



# PATHWAYS INTO AGRICULTURE REPORT

# Acknowledgements

This report has been produced by Regional Development Australia – Mid North Coast.

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Other related publications of Regional Development Australia Mid North Coast:

- **Champions of Food, Mid North Coast, 2014**
- **Mid North Coast Regional Plan 2016-2020**
- **Mid North Coast [Connected], 2016**

In this report we frequently reference several agricultural studies and reports that have taken place in recent times. These are excellent sources of information and we wish to acknowledge them here.

## **Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW, 2015**

North Coast Local Land Services

## **Horticulture Survey 2014**

North Coast TAFE

## **Primary Industries in the North Coast Region of NSW, Strategic Review 2006**

NSW Department of Primary Industries

## **Organic Food in the North Coast Region of NSW**

North Coast Local Land Services

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# Introduction

*“The average Australian farmer grows enough food to feed 600 people every year, 150 of these are Australians with the remaining 450 overseas.”*

*Keogh M, Australian Farm Institute, 2009, “Australia’s response to world food security concerns”, Address to the 1st NFF Annual Congress.*

The Agriculture and Food Manufacturing industry on the Mid North Coast currently supports over 4,600 jobs, making it one of the region’s most important industries. Nationally, research suggests there are 6 jobs available for every new university graduate of agriculture. This is an extraordinary statistic, but is it the case in the Mid North Coast region?

The Pathways into Agriculture program by Regional Development Australia - Mid North Coast (funded by the Foundation of Rural and Regional Renewal through its Innovation for Community Impact program) is about bringing some clarity to this issue.

For the vast majority of people working on the Mid North Coast, a career in agriculture will at some point involve becoming an owner operator of an agricultural property. This is currently the case for more than 80% of agricultural jobs in the region<sup>1</sup>. An examination of farming careers in the region needs to look at agricultural industries and practices that give the owner-operator the best chance of long term success.

For this reason this report is structure into two parts:

- Part A is an overview of our agricultural industries;
- Part B considers present and future jobs in agriculture.

The aim of this report is to identify the training and employment opportunities in the agricultural industries on the Mid North Coast of NSW (from Taree to Woolgoolga) and to show the various career pathways for young people who desire a long term career in agriculture.

This report concentrates on the perspective of young people considering a career in agriculture in the region, rather than existing farmers, most of whom are in the over 55 age bracket.

Additional consideration has been given to Indigenous youth in the region and this *Pathways into Agriculture* project aims to test the assumption that the out of doors, tactile nature of agriculture may appeal to many Indigenous people as a potential career.

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<sup>1</sup> ABS Census 2011 - Employment data for agricultural industries.

# Part A: Agriculture on the Mid North Coast

*"The farmer is the only man in our economy who buys everything at retail, sells everything at wholesale, and pays the freight both ways."*

*John F. Kennedy*

## Economic snapshot of food producers

Food growers, producers and manufacturers on the Mid North Coast generate a total revenue of \$1.68 billion a year. This represents 7.2% of the total revenue for our regional economy<sup>2</sup>.

The food production industry employs 4,676 people, of which 3,280 jobs are in Agriculture, Forestry & Fishing, with the remaining 1,396 employed in Food Product Manufacturing<sup>2</sup>.

While food manufacturing is a growth area, there was a downwards trend in employment in agricultural industries of -1% p.a. from 2006-2011.<sup>3</sup>

Food manufacturing has a positive flow on effect for the regional economy and for local jobs. Every time a new job is created in food manufacturing, an additional job is spawned in other industries. That is, total employment, including all direct, industrial and consumption effects is estimated to increase by up to 2 jobs.

There is a strong presence of agricultural co-operatives throughout the region creating significant market opportunities. Specialised producer co-operatives operate within many of our largest export industries including dairy, blueberries and macadamias.

One exciting opportunity for our food producers is in exports, particularly to the Asian markets. Currently, 15.8% of all regional exports are from the food sectors, totalling \$777 million a year. This makes the food industry our third highest exporting industry and food exports have been growing at 3.8% p.a.<sup>2</sup>

There is a large percentage of small farms in the region, both in land size and agricultural output. The estimated value of agricultural operations (EVAO) is a measure of the value of production from farms and a measure of their business size.

- Around 67% of farms in the Mid North Coast region had an EVAO of less than \$50 000 (Figure 1). These farms accounted for only 14% of the total value of agricultural operations in 2012–13.<sup>4</sup>

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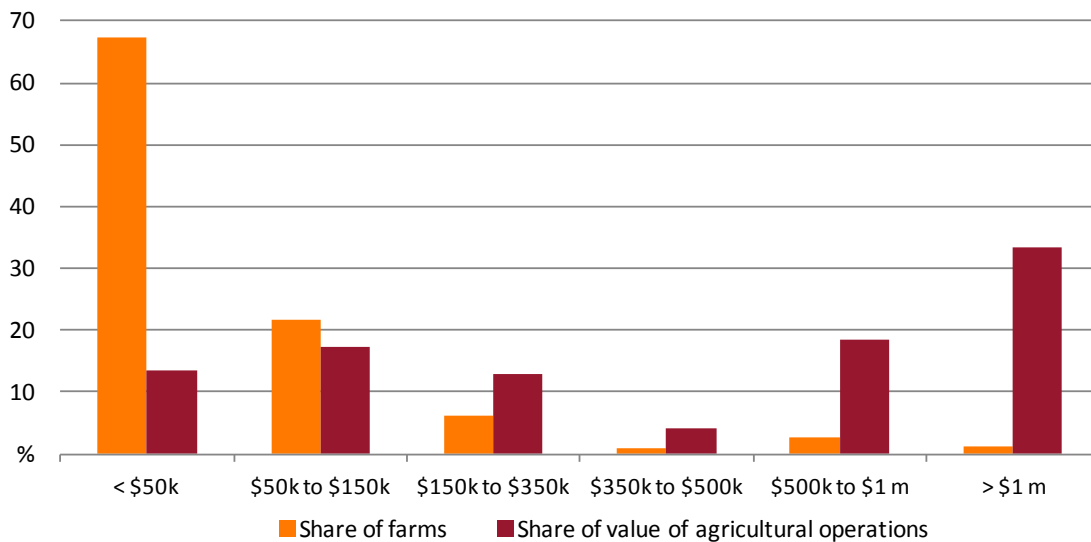
<sup>2</sup> REMPLAN ABS 2011 Census JTW Employment, ABS 2012/2013 National Input Output Tables and ABS June 2015 Gross State Product.

<sup>3</sup> Census of Population and Housing, 2011 - ABS

<sup>4</sup> Department of Agriculture, "Agriculture, Fisheries and Forestry in the Mid North Coast region of New South Wales, 2015", page 5.

- In comparison, only 5% of farms in the region had an EVAO of more than \$350 000 and accounted for an estimated 56% of the total value of agricultural operations in the region in 2012–13.<sup>4</sup>

**Figure 1 Distribution of farms by estimated value of agricultural operations, Mid North Coast region, New South Wales, 2012–13**



Source: Department of Agriculture, “Agriculture, Fisheries and Forestry in the Mid North Coast region of New South Wales, 2015”, Figure 3.

## Changes in the agricultural landscape

While globally the demand for food is on the rise, the total agricultural industry on the Mid North Coast is in a state of slight decline. There are numerous contributing factors:

- Environmental events such as drought, flood, disease and fire;
- The ever increasing age profile of farmers;
- The rising cost of trade contractors and wages;
- The rising cost of inputs including stock feed, chemicals, equipment and supplies;
- The dominance of the supermarket duopoly of Woolworths and Coles.
- The prominence of farmers without a detailed business plan;

Today, only 6% of the agricultural land in the region is being used productively.<sup>5</sup> This may be indicative of several factors including: large numbers of tree changers buying agricultural land; the increasing age profile of farmers; and changes to the financial conditions for purchasing rural properties.

