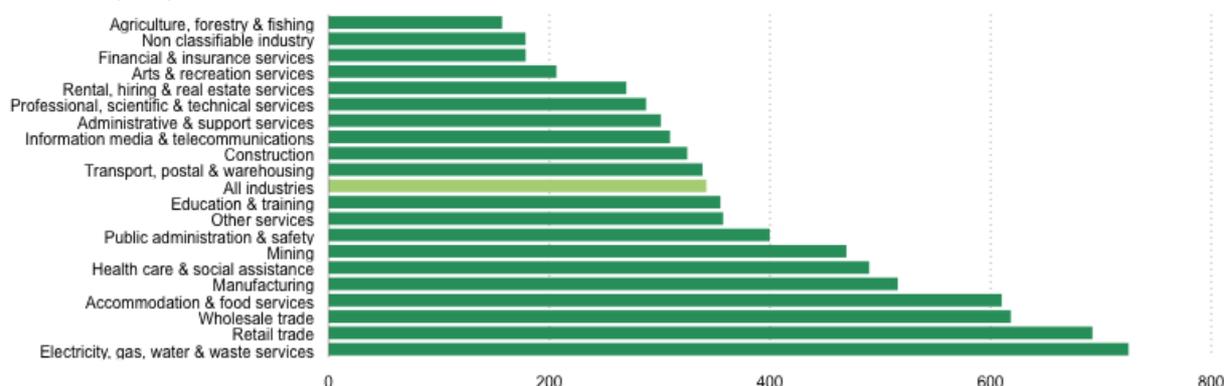


Figure 6. Number of business by industry sector on the NSW North Coast

Estimated industry turnover for the North Coast region in 2012/13 was \$14.2 billion, representing an annual decrease of 2.1%. In contrast, the average turnover per business was approximately \$342,400, an increase of 0.9%. Average business turnover by sector is illustrated in **Figure 7**.

Average Industry Turnover

North Coast (\$'000), 2012/13

**Figure 7. Business turnover per sector on the NSW North Coast (2012/13)****3.1.7 Labour market**

A summary of the labour market and unemployment rates in the North Coast of NSW are shown in **Table 15** and illustrated in **Figure 8**. The estimated number of employed persons in the North Coast region in the December Quarter 2014 was 202,141, representing a small annual decrease of 3.1% from the level recorded in the December Quarter 2013 (208,694). Over the past five years, the number of employed persons in the North Coast region has grown at an average annual rate of 0.6%.

The unemployment rate in the North Coast region was 7.6% in the December Quarter 2014, which was 0.2 percentage points higher than the rate recorded in the December Quarter 2013. The unemployment rate in the North Coast region in the December Quarter 2014 was higher than the average for NSW Wales (5.7%).

Table 15: Labour Market

| | Level Dec Qtr 2014 | Annual % change | Average annual % change Last 5 yrs |
|-------------------------------|-----------------------|--------------------|--|
| Employed persons (no.) | | | |
| North Coast | 202,141 | -3.1% | 0.6% |
| Northern SEL | 93,572 | -8.7% | -1.9% |
| Central SEL | 60,759 | 2.7% | 1.9% |
| Southern SEL | 47,810 | 1.7% | 5.0% |
| New South Wales | 3,615,845 | 0.6% | 1.3% |
| Unemployed (no.) | | | |
| North Coast | 16,567 | 10.4% | 4.2% |
| Northern SEL | 8,319 | -2.6% | 0.2% |
| Central SEL | 4,650 | 25.5% | 13.3% |
| Southern SEL | 3,598 | 30.4% | 5.3% |
| New South Wales | 219,794 | 3.4% | -0.3% |

| | Level Dec Qtr 2014 | Annual % change | Average annual % change Last 5 yrs |
|--------------------------------------|-----------------------|--------------------|--|
| Unemployment rate ^(a) (%) | | | |
| North Coast | 7.6% | 0.9% | 0.2% |
| Northern SEL | 8.2% | 0.5% | 0.2% |
| Central SEL | 7.1% | 1.2% | 0.6% |
| Southern SEL | 7.0% | 1.5% | 0.0% |
| New South Wales | 5.7% | 0.1% | -0.1% |
| Labour force (no.) | | | |
| North Coast | 218,708 | -2.2% | 0.9% |
| Northern SEL | 101,891 | -8.3% | -1.8% |
| Central SEL | 65,409 | 4.0% | 2.5% |
| Southern SEL | 51,408 | 3.3% | 5.0% |
| New South Wales | 3,835,639 | 0.7% | 1.2% |

Source: DEEWR, Lawrence Consulting

Unemployment Rate

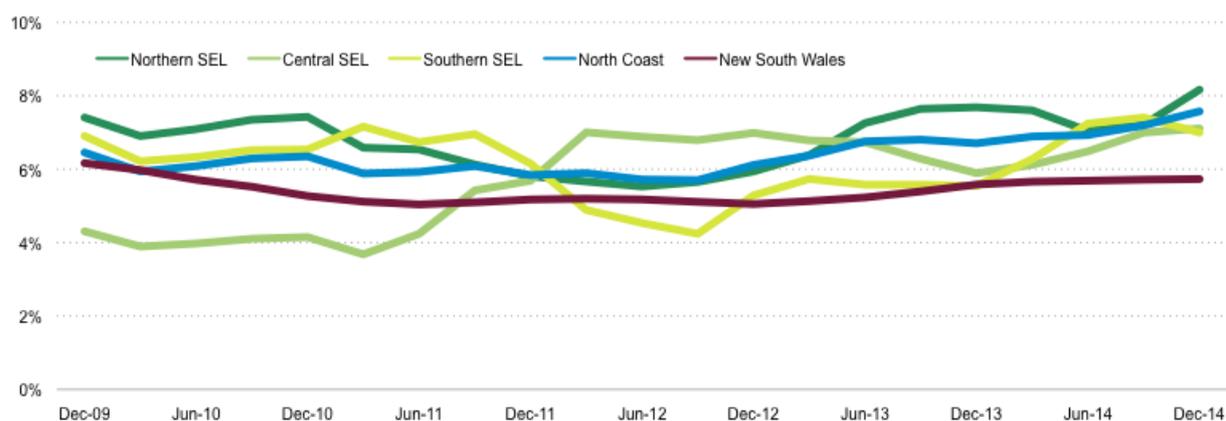


Figure 8. Unemployment with SELs, North Coast and NSW (2009-14)

With regard to the labour force, the North Coast region experienced a decrease of 2.2% over the past twelve months to a level of 218,708 persons in the December Quarter 2014, although average annual growth was 0.9% over the past five years. The number of unemployed persons in the North Coast region increased annually by 4.2% over the year to the December Quarter 2014.

Labour Force

North Coast

**Figure 9. Labour force and unemployment in the North Coast region (2009-14)****3.1.8 Employment capacity**

Employment capacity and participation rate in the North Coast region are shown in **Table 16** and **Figure 10**, respectively. The participation rate (i.e. the proportion of the resident population aged 15 and over in the labour force) in the North Coast region was 54.0% in 2013, representing a decrease of 0.8% from the average for 2012 (54.8%). The workforce participation rate for the North Coast region was significantly lower than the average for NSW in 2013 (62.3%).

Table 16: Employment Capacity

| | Level (%) 2013 | Level (%) 2012 | Annual % change ^(a) | Level 2008 | % change 2008-13 ^(a) |
|---------------------------|-------------------|-------------------|-----------------------------------|---------------|------------------------------------|
| Participation Rate | | | | | |
| North Coast | 54.0% | 54.8% | -0.8% | 53.8% | 0.2% |
| Northern SEL | 57.4% | 60.2% | -2.7% | 59.7% | -2.3% |
| Central SEL | 57.8% | 57.1% | 0.8% | 54.8% | 3.0% |
| Southern SEL | 43.2% | 42.2% | 1.1% | 41.4% | 1.8% |
| New South Wales | 62.3% | 62.5% | -0.2% | 62.5% | -0.2% |
| Dependency Ratio | | | | | |
| North Coast | 64.9% | 64.1% | 0.9% | 60.6% | 4.3% |
| Northern SEL | 61.7% | 60.9% | 0.8% | 58.2% | 3.4% |
| Central SEL | 63.5% | 62.6% | 0.9% | 59.4% | 4.1% |
| Southern SEL | 73.3% | 72.1% | 1.2% | 66.8% | 6.5% |
| New South Wales | 51.6% | 51.0% | 0.6% | 49.3% | 2.3% |

Source: ABS 3235.0, DEEWR & Lawrence Consulting

Participation Rate

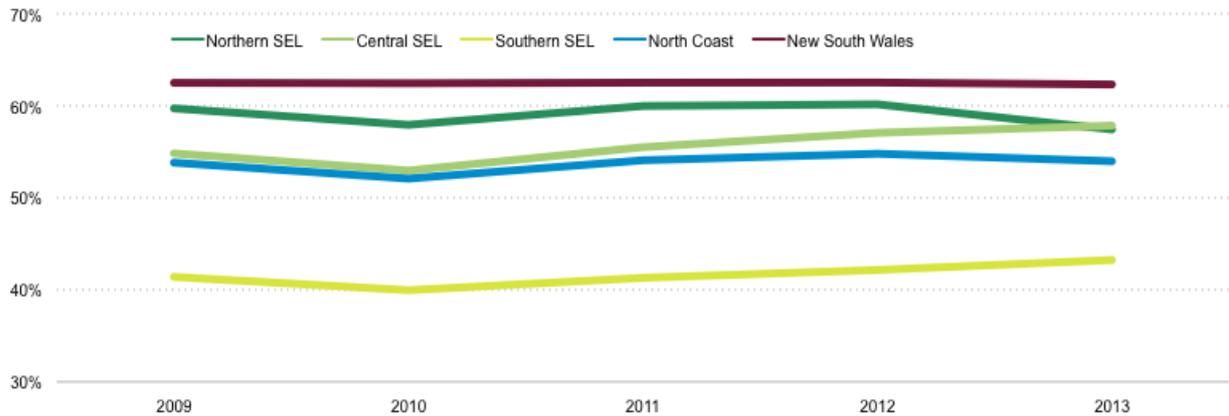


Figure 10. Participation rate in the North Coast region (2009-13)

The dependency ratio is the ratio of the economically-dependent proportion of the population to the productive part of the population. The economically-dependent proportion is recognised to be children who are too young to work and individuals that are too old, that is, generally, individuals under the age of 15 and over the age of 65. The productive part makes up the gap in between (ages 15-64), or the labour force. This ratio is important because as it increases, there is increased strain on the productive part of the population to support the upbringing of children and the support of retirees..

As shown in **Figure 11**, the dependency ratio in the North Coast region was 64.9% in 2013, representing an increase of 0.9 percentage points from the average for 2012 (64.1%). The dependency ratio for the North Coast region was significantly higher than the average for NSW in 2013 (51.6%), suggesting a greater proportion of retirees in the North Coast region.

Dependency Ratio

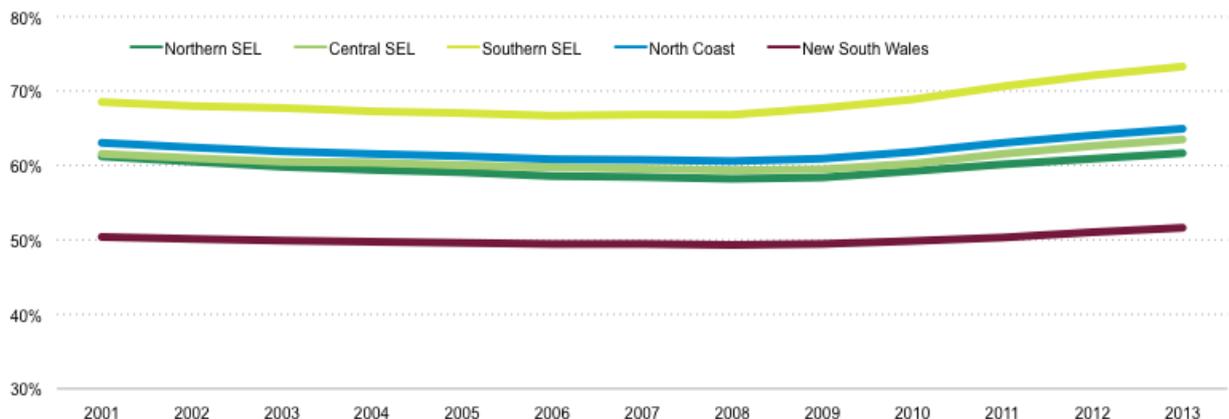


Figure 11. Dependency ratio with SELs, North Coast and NSW (2001-13)

3.1.9 Workforce

A comparison between the North Coast and NSW in terms of employment by industry is listed in **Table 17** and illustrated in **Figure 12**. The total working population in the North Coast region (i.e. the number of persons whose place of employment is within the area), was approximately 156,226 persons (2011 Census), which represented an increase of 5,320 persons (3.5%) from the 2006 Census. In 2011, the largest industry employer in the North Coast region was Health Care and Social Assistance with 16.4% of the total working population, followed by Retail Trade (14.4%), Education and Training (9.8%) and Accommodation & Food Services (9.7%). The North Coast region had a higher proportion of employment share in the Agriculture, Forestry and Fishing; Electricity, Gas, Water and Waste Services; Retail Trade; Accommodation and Food Services; Rental, Hiring and Real Estate Services; Education and Training; Health Care and Social Assistance; and Other Services sectors than NSW in 2011.

