Agriculture and Fisheries in the Illawarra region of New South Wales, 2013

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1 Regional overview

The Illawarra region of New South Wales includes the city of Wollongong and hinterland area along the coast and west to the southern highlands region (Map 1). The region comprises the three local government areas of Kiama, Shellharbour and Wollongong, and parts of the local government areas of Campbelltown, Sutherland Shire and Wollondilly to the north, and Shoalhaven and Wingecarribee to the south west. The region covers a total area of around 1500 square kilometres or less than 1 per cent of New South Wales and is home to approximately 276 000 people (ABS 2011).

The total land held by farm businesses was estimated to be 17 729 hectares in the Illawarra region in 2010–11. Agricultural land in the region was mainly used for grazing (14 289 hectares) and cropping (480 hectares). In addition, 1855 hectares of land held by farm businesses was set aside for conservation (ABS 2012).

Map 1 Illawarra region of New South Wales

Employment

Australian Bureau of Statistics (ABS) census data from 2011 indicate that around 119 400 people were employed in the Illawarra region. The Illawarra region accounts for 4 per cent of total employment in New South Wales and less than 1 per cent of all people employed in the New South Wales agriculture, forestry and fishing sector.

Health care and social assistance was the largest employing sector (15 859 people) followed by retail trade (12 529 people) (Figure 1). Other important employment sectors in the region were
education and training (12 383 people), manufacturing (11 862 people), and construction (9383 people).

Agriculture, forestry and fishing employed 497 people, representing less than 1 per cent of the Illawarra region’s workforce. Of this 77 per cent were employed in agriculture, 11 per cent in support services to the agriculture, forestry and fishing sector, and 9 per cent in fishing, hunting and trapping. In addition, an estimated 662 people were employed in food product manufacturing and 482 people were employed in wood, pulp and paper product manufacturing in the region (included in manufacturing sector employment).

Figure 1 Employment profile, Illawarra region, August 2011

Source: Australian Bureau of Statistics
2 Agriculture sector

Value of agricultural production

In 2010–11 the gross value of agricultural production (GVAP) in the Illawarra region was $31 million, which was less than 1 per cent of the total gross value of agricultural production in New South Wales ($11.7 billion) for 2010–11. This is the most recent year for which data are available from the ABS on GVAP by statistical area.

The agricultural sector in the Illawarra region is dominated by dairy and cattle production, and some horticultural output. In 2010–11, the Illawarra region accounted for around 3 per cent of the total value of New South Wales milk production.

The most important commodity in the region, based on the value of agricultural output, was milk (Figure 2). In 2010–11, milk production contributed 57 per cent ($17 million) to the total gross value of agricultural production in the Illawarra region. Cattle and calves accounted for 26 per cent ($8 million), and fruit 4 per cent ($1 million).

Figure 2 Value of agricultural production, Illawarra region, New South Wales, 2010–11

Source: Australian Bureau of Statistics

Number and type of farms

ABS data indicate that in 2010–11 there were 191 farms in the Illawarra region with an estimated value of agricultural operations of more than $5000 (Table 1). The region contains 1 per cent of all farm businesses in New South Wales.

Farms are classified in Table 1 according to the activities that generate most of their value of production. Beef cattle (74 farms) were the most common, accounting for 39 per cent of all farms in the Illawarra region, and 1 per cent of all beef cattle farms in New South Wales.
### Table 1 Number of farms, by industry classification, 2010–11

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>Illawarra region</th>
<th>New South Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no.</td>
<td>%</td>
</tr>
<tr>
<td>Beef cattle</td>
<td>74</td>
<td>39</td>
</tr>
<tr>
<td>Dairy</td>
<td>41</td>
<td>21</td>
</tr>
<tr>
<td>Other livestock</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Sheep</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Fruit and nuts</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Poultry</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Vegetable</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
<td>19</td>
</tr>
<tr>
<td>Total Agriculture</td>
<td>191</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Where the estimated value of agricultural operations is more than $5000.

Source: Australian Bureau of Statistics

A large proportion of farms in the region are small in terms of their business size. Estimated value of agricultural operations (EVAO) is a measure of the value of production from farms and a measure of their business size, and is somewhat similar to turnover. Around 59 per cent of farms in the Illawarra region had an EVAO of less than $50,000 (Figure 3). These farms accounted for only 8 per cent of the total value of agricultural operations in 2010–11. In comparison, 16 per cent of farms in the region had an EVAO of more than $350,000 and accounted for an estimated 67 per cent of the total value of agricultural operations in the region in 2010–11.

