

Chapter 13

AGRICULTURE

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Chapter 13

AGRICULTURE

Wool, fat lambs, beef, dairying and vegetable growing continue as the mainstay of the State's agricultural production. However, in recent years Tasmanian farmers have diversified into less traditional crops and activities. These include buckwheat, peppermint, fennel and pyrethrum as well as wine production and deer farming. The gross value of Tasmania's agricultural production was estimated at almost \$630 million in 1989-90. Vegetable cropping contributed almost 20 per cent, or \$120 million. Tasmania's wool producers, in spite of the downturn in the industry, contributed over a quarter (\$162 million) of the gross value of rural production.

13.1 FINANCES OF FARM BUSINESSES

Tasmanian farm businesses had a turnover of \$559 million in 1989-90 according to the results of the annual Agricultural Finance Survey.

The largest component of turnover was from livestock products, mostly from sales of wool and milk. The main components of sales of livestock were sheep and cattle, while the main components of sales of crops were vegetables and fruit.

In total, farmers were shown to have other large sources of income which amounted to \$46 million. The main categories were interest, agricultural services and agistment, hire, rent and leasing of plant and equipment, subsidies and royalties.

Despite the beginning of the rural recession, turnover was up nine per cent on 1988-89. In Australia, the commodities most affected were

13.1 SELECTED FINANCIAL STATISTICS, TASMANIA (\$m)

	1988-89	1989-90
Turnover-		
Sales from crops	119.1	132.6
Sales from livestock	124.9	115.6
Sales from livestock products	226.6	265.0
Other income	42.1	45.9
Total	512.7	559.1
Purchases and selected expenses	265.6	288.7
Value added	283.2	292.7
Gross operating surplus	197.4	198.8
Interest paid	39.4	59.3
Cash operating surplus	127.4	129.0
Total net capital expenditure	40.6	64.9
Gross indebtedness	291.1	398.9

(Source: ABS Catalogue Nos. 7507.0, 7508.0 and 7509.0).

wool and wheat. While little wheat is grown in Tasmania, wool is a major product.

Following reduced world wide demand and increased production, the market indicator price

of wool plummeted from over 1000 cents per kilogram clean to below 400. Under the Reserve Price Scheme, the Australian Wool Corporation bought all low priced wool. This led to a burgeoning debt that the Australian Wool Corporation was finding difficult to service.

In February 1991, the Federal Government abolished the Reserve Price Scheme and replaced it with a free market. Initially wool prices remained low, but slowly prices recovered to 570 cents per kilogram clean by June 1991. The drop in prices is expected to be reflected in figures to be released for 1990-91.

Superfine grade wool is a more important component of wool production in Tasmania than in most other areas of Australia. Fortunately, this grade of wool was less affected by the fall in price, and the recovery was stronger.

Although there was a nine per cent increase in turnover between 1988-89 and 1989-90, the cash operating surplus, a measure of profitability, increased by only 1.3 per cent. Value added rose by three per cent.

Gross indebtedness increased by 37 per cent. Total interest paid increased 51 per cent. This reflected not only the increased indebtedness but also the higher interest rates charged by financial institutions.

13.2 AGRICULTURAL LAND USE, TASMANIA ('000 ha)

Area	1988-89	1989-90
Crops -		
Cereals for -		
Grain	19.7	17.3
Other purposes	13.9	13.3
Legumes	1.7	1.1
Fruit	3.1	3.2
Vegetables	17.0	18.3
Other	26.3	29.3
Total crops	81.7	82.5
Sown pasture	852.9	856.1
Total area of agricultural establishments (a)	1 883.5	1 933.4

(a) Includes area used for rough grazing, forestry or not utilised for any specific purpose.

(Source: ABS Catalogue No. 7114.6).

13.2 LAND USE

There were 3699 establishments involved in commercial agricultural activities in Tasmania in 1989-90. There were a further 1500 sub-commercial establishments involved in limited agricultural activities in 1989-90.

Commercial agricultural establishments occupied 29 per cent of Tasmania's area. Just under 50 per cent of the area of commercial agricultural establishments was under sown pasture or used for crops (cereals, fruit, vegetables, etc). The balance (around 990 000 hectares) was semi-cleared land, bush or fallow; and used for rough grazing, forestry or not utilised at all.