Table 17: Employment by industry (place of work)

| Industry | North Coast | | New South Wales | |
|---|----------------|---------------|------------------|---------------|
| | No. | % of total | No. | % of total |
| Agriculture, forestry & fishing | 7,146 | 4.6% | 68,883 | 2.3% |
| Mining | 309 | 0.2% | 29,798 | 1.0% |
| Manufacturing | 10,428 | 6.7% | 258,913 | 8.5% |
| Electricity, gas, water & waste services | 2,420 | 1.5% | 33,853 | 1.1% |
| Construction | 9,849 | 6.3% | 221,682 | 7.3% |
| Wholesale trade | 4,412 | 2.8% | 137,212 | 4.5% |
| Retail trade | 22,445 | 14.4% | 318,845 | 10.5% |
| Accommodation & food services | 15,086 | 9.7% | 206,260 | 6.8% |
| Transport, postal & warehousing | 5,294 | 3.4% | 151,955 | 5.0% |
| Information media & telecommunications | 1,792 | 1.1% | 71,630 | 2.4% |
| Financial & insurance services | 3,196 | 2.0% | 156,936 | 5.2% |
| Rental, hiring & real estate services | 2,905 | 1.9% | 50,887 | 1.7% |
| Professional, scientific & technical services | 7,059 | 4.5% | 242,499 | 8.0% |
| Administrative & support services | 4,076 | 2.6% | 100,353 | 3.3% |
| Public administration & safety | 9,321 | 6.0% | 183,410 | 6.0% |
| Education & training | 15,263 | 9.8% | 245,243 | 8.1% |
| Health care & social assistance | 25,681 | 16.4% | 356,521 | 11.8% |
| Arts & recreation services | 2,105 | 1.3% | 45,556 | 1.5% |
| Other services | 6,247 | 4.0% | 115,589 | 3.8% |
| Inadequately described/Not stated | 1,192 | 0.8% | 37,501 | 1.2% |
| Total | 156,226 | 100.0% | 3,033,526 | 100.0% |

Source: ABS Census 2011

Employment by Industry

Place of Work, 2011 Census

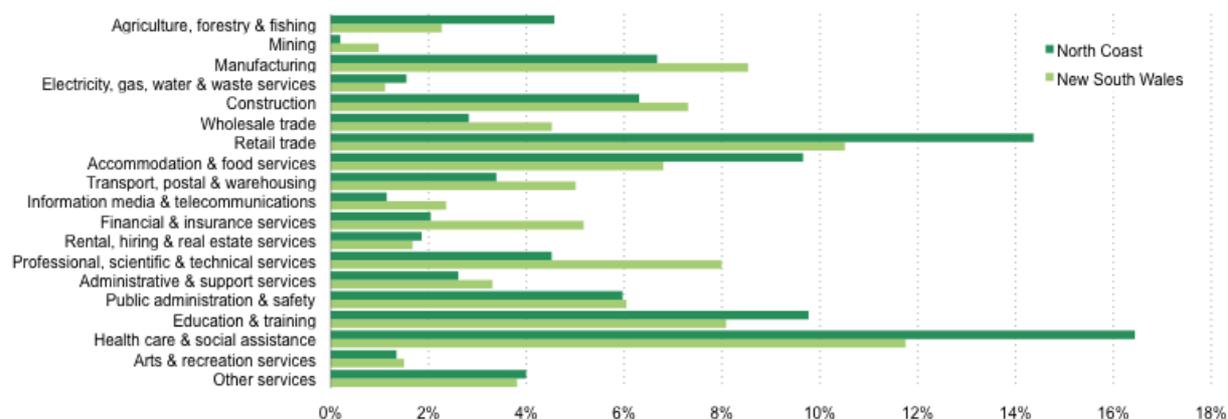


Figure 12. Employment by industry on the North Coast and in NSW

3.1.10 Economic diversity

The Regional Index of Economic Diversity measures economic or industrial diversity within a region by determining the degree to which the region’s industry mix differs from that of the nation. When the index value is close to 1, the industrial profile of a region mirrors that of the national economy and is considered more diverse.

The index value for the North Coast region is 0.834, which is lower than the index values for NSW (0.980) (Figure 13). When the index is calculated using the State economy as the comparative benchmark, the North Coast region has a value of 0.849. Within the North Coast region, the Northern SEL recorded the highest index value of 0.835, followed by the Central SEL (0.809) and the Southern SEL (0.758).

Index of Economic Diversity

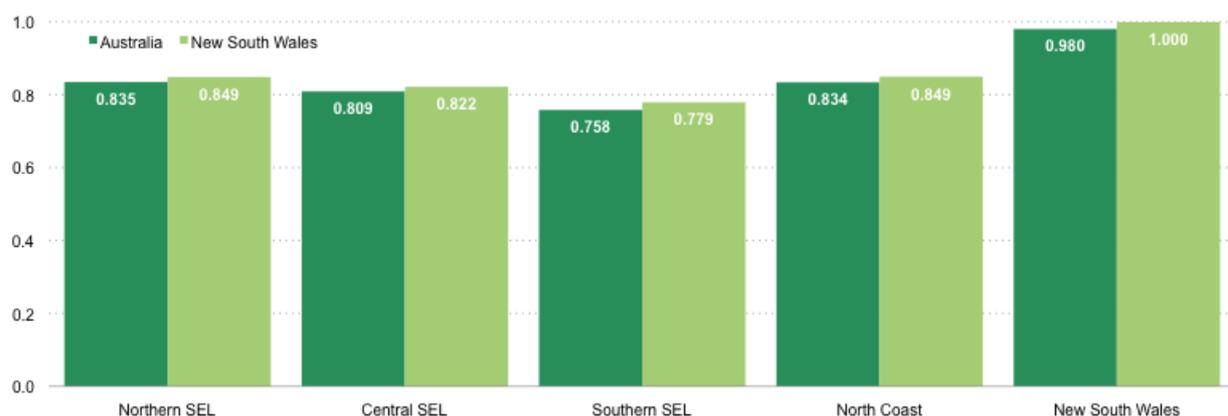


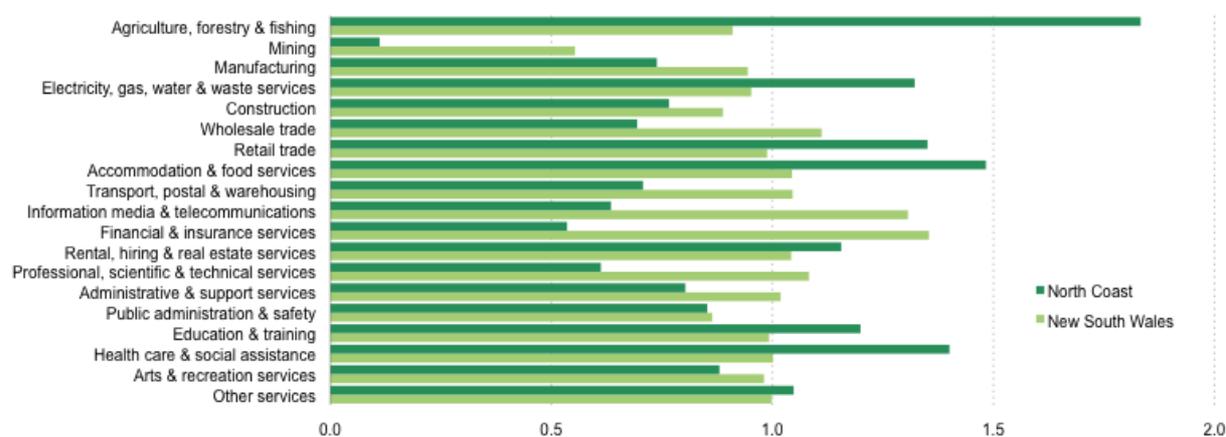
Figure 13. Index of Economic Diversity within SELs, North Coast and NSW

With regard to location quotients, the North Coast has a greater industry concentration (i.e. location quotient greater than 1) than the national economy – and is therefore considered to have net exports of goods and services – in the Agriculture, Forestry and Fishing (1.83); Accommodation and Food Services (1.48); Health Care and Social Assistance (1.40); Retail Trade (1.35); Electricity, Gas, Water and Waste Services (1.32); Education & Training (1.20); Rental, Hiring & Real Estate Services (1.11); and Other Services (1.05) sectors (Table 18; Figure 14).

Table 18: Location quotients within SELs, North Coast and NSW

| Industry | Northern SEL | Central SEL | Southern SEL | North Coast | New South Wales |
|---|--------------|-------------|--------------|-------------|-----------------|
| Agriculture, forestry & fishing | 1.95 | 1.89 | 1.53 | 1.83 | 0.91 |
| Mining | 0.12 | 0.08 | 0.12 | 0.11 | 0.55 |
| Manufacturing | 0.78 | 0.70 | 0.70 | 0.74 | 0.94 |
| Electricity, gas, water & waste services | 0.76 | 0.96 | 2.90 | 1.32 | 0.95 |
| Construction | 0.76 | 0.77 | 0.77 | 0.77 | 0.89 |
| Wholesale trade | 0.73 | 0.68 | 0.63 | 0.69 | 1.11 |
| Retail trade | 1.35 | 1.35 | 1.36 | 1.35 | 0.99 |
| Accommodation & food services | 1.46 | 1.53 | 1.47 | 1.48 | 1.04 |
| Transport, postal & warehousing | 0.68 | 0.72 | 0.75 | 0.71 | 1.05 |
| Information media & telecommunications | 0.72 | 0.59 | 0.53 | 0.63 | 1.31 |
| Financial & insurance services | 0.52 | 0.55 | 0.56 | 0.54 | 1.35 |
| Rental, hiring & real estate services | 1.17 | 1.17 | 1.11 | 1.16 | 1.04 |
| Professional, scientific & technical services | 0.65 | 0.58 | 0.57 | 0.61 | 1.08 |
| Administrative & support services | 0.79 | 0.75 | 0.89 | 0.80 | 1.02 |
| Public administration & safety | 0.74 | 1.06 | 0.83 | 0.85 | 0.86 |
| Education & training | 1.26 | 1.14 | 1.15 | 1.20 | 0.99 |
| Health care & social assistance | 1.41 | 1.37 | 1.42 | 1.40 | 1.00 |
| Arts & recreation services | 0.92 | 0.90 | 0.77 | 0.88 | 0.98 |
| Other services | 1.00 | 1.10 | 1.08 | 1.05 | 1.00 |

Source: ABS Census 2011

Location Quotients**Figure 14. Location quotients within North Coast and NSW**

3.1.11 Personal income

Personal income is summarised in **Table 19** and **Figure 15**. The estimated per capita income for the North Coast region was \$19,915 in 2010/11, representing an annual increase of \$1,121, or 6.2% from the level recorded in 2009/10 (\$18,095), and an average annual increase of 4.5% from the level recorded in 2005/06 (\$15,438).

The average wage and salary income for the North Coast region increased annually to \$40,256 (4.5% increase) in 2010/11. The average household income for the North Coast region was \$46,345 in 2010/11, which was significantly lower than the average for NSW (\$76,629).