Figure 3 Distribution of farms by estimated value of agricultural operations, Illawarra region, New South Wales, 2010–11

Source: Australian Bureau of Statistics
Farm financial performance—New South Wales

Each year, ABARES interviews Australian broadacre and dairy producers as part of its annual survey program. Broadacre industries covered in this survey include the grains, grains–livestock, sheep, beef and sheep–beef industries. The information collected is a basis for analysing the current financial position of farms in these industries and expected changes in the short term. This paper uses data from the ABARES Australian agriculture and grazing industries survey (AAGIS) and Australian dairy industry survey (ADIS) to compare estimates of financial performance indicators (Box 1) for broadacre and dairy farms in New South Wales.

**Box 1 Definitions**

<table>
<thead>
<tr>
<th>Major financial performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total cash receipts</strong>: total revenues received by the business during the financial year.</td>
</tr>
<tr>
<td><strong>Total cash costs</strong>: payments made by the business for materials and services and for permanent and casual hired labour (excluding owner manager, partner and family labour).</td>
</tr>
<tr>
<td><strong>Farm cash income</strong>: total cash receipts – total cash costs</td>
</tr>
<tr>
<td><strong>Farm business profit</strong>: farm cash income + changes in trading stocks – depreciation – imputed labour costs</td>
</tr>
<tr>
<td><strong>Profit at full equity</strong>: return produced by all the resources used in the business, farm business profit + rent + interest + finance lease payments – depreciation on leased items</td>
</tr>
<tr>
<td><strong>Rate of return</strong>: return to all capital used, profit at full equity * 100 / total opening capital</td>
</tr>
<tr>
<td><strong>Equity ratio</strong>: Farm capital minus farm debt expressed as a percentage of farm capital</td>
</tr>
</tbody>
</table>

**Industry types**

- **Grains**: farms mainly engaged in producing broadacre crops such as wheat, coarse grains, oilseeds and pulses, and including farms running sheep and/or beef cattle in conjunction with substantial broadacre crop activity.
- **Sheep**: farms mainly engaged in running sheep.
- **Beef**: farms mainly engaged in running beef cattle.
- **Dairy**: farms mainly engaged in milk production.

**Performance of broadacre farms—New South Wales**

Average broadacre farm cash income for 2012–13 is projected to increase slightly compared to that recorded in 2011–12. Overall, a small increase is expected in crop receipts with higher grain prices generally expected to offset lower production compared with 2011–12. Change in farm cash income is expected to vary across industries and regions. Small increases in farm cash incomes are expected for many grain farms in 2012–13, including farms growing rice. However, receipts from livestock and wool are projected to decline, due to lower sheep, wool and beef prices and despite an increase in the number of sheep, lambs and cattle expected to be sold.
On average, farm cash income of broadacre farms in New South Wales is projected to average $73,000 a farm in 2012–13 (Table 2), which is around 30 per cent above the average farm cash income recorded for the 10 years to 2011–12 (Figure 4).

Farm cash incomes are projected to increase in the main grain growing regions of north western New South Wales, central New South Wales and the Riverina in 2012–13. However, in Far Western New South Wales, the Northern, Central and Southern Tablelands regions, farm cash incomes are projected to decline due to reduced livestock and wool receipts.

Despite an increase in average farm cash income, average farm business profit is projected to decline as the rate of increase in sheep and beef cattle numbers slows and as stocks of grain on-farm are reduced relative to those held in 2011–12.

Figure 4 Real farm cash income, broadacre industries, average per farm

Note: p Preliminary estimate. y Provisional estimate.