An important agricultural activity is livestock grazing. 78 per cent of establishments carried cattle (milk or meat) and 55 per cent grazed sheep. This combination of meat cattle and sheep grazing is popular in Tasmania; about 25

13.3 AGRICULTURAL ESTABLISHMENTS ACCORDING TO PRINCIPAL AGRICULTURAL ACTIVITIES, TASMANIA, 1989-90

Agricultural activity	Establishments (Number)	Proportion of all holdings (%)
Establishments growing -		
Cereals for grain -		
Wheat	64	1.7
Barley	409	11.1
Vegetables for human consumption -		
Beans, French and runner for processing	174	4.7
Carrots	58	1.6
Onions	174	4.7
Peas for processing	464	12.5
Potatoes	629	17.0
Any vegetables for human consumption	903	24.4
Orchard fruit -		
Apples	199	5.4
Establishments carrying -		
Milk cattle	961	26.0
Meat cattle	2 661	72.0
Pigs	176	4.8
Sheep	2 045	55.3

per cent of establishments combine these two activities.

In 1989-90 just over 25 per cent of agricultural establishments carried dairy cattle. However this is a considerable fall from 20 years earlier when around 40 per cent of agricultural establishments carried cattle for milk.

13.3 CROPS

The principal cropping activity on Tasmanian farms is the growing of vegetables for human consumption. This is the major cropping activity in terms of both farm area used and value of products.

Most of the vegetable cropping is done along the North-West coastal strip. The area is characterised by deep friable krasnozem soil types and relatively high (900 mm to 1400 mm) and reliable rainfall. The other main vegetable growing area is in the north-east around Scottsdale. Soil and climate conditions are similar to the North-West coastal belt.

13.4 AREA OF PRINCIPAL CROPS, TASMANIA (ha)

Crops	1988-89	1989-90
Cereals for grain -		
Barley	7 820	7 983
Oats	10 233	7 568
Wheat	771	792
Vegetables for human consumption -		
Beans, French and runner for processing	1 248	1 454
Onions	1 098	1 246
Peas (green) for processing	6 320	6 527
Potatoes	6 001	6 852
Total vegetables (a)	16 998	18 345
Orchard fruit -		
Apples	2 654	2 672
Total orchard fruit (a)	2 849	2 876
Hops	809	765
Cereal crops for green feed or silage	10 943	11 895

(a) Includes components not specified separately.

(Source: ABS Catalogue No. 7114.6).

Most of the vegetable cropping in Tasmania is used for processing. Farmers grow crops such as beans, peas and potatoes under contract to processing companies. Some of the crops are exported interstate and some are sold on the local fresh market. A local Tasmanian company has developed an expanding European export market for onions. This is the reason for the marked increase in area planted to this crop over recent years. In the early 1980s around 550 hectares were planted. By the end of the 1980s the area had almost doubled to around 1000 hectares.

13.5 GROSS VALUE OF CROPS, TASMANIA (a) (\$m)

Crops	1988-89	1989-90
Cereals for grain	8.4	7.3
Legumes mainly for grain	0.7	0.5
Crops for hay	1.8	0.5
Orchard fruit	31.4	32.6
Berry and small fruit	2.2	1.2
Grapes	0.8	1.0
Vegetables for human consumption	111.9	120.0
Other crops	33.7	32.5
Pasture harvested	32.0	26.4
Total	222.9	221.9

(a) Excludes crops and pasture harvested for hay, green feed or silage.

(Source: ABS Catalogue No. 7114.6).

In both value and area, potatoes are one of the principal crops grown by Tasmanian farmers. The area planted to potatoes was over 6000 hectares in both 1988-89 and 1989-90. Potatoes are the highest value of all crops — in 1989-90 the value of the potato crop was \$60.2 million. This was some \$29 million above the value of the apple crop.