Table 19: Personal Income

| | Level (\$) 2010/11 | Annual change (\$) | Annual % change | Average annual % change last 5 yrs |
|--|-----------------------|-----------------------|--------------------|--|
| Total income (\$M) | | | | |
| North Coast | 9,516.9 | 612.3 | 6.9% | 5.6% |
| Northern SEL | 4,728.1 | 307.0 | 6.9% | 5.6% |
| Central SEL | 2,505.2 | 134.2 | 5.7% | 5.6% |
| Southern SEL | 2,283.6 | 171.2 | 8.1% | 5.4% |
| New South Wales | 210,783.5 | 18,118.6 | 9.4% | 5.9% |
| Per capita income (\$) | | | | |
| North Coast | 19,215 | 1,121 | 6.2% | 4.5% |
| Northern SEL | 19,992 | 1,202 | 6.4% | 4.6% |
| Central SEL | 18,532 | 872 | 4.9% | 4.6% |
| Southern SEL | 18,476 | 1,241 | 7.2% | 4.1% |
| New South Wales | 28,846 | 2,156 | 8.1% | 4.5% |
| Average wage and salary income (\$) | | | | |
| North Coast | 40,256 | 1,740 | 4.5% | 4.8% |
| Northern SEL | 40,223 | 1,739 | 4.5% | 4.8% |
| Central SEL | 39,723 | 1,717 | 4.5% | 4.8% |
| Southern SEL | 40,937 | 1,755 | 4.5% | 5.0% |
| New South Wales | 53,916 | 3,032 | 6.0% | 4.4% |

Source: Lawrence Consulting

Per Capita Income

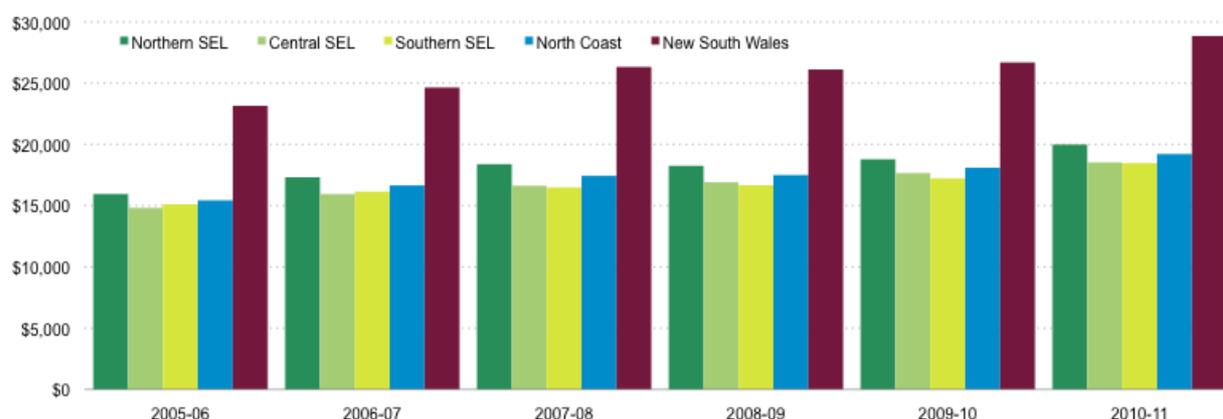


Figure 15. Per capita income within the SELs, North Coast and NSW

3.1.12 Socio-economic indices

Socio-economic Indexes for Areas (SEIFA) have been constructed to allow comparison of the social and economic conditions of regions across Australia. The reference score for the whole of Australia is set to 1,000, with lower scores indicating lower socio-economic status. The four indices in SEIFA 2011 are:

- Index of Relative Socio-economic Disadvantage: focuses primarily on disadvantage, derived from Census variables like low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- Index of Relative Socio-economic Advantage and Disadvantage: is a continuum of advantage (high values) to disadvantage (low values), derived from Census variables related to both advantage and disadvantage.
- Index of Economic Resources: focuses on financial aspects of advantage and disadvantage, using Census variables relating to residents' incomes, housing expenditure and assets.
- Index of Education and Occupation: includes Census variables relating to the educational attainment, employment and vocational skills.

SEIFA outputs from SELs and the North Coast are listed in **Table 20** and illustrated in **Figure 16**. The North Coast region recorded SEIFA index scores below the national average (i.e. 1,000) and the weighted average for NSW, indicating that it is relatively disadvantaged compared with the majority of other regions across NSW and Australia. The SEIFA scores for the North Coast region ranged from 930.6 for the Index of Relative Socio-Economic Advantage and Disadvantage to 952.7 for the Index of Economic Resources.

Table 20: Socio-Economic Indexes for Areas

| Index | Northern SEL | Central SEL | Southern SEL | North Coast |
|---|--------------|-------------|--------------|-------------|
| Index of Relative Socio-economic Advantage and Disadvantage | 939.1 | 912.9 | 931.21 | 930.6 |
| Index of Relative Socio-economic Disadvantage | 945.5 | 919.9 | 942.34 | 938.3 |
| Index of Economic Resources | 956.5 | 936.9 | 960.97 | 952.7 |
| Index of Education and Occupation | 956.4 | 938.6 | 923.14 | 943.6 |

Source: ABS Census 2011, Lawrence Consulting

Socio-Economic Indexes for Areas

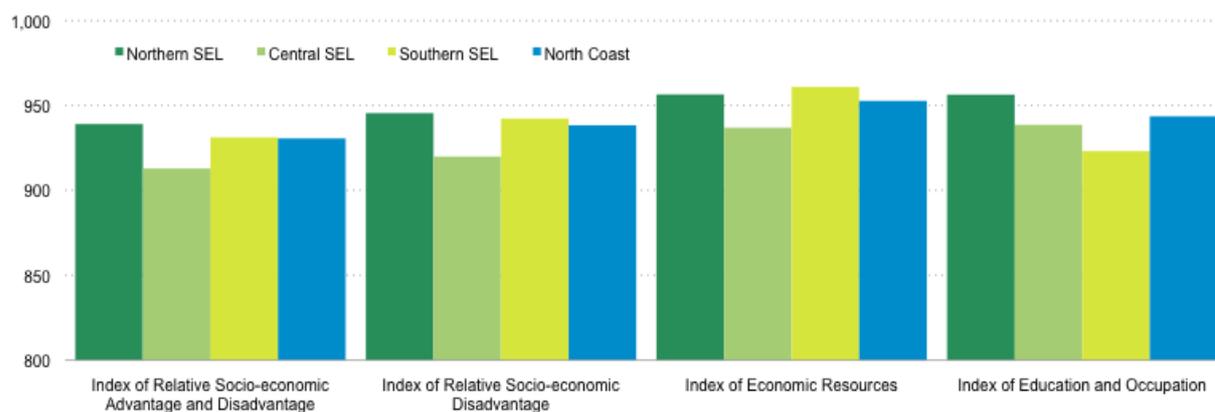


Figure 16. SEIFA comparison for SELs and North Coast

3.1.13 Demographic profile

Table 21 contains key demographic statistics for the North Coast region as at the 2011 Census, along with comparison data for NSW.

Table 21: Key Demographic Indicators

| | North Coast | | New South Wales | |
|---|-------------|------------|-----------------|------------|
| | No. | % of total | No. | % of total |
| Person Characteristics | | | | |
| Total persons | 477,689 | - | 6,917,658 | - |
| Males | 232,609 | 48.7 | 3,408,878 | 49.3 |
| Females | 245,170 | 51.3 | 3,508,780 | 50.7 |
| Age groups: | | | | |
| 0-4 years | 88,894 | 18.6 | 1,332,512 | 19.3 |
| 5-14 years | 51,651 | 10.8 | 893,101 | 12.9 |
| 15-24 years | 68,634 | 14.4 | 1,429,620 | 20.7 |
| 25-54 years | 101,066 | 21.2 | 1,433,954 | 20.7 |
| 55-64 years | 69,978 | 14.6 | 810,290 | 11.7 |
| 65 years and over | 97,461 | 20.4 | 1,018,180 | 14.7 |
| Country of Birth - Australia | 398,492 | 83.4 | 4,747,372 | 68.6 |
| Indigenous persons | 21,467 | 4.5 | 172,313 | 2.5 |
| Households Characteristics | | | | |
| Total households | 189,055 | - | 2,471,292 | - |
| Family households | 130,540 | 69.0 | 1,777,398 | 71.9 |
| Couple families with children | 46,313 | 24.5 | 823,012 | 33.3 |
| Couple families without children | 57,937 | 30.6 | 637,528 | 25.8 |
| One parent families | 24,687 | 13.1 | 286,077 | 11.6 |
| Other families | 1,603 | 0.8 | 30,781 | 1.2 |
| Group households | 6,636 | 3.5 | 94,743 | 3.8 |
| Lone person households | 51,879 | 27.4 | 599,151 | 24.2 |
| Dwelling Characteristics | | | | |
| Total private dwellings | 211,394 | - | 2,864,531 | - |
| Occupied private dwellings: | 186,493 | - | 2,599,193 | - |
| Fully owned | 74,439 | 39.9 | 830,228 | 31.9 |
| Being purchased | 52,312 | 28.1 | 828,139 | 31.9 |
| Rented | 52,573 | 28.2 | 756,832 | 29.1 |
| Other tenure type | 2,007 | 1.1 | 21,445 | 0.8 |
| Dwelling occupancy rate (persons/occupied dwelling) | 2.56 | - | 2.66 | - |
| Total internet connections | 134,671 | 72.2 | 1,904,905 | 73.3 |

Source: ABS Census 2011

3.2 Agricultural industry analysis

Table 22 analyses a number of key indicators for the Agriculture, Forestry and Fishing sector in the North Coast region. This analysis compares the data from the three SELs with the regional and NSW state average.

Table 22: Comparative Indicators – Agriculture, Forestry and Fishing Industry

| Indicator | Northern SEL | Central SEL | Southern SEL | North Coast | New South Wales |
|--|--------------|-------------|--------------|-------------|-----------------|
| Business Numbers | | | | | |
| No. of agriculture, forestry & fishing businesses, June 2013 | 3,790 | 1,899 | 1,688 | 7,377 | 55,780 |
| % of total businesses | 17.7% | 18.0% | 17.8% | 17.8% | 8.1% |
| Total industry turnover, 2012/13 (\$M) | 597.1 | 328.0 | 235.0 | 1,160.1 | 17,045.5 |
| Average industry turnover, 2012/13 (\$'000) | 157.6 | 172.7 | 139.2 | 157.3 | 305.6 |
| Contribution to GRP | | | | | |
| Industry contribution to GRP, 2013/14 (\$M) | 382.9 | 239.6 | 148.9 | 771.4 | 6,617.0 |
| Annual growth, 2012/13-2013/14 (%) | -25.0% | -21.1% | -12.8% | -21.7% | -21.0% |
| Average annual growth, last 5 yrs (%) | -4.0% | 0.3% | 3.1% | -1.5% | -0.8% |
| % of total GRP, 2013/14 (\$M) | 3.5% | 3.5% | 2.7% | 3.3% | 1.3% |
| Industry productivity, 2013/14 (\$) | 39.78 | 39.93 | 41.09 | 40.07 | 37.56 |
| Contribution of Aquaculture, 2013/14 (\$M) | 0.0 | 3.6 | 4.0 | 7.6 | 105.9 |
| Contribution of Fishing to GRP, 2013/14 (\$M) | 4.6 | 8.1 | 3.7 | 16.5 | 125.7 |
| Contribution of Forestry to GRP, 2013/14 (\$M) | 9.6 | 26.8 | 36.5 | 72.9 | 377.2 |
| Employment | | | | | |
| Industry working population, 2011 | 3,659 | 2,082 | 1,405 | 7,146 | 68,883 |
| % of total working population (%) | 4.9% | 4.7% | 3.8% | 4.6% | 2.3% |
| Industry resident employed persons, 2011 | 4,150 | 2,443 | 1,585 | 8,178 | 69,576 |
| % of total resident workforce (%) | 4.5% | 4.8% | 3.7% | 4.4% | 2.2% |
| Working population as % of resident workforce (%) | 88.2% | 85.2% | 88.6% | 87.4% | - |
| Local employed residents within industry, 2011 | 3,536 | 2,019 | 1,361 | 6,967 | - |

| Indicator | Northern SEL | Central SEL | Southern SEL | North Coast | New South Wales |
|--|--------------|-------------|--------------|-------------|-----------------|
| Local employed residents as % of industry working population (%) | 96.6% | 97.0% | 96.9% | 97.5% | - |
| Industry location quotient | 1.95 | 1.89 | 1.53 | 1.83 | 0.91 |
| Land Area & Holdings | | | | | |
| Area of holding (ha) | 487,947 | 452,292 | 256,952 | 1,197,191 | 58,326,346 |
| Number of establishments | 3,462 | 1,469 | 1,362 | 6,293 | 43,541 |
| Average holding (ha) | 140.9 | 307.9 | 188.7 | 190.2 | 1339.6 |
| Gross Value of Production | | | | | |
| Agriculture total, 2010/11 (\$M): | 372.5 | 191.3 | 107.5 | 671.3 | 11,714.0 |
| Crops (\$M) | 173.5 | 122.8 | 30.7 | 327.0 | 7,078.6 |
| Livestock slaughterings (\$M) | 155.5 | 48.3 | 43.7 | 247.5 | 3,084.2 |
| Livestock products (\$M) | 43.5 | 20.4 | 33.0 | 96.9 | 1,551.2 |
| Aquaculture, 2010/11 (\$M) | 4.8 | 8.8 | 4.7 | 18.4 | 70.3 |
| Fishing, 2010/11 (\$M) | 7.8 | 19.3 | 2.9 | 30.0 | 117.1 |
| Forestry, 2010/11 (\$M) | 25.0 | 58.5 | 9.8 | 93.3 | 421.7 |

3.3 Agriculture industry sector analysis

A summary of the value of the top 15 industries in the NCLLS and in each SEL is shown in **Table 23**. Although these data are now 5 years old, they demonstrate the relative value (on a per hectare basis) of the more intensive horticultural industries (e.g. blueberries, nurseries, cut flowers, potatoes, passionfruit) compared with more extensive enterprises including beef, dairy, sugar, hay, and grain. These data clearly demonstrate that with appropriate technology and support, a shift from less intensive to more intensive agriculture could increase the contribution of agriculture to GRP and provide more employment opportunities in the region.