<sup>5</sup> Primary Industries in the North Coast Region of NSW, Strategic Review - NSW Department of Primary Industries.

We estimate that the average farm in the Mid North Coast is approximately 198 hectares, with many farms closer to the coast being considerably smaller. The relatively small size of agricultural land holdings in the region can be a limiting factor to the capacity and profitability of some farms, however, many profitable food products that are suited to the climate can be commercially grown on smaller land holdings.

In 2011, several councils in the Mid North Coast region adopted the Standard Local Environmental Plan (LEP), which introduced new land zoning descriptions and minimum lot size regulations. For many rural properties this meant they no longer met the minimum land size for new dwelling entitlement. The purpose of this legislation is to discourage further fragmentation of agricultural land.

The industry is currently dominated by ageing farmers. Today, there are more farmers on the Mid North Coast in the 75-84 age category than there are in the 20-24 age category.<sup>6</sup> The average farmer on the Mid North Coast is 68 years old.

Many existing farmers that were interviewed for this study, particularly those who are practicing traditional, single income source farming such as beef cattle or dairying, say they are “just treading water”.

A lack of adequate succession planning has also been identified as a serious problem. Many ageing farmers do not have a planned exit strategy for retirement and family succession, or for realising the best value from the sale of their farm.

To revitalise the industry and get more young people interested in a career agriculture change is needed. While many existing farmers will continue to do things as they always have, young farmers moving into the industry have a great opportunity to consider new business models that are more sustainable and profitable in this region and into the future.

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<sup>6</sup> Census of Population and Housing, 2011 - ABS

## What type of farm works here?

The vast majority of Mid North Coast farms could be classed as relatively small agricultural holdings. For this reason, more intensive farming operations where higher production can be achieved on smaller properties will have an advantage here.

In 2015, North Coast Local Land Services identified 4 key emerging and growing industries that fit the model of a high value of production per hectare. The key emerging industries identified in the Mid North Coast region were:

1. Blueberries
2. Poultry
3. Vegetables
4. Eggs

The Mid North Coast region is also proven to be suitable for:

- Green house horticulture such as tomatoes and salad greens
- Avocadoes and other orchard fruit
- Tree nuts such as macadamias and pecans
- More intensively farmed livestock, particularly rabbits and goats.

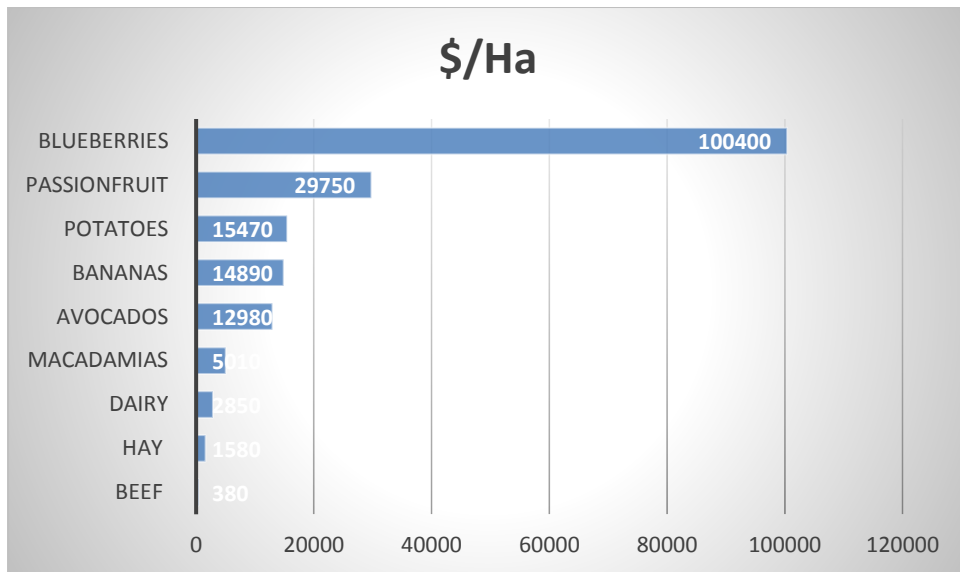
When carefully managed, these operations can produce a significant commercial value on moderately small land holdings. The mild coastal temperature and relatively high rainfall of the Mid North Coast are also favourable to these forms of agriculture, particularly poultry which can be very sensitive to heat.

Forms of agriculture where large land holdings are an advantage are much less likely to produce a viable long term income for farmers in this region unless a suitable market niche is found, or they are part of a diversified agribusiness. This is not to say innovative farmers cannot run a profitable business with some of these commodities, particularly beef cattle which is the region's largest agricultural industry, but the size and cost of land will inevitably be a barrier to agricultural capacity and profitability.

It is therefore extremely important for farmers to have a clear plan in place which identifies how they can make their agribusiness profitable and sustainable into the future.

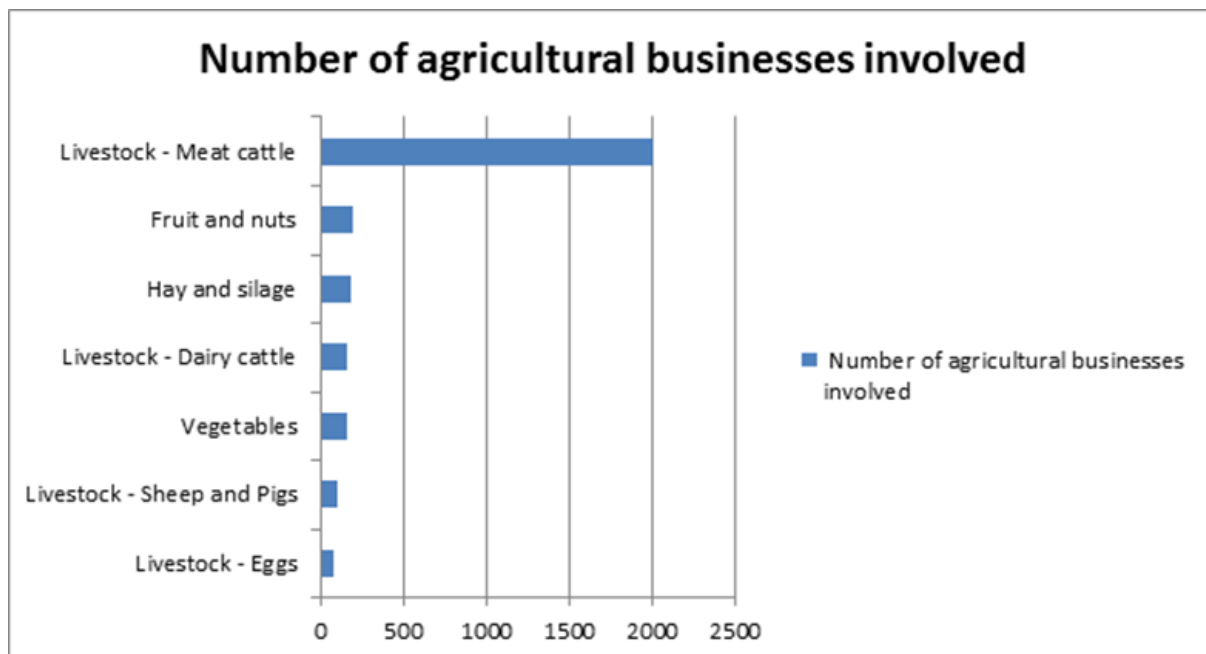
**Note:** *One barrier to poultry and livestock production is the limited choice of suitable abattoirs in the region. Investment into processing facilities is considered a regional priority to remove this roadblock. Some local farmers have already "bitten the bullet" and set up their own on site processing facilities at considerable expense.*

The following chart shows the revenue per hectare provided by various agricultural commodities and illustrates that small farm size doesn't necessarily equal small return.



Source: *Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW*  
 Prepared by ecological Australia for the North Coast Local Land Services 25 May, 2015.