A traditional Tasmanian crop is hops. They used to be grown in numerous small plots throughout the Derwent Valley. However, with the introduction of new high yielding varieties and mechanical harvesting in place of hand picking, hop growing has undergone substantial change. Hops are now grown in larger lots suited to mechanical harvesting. Significant areas in the north-east and north-west have been planted to the crop as well. These changes have maintained Tasmania's position as the

main grower State; around two thirds of the Australian total area is grown in Tasmania.

A characteristic of the vegetable growing industry is the dominance of large producers. This is partly attributable to the high capital cost of equipment needed in the industry. In 1989-90, there were 372 establishments growing less than 10 hectares of vegetables. As a group they represented more than 40 per cent of vegetable producers, yet they produced less than 10 per cent of the total area of vegetables reported.

Conversely, the largest five per cent of the State's vegetable growers, that is those cultivating 60 hectares or more, produced a little over a quarter of Tasmania's vegetable crops.

13.3.1 Potatoes

Tasmania produces about 25 per cent of the Australian potato crop. Most are grown under contract to vegetable processors and are turned into potato chips. In recent years, the potato crop has been the most valuable single agricultural crop produced by Tasmanian farmers, accounting for eight to 10 per cent of the total gross value of all agricultural production.

Most of the potato crop is grown along the North-West coastal strip stretching from the municipality of Latrobe to Circular Head. Like many other agricultural activities, potato growing is dominated by large producers. Those growing 20 hectares or more (15 per cent of growers) accounted for more than 40 per cent of the area of potatoes grown.



Photo: School of Agriculture and Horticulture

13.3.2 Apple Industry

Tasmania is still referred to by many as the Apple Isle. This was once an accurate reflection of the importance of apple orcharding to the State's economy and agricultural industry. Apples contributed around 15 per cent to the total gross value of agricultural production and were one of the State's major overseas exports.

Apple orcharding was based on overseas exports to Europe, in particular the United Kingdom. About 75 per cent of the crop went overseas, nearly all to European countries. Apples are still important to the Tasmanian agricultural industry. They remain one of the two most significant crops in value terms and account for around five per cent of the gross value of all agriculture.

13.6 POTATOES, TASMANIA

Year	Area (hectares)	Production ('000 tonnes)
1985-86	4 777	193
1986-87	5 744	223
1987-88	6 380	248
1988-89	6 001	257
1989-90	6 852	297

(Source: ABS Catalogue No. 7114.6).

13.7 APPLES, TASMANIA

Year	Number of trees ('000)	Production ('000 tonnes)
1985-86	1 256	57.0
1986-87	1 218	48.1
1987-88	1 251	52.9
1988-89	1 267	52.6
1989-90	1 340	57.3

(Source: ABS Catalogue No. 7114.6).

THE VEGETABLE INDUSTRY OF TASMANIA

The growing of vegetables has been a major activity in Tasmanian agriculture over many decades. This factor is well recorded, in the early days of the colony it was stated that '...in the year 1817...about three hundred and eighty tons of potatoes were on the above occasion shipped to Port Jackson. And here it may be remarked, in evidence of the superiority of the soil, for the growth of this valuable root...that, while the potatoes grown in the vicinity of Port Jackson are of a very moderate size, waxy, and incapable of being kept more than a few weeks, those of Van Diemen's Land, on the contrary, are always produced in the most profuse quantities, are as large as a full sized Swedish turnip, mealy, of a very delicious taste, and will keep from season to season.' (Evans, G.W., *A Geographical, Historical, and Topographical Description of Van Diemen's Land*, 1822.)

For the next hundred years or so, until the 1940s, Tasmanian vegetable production was virtually confined to the production of a range of vegetables for the local market; and potatoes, carrots, parsnips and swedes for interstate exports.

The establishment of processing facilities in Tasmania during World War II, with dehydration plants at Smithton, Ulverstone, Scottsdale and Devonport and a canning plant also at Devonport, provided further impetus to the diversified industry that now operates in this State. Postwar developments in the Tasmanian vegetable industry were slow until the commercial development of quick freezing techniques in the 1950s.

Rapid progress has taken place in the industry since then under the influence of a burgeoning processing sector which encompasses freezing, canning and a limited amount of dehydration. In recent years, vegetable crops have occupied about 18 000 hectares per annum. In July 1991, the value of these crops was about \$120 million, which was almost half of the gross value of all crops grown in Tasmania.