Table 23. Value of top 15 industries in the North Coast LLS region (2010/2011 commodities data)

| Industry | North Coast LLS | | | | Northern SEL ¹ | | | | Central SEL ² | | | | Southern SEL ³ | | | |
|---------------------------|-----------------|--------------|-----------|---------|---------------------------|--------------|-----------|---------|--------------------------|--------------|-----------|---------|---------------------------|--------------|-----------|---------|
| | Rank | Value (M \$) | Area (ha) | \$/ha | Rank | Value (M \$) | Area (ha) | \$/ha | Rank | Value (M \$) | Area (ha) | \$/ha | Rank | Value (M \$) | Area (ha) | \$/ha |
| Beef | 1 | 344.4 | 905,700 | 380 | 1 | 199.0 | 341,900 | 580 | 1 | 68.7 | 369,800 | 185 | 1 | 76.7 | 194,000 | 395 |
| Dairy ⁴ | 2 | 92.3 | 32,340 | 2,850 | 4 | 42.4 | 14,840 | 2,860 | 4 | 19.8 | 6,950 | 2,850 | 2 | 30.1 | 10,550 | 2,850 |
| Blueberries | 3 | 70.3 | 700 | 100,400 | 15 | 2.2 | 62 | 35,490 | 2 | 67.4 | 617 | 109,240 | 12 | 0.7 | 21 | 33,330 |
| Sugar | 4 | 61.7 | 26,050 | 2,370 | 5 | 39.7 | 16,912 | 2,350 | 3 | 21.9 | 9,085 | 2,410 | 19 | 0.1 | 53 | 1,890 |
| Nurseries and cut flowers | 5 | 61.4 | 783 | 78,400 | 3 | 44.8 | 550 | 81,460 | 6 | 6.7 | 67 | 100,000 | 3 | 9.9 | 166 | 59,640 |
| Poultry | 6 | 54.1 | No data | No data | 2 | 52.2 | No data | No data | 20 | 0.2 | No data | No data | 9 | 1.4 | No data | No data |
| Macadamias ⁵ | 7 | 42.2 | 8,420 | 5,010 | 6 | 38.7 | 7,756 | 4,990 | 13 | 0.8 | 148 | 5,410 | 6 | 2.7 | 515 | 5,243 |
| Bananas | 8 | 18.7 | 1,291 | 14,890 | 8 | 7.3 | 582 | 12,540 | 5 | 9.9 | 570 | 17,370 | 8 | 1.5 | 79 | 18,990 |
| Avocados ⁶ | 9 | 11.6 | 894 | 12,980 | 10 | 3.3 | 265 | 12,450 | 11 | 0.9 | 118 | 7,630 | 4 | 7.4 | 511 | 14,480 |
| Pigs | 10 | 10.8 | No data | No data | 7 | 9.4 | No data | No data | 26 | 0.1 | No data | No data | 10 | 1.3 | No data | No data |
| Hay | 11 | 7.1 | 4,492 | 1,580 | 11 | 3.1 | 1,935 | 1,00 | 8 | 2.2 | 1,263 | 1,740 | 7 | 1.8 | 1,294 | 1,390 |
| Cereals for grain | 12 | 4.3 | 8,916 | 480 | 12 | 2.7 | 4,407 | 610 | 9 | 1.6 | 4,316 | 370 | na | 0.0 | 193 | na |
| Potatoes | 13 | 4.1 | 265 | 15,470 | 21 | 0.7 | 51 | 13,730 | 7 | 2.3 | 129 | 17,830 | 11 | 1.1 | 85 | 12,940 |
| Eggs | 14 | 3.9 | No data | No data | 23 | 0.6 | No data | No data | 17 | 0.4 | No data | No data | 5 | 2.9 | No data | No data |
| Passionfruit | 15 | 3.6 | 121 | 29,750 | 9 | 3.6 | 119 | 30,250 | na | 0.0 | 0 | na | na | 0.0 | 2 | na |

1. Unlisted top 15 industries in the Northern SEL include custards apples (\$2.6M, rank 13)
2. Unlisted top 15 industries in the Central SEL include raspberries (\$1.4M; rank 10), wheat for grain (\$0.9M, rank 12), tomatoes (\$0.8M, rank 14) and mushrooms (\$0.6M, rank 15)
3. Unlisted top 15 industries in the Southern SEL include tomatoes (\$0.7M; rank 13), beans (\$0.4M, rank 14) and oilseeds (\$0.2M; rank 15)
4. Based on 1.1 milking cows per hectare, and 35,600 milkers in the NCLLS region
5. Macadamia area calculated using industry stocking density of 301 trees/ha (2,537,000 trees in the North Coast LLS)
6. Avocado area calculated using industry stocking density of 185 trees/ha (165,400 trees in the North Coast LLS)

3.4 Agricultural industry profiling

All significant agricultural industries in the region were profiled to determine their relative priority and growth status. This information is intended to be part of a more comprehensive assessment of industry data to support the targeting and allocation of investment and other resources by the NCLLS.

The agricultural profiling matrix used to determine priorities and growth status of each industry is provided in **Table 25**. This table indicates how each of the region's significant agricultural industries scored against the indicators, providing a cumulative priority score, a priority ranking, a cumulative growth score, and a respective growth category.

The priority ranking of the region's significant agricultural industries (i.e. annual turnover > \$2 million) using the agricultural industry profiling matrix are listed in **Table 24**. Blueberries, poultry and vegetables rate as the highest priority industries on the North Coast.

Table 24. Prioritisation of regionally significant agricultural industries

| Priority Ranking | Agricultural Industry(ies) |
|------------------|---|
| 1 | Blueberries |
| 2 | Poultry |
| 3 | Vegetables (other) |
| 4 | Eggs |
| 5 | Beans |
| 6 | Beef, Oilseeds |
| 7 | Orchard Fruit (other) |
| 8 | Nurseries (combined indoor & outdoor) |
| 9 | Dairy |
| 10 | Pasture cut for hay/silage, cultivated turf, avocados, macadamias & bananas |
| 11 | Cut flowers |
| 12 | Sugar cane |
| 13 | Tomatoes |
| 14 | Pigs |

NB: Comparative indicator information was not available for the region's oyster industry therefore it was not included in the industry prioritisation process

Table 25: Agricultural industry profiling matrix

| Commodity | Value | | | | | Change 2005/06-2012/13 | | | | | | | | | | | | | | | | | | | | Priority score | Rank | Growth score | Growth Category |
|-------------------------------------|----------|---------|----------|-----------|--------|------------------------|-----------|---------|---------|-----------|-----------------------------------|---------|-----------|--------|---------|------------|---------|---------|-----------|--------|------------|-----------|---------|---------|---|----------------|------|--------------|-----------------|
| | Turnover | | | | | Turnover | | | | | Area Under Land Use / Total Stock | | | | | Production | | | | | Employment | | | | | | | | |
| | Small | Medium | Large | Declining | Stable | Growing | Declining | Stable | Growing | Declining | Stable | Growing | Declining | Stable | Growing | Declining | Stable | Growing | Declining | Stable | Growing | Declining | Stable | Growing | | | | | |
| <\$2M | \$2-5M | \$5-10M | \$10-30M | \$30+M | <-30% | -10-30% | +/- 10% | +10-30% | >+30% | <-30% | -10-30% | +/- 10% | +10-30% | >+30% | <-30% | -10-30% | +/- 10% | +10-30% | >+30% | <-30% | -10-30% | +/- 10% | +10-30% | >+30% | | | | | |
| Oilseeds | | | ✓ | | | | | | ✓ | | | | ✓ | | | | | ✓ | | | | | | | | 18 | 6 | 15 | Growing |
| Sugar cane (cut for crushing) | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | | | | | | | 11 | 12 | 6 | Declining |
| Cultivated turf | | | ✓ | | | | | ✓ | | | | ? | | | | | | ? | | | | | | | | 14 | 10 | 11 | Stable |
| Nurseries - Undercover | | | | ✓ | | ✓ | | | | | | ? | | | | | ? | | | | ✓ | | | | | 11 | | | |
| Nurseries - Outdoor | | | | ✓ | | | | ✓ | | | | ? | | | | | ? | | | | | ✓ | | | | 16 | 8 | 10 | Stable |
| Cut flowers - Outdoor | | | ✓ | | | | | ✓ | | | | ? | | | | | ? | | | | ✓ | | | | | 12 | 11 | 9 | Declining |
| Pasture cut for hay | | ✓ | | | | | | ✓ | | | | ✓ | | | | | ✓ | | | | | | ✓ | | | 14 | 10 | 12 | Stable |
| Beans | | ✓ | | | | | | | ✓ | | | | | ✓ | | | | | | ✓ | | | ✓ | | | 19 | 5 | 17 | Key Emerging |
| Tomatoes | | ✓ | | | | | | | | ✓ | | | | | | | | ✓ | | | | ✓ | | | | 10 | 14 | 8 | Declining |
| Other vegetables | | | | | ✓ | | | | ✓ | | | | ✓ | | | | | | ? | | | ✓ | | | | 21 | 3 | 16 | Growing |
| Other orchard fruit | | | ✓ | | | | | | ✓ | | | | ✓ | | | | | | ? | | | ✓ | | | | 17 | 7 | 14 | Stable |
| Avocados | | | | ✓ | | | | ✓ | | | | | ✓ | | | | | ✓ | | | ✓ | | | | | 14 | 10 | 10 | Stable |
| Macadamias | | | | | ✓ | | | ✓ | | | | | ✓ | | | | | ✓ | | | | ✓ | | | | 14 | 10 | 9 | Declining |
| Bananas | | | | ✓ | | | | ✓ | | | | ✓ | | | | | | | | ✓ | | ✓ | | | | 14 | 10 | 10 | Stable |
| Blueberries (incl. all other fruit) | | | | | ✓ | | | | ✓ | | | | ✓ | | | | | | ? | | | | | ✓ | | 24 | 1 | 19 | Key Emerging |
| Beef (cattle and calves) | | | | | ✓ | | | | ✓ | | | ✓ | | | | | | | ? | | | | ✓ | | | 18 | 6 | 13 | Stable |
| Pigs | | | ✓ | | | ✓ | | | | | | ✓ | | | | | | | ? | | | ✓ | | | | 9 | 14 | 6 | Declining |
| Poultry | | | | | ✓ | | | | ✓ | | | | ✓ | | | | | | ? | | | | ✓ | | | 22 | 2 | 17 | Key Emerging |
| Eggs | | | ✓ | | | | | | ✓ | | | | ✓ | | | | | | ? | | | | ✓ | | | 20 | 4 | 17 | Key Emerging |
| Dairy (whole milk) | | | | | ✓ | | | ✓ | | | | ? | | | | | | | ? | | | | ✓ | | | 16 | 8 | 11 | Stable |
| Priority Values | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | | | | |

Growth Categories
 Key Emerging: = or > 17 growth score
 Stable: 10 - 14 growth score
 Growing: 15 - 16 growth score
 Declining: < 10 growth score

The growth status of all regionally significant agricultural industries on the North Coast of NSW is provided in **Table 26**. The two highest priority industries – blueberries and poultry – in addition to eggs and beans, are key emerging industries on the North Coast. Some traditional industries such as macadamias, pigs and sugar are declining.

Table 26: Growth status of regionally significant agricultural industries

| Key Emerging | Growing | Stable | Declining |
|--------------|--------------------|-----------------------|-------------|
| Blueberries | Vegetables (other) | Orchard fruit (other) | Macadamias |
| Poultry | Oilseeds | Beef | Cut flowers |
| Eggs | | Pasture cut for hay | Tomatoes |
| Beans | | Cultivated turf | Pigs |
| | | Diary | Sugar cane |
| | | Bananas | |
| | | Avocados | |
| | | Nurseries | |

NB: Comparative indicator information was not available for the region's oyster industry therefore it was not included in the industry prioritisation process

3.5 Priority agricultural industry analysis

The industry analysis undertaken for this project reviewed the social and economic statistics for those agricultural industries identified as priorities for the region by the NCLLS. The analysis also sourced data from current publications and through interviews with industry peak bodies to ensure information was comprehensive and up to date. This information is provided in the following series of tables (nb: industries are not listed in a priority order).