Compare this to the dominance of traditional agricultural farms like beef and dairy in the region and there is an obvious need for discussion in how these industries can be assisted to adapt to remain profitable in the future.



Source: ABS 71210DO004\_201213 *Agricultural Commodities, Australia, 2012-13 "Mid North Coast" Great Lakes – Nambucca.*

# 10 opportunities farmers should consider.....

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## 1. Diversification

Producing more than one product can assist with cash flow and spread the workload of a farm across multiple harvest seasons. This creates farm businesses that are more sustainable, less affected by environmental events and have a continuous source of income.

## 2. Cooperatives and consortiums

Existing producer cooperatives or consortiums can help farmers to share their processing, distribution and marketing costs and achieve higher profitability. Dairy, blueberries, macadamias and organic food are examples of local industries where groups of farmers invest together to share processing, packaging and marketing costs.

## 3. Value adding and value adding before exporting

Taking a primary product and “manufacturing” it into a value added product can greatly improve a farmer’s profitability. Food manufacturing is a growing sector in the region and a processed, packaged and branded product is much more valuable than a commodity.

Farmers should investigate joining or forming groups or consortiums that have the power to lobby the government, or that have the financial means to investigate or create export value added opportunities such as:

- Australian processed religious and cultural foods;
- Lactose free products into the Asian markets. For example, ice cream and long life milk. “Approximately 65 percent of the human population has a reduced ability to digest lactose after infancy. Lactose intolerance in adulthood is most prevalent in people of East Asian descent, affecting more than 90 percent of adults in some of these communities.”<sup>7</sup>
- Creating unique products for export such as ready to eat meals combining meat products, vegetables and Australian native foods.

## 4. Higher density farming

Relatively small land sizes in the region mean that more densely farmed commodities like poultry, eggs, berries and hot house horticulture can provide a farmer with better returns per hectare.

*Note: “Higher density farming” in this report is not intended to imply that a farm is over stocked or that livestock is kept in inhumane conditions, rather it refers to a higher level of production per hectare.*

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<sup>7</sup> (<https://ghr.nlm.nih.gov/condition/lactose-intolerance#statistics>)

## **5. Exporting**

Products that are suitable not only for the Australian market but also for export give a farmer more choice of who to sell to and potentially more profitability.

We should be asking what our export commodities are being used to produce overseas and how we can produce that product before it leaves our shores.

## **6. Leasing**

The traditional thought of a farmer owning the land is being challenged by the potentially more cost effective method of leasing land to save on up-front costs and increase holding capacity. The local dairy industry is a pioneer in this area.

## **7. Organic farming**

While still only a small percentage of overall production, the organic food industry is growing nationally at 15% p.a. Organic farming methods often lend themselves to harvesting from a smaller area so many organic farms may find agricultural properties in the Mid North Coast region suitable for their needs.

## **8. Lifelong learning**

Farming practices and knowledge is changing and farmers that invest the time to continue to learn will reap the benefits that new knowledge can bring. Many regional organisations like Landcare, Local Land Services, NSW Farmers and Department of Primary Industries conduct regular workshops and seminars that are a valuable source of knowledge and networking.

## **9. Business planning**

Preparing a sound business plan will help with cash flow, profitability, securing finance and avoiding many potential pitfalls. This is true for all businesses. New farmers should seek out mentors and support networks in the industry that can assist them along the way. Membership to an organisation like NSW Farmers, NSW Business Chamber or a relevant industry group which offers business support services and advice can be valuable.

## **10. Succession planning**

It might sound strange to someone entering the industry, but farmers should have a plan for how they are going to get out of farming one day. A farmer with a good exit strategy is likely to have a better long term financial future and have an agribusiness that is more saleable and potentially more valuable.

# Key and Emerging Industries

In May 2015, North Coast Local Land Services<sup>8</sup> produced a table of priority agricultural industries based on research focussed on the geographic footprint from Port Macquarie to Tweed Heads. By adapting this list for industries relevant to the Mid North Coast region (from Taree to Coffs Harbour) we have produced the following list of priority agricultural industries.

## Priority industries

	<p><b>1. Blueberries</b>  <b>Industry:</b> High growth  <b>Climate:</b> Very suitable microclimates.  <b>Land:</b> Fairly small properties are suitable.</p>
	<p><b>2. Poultry</b>  <b>Industry:</b> Emerging  <b>Climate:</b> Broadly suitable.  <b>Land:</b> Fairly small properties are suitable.</p>
	<p><b>3. Vegetables</b>  <b>Industry:</b> Growing  <b>Climate:</b> Suits a variety of produce  <b>Land:</b> High rainfall areas suitable.</p>
	<p><b>4. Eggs</b>  <b>Industry:</b> Emerging  <b>Climate:</b> Broadly suitable.  <b>Land:</b> Fairly small properties are suitable.</p>
	<p><b>5. Beef Cattle</b>  <b>Industry:</b> Stable  <b>Climate:</b> Broadly suitable.  <b>Land:</b> Smaller property sizes can be a disadvantage.</p>
	<p><b>6. Orchard Fruit and Tree Nuts</b>  <b>Industry:</b> Stable  <b>Climate:</b> Suits avocados, macadamias, citrus, finger limes and more.  <b>Land:</b> High rainfall areas suitable.</p>
	<p><b>7. Dairy</b>  <b>Industry:</b> Stable  <b>Climate:</b> Suitable in areas with good rainfall.  <b>Land:</b> Herd size can be expanded by leasing additional properties.</p>
	<p><b>8. Other Livestock</b>  <b>Industry:</b> Declining apart from some niche markets  <b>Climate:</b> Broadly suitable  <b>Land:</b> Suits more intensively farmed animals like rabbits and goats</p>

<sup>8</sup> Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW – 25 May 2015, North Coast Local Land Services.

# 1) Blueberries



## Industry overview

The blueberry industry is booming in the Coffs Harbour area. So much so, it's been identified as the top priority industry for the region. 88% of national blueberry production is currently grown on the Coffs Coast.<sup>8</sup>

The domestic market consumes about 75% of the crop, while 15% is exported to Asia and Europe and 10% is processed, mainly as frozen product. Future marketing will target Japan, China, New Zealand and Taiwan.<sup>8</sup>

Oz Berries Co-op, a local consortium of 85 growers, has reported 15% pa growth since 2001 and expects this to continue for the next 5 years at least. During peak harvest times as many as 3,000 Coffs Coast locals are employed in this industry.<sup>9</sup>

This explosive growth of this industry is due to a combination of greater demand for blueberries (including export), particularly for their nutritional properties, increased production, and improved yields from new varieties. The Coffs Coast is currently the only place in the world where blueberries can be harvested year round, thanks to the area's various micro climates and the use of multiple varieties of blueberries.

While there is a strong concentration of growers in the Woolgoolga area, farms in the region are spread as far south as Comboyne in the Hastings area.

An intensively farmed product, blueberry farms can produce a revenue of \$100,000 per hectare, however, labour costs are high as each blueberry needs to be handpicked. Labour involved in picking and packing of blueberries contributes to around 58% of the production cost.<sup>10</sup>

A downside to the industry is its high production costs compared to overseas competitors. Local farmers say their efficiency needs to be improved to lower production costs.<sup>11</sup>

Finding available labour is an important issue for the industry, particularly during the Christmas/New Year season. Blueberries are more time-sensitive than other crops, providing minimal flexibility in picking time.<sup>11</sup>

There have also been reported community concerns over the quantity of agricultural pesticides and other chemicals used in blueberry production and the potential effect of these on neighbouring communities and nutrient levels in waterways.

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<sup>9</sup> Champions of Food 2014, Regional Development Australia.

<sup>10</sup> Blueberry establishment and production costs, DPI 2008

<sup>11</sup> Horticulture Survey 2014, North Coast TAFE.

## 2) Poultry



### Industry overview

Currently still a fairly small presence in the region, poultry has been identified as a key emerging market due to a global increase in demand for the product and its suitability to the area and climate.<sup>8</sup> While resilient to colder temperatures, poultry can be very sensitive to heat, so the mild climate of the Mid North Coast is ideal for poultry farming.

