Agriculture and Fisheries in the Greater Darwin region of the Northern Territory, 2013

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Maps

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1  Regional overview

The Greater Darwin region of the Northern Territory is located in the north of the territory (Map 1). The region comprises the three local government areas of Darwin, Litchfield, and Palmerston and the major town centres of Darwin, Palmerston and Humpty Doo. The region covers a total area of around 3200 square kilometres, less than 1 per cent of the Northern Territory's total area, and is home to approximately 120 600 people (ABS 2011).

The total land held by farm businesses was estimated to be 181 953 hectares in the Greater Darwin region in 2010–11. Agricultural land in the region was mainly set aside for conservation (127 130 hectares) with some grazing (48 512 hectares) and cropping (3628 hectares) taking place (ABS 2012).

Map 1 Greater Darwin region of Northern Territory

Employment

Australian Bureau of Statistics (ABS) census data from 2011 indicate that around 63 000 people were employed in the Darwin region. The Greater Darwin region accounts for 64 per cent of total employment in the Northern Territory and 30 per cent of all people employed in the Northern Territory's agriculture, forestry and fishing sector.

Public administration and safety was the largest employing sector (13 607 people) followed by the health care and social assistance sector (5843 people). Other important employment sectors in the region were construction (5751 people), retail trade (5390 people) and education and training (4941 people).
The agriculture, forestry and fishing sector employed 572 people, representing 1 per cent of the region’s workforce (Figure 1). Of this 61 per cent were employed in agriculture, 26 per cent in fishing, hunting and trapping industries, 6 per cent in support services for agriculture, forestry and fishing, 4 per cent in aquaculture and 2 per cent in forestry and logging. In addition, an estimated 280 people were employed in food product manufacturing and 112 people were employed in wood, pulp and paper product manufacturing in the region (included in manufacturing sector employment).

**Figure 1 Employment profile, Greater Darwin 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 Greater Darwin region was $55 million, which was 12 per cent of the total gross value of agricultural production in the Northern Territory ($448 million) for 2010–11. This is the most recent year for which data are available from the ABS on GVAP for this region.

The agricultural sector in the Greater Darwin region is relatively small and dominated by fruit production. In 2010–11, the Darwin region accounted for 100 per cent of the total value of cut flowers in the Northern Territory, 88 per cent of the total value of both bananas and nursery products, and 60 per cent of the total value of all fruit.

The most important commodity in the region, based on the value of agricultural output, was fruit (Figure 2). In 2010–11, fruit contributed 51 per cent ($28 million) to the total gross value of agricultural production in the Greater Darwin region. The major crops were mangoes ($23 million) and bananas ($4 million). Vegetables accounted for 23 per cent ($13 million), nurseries, flowers and turf 12 per cent ($7 million) and cattle and calves 3 per cent ($2 million).

Figure 2 Value of agricultural production, Greater Darwin region, Northern Territory, 2010–11

Number and type of farms

ABS data indicate that in 2010–11 there were 196 farms in the Greater Darwin region with an estimated value of agricultural operations of more than $5000 (Table 1). The region contains 38 per cent of all farm businesses in the Northern Territory.
Table 1 Number of farms, by industry classification, 2010–11

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>Greater Darwin region</th>
<th>Northern Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no.</td>
<td>%</td>
</tr>
<tr>
<td>Fruit and nuts</td>
<td>100</td>
<td>51</td>
</tr>
<tr>
<td>Vegetable</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Nurseries, cut flowers and turf</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Beef cattle</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Other livestock</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Other crop growing</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Total Agriculture</td>
<td>196</td>
<td>100</td>
</tr>
</tbody>
</table>

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

Source: Australian Bureau of Statistics

Farms are classified in Table 1 according to the activities that generate most of their value of production. Fruit and nuts (100 farms) were the most common, accounting for 51 per cent of all farms in the Darwin region, and 69 per cent of all fruit and nut farms in the Northern Territory.

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 36 per cent of farms in the Darwin region had an EVAO of less than $50 000 (Figure 3). These farms accounted for only 3 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 74 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, Greater Darwin, Northern Territory, 2010–11
Farm financial performance—Northern Territory

Each year, ABARES interviews Australian broadacre 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 provides 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) to provide estimates of financial performance of Northern Territory beef industry farm businesses (Box 1).