Table 27: Beef industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|---|---|---|---|
| Southern | \$78 (31% of region's agricultural value) | USA (24%), Japan (25%), China (14%) Korea (14%) of beef exports in 2013/14; Indonesia is main market for live cattle (55%). | Total Australian beef exports worth \$6.45 billion, live cattle \$1.05 billion in 2013/14 ¹ . | <ul style="list-style-type: none"> Record high turn-off in 2014 has contributed to reduced herd size; Rebuilding herd is expected to take several years and may impact on potential supply⁴ International competition, market access and policy issues Climate change & seasonal conditions Animal welfare concerns regarding live exports |
| Central | \$44 (34%) | | Total value of cattle and calves slaughterings/disposals in 2014 was \$8.5 billion, up 11% on 2012/13 ² | |
| Northern | \$79 (19%) | | 1,587 farms (68%) in MNC have beef cattle; 624 farms (48%) in CH-G and 1,519 farms (44%) in R-T | |
| | | | <p>Trend:</p> <p>Cattle numbers are expected to decline 2% between 2014 and 2020, with a 14% decline in slaughtering. Live exports are expected to decline by 21% and beef by 15%.³</p> | |

¹ Meat & Livestock Australia (2014) *Fast Facts: Australia's beef industry*

² Australian Bureau of Statistics

www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyTopic/CEE8B08F42CFAA56CA25794A0011F8DF?OpenDocument

³ Meat & Livestock Australia (2014) *Australian cattle industry projections 2015* www.mla.com.au/Prices-and-markets/Trends-and-analysis/Beef/Forecasts/MLA-Australian-cattle-industry-projections-2015

⁴ Meat & Livestock Australia (2014) *Australian cattle industry projections 2015* www.mla.com.au/Prices-and-markets/Trends-and-analysis/Beef/Forecasts/MLA-Australian-cattle-industry-projections-2015

Table 28: Banana industries analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|-------------------------|--------------------------------------|--|--|--|
| Northern Central | \$15 (2012/13) \$11 (2012/13) | Entirely domestic. Bananas are not currently exported due to relative cost of production but growers are investigating niche markets ⁵ . There are no imports of fresh bananas. | 1,100 ha in NSW (2013/14) with total production of 11,000 tonnes, on about 350 farms ⁶ (equivalent to 3% of total banana production) Trend: National production in 2014 increased by 8% over previous year ⁷ and by 20% from 2009/108. Consumption increased by 13% between 2008/9 and 2012/13 ⁹ . | <ul style="list-style-type: none"> • Disease – recently Panama Tropical Race⁴ (a soil fungus), and Banana Freckle; • Variety suitability – subtropical climate requires subtropical varieties, but less is known about their management |

⁵ Australian Banana Growers' Council, Alix Perry (Business Manager) by email 07April 2015

⁶ Australian Banana Growers' Council (2015) <http://abgc.org.au/projects-resources/industry-info/fact-sheets-info/>

⁷ Australian Banana Growers' Council (2015) <http://abgc.org.au/banana-industry-2/our-industry/economic-contribution/>

⁸ Australian Banana Growers' Council (2015) <http://abgc.org.au/projects-resources/industry-info/fact-sheets-info/>

⁹ Australian Banana Growers' Council (2015) <http://abgc.org.au/projects-resources/industry-info/fact-sheets-info/>

Table 29: Macadamia industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|-------------------------|---------------------------|---|--|---|
| Northern Central | \$44 (2012/13) \$1 | 37% of total production is sold on the domestic market, 95% as kernel ¹⁰ . Exports to USA, Europe, Japan and other Asia. Chinese market growing, significant market expansion predicted. ¹¹ | About 50% of Australian crop is produced in NSW Northern Rivers district. Total nut production for 2014 estimated at 11,400 t kernel ¹² Trend: Industry still expanding, fastest growing region is Bundaberg QLD where production is expected to increase by 40% by 2020. Other growth areas will be Mackay and Emerald. About one third of the 6 million trees planted are yet to reach full production. Overall production expected to increase to >16,000 t by 2020. ¹³ | <ul style="list-style-type: none"> • Cost of R&D, time lag for results • Climate change • Availability of new land • Marketing & engaging stakeholders • Increasing global competition |

¹⁰ Australian Macadamia Society (nd) *Strategic Investment Plan 2014-2019 Macadamia Industry*

¹¹ Australian Nut Industry Council (nd) *Industry Snapshot – Macadamias* <http://nutindustry.org.au/ANIC/Industry-Snapshots/Australian-Macadamias.asp>

¹² Australian Nut Industry Council (nd) *Industry Snapshot – Macadamias* <http://nutindustry.org.au/ANIC/Industry-Snapshots/Australian-Macadamias.asp>

¹³ Australian Nut Industry Council (nd) *Industry Snapshot – Macadamias* <http://nutindustry.org.au/ANIC/Industry-Snapshots/Australian-Macadamias.asp>

Table 30: Blueberry industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|----------------------|--|--|--|--|
| Central/ Southern | \$120-130 Australia-wide in 2014 ~\$80 (2012/13) | Mainly domestic (75%); 15% exported to Asia/Europe and 10% processed; Future marketing will target Japan, China, New Zealand and Taiwan ¹⁴ Major processing plant in Coffs Harbour proposed | Across Australia in 2010/11 season, 3,738 ha (643 businesses), of which 2,950 ha (315 businesses) in NSW ¹⁵ . Yearly production of about 6,000 tonnes ¹⁶ . Nationally, area under production has more than doubled since 2007 ¹⁷ . 88% of production is from NSW, about 900 ha around Coffs Harbour ¹⁸ Trend: Industry is expanding, particularly around Coffs Coast where it has largely replaced bananas ¹⁹ . Other growth areas include Tasmania and Atherton Tablelands. ²⁰ | <ul style="list-style-type: none"> Imports from overseas (value of \$A) Pests, especially Queensland Fruit Fly Non-tariff trade barriers (quarantine) inhibiting exports Risk of oversupply on domestic market without development of export markets |

¹⁴ ABC Rural (4 March 2015) *Australian blueberry industry wants Federal Government support to develop export markets.* www.abc.net.au/news/2015-03-03/blueberry-export-market-development-greg-mcculloch/6277374

¹⁵ Australian Blueberry Growers' Association (2015) www.abga.com.au/

¹⁶ Australian Blueberries www.australianblueberries.com.au/is-good/berry-facts

¹⁷ ABC Rural (27 June 2014) *Blueberry industry booming.* www.abc.net.au/news/2014-06-26/blueberry-industry-booming/5551870

¹⁸ C Botfield

¹⁹ ABC News (4 September 2014) *NSW Government urged to let North Coast blueberry growers clear more land.* www.abc.net.au/news/2014-09-04/nsw-government-urged-to-let-north-coast-blueberry-growers-clear/5718460

²⁰ ABC Rural (27 June 2014) *Blueberry industry booming.* www.abc.net.au/news/2014-06-26/blueberry-industry-booming/5551870

Table 31: Avocado industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|---------------------------------|--|--|--|
| Northern | 45% of NSW production (2012/13) | Mainly fresh fruit for domestic market. | 54,877 tonnes across Australia in 2012/13. | <ul style="list-style-type: none"> • Insect pests and diseases • Quality management • Supply chain issues • Imports from countries with lower labour costs |
| Southern | 38% of NSW production (2012/13) | Processing for food, oil production and cosmetics is not a large market. Efforts to export into Asia and Middle East over last few years – exports accounted for 5% of crop as at 2010 with most important markets Thailand, Singapore and Hong Kong ²¹ | <p>Trend:</p> <p>Outlook is considered good but potentially under threat from imports. Marketing initiatives are aiming to increase domestic consumption to accommodate increasing supply profitably²².</p> | |

²¹ National Horticultural Research Network (nd) *Situation Statement – Avocado* www.hin.com.au/nhrm/resources/industry-situation-statement-avocado

²² National Horticultural Research Network (nd) *Situation Statement – Avocado* www.hin.com.au/nhrm/resources/industry-situation-statement-avocado

Table 32: Sugar cane industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|-------------------------|--|--|---|---|
| Northern Central | 70% of state production (\$31) 29% of state production (\$13) | 80% of crop exported. White and raw sugar mainly to Asia-Pacific, including Indonesia, Hong Kong, Fiji and Papua New Guinea ²³ , other markets NZ and USA ²⁴ | 371,000 ha (30,526,000 tonnes of cane) harvested across Australia in 2013; 14,860 ha (1,302,000 tonnes) in NSW. ²⁵ 129 farms (10%) in CH-G have sugarcane and 254 farms (7%) in R-T. Trend: Production increased from 2012, industry in new growth phase. Asian market experiencing strong growth, Australia is a preferred supplier ²⁶ . | <ul style="list-style-type: none"> • Weather conditions, especially cyclones & flooding • Diseases & pests • Volatile world prices • Fertiliser, pesticide and water management |

²³ Sugar Australia (nd) www.sugaraustralia.com.au/BusinessChannels.aspx?content=buschexport

²⁴ Canegrowers Annual Report 2013/14 www.canegrowers.com.au/icms_docs/204638_CANEGROWERS-Annual-Report-2013-14.pdf

²⁵ Canegrowers Annual Report 2013/14 www.canegrowers.com.au/icms_docs/204638_CANEGROWERS-Annual-Report-2013-14.pdf

²⁶ Canegrowers Annual Report 2013/14 www.canegrowers.com.au/icms_docs/204638_CANEGROWERS-Annual-Report-2013-14.pdf

Table 33: Dairy industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|---|---|--|---|---|
| Southern Central Northern | \$62 (25%) \$18 (13%) \$30 (7%) | Domestic market is dominant, 33% of milk production is used for cheese, 27% for drinking milk. 40% of milk production is exported to Asia, predominantly Japan and Greater China. | The total value in 2013/14 in Australia was \$4,729 million, up 28% on 2012/13 ²⁷ . National production 9.2 billion litres from 1.65 million cows ²⁸ 127 farms (5%) in MNC have dairy cattle; 37 farms (3%) in CH-G and 83 farms (2%) in R-T Trend: ABARES prediction is for short-term improvement due to increasing demand, but declining real term prices in the medium term due to competition from other exporting nations. ²⁹ | <ul style="list-style-type: none"> • Global production exceeds demand • Restrictive trade agreements favouring competitors • Competition for farmgate milk supply • Fluctuations in key input prices (especially fertilizer and fodder) |

²⁷ Canegrowers Annual Report 2013/14 www.canegrowers.com.au/icms_docs/204638_CANEGROWERS-Annual-Report-2013-14.pdf

²⁸ Dairy Australia Annual Report 2012/13

²⁹ ABC Rural (4 March 2015) *Commodity forecaster tips increase in overall Australian farm production value and export earnings in 2015-16.* www.abc.net.au/news/2015-03-03/abares-outlook-2015/6274908

Table 34: Oyster industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|---|--|---|---|---|
| Southern, particularly Wallis Lakes (outside North Coast LLS) | \$12 in 2012/13, of which \$8.3 from Wallis Lake; Nambucca River \$0.9, Macleay River \$0.2, Hastings River \$1.6, Camden Haven River \$1.4 | 85% of oysters grown in NSW are sold within NSW, most of the remainder is sold interstate. Overseas export is a minor component; currently there are 7 export-approved harvest areas (not in North Coast LLS) but work is being undertaken to gain access to EU ³⁰ . | Oysters are farmed in 32 estuaries right along the NSW coast. Across NSW, 279 permit holders produced over 5 million dozen oysters in 2013/14, valued at over \$34 million (\$31 million for Sydney Rock Oyster). ³¹ Oyster production accounts for 70% of the value of NSW aquaculture production. Production in 2011/12 was 92,000 dozen from Nambucca River, 22,000 from Macleay and 204,000 from Hastings. ³² Trend: Production is still declining from a production peak in 1976/77. Effects of repeated flooding on estuaries since 2009 expected to be evident until at least 2018. Target to increase production to estimated sustainable level of 7,500 tonnes of premium NSW oyster products for domestic and export markets by 2020. ³³ | <ul style="list-style-type: none"> • Flooding of estuaries • Disease • Water quality – contamination from sewage, stormwater runoff, industrial and agricultural discharges, contaminated sediments • Increasing subdivision and associated effluent management • Estuary management for competing uses³⁴ |