The productivity of poultry on a per hectare basis is very high and commercial quantities can be produced on relatively small land holdings. For example, the published *Humane Choice* certified stocking limit for free range chickens is 1,500 birds per hectare, with a processing time of 35-55 days.<sup>12</sup> While actual stocking will vary for each situation, this demonstrates the suitability of the industry to this region.

The limited number of poultry processing facilities in the region is currently a hindrance to the growth of this industry, leading some farmers to invest in their own processing facilities.

The threat of wild dogs is an issue for free ranging birds and needs careful management.

Poultry <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
Meat Chickens (No.)	No Data	964,211	32,034,900
Number of Agricultural Businesses	No Data	9	252
Gross Value (\$)	\$60,292	\$42,573,350	\$876,729,887
Local Value (\$)	\$59,522	\$42,029,242	\$865,524,843

<sup>12</sup> <https://sustainabletable.org.au/Hungryforinfo/Freerangeeggandchickenguide/>

## 3) Vegetables



### Industry overview

In contrast to many forms of animal based agriculture, horticultural enterprises on the Mid North Coast have a much higher return per hectare, at an average of \$51,963. This has caused the growing vegetable industry to be listed as a priority industry in the region.<sup>8</sup>

The mild subtropical climate in this region and its high rainfall make it suitable to a wide variety of crops. When set up in controlled environments such as hothouses and irrigated netted areas, these enterprises are less affected by environmental changes and are therefore moderately drought proof.

Finding suitable labour during seasonal harvest times can be a challenge. The horticulture industry often fails to attract jobseekers as work is casual and irregular and will not meet a jobseeker's "Activity Test" requirements. Proposed "Backpacker" tax changes may discourage working holiday makers.

Many employers find the entrenched "cash culture" that this causes prohibits legitimate employment. Perhaps for this reason there has been a slight decline in employment of -0.7% p.a. from 2006-2011.<sup>13</sup>

Vegetables for Human Consumption <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
Area (Ha)	535ha	280ha	14,734ha
Number of Agricultural Businesses	151	64	1,212
Gross Value (\$)	\$12,065,539	\$6,301,835	\$417,708,660
Local Value (\$)	\$10,418,845	\$5,243,245	\$357,355,885

<sup>13</sup> ABS 2011 Census of Population and Housing

<sup>14</sup> ABS 2014-2015, Cat 7121.0 and Cat 7503.0

## 4) Eggs



### Industry overview

The Mid North Coast is the most important egg producing area on the North Coast. Egg production in 2012/13 was valued at \$35 million, leading it to be classified as a key emerging industry. Our domestic egg consumption is growing and the outlook for the industry looks positive.<sup>15</sup>

As with poultry farming in general, the mild, sea-cooled climate of the Mid North Coast is favourable to hens which can be sensitive to heat.

The relatively small agricultural property sizes of the region are no obstacle for egg production which does not require large landholdings. As an example, the free range stocking density per outdoor paddock is 750 birds per hectare. In a shed it is 6-10 birds per square metre.<sup>16</sup>

As with meat birds, wild dogs are a significant threat if hens are free ranging in paddocks.

Animal welfare concerns amongst consumers are resulting in a growing demand for lower-intensity production systems.

Eggs <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
<b>Total number of layers and pullets (no.)</b>	554	676,049	4,860,745
<b>Number of Businesses</b>	38	236	2,112
<b>Total number of eggs for human consumption (dozens)</b>	3,481	12,917,060	95,863,610
<b>Number of Businesses</b>	38	236	2,112
<b>Total Number – All other poultry (no.)</b>	2,102	235,839	1,739,594
<b>Number of Businesses</b>	85	59	609
<b>Gross Value (\$)</b>	\$8,687	\$32,239,437	\$239,264,118
<b>Local Value (\$)</b>	\$7,756	\$28,782,388	\$213,607,717

<sup>15</sup> Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW, North Coast LLS, 2015.

<sup>16</sup> <https://sustainabletable.org.au/Hungryforinfo/Freerangeeggandchickenguide/>

## 5) Beef Cattle



### Industry overview

Classified as a stable industry in the region, beef is by far the most common agricultural commodity produced. There are 408,564 meat cattle in the region.<sup>17</sup>

Many farmers have been producing beef cattle for generations. It is also extremely popular with hobby farmers as beef cattle are possibly the least labour intensive of all commodities to farm.

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%).<sup>8</sup>

Local Government Area	Jobs
Bellingen (A)	142
Coffs Harbour (C)	82
Greater Taree (C)	288
Kempsey (A)	199
Nambucca (A)	153
Port Macquarie-Hastings (A)	255
<b>Total</b>	<b>1119</b>

There are 2,886 Livestock businesses in the region, with a Gross Value of \$193,006,337.<sup>17</sup>

1119 people across the region are employed in the beef industry, with the vast majority self-employed or on family farms. There was a reported employment loss of - 2.4% p.a. from 2006-2011.<sup>18</sup>

The production of beef cattle returns, on average, around \$380 per hectare.<sup>8</sup> This is the lowest value per hectare of any common agricultural commodity in the region.

While current prices for beef cattle are at historical highs, the smaller land sizes on the Mid North Coast can be a competitive disadvantage as herd sizes here are much smaller than they are in many other regions. This makes it hard for farmers to achieve economies of scale and profitability in the long term.

Some farmers have compensated for this by:

- Running beef as a part of a diversified agribusiness;
- Marketing a niche product such as Waygu or organic beef;
- Capturing more of the value chain by processing and selling direct to retail markets.

Opportunities for co-operatives and bulk/group purchasing of products and machinery can also increase a farmer's profitability.

The beef industry is heavily affected by commodity prices and farmers need to be very shrewd with their calculations. It is a different story for meat manufacturing and this value added component appears to be where the real profits are made. Meat manufacturing supports 471 workers throughout the region with abattoirs located in the towns of Wingham and Frederickton.<sup>19</sup>

<sup>17</sup> ABS 71210, 2014-15, combined data for Coffs Harbour – Grafton and Mid North Coast.

<sup>18</sup> ABS 2011 Census of Population and Housing

<sup>19</sup> ABS 2011 Census of Population and Housing

## 6) Orchard fruit and tree nuts



### Industry overview

Blueberries aside, the largest markets for orchard fruit and tree nuts are macadamias, avocados and bananas. Although the latter is largely being transitioned into blueberry farms. Examples of other orchard fruit and nuts that grow well here are raspberries, kiwi fruit, citrus, pecans and finger limes.

The overall orchard fruit and nut industry is classified as stable, with a slight decline in job numbers of -1.0% from 2006-2011.<sup>20</sup>

### Macadamias

The macadamia industry is classified as stable, though some growers believe the industry is growing. These farmers point to recent improvements in prices, along with enhanced yields through better fertilisation processes.

There is a concentration of macadamia growers in the Nambucca Valley, in close proximity to the Nambucca MacNuts processing facility.

Macadamia harvesting is now largely mechanised and labour requirements are small. However there is plenty of semi-skilled pruning work available for growers large enough to justify external hiring.<sup>21</sup>

The annual revenue for the region's macadamia growers is around \$42.2M<sup>22</sup>.

Macadamias <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
Total trees (no.)	25,084	155,868	2,629,483
Number of Businesses	20	67	677
Production (kg)	199,736	812,662	20,627,634
Gross Value (\$)	\$812,925	\$3,307,535	\$83,954,469
Local Value (\$)	\$791,953	\$3,222,205	\$81,788,567

<sup>20</sup> ABS 2011 Census of Population and Housing

<sup>21</sup> Horticulture Survey 2014, North Coast TAFE.

<sup>22</sup> Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW, North Coast LLS, 2015.

## Avocados

The Mid North Coast accounts for around 80% of avocado production in NSW. There are large Plantations of avocados in the Comboyne and Stuarts Point areas.