Table 2 Financial performance, New South Wales broadacre industries, 2010–11 to 2012–13, average per farm

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>units</th>
<th>2010–11</th>
<th>2011–12p</th>
<th>RSE (%)</th>
<th>2012–13y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cash receipts</td>
<td>$</td>
<td>371,670</td>
<td>343,700</td>
<td>(5)</td>
<td>340,000</td>
</tr>
<tr>
<td>Total cash costs</td>
<td>$</td>
<td>268,800</td>
<td>272,400</td>
<td>(5)</td>
<td>267,000</td>
</tr>
<tr>
<td>Farm cash income</td>
<td>$</td>
<td>102,870</td>
<td>71,300</td>
<td>(11)</td>
<td>73,000</td>
</tr>
<tr>
<td>Farms with negative farm cash income</td>
<td>%</td>
<td>27</td>
<td>32</td>
<td>(11)</td>
<td>32</td>
</tr>
<tr>
<td>Farm business profit</td>
<td>$</td>
<td>67,590</td>
<td>-8,300</td>
<td>(91)</td>
<td>-11,000</td>
</tr>
<tr>
<td>Profit at full equity - excluding capital appreciation</td>
<td>$</td>
<td>104,840</td>
<td>27,900</td>
<td>(29)</td>
<td>21,000</td>
</tr>
<tr>
<td>Farm capital at 1 July a</td>
<td>$</td>
<td>3,390,700</td>
<td>3,420,100</td>
<td>(4)</td>
<td>na</td>
</tr>
<tr>
<td>Farm debt at 30 June b</td>
<td>$</td>
<td>437,610</td>
<td>446,300</td>
<td>(9)</td>
<td>420,000</td>
</tr>
<tr>
<td>Equity ratio b</td>
<td>%</td>
<td>87</td>
<td>87</td>
<td>(1)</td>
<td>na</td>
</tr>
<tr>
<td>Rate of return - excluding capital appreciation c</td>
<td>%</td>
<td>3.2</td>
<td>0.8</td>
<td>(28)</td>
<td>0.7</td>
</tr>
<tr>
<td>Off-farm income of owner manager and spouse b</td>
<td>$</td>
<td>35,180</td>
<td>33,600</td>
<td>(11)</td>
<td>na</td>
</tr>
</tbody>
</table>

Note: a Excludes leased plant and equipment. b Average per responding farm. c Rate of return to farm capital at 1 July.

p ABARES preliminary estimates. y ABARES provisional estimates. na Not available. RSE Relative standard errors, expressed as a percentage of the estimate provided.
Performance of grains industry farms—New South Wales

Average farm cash income for New South Wales grains industry farms declined in 2011–12 compared with 2010–11. Record grain and oilseed production in 2010–11 resulted in the carryover of substantial grain stocks into 2011–12. Sale of on-farm grain stocks boosted crop receipts and helped offset the effect on crop receipts of lower grain and oilseed production combined with lower grain prices. The selling down of grain stocks cushioned the decline in farm cash income for grains industry farms but lowered the value of on-farm stocks, resulting in a larger decline in farm business profit in 2011–12.

In 2012–13, crop receipts are projected to increase by around 8 per cent for New South Wales grains farms as higher crop prices more than offset reductions in crop production resulting from drier conditions through winter and spring in most regions and high temperatures in northern summer cropping regions mid-summer. On mixed enterprise farms, increased crop receipts are expected to be partly offset by reduced receipts from sheep and due to lower sheep, lamb and wool prices and in spite of a small increase in beef cattle receipts as drier conditions result in increased cattle turnover.

Farm cash income for New South Wales grains industry farms is projected to average $139 000 a farm in 2012–13, an increase on the average farm cash income for 2011–12, and around 75 per cent above the industry average for the previous 10 years (Figure 5). However, farm cash incomes for New South Wales grains industry farms were markedly reduced by dry conditions throughout much of this decade.

Performance of sheep industry farms—New South Wales

Farm cash incomes have been relatively high in historical terms for New South Wales sheep industry farms in recent years (Figure 6).

In 2011–12 a small reduction in average prices received for adult sheep and lambs resulted in a small decline in average farm receipts for New South Wales sheep industry farms. Despite a reduction in average cash costs resulting mainly from reduced expenditure on sheep purchases,
average farm cash income for sheep industry farms declined slightly to an average of $81 300 per farm.

In 2012–13, lower prices for adult sheep, lambs and wool are projected to far outweigh small increases in wool production and in sheep and lamb turnoff, together with reductions in expenditure on sheep purchases and interest payments. Adult sheep prices received are expected to decline by around 30 per cent; lamb prices by around 20 per cent and the average wool price received by around 17 per cent.

As a result, average farm cash income for sheep industry farms is projected to decline to average $44 000 per farm, which is around 3 per cent below the industry average of $46 000 per farm for the previous 10 years, in real terms.