Box 1 Definitions

**Major financial performance indicators**

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

**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 beef industry farms—Northern Territory**

Many farm businesses in the upper portion of the Northern Territory derive a high proportion of their total cash receipts from selling cattle for live export to Indonesia. Reliance is highest in the Top End–Gulf and Victoria River–Katherine regions and is also relatively high in the Barkly–Tennant Creek region. The number of cattle sold for live export to Indonesia was reduced in 2010–11 and 2011–12 and is expected to be further reduced in 2012–13.

In 2011–12 the average number of cattle sold per farm declined in the Northern Territory and cattle numbers on farms increased. Overall, average cattle receipts per farm declined, but were partially offset by reduced total cash costs with reductions in beef cattle purchases and cattle transferred to corporately owned properties, together with reduced hired labour and contract
expenditure. Farm cash incomes declined to an average of $179 500 per farm (Figure 4). However, an increase in average beef cattle numbers resulted in an increase in the value of trading stocks and farm business profit remained similar to 2010–11, averaging $335 600 per farm.

Figure 4 Real farm cash income, beef industry, average per farm

An increase in beef cattle numbers in the Northern Territory during 2010–11 and 2011–12, together with drier seasonal conditions are projected to lead to an increase in beef cattle turnoff and a slowing in the rate of increase in herd sizes in the Northern Territory during 2012–13. Lower sale prices for beef cattle are projected to partly offset the effect of increased turnoff of total farm cash receipts, but overall average total farm receipts are projected to increase for Northern Territory beef industry farms. Average farm cash income is expected to increase to average $309 000 per farm. However, a slow-down in the growth of beef herds resulting from increased cattle turnoff will reduce the build-up in trading stocks on Northern Territory beef industry farms. As a consequence, farm business profit for the Northern Territory beef industry is projected to decline to $175 000 per farm in 2012–13 (Table 2 and Figure 5).

Figure 5 Financial performance, Northern Territory beef industry, average per farm

Note: p Preliminary estimate. y Provisional estimate.
Table 2 Financial performance, Northern Territory beef industry, 2010–11 to 2012–13, average per farm

<table>
<thead>
<tr>
<th>Performance indicator</th>
<th>units</th>
<th>2010–11</th>
<th>2011–12</th>
<th>RSE (%)</th>
<th>2012–13</th>
<th>RSE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cash receipts</td>
<td>$</td>
<td>2 229 010</td>
<td>1 406 500</td>
<td>(14)</td>
<td>1 273 000</td>
<td></td>
</tr>
<tr>
<td>Total cash costs</td>
<td>$</td>
<td>1 724 330</td>
<td>1 227 000</td>
<td>(16)</td>
<td>964 000</td>
<td></td>
</tr>
<tr>
<td>Farm cash income</td>
<td>$</td>
<td>504 680</td>
<td>179 500</td>
<td>(87)</td>
<td>309 000</td>
<td></td>
</tr>
<tr>
<td>Farms with negative farm cash income</td>
<td>%</td>
<td>26</td>
<td>60</td>
<td>(13)</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Farm business profit</td>
<td>$</td>
<td>311 280</td>
<td>335 600</td>
<td>(29)</td>
<td>175 000</td>
<td></td>
</tr>
<tr>
<td>Profit at full equity - excluding capital appreciation</td>
<td>$</td>
<td>477 360</td>
<td>462 900</td>
<td>(21)</td>
<td>274 000</td>
<td></td>
</tr>
<tr>
<td>Farm capital at 1 July</td>
<td>$</td>
<td>19 521 420</td>
<td>17 519 600</td>
<td>(11)</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>Farm debt at 30 June</td>
<td>$</td>
<td>1 960 480</td>
<td>1 746 100</td>
<td>(27)</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>Equity ratio</td>
<td>%</td>
<td>79</td>
<td>80</td>
<td>(5)</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>Rate of return - excluding capital appreciation</td>
<td>%</td>
<td>2.3</td>
<td>2.5</td>
<td>(19)</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Off-farm income of owner manager and spouse</td>
<td>$</td>
<td>49 430</td>
<td>46 600</td>
<td>(38)</td>
<td>na</td>
<td></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

In 2010–11 the gross value of the Northern Territory’s fisheries production (both aquaculture and wild-catch) was $59 million, an increase of 5 per cent ($3 million) from 2009–10. The Northern Territory contributed 3 per cent of the total value of Australian fisheries production in 2010–11. In value terms, the wild-catch sector accounted for 55 per cent ($32 million) of the territory’s total production and the aquaculture sector accounted for the remaining 45 per cent ($27 million).