The avocado industry is classified as a stable industry, though some farmers say it is a growth industry, mainly due to increased production and/or new trees coming on line.<sup>23</sup>

The annual revenue for the region's avocado growers is \$11.2M<sup>24</sup>.

There is healthy demand for avocado pickers, and this work is counter-cyclical to blueberries. However, pickers do need training in, and an aptitude for, working at heights. There is also seasonal demand for semi-skilled pruners.<sup>25</sup>

Avocados <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
Total trees (no.)	3,704	68,220	176,880
Number of Businesses	11	70	179
Production (kg)	21,561	1,625,380	3,794,158
Gross Value (\$)	\$90,875	\$6,850,500	\$15,991,264
Local Value (\$)	\$77,185	\$5,818,471	\$13,582,177

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<sup>23</sup> Horticulture Survey 2014, North Coast TAFE.

<sup>24</sup> ABS 7503.0 – Value of Agricultural Commodities Produced 2010-11

<sup>25</sup> Horticulture Survey 2014, North Coast TAFE.

## 7) Dairy



### Industry overview

Dairying is a significant industry and employer on the Mid North Coast. Considered a stable industry in the region, dairy farming has had its share of challenges since deregulation. However, there is potential for farms to provide a sustainable income, particularly if smaller farms can lease additional properties on which to graze and increase their total herd size. A combination of farm ownership and leasing can allow farmers to manage larger herds to improve their production capacity and economies of scale. The dairy industry is a leader in the area of farm leasing.

The average profit of dairy farms is \$2,850 per hectare, substantially more than for beef cattle.<sup>26</sup> The proportion of dairy cattle to total cattle in the region 1:10, with a total dairy cattle number of approximately 40,500.<sup>27</sup>

Primary Industries in the North Coast Region reports:

- Average farm size is 120 ha
- Average herd size is 140 cows
- Herd production 5,500 litres per cow per year
- Total annual milk production: 258 Million Litres
- Average farm gross income \$260,000.<sup>28</sup>

The dairy industry in the Mid North Coast employs 550 people. There was a very slight employment downturn of -0.5% p.a. from 2006-2011.<sup>29</sup>

Norco is a large buyer and manufacturer of dairy products on the Mid North Coast with a milk factory located at Raleigh in the Bellingen Shire.

Dairy <sup>14</sup>	Coffs Harbour - Grafton	Mid North Coast	New South Wales
<b>Total number of Dairy Cattle</b>	20,040	42,070	313,020
<b>Number of Businesses</b>	167	241	1,819
<b>Gross Value (\$)</b>	\$36,716,041	\$86,381,150	\$611,906,988
<b>Local Value (\$)</b>	\$36,716,041	\$86,381,150	\$611,906,988

<sup>26</sup> Characterisation of the Socio-Economic Landscape of the North Coast Region of NSW Prepared by ecological Australia for the North Coast Local Land Services 25 May, 2015.

<sup>27</sup> ABS 71210DO004\_201213 Agricultural Commodities, Australia, 2012-13 "Mid North Coast" Great Lakes – Nambucca

<sup>28</sup> NSW Strategic review by NSW DPI

<sup>29</sup> ABS 2011 Census of Population and Housing

The dairy industry has a strong industry body in Dairy Australia. Despite highly publicised, innovative, and imaginative programs such as Cows Create Careers and Picasso Cows, farmers and Dairy Australia members advise that they still find it very difficult to attract and retain staff. The dairy industry has an aging workforce with very few young people showing an interest in starting a career in dairying.

Export is a growing market for the dairy industry, particularly to China, as Australia milk is viewed as clean and safe.

## 8) Other livestock



### Industry overview

While the total industry category of “other meat” (meat other than beef) is in decline, there are pockets of this industry that show real promise for the Mid North Coast region. The industry has been traditionally dominated by sheep and pigs, both now declining industries in this region according to ABS statistics.

The 12,665 ha of grazing pasture for livestock other than beef comprises of: sheep (5267ha), pigs (4063ha), goats (1743ha), deer (1560ha) and buffalo (32ha).<sup>30</sup>

Employment in the industry overall fell 6.0% p.a. from 2006-2011, the largest fall of any key industry shown in this report.<sup>31</sup> However, due to the variety of possible livestock, some local farms have experienced growth and significant market penetration, most notably farms of goats and rabbits.

### Rabbits

Rabbit farms are a good example of an alternative industry that can fare well in this region. There is strong national demand growth for rabbit meat which has a high nutritional value and is increasingly sought after by restaurants and consumers in metropolitan areas.

Similar to poultry, commercial quantities of rabbits can be grown on relatively small land holdings and the animals are processed at around 12 weeks. The climate of the Mid North Coast is also favourable, though rabbit farming is usually done in temperature controlled sheds.

Rabbit fur is a commercial by-product and the Akubra Hats factory in Kempsey used to be a large purchaser of rabbit pelts, however, they are currently unable to source enough local furs Akubra now buy them from overseas.

The Calici virus is a serious threat which has affected local rabbit farmers. Careful consideration is recommended for people looking at farming rabbits to ensure that facilities are relatively safe from insects and that a strict vaccination program is adhered to.

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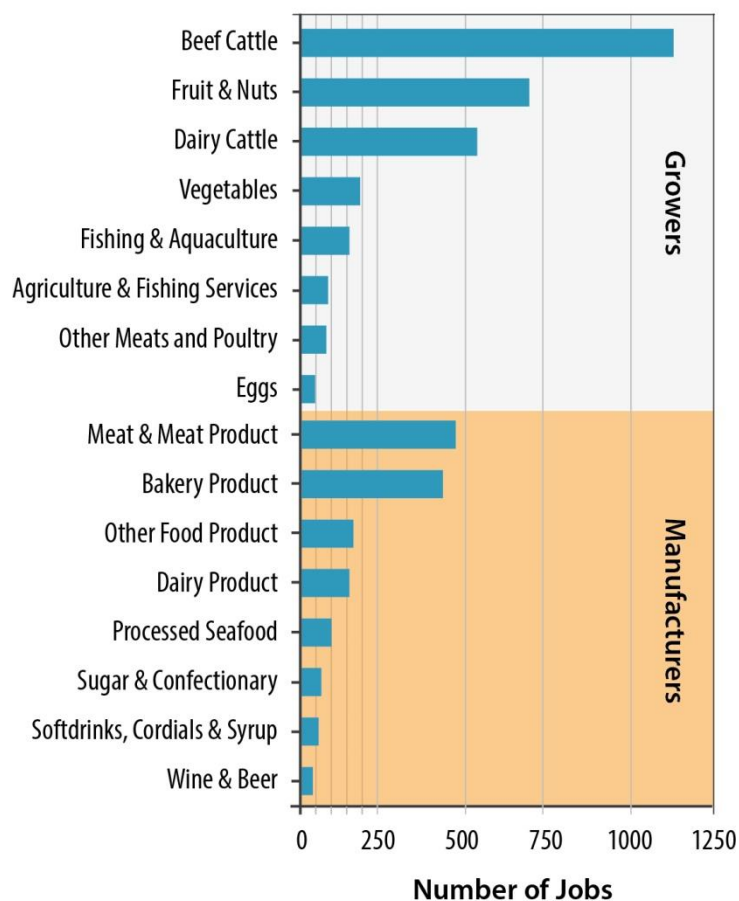
<sup>30</sup> ABS 71210DO005\_201011B Agricultural Commodities, Australia 2010-11. Edited data from Table 5 – Coffs Harbour – Grafton – 2010-2011 and Table 9 Mid North Coast 2010-11

<sup>31</sup> ABS 2011 Census of Population and Housing

## Part B: A career in food production

The total food production industry in the Mid North Coast region employs 4,610 people, of which 3,232 jobs are in Agriculture. The following chart illustrates the distribution of these jobs across the various agricultural industries, with beef cattle farming being the largest employer and dairy farming another significant employer.