³⁰ NSW DPI (2014) *NSW Oyster Industry Sustainable Aquaculture Strategy*

³¹ NSW DPI (2015) *Aquaculture Production Report 2013/14*

³² NSW DPI (2014) *NSW Oyster Industry Sustainable Aquaculture Strategy*

³³ NSW DPI (2014) *NSW Oyster Industry Sustainable Aquaculture Strategy*

³⁴ NSW DPI (2014) *NSW Oyster Industry Sustainable Aquaculture Strategy*

Table 35: Poultry industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|---|---|--|---|
| Southern | Gross value of poultry production across Australia for 2010/11 estimated at \$2,179 ³⁵ \$26 (10% of total agricultural production value in 2012/13) | Almost entirely domestic, and mainly (69%) raw product. Meat exports of about 4% of production go primarily to South Africa (33%), the Philippines (18%), Hong Kong (21%), Singapore and South Pacific islands. This mainly comprises frozen cuts and edible offal. ³⁶ | Across six states, total slaughterings for 2012/13 was 563.25 million birds (1.05 million tonnes), of which about 30% originated in NSW ³⁷ . Over 95% is produced by 7 companies, the two largest of which supply 70% of the market. ³⁸ Trend: FAO outlook indicates a global increase in production of 23% by 2023, with poultry overtaking pork as the largest share of total meat production by 2020 ³⁹ . | <ul style="list-style-type: none"> • Diseases and parasites • Animal welfare concerns • Competition with other meats |
| Northern | \$64 (15%) | | | |

³⁵ Australian Chicken Meat Federation Inc. (2011) *The Australian chicken meat industry: an industry in profile*. www.chicken.org.au/industryprofile/downloads/The_Australian_Chicken_Meat_Industry_An_Industry_in_Profile.pdf

³⁶ Australian Chicken Meat Federation Inc. (2011) *The Australian chicken meat industry: an industry in profile*. www.chicken.org.au/industryprofile/downloads/The_Australian_Chicken_Meat_Industry_An_Industry_in_Profile.pdf

³⁷ Australian Chicken Meat Federation Inc. www.chicken.org.au

³⁸ Australian Chicken Meat Federation Inc. (2011) *The Australian chicken meat industry: an industry in profile*. www.chicken.org.au/industryprofile/downloads/The_Australian_Chicken_Meat_Industry_An_Industry_in_Profile.pdf

³⁹ Australian Chicken Growers Council (1 October 2014) *FAO Outlook – Poultry comes out on top*. <http://acgc.org.au/fao-outlook-poultry-comes-out-on-top/>

Table 36: Egg industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|---|--|--|--|
| Southern | <p>\$35 (14% of total agricultural production value for 2012/13)</p> <p>Retail sale of eggs across Australia in 2011 was valued at \$523.5⁴⁰</p> | <p>Almost entirely domestic; mainly fresh shell eggs, some processed products such as egg powder and egg pulp.</p> <p>Minor exports of egg powder (13mt), pulp (429mt) and shell eggs (87mt)⁴¹.</p> | <p>Total national production of eggs in 2011 was 392 million dozen; 128.4 million dozen were sold through retail.</p> <p>34% of Australia's egg production is in NSW, with about 300 licensed businesses⁴².</p> <p>Trend: Egg consumption increased 30% in the period 2003-2012, production increased 44% over the same period. Outlook is optimistic⁴³.</p> | <ul style="list-style-type: none"> • Diseases and parasites in laying birds • Animal welfare concerns, with a growing demand for lower-intensity production systems • Competition with other protein sources • Conflicting nutritional advice • Food-borne illness (e.g. Salmonella) • Egg labelling laws – consumer confusion & legal obligations |

⁴⁰ Poultry Hub (nd) Chicken egg (Layer) Industry www.poultryhub.org/production/industry-structure-and-organisations/egg-industry/

⁴¹ Australian Egg Corporation Limited (2012) *Strategic Plan 2012-2016*. www.aecl.org/assets/www.aecl.org/docs/AECL-Strategic-Plan-2012-2.pdf

⁴² NSW Food Authority (nd) *Industry sector requirements – Eggs*. www.foodauthority.nsw.gov.au/industry/industry-sector-requirements/

⁴³ Australian Egg Corporation Limited (2012) *Strategic Plan 2012-2016*. www.aecl.org/assets/www.aecl.org/docs/AECL-Strategic-Plan-2012-2.pdf

Table 37: Nurseries, cut flower & turf industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|---|--|---|---|
| Northern | \$1.27 across Australia in 2011/12 \$36 (8% of all agricultural production value in 2012/13) | China, Japan, USA and Europe import native or bush greens and native flowers ⁴⁴ . | Across Australia there are about 900 flower farms and foliage growers, of which about 740 are in NSW ⁴⁵ . MNC region accounts for 19% of the state's cut flower production on 50 farms. There are 38 farms in this sector in R-T region and 34 in CH-G region. | <i>No specific challenges were identified</i> |
| Southern | \$15 (6%) | | | |
| Central | \$8 (6%) | | | |

⁴⁴ Australian Flower Industry (nd) <http://australianflowerindustry.com.au/industry/importexport/>

⁴⁵ Australian Flower Industry (nd) <http://australianflowerindustry.com.au/industry/data/>

Table 38: Other vegetables industry analysis

| Main Growing Areas | Value (\$M) | Markets | Scale of Industry | Challenges |
|--------------------|--|--|--|--|
| Northern | Australia-wide, fruit and nut production was valued at \$4,090 million, vegetables at \$3,338 million in 2011/12 ⁴⁶ . | Australia's fresh vegetable production exceeds demand but there are imports of processed and frozen fruit, nuts and vegetables ⁴⁸ . | 100% of NSW pineapples grown in R-T region. Fruit & nuts grown on 621 farms, vegetables on 76 farms. | <ul style="list-style-type: none"> • Pests and diseases • Competition with imports on domestic market • Trade barriers for export market • Exports to some countries are constrained by quarantine considerations – Japan, USA, mainland China, South Korea and Taiwan⁵⁴. • Seasonal conditions • Climate change • Changing consumer preferences • Time lag between establishment and production for tree crops |
| | Vegetable exports \$256 in 2013/14 ⁴⁷ | 4,000-5,000 t mangoes exported annually, 80% to Hong Kong, NZ, Singapore & UAE ⁴⁹ | 42% of NSW mango production (by value) grown in CH-G region. Fruit & nuts grown on 154 farms, vegetables on 51 farms. | |
| Central | Fruit & nuts (excl bananas & macadamias) \$68 (16% of total agricultural production value in 2012/13); Vegetables \$41 (10%) | About 7% of vegetable production is exported, valued at around \$248 million. Potatoes and processed potato products, and fresh carrots are exported to Asia and the Middle East ⁵⁰ . | 38% of NSW avocado production grown in MNC region, and 22% of beans (by value). Fruit & nuts grown on 105 farms, vegetables on 66. | |
| Southern | Fruit & nuts (excl bananas & macadamias) \$28 (22%), of which mangoes \$1; Vegetables \$4 (3%) | Other export markets include Japan (18% of vegetable market), NZ and Singapore ⁵¹ | Trend: Potential growth in vegetable exports to Asia and Middle East ⁵² . | |
| | Fruit & nuts \$22 (9%); Vegetables \$8 (3%) | | New trade access for mangoes into USA; potential to double exports over next three years ⁵³ . | |

⁴⁶ DAFF (nd) *Horticulture Fact Sheet*www.agriculture.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0020/2109206/Horticulture_Fact_Sheet.pdf⁴⁷ Ausveg (nd) www.ausveg.com.au/statistics/⁴⁸ DAFF (nd) *Horticulture Fact Sheet*www.agriculture.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0020/2109206/Horticulture_Fact_Sheet.pdf⁴⁹ Australian Mango Industry Association (nd) *Australian Mango Export Plan 2014-2017*. www.industry.mangoes.net.au/resource-collection/2015/1/22/australian-mango-export-plan-2014-2017⁵⁰ Austrade (nd) *Horticulture Export Capability Statement: Fruit and Vegetables* www.ahea.com.au/⁵¹ Ausveg (nd) www.ausveg.com.au/statistics/⁵² Ausveg (nd) *Summary – Trade in Vegetables*. <https://ausveg.worldsecuresystems.com/resources/statistics/trade-in-vegetables/summary.htm>⁵³ Australian Mango Industry Association (nd) *Australian Mango Export Plan 2014-2017*. www.industry.mangoes.net.au/resource-collection/2015/1/22/australian-mango-export-plan-2014-2017⁵⁴ DAFF (nd) *Horticulture Fact Sheet*www.agriculture.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0020/2109206/Horticulture_Fact_Sheet.pdf

3.6 Socio-economic snapshot presentation workshop

The workshop held in April 2015 presented the initial socio-economic and industry analysis to key representatives of the NCLLS. A number of outcomes were delivered through discussion of the data, including:

- Need for an improved understanding of the current and changing socio-economic dynamics of communities across the region - including general performance, capacity and resilience measures
- Understanding that priority agricultural industries for the NCLLS include all regionally significant industries and that these industries would be at different places in the growth/development cycle. And would include key emerging industries as well as traditional industries that may be in decline
- Recognising that the significance of agricultural industries to the region needs to consider their:
 - Economic significance – contribution to GRP
 - Social significance – employment and industry value adding
 - Environmental significance – regional footprint of industry
- Need for a simple, robust and repeatable monitoring framework that enables NCLLS to regularly update their understanding of:
 - Socio-economic circumstances of regional communities
 - Priority agricultural industries operating in the region
 - Movement of industries through different phases of the growth/development cycle
- Identification of regional socio-economic issues requiring more investigation, for example the impact of off-farm income on the viability of agricultural industries and which may be most dependent.

These issues guided the subsequent industry analysis and the content of this report.

4 Discussion

4.1 Socio-economic profile of the NCLLS region

The socio-economic snapshot and summary each highlight the key social and economic attributes of the NCLLS region. The data also show the different socio-economic character of each SEL and the North Coast region, compared to the rest of NSW. Having an accurate profile of the region and the SELs is critical to understanding how and what support key industries and communities may require from organisations such as the NCLLS.

Possession of a set of comparative metrics also enables comparison between communities, industries, regions and referencing against state averages. These metrics may also be useful as performance benchmarks and to measure progress or change over time.

Key points highlighted in the Snapshot data are discussed below.

4.1.1 Population growth

The average growth in population across the region is 0.8%, which will see the current population of 505,312 grow to 574,400 by 2031. The region's population growth rate is slightly over half the NSW state average of 1.5%. The rate of population growth is slowing in the Central SEL but increasing in the Northern and Southern SELs consistent with the increasing growth rate trend in NSW.

The average age of the region's population is 42.3 years which is considerably higher than the NSW state average of 38.3 years. The southern SEL has the oldest average population, driven largely by the town of Port Macquarie's popularity as a retirement centre.

The older than average population is also reflected in the region's Dependency ratio discussed in **Section 4.1.5**. An aging population can exert pressure on government health, welfare and aged care services with a resulting impact on regional economies. Conversely there may also be opportunities for regional economies to exploit the competitive advantage that exists with favourable location (ready access to Brisbane and Sydney markets), good climate, existing industry and services being readily suited to the retirement sector.

4.1.2 Employment growth

The average growth in the number of employed persons in the North Coast region is -3.1%. This regional average figure is heavily skewed by the Northern SEL value of -8.7%. By contrast the Central SEL supports a 2.7% increase in the number of employed persons, and the Southern SEL an increase of 1.7%. Increases in both the Central and Southern SELs exceed the NSW state average of 0.6%.

The variation in employment growth figures between SELs reinforces the need to stratify the region to better understand the geographic distribution of socio-economic status across the region (and the associated social and economic dynamics operating between regions) and to prioritise and target resources and investment into initiatives such as industry development and jobs growth.

4.1.3 Gross Regional Product

The average rate of growth in regional GRP is 0.9%, approximately half the NSW state average of 2.1%. This average is lifted by a rising GRP growth rate of 10.9% in the Southern SEL, more than 5 times the state average. The annual growth rate (2013/14) for the Southern SEL is also more than

double their long term (5 years) growth rate of 5.2%. By contrast the rate in Northern SEL is falling and already negative at -3.0% and Central SEL exhibits a similar declining trend with 0.0% growth in GRP.

4.1.4 Average income

Average income is consistent across the region with an average of \$40,256. This is significantly lower than the NSW state average of \$53,916. Variation between SELs is relatively minor with all being within $\pm 1.7\%$ of the regional average.

Average household income is \$46,345 on the North Coast, markedly lower than the NSW state average of \$76,629. The small difference (+15%) between the average income and average household income in NCLLS indicates a comparatively large number of single income households, compared to the NSW average of +42% difference. Economies with a larger number of single income households are generally less resilient due to the increased likelihood that household income will be lost through changing employment circumstances.

The growth trend in regional average income on the North Coast is 4.5%. lower than the NSW state average of 6.0%. The growth rate is also slowing in contrast to the increasing NSW state trend.