Performance of beef industry farms—New South Wales

A smaller average herd size for New South Wales beef industry farms compared with the average for the whole of Australia results in average farm cash income for New South Wales beef industry farms typically being below the national average (Figure 7).

Turnoff of beef cattle declined slightly in 2011–12 compared with 2010–11, but was offset by an increase of around 3 per cent in average sale prices for beef cattle to result in a small increase in total cash receipts. Increased receipts combined with a reduction in expenditure on cattle purchases together with reduced interest payments resulted in average farm cash income for New South Wales beef industry farms increasing to an average of $31 000 per farm.

In 2012–13 drier seasonal conditions are expected to result in an increase in beef cattle turnoff, in all New South Wales regions and a slow-down in the rate of increase in herd sizes. Lower average sale prices for beef cattle are projected to more than offset the increase in turnoff to result in average beef cattle receipts declining by around 2 per cent. Despite a further reduction in expenditure on beef cattle purchases and lower interest expenditure, farm cash costs are projected to increase. Lower farm receipts and higher farm cash costs are projected to result in average farm cash income for New South Wales beef industry farms declining to average...
$21,000 per farm in 2012–13. This is around 35 per cent below the average of $33,000 for the previous 10 years, in real terms (Figure 7).

Figure 7 Real farm cash income, beef industry, average per farm

![Graph showing real farm cash income for beef industry in Australia and New South Wales from 2000–01 to 2012–13.](image)

Note: Preliminary estimate. Provisional estimate.

Performance of dairy industry farms—New South Wales

In 2011–12, a small increase in average farm cash income is estimated for dairy farms in New South Wales. Milk production increased by around 4 per cent, more than offsetting a reduction of around 1 per cent in the average farmgate milk price received as well as an increase of around 2 per cent in total cash costs. Farm cash income for New South Wales dairy farms is estimated to have averaged $159,200 per farm in 2011–12 (Figure 8, Table 3).

Figure 8 Real farm cash income, dairy industry, average per farm

![Graph showing real farm cash income for dairy industry in Australia and New South Wales from 2000–01 to 2012–13.](image)

Note: Preliminary estimate. Provisional estimate.
In 2012–13, lower average farmgate milk prices together with a small reduction in milk production and a small increase in total cash costs, resulting mainly from higher fodder expenditure, are projected to result in lower average farm cash income for all New South Wales dairy regions. Farm cash income for New South Wales dairy farms is projected to decline to an average of $109,000 per farm, which is still close to the average for the previous 10 years.

Table 3 Financial performance, New South Wales dairy industry, 2010–11 to 2012–13, average per farm

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>units</th>
<th>2010–11</th>
<th>2011–12p</th>
<th>RSE (%)</th>
<th>2012–13y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cash receipts</td>
<td>$</td>
<td>679 550</td>
<td>713 500</td>
<td>(3)</td>
<td>670 000</td>
</tr>
<tr>
<td>Total cash costs</td>
<td>$</td>
<td>541 460</td>
<td>554 300</td>
<td>(5)</td>
<td>561 000</td>
</tr>
<tr>
<td>Farm cash income</td>
<td>$</td>
<td>138 090</td>
<td>159 200</td>
<td>(10)</td>
<td>109 000</td>
</tr>
<tr>
<td>Farms with negative farm cash income</td>
<td>%</td>
<td>10</td>
<td>11</td>
<td>(44)</td>
<td>13</td>
</tr>
<tr>
<td>Farm business profit</td>
<td>$</td>
<td>53 240</td>
<td>63 300</td>
<td>(27)</td>
<td>-11 000</td>
</tr>
<tr>
<td>Profit at full equity - excluding capital appreciation</td>
<td>$</td>
<td>119 860</td>
<td>122 400</td>
<td>(13)</td>
<td>43 000</td>
</tr>
<tr>
<td>Farm capital at 1 July a</td>
<td>$</td>
<td>3 967 720</td>
<td>3 889 800</td>
<td>(5)</td>
<td>na</td>
</tr>
<tr>
<td>Farm debt at 30 June b</td>
<td>$</td>
<td>600 540</td>
<td>646 900</td>
<td>(11)</td>
<td>640 000</td>
</tr>
<tr>
<td>Equity ratio b</td>
<td>%</td>
<td>85</td>
<td>83</td>
<td>(2)</td>
<td>na</td>
</tr>
<tr>
<td>Rate of return - excluding capital appreciation c</td>
<td>%</td>
<td>3.0</td>
<td>3.1</td>
<td>(13)</td>
<td>1.1</td>
</tr>
<tr>
<td>Off-farm income of owner manager and spouse b</td>
<td>$</td>
<td>18 100</td>
<td>16 100</td>
<td>(19)</td>
<td>na</td>
</tr>
</tbody>
</table>