**Jobs by Regional Food Industries (2011)**



*Census of Population and Housing, 2011 - ABS*

The vast majority of the “growers” jobs are owner operators.

## Owner operators

83% of all businesses in the agriculture, forestry and fishing sector are classified as non-employing businesses. 14% of businesses employ 1-4 people and only 3% of businesses employ more than 4 people. (These statistics include forestry, so the percentage of non-employing agricultural businesses is probably higher.)<sup>32</sup>

This demonstrates that for the majority of people, a long term career in agriculture is likely to involve becoming an owner operator at some stage.

Self-employment through contracting in roles such as fencing, fodder production and scientific services is an area that seems to be growing, as more farmers work off farm and farmers age. This caters to a demand from small acreage farmers where it is not financially viable for them to purchase specialised farming equipment.

## Entry level positions

Aside from owner operators, entry level positions are the most common jobs available. This includes: labourers, production line operators, packers, fruit pickers and farm hands.

Due to the seasonal nature of agriculture, casual jobs are much more common in the industry. However, different agricultural industries have different peak seasons, so it is possible, in theory, for a fruit picker to have year round work.

A recent survey of horticultural farmers in the region found that there was interest in a shared labour pool where different industries with alternate picking seasons could provide a steady supply of work to casuals.<sup>33</sup> However, they balk at what they consider to be excessively high charge out rates of labour hire companies.

Employers in the agricultural arena tell of difficulty attracting employees that are reliable and willing to commit to the long hours and hard work involved in working on farms. Many feel that the industry isn't "sexy" enough and cannot compete with civil and mining wages.

Owners and managers of many horticultural enterprises advise that they struggle to find enough reliable staff and therefore access migrant workers to fill these labour needs. Others have used WOOFERS for cheap labour.

Some contributing factors to the low number employment opportunities in agriculture on the MNC include:

- Family run farms that do not employ outside the family unit;
- Smaller farms with low profit margins;
- A historical inability to attract staff;
- Piece work payment;
- Concerns regarding the legal responsibilities of having employees;

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<sup>32</sup> REMPLAN ABS data

<sup>33</sup> Horticulture Survey, 2014 - North Coast TAFE

- Not wanting the “hassle’ and “pastoral care” issues of employees.
- Farm owners regularly working “off farm” themselves.

Perhaps for these reasons, employment in agriculture on the Mid North Coast is projected for minimal growth up to 2019.<sup>34</sup>

When it comes to full time employed positions on farms there are very few. This is due to the prominence of small scale agricultural operations on the Mid North Coast. At present, the career progression for most agricultural trainees is either to start their own agribusiness or to relocate to another region for career advancement.

Larger properties are found as you move further away from the coast and up into the higher areas. Larger enterprises that have the capacity to hire staff, such as Comara in the Macleay Valley and Bungay Dairy in the Manning Valley, find that the isolation of these properties sometimes provides further difficulties for employment if on site accommodation is not available.

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<sup>34</sup> Australian Government Department of Employment Regional Projections, 2019  
<http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections>

# Skills gaps and career opportunities

In 2014, North Coast TAFE conducted a survey of horticultural farmers from the region's four largest horticultural industries, being blueberries, avocados, macadamias and bananas. The intention was to identify future industry and training needs. The survey identified labour shortages at peak harvest seasons, particularly for blueberries, and a lack of skilled labourers in areas such as working at heights.



The survey found that:

- Labour needs are crop-specific, with blueberry farmers facing the greatest demand for harvesting labour and macadamia farmers the least.
- There is demand across all sectors for skilled and semi-skilled workers. Blueberries and bananas are largely counter-seasonal to avocados and macadamias, so this requirement is relatively consistent year round.
- Although farmers are comfortable using backpackers and other labour types, there is interest in a shared labour pool of semi-skilled locals, ideally available on a daily contract basis.
- Training of greatest interest included: work health and safety, agronomy, correct use of fertilisers, organics, pest management, and anything which promises to boost farm productivity or lower input costs. The more crop-specific, the better.

This suggests that there are skills shortages in our agricultural industries.

There appears to be a gap emerging as aging farmers retire or leave the industry and valuable agricultural skills are lost. These roles involve a broad range of skills: land management, understanding of machinery, crop rotations, animal handling, food handling, production processes and knowledge of the local area.

## **Career prospects differ from national averages**

Nationally, research tells us that there are six jobs available for every university graduate of agriculture. However, our research shows that this statistic does not translate to the Mid North Coast region.

The preference for hiring staff with hands on skills and experience, coupled with low wages, means that many of positions in this region are not suitable for either university graduates or unskilled labourers.

Positions in the sciences, such as food production and agronomy, while valuable, are predominantly found in Government offices such as Local Land Services and Department of Primary Industries. Scientific and management staff are often long standing employees, so the opportunity for employment in these areas is minimal. Specialised employment agencies such as Kelly Scientific advise that they are “lucky to have one vacancy a year” for scientific roles in agriculture in this region.

On the food manufacturing side, processing plants such as Norco, Nestle and the Wingham Beef Exports abattoir are large employers of labourers and process line workers.

## **Farmers’ perspectives**

When interviewed, farmers throughout the region have impressed that qualifications are not as important to them as practical experience and a willingness to learn and have a go, for on farm and entry level jobs. There is a prevailing thought among many farmers that “you can’t teach common sense”.

This is reflected in the level of qualifications required for management roles in the industry. North Coast TAFE advises students that a Certificate III is an entry level management level qualification in most areas of agriculture, which is much lower than other industries.

A small number of farmers are interested in employing higher qualified employees with qualifications in a different field of knowledge than their own. They are open to opportunities that may offer new income streams or farming practices, such as organic and biodiversity systems. This is prevalent in horticulture, fodder production and operators who are diversifying their farm businesses.

# Agricultural workforce characteristics

## Ageing workforce

The Mid North Coast region has an ageing agricultural workforce. 46% of people employed in agriculture are over 55 years of age. Conversely, only 6.5% of people working on farms are under 25 years of age.

The following table shows the majority of farmers are currently between 45-75 years of age and the average age of farmers on the Mid North Coast is 68 years of age.

<b>Age</b>	<b>Jobs</b>	<b>%</b>
15 - 19	71	2.4 %
20 - 24	121	4.1 %
25 - 34	283	9.6 %
35 - 44	448	15.1 %
45 - 54	671	22.7 %
55 - 64	701	23.7 %
65 - 74	493	16.7 %
75 - 84	154	5.2 %
Over 84	18	0.6 %
<b>Total</b>	<b>2,961</b>	

*Source: 2011, ABS, Census of Population and Housing*

## Gender

Around 70% of the region's agricultural workers are male, slightly lower than the national average of 72%.<sup>35</sup>

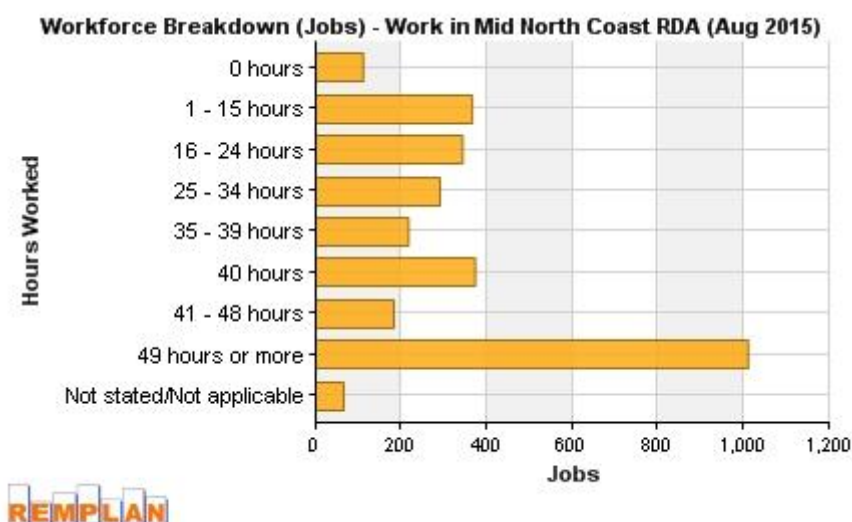
However, there is a positive trend towards farmers employing female staff trainees, especially those that involve animal handling and management. Many farmers now express appreciation of the care that female farm workers show in looking after their livestock and farm equipment and the diligence shown in their duties.