4.1.5 Dependency ratio

The average dependency ratio for the North Coast region is 64.9%. This is significantly higher than the NSW state average of 51.6% and reiterates the significant attraction of the region to life-styler citizens including retirees.

The Southern SEL has the highest dependency ratio with 73.3%. In contrast the Central SEL has 63.5% and Northern SEL 61.7%. The significance of Southern SEL's high dependency ratio is magnified its highest rate of annual and long term population growth and its highest average age at 43.8 years. These factors will continue to exert strong influence over the social and economic profile of the Southern SEL community.

4.1.6 Agricultural contribution to GRP

The relative contribution of agricultural industries to GRP declined significantly in the 2013-14 year. This trend most likely reflects the impact of dry conditions on the region's agricultural outputs in the 2013/14 year.

The decline was most pronounced in the Northern SEL. with a negative growth in the contribution of agriculture to GRP of -25.0%. Central SEL was the next most affected with a rate of -21.1%, followed by Southern SEL with -12.8%. This decline was broadly in line with the NSW state average of -21.0%, (with the exception of Southern SEL at 12.8%), reflecting the very broadscale nature of the drought conditions which prevailed at the time.

Given the dramatic influence of drought on annual agricultural production, it is important to consider the long term trends in the growth of agriculture's contribution to GRP. Over the five year period 2008/09 – 2013/14 Southern SEL agricultural contributions to GRP grew at 3.1%, far exceeding the NSW state average of -0.8%. Central SEL also realised positive growth in agricultural contribution to GRP of 0.3% while Northern SEL exhibited negative growth at -4.0, well below the NSW state average.

The results demonstrate that the relative economic importance of agriculture within the Southern and Central SELs continues to increase. By contrast the importance of agriculture to the economy of the Northern SEL appears to be diminishing.

The generally positive signs for agriculture in the Southern and Central SELs are further supported by the industry productivity figures (41.09 and 39.93 respectively) which exceed the NSW state average of 37.56. Northern SEL also exceeds the NSW state average for productivity with 39.78.

4.1.7 Agriculture sector employment

Employment in the agricultural sector as a percentage of the total working population is relatively consistent across the three SELs ranging from 3.8% in Southern to 4.9% in Northern, with Central at 4.7%. These values are well above the NSW state average, as expected for non-metropolitan rural areas.

The percentage of employees engaged by the agricultural sector who are local residents is very high: Northern SEL = 96.6%; Central SEL = 97.0%; and Southern SEL = 96.9%. This reinforces the importance of agricultural industries to the social fabric of SELs in the North Coast region.

The total number of people employed by the agricultural sector from 2006 to 2011 reduced considerably across the North Coast region, and was nearly double the rate of the NSW state average, as shown in **Table 39**. This is partly reflected in the continuing consolidation of rural enterprises as discussed in **4.2.3**.

Table 39: Change in number of persons employed in agriculture 2006 -2011

| | Southern SEL | Central SEL | Northern SEL | NCLLS | NSW |
|---------------------|--------------|-------------|--------------|--------|--------|
| No. employed | -143 | -201 | -799 | -1,443 | -7,386 |
| Percentage | -0.6 | -0.7 | -1.2 | -0.9 | -0.5 |

4.1.8 Agriculture sector land use area

Agriculture represents the biggest land use in the NCLLS region covering approximately 11,972 km². The amount of land engaged in agricultural production has also changed slightly over time with competing land use resulting in some conversion of productive lands for other purposes.

The area of agricultural land use in each SEL is provided in **Table 40**.

Table 40: Area of agricultural land use in NCLLS region – 2010/11 and 2005/06 (km²)

| Agricultural land-use | Southern SEL(ha) | Central SEL(ha) | Northern SEL(ha) | NCLLS (km ²) | NSW (km ²) |
|-----------------------|------------------|-----------------|------------------|--------------------------|------------------------|
| 2005/06 | 2,773 | 4,646 | 5,189 | 12,608 | 621,192 |
| 2010/11 | 2,570 | 4,523 | 4879 | 11,972 | 583,263 |

The general trend appears to be slight contraction in the amount of land used for agricultural production. When considered in the context of increasing demand for agricultural commodities associated with an increasing population, the rapid growth of a diverse range of high value agricultural industries in the region (e.g. blueberries), and increasing urban, peri-urban, industrial and infrastructure related land uses, regional competition between land uses emerges as a major issue.

4.2 Agricultural industries in the NCLLS region

4.2.1 Diversity

The following indicators from the socio-economic snapshot highlight the significant agricultural diversity in the NCLLS region:

- Index of Economic Diversity for the region's agricultural sector (1.83) is more than twice the NSW index for agriculture (0.91)
- 6,293 individual farming units covering 1,197,191 hectares
- 20 agricultural industries each contribute over \$2M to GRP
- Agriculture contributing a total of \$771.4 million to NSW's \$6,617 million agricultural production in 2013-14
- Producing the majority of NSW's output for several industries including:
 - Blueberries – 96.8% (\$70.3M)
 - Sugar cane – 97.8% (\$67.7M)
 - Macadamia nuts – 99.8% (\$42.2M)
 - Avocados – 77.9% (\$11.6M).

Whilst agricultural diversity contributes greatly to both the earning potential and the overall resilience of the regional economy it also presents challenges. For example the potential competition for finite amount of agricultural land across the region will place increasing pressure on land uses which may not deliver the highest economic return per hectare, but may deliver environmental services such as biodiversity. Patches of native vegetation that are used for light grazing or potentially logging and maintain relatively high conservation values may come under increasing pressure from land clearing as highly desirable commodities expand.

An increasingly diverse range of rapidly growing agricultural industries also puts pressure on the capacity of regulators and advisory/extension services to keep pace with growing demands, and to ensure that best management practices are developed and implemented to minimise impact to natural resources and maximise production.

4.2.2 Productivity

The snapshot data and industry analysis provide clear evidence that the agriculture sector on the North Coast exhibits:

- Strong regional productivity for agricultural industries
- High variability of productivity within and across agricultural industries and SELs, and
- Susceptibility of agricultural productivity to climate impact such as drought.

The overall regional productivity of the agricultural sector exceeds the NSW average as shown in **Table 41**. This indicates that NCLLS agricultural industries are relatively productive compared to the agricultural sector industries in other parts of NSW, a result of good soils, extensive and productive floodplains, and relatively reliable rainfall compared with other parts of NSW.

Table 41: NCLLS agricultural sector productivity

| | Southern SEL | Central SEL | Northern SEL | NCLLS | NSW |
|---------------------------|--------------|-------------|--------------|-------|-------|
| Productivity index | 41.09 | 39.93 | 39.78 | 40.07 | 37.56 |

While productivity of different industries within the agricultural sector vary considerably (and this needs to be considered when analysing average regional productivity figures), agricultural productivity will also vary spatially and temporarily due to environmental, economic and social issues (e.g. the capacity of industries to respond to climate impacts and biosecurity risks – ELA 2014).

The productivity data in **Table 42** demonstrate the large difference between the outputs delivered by the most and least productive farming enterprises in each SEL, (notwithstanding the fact that this includes very different agricultural industries).

Table 42: Outputs per number of farming enterprises

| Indicator | Southern SEL | | Central SEL | | Northern SEL | |
|---|--------------|-------|-------------|-------|--------------|-------|
| | Most | Least | Most | Least | Most | Least |
| % of total number of farms | 5 | 67 | 6 | 61 | 5 | 60 |
| % of total agricultural output produced | 56 | 14 | 46 | 14 | 45 | 11 |

The data in **Table 42** demonstrate that on average the most productive 5.3% of farms across the North Coast region produce 49% of agricultural outputs. Conversely the least productive 62.7% of farms across the region produce only 13% of agricultural outputs. Between the two ends of this spectrum lie the 32% of farms that deliver 38% of the agricultural outputs.

Accepting the inherent differences in the productivity of different industries, location and other valid factors, this significant degree of variability indicates the potential for substantial productivity improvement across the agricultural sector.

Snapshot data also show a significant fall in agricultural productivity across all SELs from 2012-13 to 2013-14. This drop was also consistent with the average productivity decline across NSW (**Table 43**).

Table 43: Agricultural productivity change 2012/13 – 2013/14

| | Southern SEL | Central SEL | Northern SEL | NCLLS | NSW |
|------------------------|--------------|-------------|--------------|-------|-------|
| Annual % Change | -21.5 | -21.6 | -21.7 | -21.6 | -21.4 |

The consistency in contraction of the agricultural productivity indicates that the decline was a result of factors impacting the entire region and NSW. Given the widespread drought conditions during this period it is reasonable to surmise that the significant reduction in agricultural productivity was attributable to climate factors.

4.2.3 Competing land use

There is considerable potential for competition between land uses in the region. This is a consequence of finite land stock with limited opportunity to increase areas of land suitable for agricultural production; a diverse range of agricultural industries operating in the region including some rapidly growing high value agricultural industries, growth in non-agricultural land uses such as infrastructure and urban/ industrial development; significant areas of the region being managed for environmental purposes; and a dominance of established agricultural industries.

Some industries are particularly vulnerable to contracting areas of production. For example sugar mills rely on a critical mass of production to operate efficiently and therefore viably. As a result the mills and growers are very reluctant to change land use away from cane as it will increasingly compromise the viability of the mill. If a mill closes there are few options for the industry in that district as long distance transport of cane to neighbouring mills becomes uneconomic. Notwithstanding the importance of maintaining area under cane to the viability of the industry, there was still a 22.6% contraction in area under cane from 18,283 ha in 2005-06 to 14,156 ha in 2010/11.

Rapidly expanding high value agricultural industries are increasing competition for agricultural land. For example the area of land managed by the blueberry industry expanded by 64% between 2005/06 and 2010/11 according to ABS estimates, whilst the area under bananas contracted almost 30% from 1,725 ha to 1,231 ha in this same period. Industry sources state the area under blueberries in Australia has more than doubled since 2007 and that in 2010/11 there were 2,950 ha in production in NSW.

Whilst there has been increasing competition between land uses and rapid growth of some smaller more intensive horticultural industries, the region has seen an overall contraction in the total number of agricultural enterprises. This highlights the continuing trend towards consolidation of agriculture, particularly amongst more traditional industries where it is increasingly difficult to retain viable businesses on traditional-sized land holdings. For example diary businesses reduced from 351 in 2005/06 to 342 in 2010/11 and beef cattle businesses reduced in number from 4,708 to 4,284 in the same period. For the whole region there was an overall reduction in the number of agricultural business from 7,051 to 5,947 over the same period.

The increasing land use competition between agricultural industries issues highlights the need for strategic land use planning. The development of high value agricultural industries should correspond to land which is best suited for these enterprises in terms of land capability, proximity to transport, markets and suppliers, and having minimal impact on other environmental values.

Strategic land use planning should also include targeting the conversion of lower value land use in declining agricultural industries to higher value land use in growing industries and thereby provide viable economically sustainable land use options for growers, and a more prosperous and resilient region.

4.2.4 Key emerging agricultural industries

The key emerging agricultural industries identified through the industry analysis were blueberries, poultry, eggs and beans. Generally emerging industries will have common issues around the availability of suitable land, marketing, transport and supply chain development, availability of labour, availability of supporting regulatory and policy mechanisms, and access to technical and advisory support.

There is a distinction between key emerging industries which are new to a region but are well established elsewhere. For example the blueberry industry is a key emerging industry for Australia with North Coast leading the expansion, whereas the poultry and egg industry are well established nationally. For industries such as eggs that have a strong existing domestic presence, the regulatory and policy mechanisms may not be a major issue as appropriate regulation can be translocated across jurisdictions relatively quickly. Conversely for industries such as blueberries that are building a presence in Australia though development on the NSW North Coast, appropriate regulation needs to be developed. The significance of this issue is often compounded by the lack of strong peak industry groups who can assist government and industry in regulation and policy development.

In some instances the regulatory environment has been cited as an impediment to the development of key emerging industries. For example blueberry growers suggest that vegetation clearing regulations in NSW are restricting the development of the industry. Similarly the egg industry highlights increased regulation as a key challenge.

Rapid growth of key emerging industries can also result in the sub-optimal spatial expansion of industry. This is a result of a lack of strategic land use planning for the expansion of agricultural industries and the strong competition for agricultural land. In effect development occurs opportunistically where land is available, not necessarily where development would be ideally suit that particular agricultural industry due to land type, proximity to markets/transport, and compatibility with neighbouring industries.

The following case studies for the blueberry and egg industry highlight some of the issues common to key emerging industries.