Note: a Excludes leased plant and equipment. b Average per responding farm. c Rate of return to farm capital at 1 July. p ABARES preliminary estimates. y ABARES provisional estimates. na Not available. RSE Relative standard errors, expressed as a percentage of the estimate provided.
3 Fisheries sector

The coast line of the Illawarra region extends north from Gerringong to the Royal National Park. Most of the commercial and recreational fishing in this region occurs in Lake Illawarra. The main species caught in Lake Illawarra are finfish including sea mullet, luderick, dusky flathead and silver biddy. Prawns, blue swimmer crabs, and shellfish are also harvested from the Lake Illawarra area. The key recreational species caught in the region are tailor, kingfish, Australian salmon, luderick, snapper, bream, whiting, leatherjacket and flathead. Gamefishing is also a popular recreational pursuit in the region, targeting larger finfish species such as tuna, marlin and billfish.

In 2010–11 the gross value of New South Wales fisheries production was estimated to be around $124 million, a decrease of 7 per cent ($10 million) from 2009–10. New South Wales contributed 6 per cent of the total value of Australian fisheries production in 2010–11. In value terms, the wild-catch sector accounted for 61 per cent ($75.4 million) of the state's total production and the aquaculture sector accounted for the remaining 39 per cent ($48.1 million).

New South Wales wild-catch fisheries provide a range of fisheries products. In 2010–11, finfish species contributed 55 per cent of the wild-catch production, valued at $42 million. The main finfish species landed were sea mullet, with a gross value of production of $8 million, followed by black and yellowfin bream ($4 million), school whiting ($3 million), snapper ($3 million) and yellowtail kingfish ($2 million). Prawns contributed 19 per cent of the total value of wild-catch fisheries with a value of $15 million, with other important groups being eastern rocklobster (10 per cent; $8 million) and crabs (6 per cent; $4 million).

In 2010–11 the value of New South Wales aquaculture production is estimated to have declined by 8 per cent from $52 million in 2009–10 to $48 million. Oyster production makes the greatest contribution to New South Wales aquaculture production, accounting for 80 per cent of production by value, worth $38 million. Prawns ($2 million) and finfish aquaculture species, including silver perch ($3 million), trout ($2 million) and barramundi ($1 million) make up most of the remaining aquaculture production.

Commonwealth fisheries active in New South Wales include the Small Pelagic Fishery, the Eastern Tuna and Billfish fishery (mainly supplying export markets with tuna), and the Commonwealth trawl sector of the Southern and Eastern Scalefish and Shark fishery.

In 2010–11, New South Wales fisheries product exports were valued at $19 million. The main export products include live and fresh, chilled or frozen fish, rocklobster and abalone. Japan and Hong Kong, are the major destinations for New South Wales fisheries exports, accounting for 39 per cent, and 37 per cent of the total value of exports in 2011–12, respectively. Other major export destinations include Chinese Taipei (6 per cent) and New Zealand (6 per cent).

The New South Wales coastline is an important recreational fishing area, with a multitude of inlets and estuaries from which to fish (NSWDPI 2013). Being a tourism precinct, the region offers a number of recreational fishing opportunities, with the value of this activity to the regional economy likely to be significant. There are also a range of game fishing tournaments throughout the year, including in the Bermagui and Port Stephens area, targeting tuna and marlin species. New South Wales also contains a number of recreational only fishing areas, especially in the far south coast of New South Wales, a popular destination for both marine and freshwater recreational fishers. A large number of recreational fishers also fish in the Greater Sydney area, stretching from the Newcastle to Illawarra area, and comprising the city areas of
Newcastle, Sydney and Wollongong. Species commonly targeted in the area include yellowfin bream, dusky flathead, yellowtail, blue swimmer crab, squid, and southern calamari (Steffe and Murphy 2011).
References


Steffe, AS & Murphy, JJ, 2011, Recreational fishing surveys in the Greater Sydney Region, NSW Fisheries final report series no. 131, NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, New South Wales.