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<sup>35</sup> Census of Population and Housing, 2011 - ABS

## Work commitments and earnings

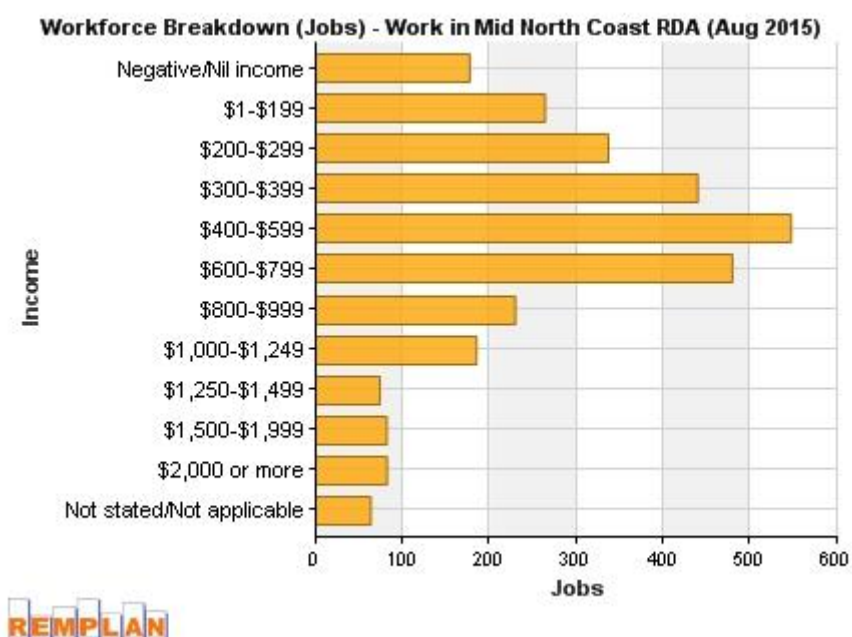
The majority of farmers (53%) are owner operators who work a 49 hour week or longer. However, many of these small acreage farmers work away from their farms in some manner, often in a full time capacity. This is colloquially known as “Subsidised Farming”.



Source: 2011, ABS, Census of Population and Housing

Farmers generally stay in their job longer than the rest of the employed population. In fact the majority of the workforce has held the same role for more than 20 years.

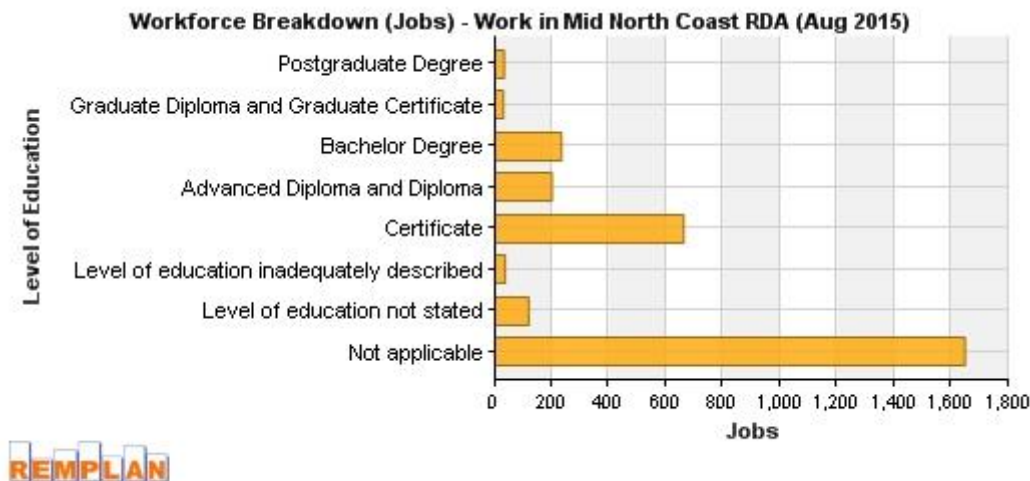
The weekly income from this industry is relatively low, most commonly \$400-599 per week.



Source: 2011, ABS, Census of Population and Housing

## Educational Qualifications

Many workers in the agriculture and food manufacturing sectors do not have a tertiary qualifications. Certificate level training is currently considered sufficient, with most employers preferring practical experience and practical short course training by training centres such as TAFE, Tocal and Department of Primary Industry courses.



Source: 2011, ABS, Census of Population and Housing

Overall, there are a total of 1,932 people in the workforce who are tertiary trained, comprising of 1,373 in agriculture and 559 in food production.<sup>36</sup>

The highest tertiary attainment numbers are in Greater Taree (23.5%) with the vast majority being at a certificate level. Is this due to a strong TAFE presence in Taree with a broad choice of industry advised agriculture courses available?

<sup>36</sup> Census of Population and Housing, 2011 - ABS

# The Pathways into Agriculture survey

A key part of the Pathways into Agriculture project was two student surveys conducted in Mid North Coast high schools that deliver agricultural programs.

## Initial survey

An initial survey of high school students was conducted before students attended a presentation from the Pathways into Agriculture program.

Results of the initial survey of 213 high school students studying Agriculture, Horticulture and Primary Industries in the Mid North Coast (from years 9 – 12) returned the following responses:

- 83 of the students surveyed have advised that they have taken Agriculture and Primary Industries because it is fun.
- Only 45 Students responded that they took Agriculture or Primary Industries for their future careers

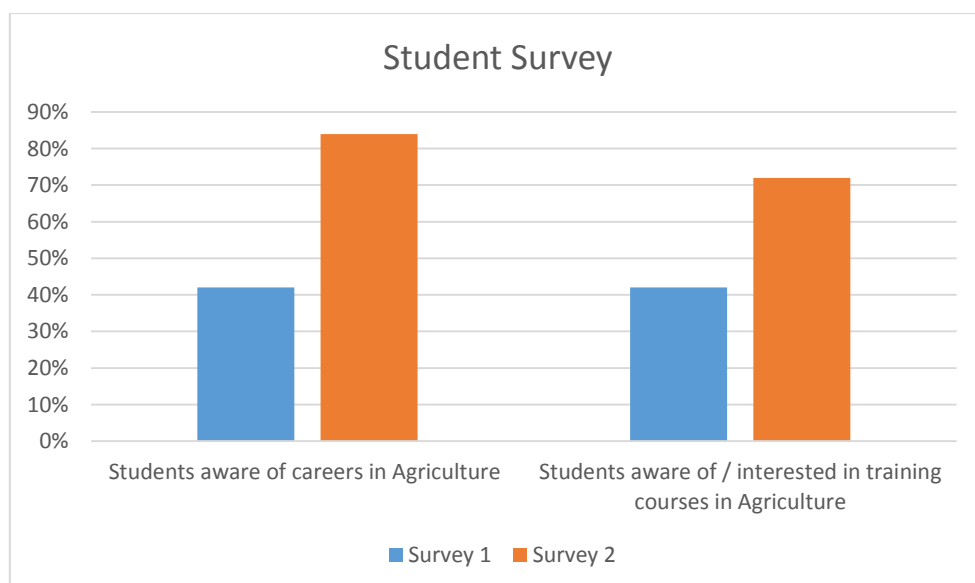
## Follow up survey

After taking part in a school based presentation from RDA's Agricultural Pathways Officer, the same group of students were given a second survey to complete.