Case Study: Blueberries – A key emerging industry in North Coast NSW

Within NSW blueberries are grown chiefly in the Coffs Harbour and Woolgoolga areas and currently occupy about 900 ha, with many crops replacing bananas. The crop was first introduced into Australia in the early 1970s and by the early 1980s, varieties suitable for the north coast climate were identified and the first plantings undertaken.

The industry is expanding across Australia, and particularly around the Coffs Coast. Nationally, the area under production has more than doubled since 2007, and was worth between \$120 and \$130 million in 2014. Three major farms in the Northern Rivers region produce 75% of the national crop. Over 50 growers are part of a cooperative that produces significant quantities of blueberries.

The domestic market consumes about 75% of the crop; 15% is exported to Asia/Europe, and 10% is processed (mainly as frozen product). Future marketing will target Japan, China, New Zealand and Taiwan.

Growers cite land clearing controls as a barrier to further expansion; the industry is also at risk from cheaper imports, particularly from South America where labour costs are lower. Imports could result in oversupply on the domestic market, although recent and highly publicised contamination of berries grown overseas is an opportunity to promote Australia's product on the domestic and export markets.

Opportunities to further expand the industry include the development of new varieties that may extend the season and provide out-of-season exports. A major handling and packaging site has recently been proposed for Coffs Harbour. Organic and bio-dynamic certification is increasing in Victoria, and could also offer North Coast growers opportunities to access specific domestic markets.

Industry risks include non-tariff trade barriers to exports, and pests such as Queensland Fruit Fly.

Case Study: Eggs – A key emerging industry in North Coast NSW

Australia's total egg production was 392 million dozen in 2011, from a laying flock of 16.5 million hens. Of these, about 128.4 million dozen (about 32%) were sold through retail outlets, with a value of \$523.5 million. NSW accounts for about 34% of the nation's production, with about 300 licensed businesses.

The Mid North Coast is the most important egg producing area within the North Coast LLS. Egg production in 2012/13 was valued at \$35 million, comprising 14% of the total value of agricultural production.

The egg market is almost entirely domestic, and mainly comprises fresh shell eggs. "Free Range" eggs comprise approximately 34% of volume but 44% of the value of retail sales. Exports of shell eggs in 2011 were valued at about \$1.96 million.

Some processed products such as egg powder and egg pulp are also produced. Exports of these products were valued at less than \$1 million, while imports of the same produces were valued at over \$7 million.

The sector is growing; national retail sales of eggs rose from about 102 million dozen in 2008 to about 131 million dozen in 2012. The market share of cage eggs declined from just over 70% to about 54% over the same period, mainly losing ground to free range (about 22% to 34%). Barn laid eggs also rose from about 5% to 10%. Per capita egg consumption rose from about 183 eggs per year to about 215 over the same period.

The trend has been towards oligopoly competition, with fewer and larger businesses emerging. Further rationalisation is expected over the short term, especially among egg producers and traders, assisted by new hen housing regulations and the resulting need for significant capital reinvestment.

4.2.5 Growing agricultural industries

Regional agricultural industries identified as growing were vegetables and oilseeds. Growing industries have some similar issues with key emerging industries around availability of suitable land at reasonable prices, availability of labour and maintaining growth in market share.

As highlighted with blueberries, regulation can also be an impediment to growing industries where a conversion of land use may involve regulatory approvals. For growing industries requiring access to water resources for irrigation, the availability of licenses and /or the physical availability of water in some locations can be a growth limiting factor.

4.2.6 Stable agricultural industries

The stable agricultural industries identified in the region were:

- Beef
- Orchard fruit (other)
- Pasture cut for hay
- Cultivated turf
- Dairy
- Bananas
- Avocados
- Nurseries

The sorts of issues facing stable industries are highlighted in the beef industry case study below.

Case Study: Beef – A stable agricultural industry in North Coast NSW

The Australian beef cattle industry is worth about \$1.05 billion in live exports, \$6.45 billion in beef exports, and over \$8.5 billion overall for slaughtering's and disposals of cattle and calves.

Beef cattle are important across the entire North Coast LLS region, with production worth about \$200 million annually. As a proportion of the total agricultural value, beef is most significant in the Mid North Coast where it contributes 31% of the agricultural value and includes 68% of farms. In dollar terms, production in the Richmond-Tweed area is similar, but this only represents about 19% of total agricultural value and 44% of farms.

The major export markets for beef are USA (24%), Japan (25%), China (14%) and Korea (14%); Indonesia is the main market for live cattle (55%).

The industry is expected to decline over the next few years (to 2020) as a result of record high turn-over in 2014 as a result of widespread drought, reducing herd size. Market predictions indicate declines of 14% in slaughtering's, 21% in live exports and 15% in beef exports. Rebuilding of the herd is expected to take several years and during this time, supply will be impacted by reduced disposals.

The beef industry faces challenges on economic, environmental and political fronts. Export markets are at risk from international competition, non-tariff trade barriers (such as quarantine), market access and policy issues. Animal welfare concerns surrounding the export of live cattle are an ongoing issue and were recently shown to have the potential to significantly impact the industry. Climate change is a long-term threat, and adverse seasonal conditions such as drought will remain a significant challenge. However the North Coast industry is not expected to be subject to the extremes of climate change experienced further west, and to this extent the local beef industry may benefit.

4.2.7 Declining agricultural industries

Industry analysis identified several agricultural sectors that were declining in regional significance. These were macadamias, cut flowers, tomatoes, pigs and sugar cane.

Several of these declining regional industries have terms of trade which are strongly aligned to international markets. This international exposure makes them vulnerable to changes in Australian dollar, lower international production costs and increasing competition in domestic and international markets from competitors. High input costs including labour and increasing competition from other agricultural industries for land use with higher return on investment also increase pressure on these businesses.

The issues being experienced by declining industries in the region are highlighted in the following dairy industry case study.

Case Study: Dairy – A declining agricultural industry in North Coast NSW

The dairy industry is widespread and well established across temperate and some sub-tropical regions of Australia. The industry originated from cattle brought to Australia with the First Fleet, and is now Australia's 3rd largest rural industry, with a total value of \$4.7 billion in 2013/14 and a direct workforce of about 43,000 employees. National milk production is about 9.2 billion litres, from a herd of about 1.65 million cows. About 38% of production is exported, valued at about \$3.21 billion (7% of world dairy trade).

In the North Coast LLS region, dairy is most significant in the Southern SEL where it contributes \$62 million (25% of the total agricultural value) from only 127 (5%) of farms. While still significant in dollar terms, dairy is comparatively less important in the Coffs Harbour-Grafton area (\$18 million, 13%) and Richmond-Tweed (\$30 million, 7%).

Cheese, butter/spreads and drinking milk are the major dairy products, accounting for 30, 27 and 27% of milk utilisation respectively.

The domestic market is dominant, and includes all fresh and processed products. Major export destinations include Japan, China, Singapore, Indonesia and Malaysia. The Middle East is an emerging market.

ABARES predicts a short-term improvement in industry prospects due to increasing demand, but declining real term prices in the medium term due to competition from other exporting nations.

The industry is heavily influenced by global prices; currently international dairy markets are unsettled and global supply exceeds demand. Milk production quotas in Europe ceased on 31 March 2015 and may exacerbate the oversupply.

Other significant challenges include fluctuating currency values, and fluctuating prices for key inputs such as fodder (which is affected by seasonal conditions), fertiliser and water. Reliance on irrigated pasture may be threatened during dry periods.

4.2.8 Oyster industry

The oyster industry was identified as a priority by the NCLLS for consideration in the industry analysis. As there is no comparative indicator data available for the oyster industry that would enable it to be compared and profiled with other agricultural industries, it has not been included in the industry profiling for this project. As a result it has not been prioritised nor allocated a growth status. However the oyster industry was included in the second part of the industry analysis involving contacting representatives and reviewing industry peak bodies and reviewing information. From this exercise the oyster industry does appear to be regionally significant, with an annual production of approximately \$4.1 million.

The oyster industry is in a production and market building phase. The industry is recovering from flooding events which impacted the estuaries several times since 2009 and have closed oyster beds in some estuaries including the Macleay. Water-borne contaminants from urban and agricultural runoff are a major risk to this industry.

5 Conclusions and Recommendations

The NCLLS region supports a diverse agricultural sector that has been historically underpinned by the beef, dairy and sugar industries. While these industries are likely to persist in the region, more intensive horticultural industries such as the rapidly emerging blueberry enterprise have the potential to increase the socio-economic status of the North Coast region. The region is endowed with relatively reliable rainfall, expansive areas of rich alluvial soils, a diversity of landscapes that support different types of produce, ready access to Sydney, Brisbane and overseas markets via road (and in the longer term possible rail and shipping), and a surplus of potential employees.

The NCLLS will provide various levels of support and expertise to industries in the region across its four pillars, but should consider placing emphasis on those key emerging industries that are currently expanding in the region, and that are increasingly contributing to the region's GRP. It is essential that an appropriate land use planning framework be developed for these industries to ensure that they grow and prosper on an ecological sustainable footing, and within an adaptive capacity context that accounts from climate and biosecurity risks as well as emergency response.

Six recommendations are made to NCLLS as a result of this study. Some of the recommendations are initiatives that NCLLS can undertake independently, and others involve working with various regional stakeholders across industry and government.

1. Regular socio-economic surveillance monitoring:

It is recommended that the NCLLS establish a regular surveillance monitoring program to provide current information on the performance and resilience of regional communities and the agricultural industry sector. Regular monitoring will ensure the NCLLS is in the best position to respond quickly and appropriately in the provision of support to industry and the community to facilitate production and NRM outcomes across the region.

For measuring regional community performance and resilience the monitoring program should use the socio – economic indicators identified in **Table 5 – Comparative indicators**.

For measuring the performance and resilience of the regional agriculture, forestry and fishery sector the program should use the indicators in **Table 11 – Comparative indicators – Agricultural, forestry & fishing industries**

The frequency of the monitoring program should correspond with the availability of new ABS census data as this provides the information on key indicator incorporated in the monitoring program.

2. Regular analysis of significant regional agricultural industries:

It is recommended that the NCLLS, in collaboration with industry, regularly analyse the significant agricultural industries in the region to determine:

- agricultural industries which are a priority for the NCLLS due to their significance for the region. and
- growth trends for significant agricultural industries

This analysis will support and justify the funding and resource allocation decisions of NCLLS and help inform the design of support programs that recognise the different issues impacting industries in different phases of development.

Industry analysis should use a two stage approach involving:

- a. analysis of quantifiable data and statistics using the Agricultural Industry Profiling process in detailed in Section 3.4 Profiling agricultural industries, and
- b. analysis of industries through interview and analysis of industry peak body information

The frequency of analysis will depend on the needs of the NCLLS however the availability of new data for the quantifiable analysis is reliant on output statistics from ABS and ABARES.

3. Regional strategic land use planning:

It is recommended that the NCLLS work with government and industry stakeholders to facilitate strategic land use planning across the region which includes consideration of:

- Land use needs of emerging and growing agricultural industries. and where these are best located
- Opportunities to convert low return land uses in declining industries to high return land uses in emerging / growing industries
- Growth of non-agricultural land use for infrastructure, urban and industrial development and environmental purposes
- Compatibility of neighbouring land uses and building and seeking to build on synergies and minimise conflicts.

Initially this could involve working with industry to identify suitability maps for key emerging industries across the region.

4. Bioclimatic analysis

Recent climate change research undertaken by CSIRO and OEH has provided spatial information about the shift in bioclimatic classes from 1990 to 2050 under different climate change scenarios. These spatial datasets provide an exciting opportunity for NCLLS to predict what future industries could emerge in the region. For example, if a bioclimatic class currently associated with the Gympie region is forecast to occur within the Coffs Harbour region by 2050, an investigation of the current agricultural profile of that Gympie region might provide evidence of land use options for the Coffs region in future. A similar analysis of key biosecurity risks might also be considered.

5. Developing and promoting best management practice in key emerging industries

It is recommended that NCLLS work with key emerging industry to develop and promote best management practice guidelines or codes of practice to assist producers and the industry. These guidelines will ensure that production is optimised whilst minimising any negative environmental, social or economic impacts.

The proactive collaborative development of best management practice codes or guidelines will also help ensure any subsequent policy or regulation is measured and informed by the requirements of the industry and the environment in which it operates.

6. Build understanding of the region's socio-economic profile

It is recommended that NCLLS continue to build their understanding of the region by identifying key knowledge gaps and actively seeking opportunities to collaborate on research to fill these gaps.

This study has identified the following key knowledge gaps:

- What is the extent of off-farm income across agricultural industries in the region?
- How reliant is agricultural industry viability on off-farm income and which industries are most reliant?
- What are the major non – agricultural opportunities for the region and how may these impact on communities and other industries in terms competition for land use, labour and other resources?
- How can we compare priority regional industries for which we do not have comparative indicators such as the oyster industry?

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