The Northern Territory’s wild-catch fisheries sector provide a range of fisheries products with the highest contribution being from crabs (primarily mud crabs), which account for 24 per cent of the total value of wild-catch fisheries with a value of $8 million. Other important wild-catch fisheries products are barramundi (15 per cent; $5 million), sea perch (17 per cent; $5 million), mackerel (15 per cent; $5 million) and gold band snapper ($3 million; 10 per cent). Over the last decade the value of the Northern Territory’s wild-catch fisheries products has decreased from $46 million (2000–01) to $32 million (2010–11; in 2010–11 terms). The products for which the real value of production declined most over the past decade are crabs and barramundi, falling by $6 million and $2 million respectively between 2000–01 and 2010–11.

In 2010–11 the value of the Northern Territory’s aquaculture production is estimated to have increased by 6 per cent from $26 million in 2009–10 to $27 million in 2010–11. Aquaculture pearls are the most valuable aquaculture product produced in the region, valued at $21 million and 78 per cent of the total regional gross value of fisheries production from aquaculture. Pearls are produced predominantly for the export market, with most pearls being exported to Hong Kong.

While most finfish products from the region are wild-caught there is an increasing trend toward barramundi aquaculture production. The barramundi aquaculture industry has grown rapidly in recent years in the region. In 2010–11, over $5 million worth of the barramundi aquaculture was produced in the Northern Territory.

The Commonwealth Northern Prawn Fishery was the most valuable fishery in the Northern Territory region, with the gross value of production in 2010–11 of $95 million, across the entire fishery. In 2010–11, the gross value of production for the Northern Prawn Fishery increased by 7 per cent due to a 28 per cent increase in catches of tiger prawns, and 31 per cent increase in catches of banana prawns. Darwin is a major landing site for the Northern Prawn Fishery.

In 2011–12, the Northern Territory’s seafood product exports were valued at around $0.1 million. The main export products include live and fresh, chilled or frozen fish, and crabs with Hong Kong and Japan being the main export markets. The main non-edible fisheries product produced for the export market in the Northern Territory is pearls.

It is estimated that Northern Territory residents and visitors spend nearly $51 million annually on recreational fishing, with the purchase of vessels and vehicles and their associated running costs making up the bulk of the expenditure (West et. al. 2012). According to the most recent survey of recreational fishing activity in the Northern Territory (West et. al. 2012)), the main target fish species are barramundi, followed by golden snapper, small bai t fish, catfish, saddletail and crimson snapper, and mullet. Mud crabs dominates the crustacean catch, followed by cherabin, the giant freshwater prawn.
The Northern Territory has also a significant indigenous customary fish sector. The 2000–01 National Recreational and Indigenous Fishing Survey (NRIFS) aimed to better understand the level of fishing undertaken by the Indigenous fishing sector (Henry and Lyle 2003). The survey collected fisheries catch statistics from Indigenous people aged five years and older, living in coastal communities across the north of Australia, from Broome in Western Australia to Cairns in Queensland (excluding those living in the Torres Strait). The survey showed that an estimated 37 000 Indigenous people living in the north of Australia fished at least once during the survey year. This was equivalent to 92 per cent of the Indigenous population in the region.

The survey indicated that Indigenous fishers in northern Australia harvested approximately 900 000 finfish, 1 million molluscs, 660 000 prawns and yabbies, 180 000 crabs and rock lobsters and smaller numbers of other species during 2000–01. The most prominent finfish species groups were mullet, catfish, tropical snapper, bream and barramundi. The most prominent non-fish species groups were mussels, freshwater prawn, mud crabs, prawns and oysters.
References