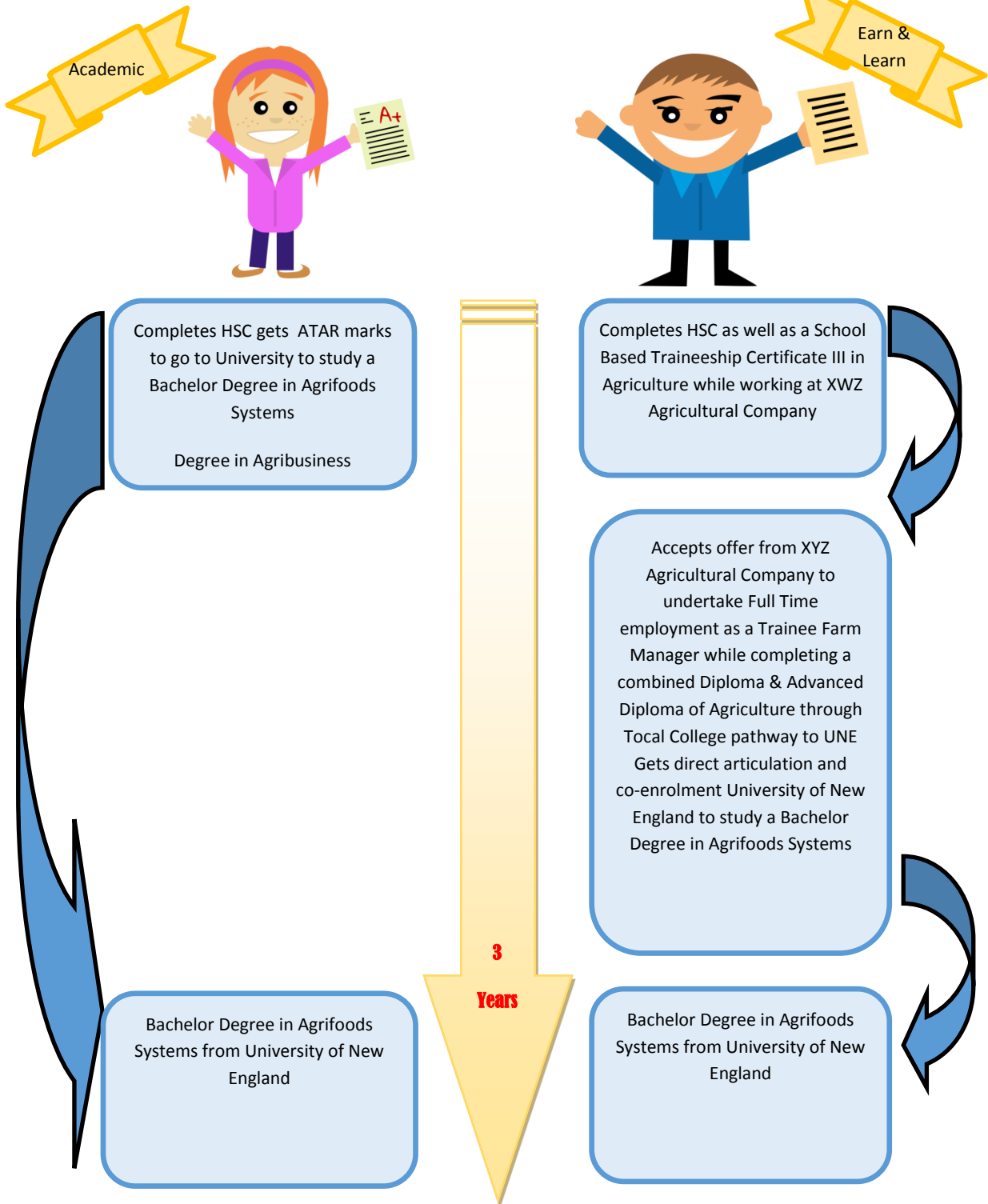
Over 80% of students that completed the second survey answered "Yes" when asked if they were now more aware of the agricultural careers and opportunities open to them.

When asked if they would be interested in employment throughout a range of Agricultural and Food Production roles, all students answered yes on the second survey.

These results seem to demonstrate that there is a lack of knowledge among young people in schools about the potential for a career in agriculture.



# Agricultural Pathway example



## Pathways programs and job services

When interviewed as part of the Pathways into Agriculture project, many local farmers expressed disillusionment with Job Services programs, despite huge wage subsidies and trainee rebates. This was due to several factors:

- Unsuitable or unprepared jobseekers being referred;
- The amount of paperwork required to accept a jobseeker;
- The constant contact by Job Services for evidence of employment (required by the Department of Employment);
- Concern regarding insurances, pay procedures and trainee management matters.

Some farmers whose properties had the capacity to employ in the past have advised that they attempted to find staff through Job Services programs without success. There were numerous cases where job seekers would not turn up for interviews or would attend the interview with no interest in getting the job.

Many farmers reported that they prefer entry level farm staff with hands on experience and some “soft” skills such as problem solving, initiative and common sense. The more respected pathways programs had a large component of work experience and practical application from entry level through to tertiary studies.

### **School based traineeships**

In contrast to the negative view of job services, farmers on the Mid North Coast are showing interest in School Based Traineeship (SBaT) programs, which support young people from school based agricultural studies through to tertiary studies, with practical work experience. Many farmers like the fact that these young people are motivated, handy and working towards a career in the industry.

A school based traineeship on a working farm is a worthwhile option to consider as practical skills are often best learnt on the job. Students can undertake a School Based Traineeship (SbaT) while completing their year 11 and 12 studies and working in the industry. They can then continue on to higher levels of study through work based traineeships, up to Advance Diploma levels. Some of the institutions that offer these courses also offer pathways into various university degrees.

The majority of farmers surveyed for this project were very positive about School Based Traineeships. The reasons they favoured School Based Traineeships were:

- Opportunity for sharing their knowledge with the farmers of the future;
- Starting young people in a career while they are still motivated and before they are part of the Job Services system;
- Opportunity for advancement and continual learning that is relevant to the students interest;
- Low wages and traineeship rebates are attractive;
- A wish that similar programs had been available to themselves and their children when they were at school.

## Indigenous careers in agriculture

One objective of the Pathways into Agriculture program was to determine whether the out of doors, tactile nature of agriculture would appeal to young Indigenous people in the region. The success of Indigenous farm-based programs elsewhere seemed to suggest it would.

However, our study of Mid North Coast high schools found the number of Indigenous students undertaking agricultural studies is virtually non-existent. Regrettably, we weren't able to find much qualitative or quantitative evidence, either supporting or disproving the suitability of Indigenous careers in agriculture. This may not mean that Indigenous young people are not interested in agriculture - it could be a reflection of very low engagement levels in high school and scepticism about their career prospects in any industry.

Our study did find local interest at the Local Aboriginal Lands Council (LALC) level. One LALC in the region is currently working on a plan to convert some of their rural land holdings into a working cattle farm and agricultural training centre. Another, in a large regional city, has substantial horticultural business enterprises and are intending to expand and take on trainees in 2017.

With this in mind, we are left to make the following conclusions based on advice from Local Aboriginal Lands Councils, along with findings from programs such as the Indigenous Land Corporation properties, reports such as the Investigation into Indigenous Land Administration and Use- *Report to the Council of Australian Governments* and on reasonable assumptions:

- Indigenous kids need to receive careers advice about agricultural studies early in high school.
- Training that's tactile and culturally sensitive is likely to encourage greater engagement.
- A lack of Indigenous managed and owned farms in the region means Indigenous kids have no family experience or ambition in agriculture.
- The culture of a working farm needs to be taught to potential Indigenous trainees as farmers are time poor and won't take on trainees if they think it is too difficult to train them.
- Careers in agriculture for Indigenous people are possible, if supported.
- Group Training Organisations should be engaged to provide their services to make it convenient for farmers to employ, without needing to worry about insurances and paperwork.

# Appendix A – Agriculture Pathways Tertiary Course List

(See attached document)