The climate of Tasmania is well suited to vegetable crops, but the prime advantage of the State lies in the quality of the soil used for vegetable production. The red basaltic

(krasnozem) soils of the north-west and north-east of the State have a desirable, free-draining, water-stable structure. A wide range of vegetables are produced in the State with potatoes being the most valuable.

Vegetable production declined in the 1990-91 season, mainly because of lower processing requirements for crops such as potatoes, peas, beans and carrots.

This was the result of several factors: a relatively static per capita consumption of a range of commodities nationally, an abundance of fresh produce and increasing quantities of imported produce.

It is anticipated that production of vegetables in Tasmania may further decline in 1991-92, and probably even into 1992-93, but then an upward trend is envisaged with further strong growth continuing into the late 1990s.

The vegetable industry today comprises three basic production and marketing segments: processing, the local fresh market and fresh exports. Large proportions of the major vegetable crops are grown specifically for the processing industry.

More than two thirds of the State's potatoes and almost all of the green peas and green beans are processed. Tasmania supplies a very high proportion of the Australian requirement for processed peas and beans. Other major crops include brussels sprouts, cauliflowers, carrots and sweet corn.

The local market for fresh vegetable produce is small and appears to be declining. In spite of the absence of central markets, Tasmania has a number of well organised specialist fresh vegetable growers and wholesalers who provide an important contribution to the State's vegetable industry and economy. Onions, potatoes and swedes are marketed interstate; and onions, carrots, squash, potatoes, swedes and musk melons are exported overseas. There is a need to seek long term export markets rather than the opportunity markets so often served in the past.

(Article contributed by Department of Primary Industry, Tasmania.)

About 20 per cent of the crop is exported overseas now, of which over 50 per cent is exported to Asian markets.

13.3.3 Wine Grapes

Tasmania has become a wine producer of genuine world standing. Although the wine industry is small it has developed an enviable reputation for producing premium quality wines.

This reputation is protected by the Tasmanian Appellation of Origin Scheme. This wine certification system legislates to prevent wine producers calling a wine Tasmanian unless the wine has been produced from grapes grown in the State.

13.8 AREA OF VINEYARDS AND GRAPE PRODUCTION

Variety	1988-89	1989-90
Red grapes -		
Bearing (ha)	32	55
Non-bearing (ha)	22	46
Total (ha)	54	101
Production (t)	200	323
White grapes -		
Bearing (ha)	30	51
Non-bearing (ha)	20	33
Total (ha)	50	84
Production (t)	140	370

(Source: ABS Catalogue No. 7114.6).

13.4 LIVESTOCK AND LIVESTOCK PRODUCTS

Cattle and sheep are the mainstay of Tasmanian agriculture. Sales of livestock and livestock products account for 65 to 70 per cent of the gross value of Tasmanian agriculture.

13.4.1 Sheep

Despite the diversity of Tasmanian agriculture, sheep are the biggest single contributor to the value of Tasmanian agricultural production.

13.9 LIVE SHEEP EXPORTS FROM TASMANIA TO THE MIDDLE EAST

Year	No. of sheep ('000)	Value (\$m)
1984-85	143.0	3.06
1985-86	255.4	5.41
1986-87	299.3	6.65
1987-88	201.5	4.95
1988-89	273.3	6.86
1989-90	—	—

Together, wool and sales of sheep (for slaughtering and export) contribute around 25 per cent of the gross value of Tasmanian agricultural output. Until recently, this proportion has been higher due to the buoyant wool prices experienced.

Live Sheep Exports

In mid-1989, the live sheep export was seriously threatened by Saudi Arabia when a number of shipments from Australia were banned on the grounds that the sheep were diseased. The diseases that the Saudi Arabian inspection claimed to have detected do not occur in Australia. The shipments refused entry to Saudi Arabia were directed to other Arab gulf states. Due to possible effects on exports of live sheep to other countries, Australia suspended exports to Saudi Arabia in September 1989 pending further discussions with Saudi authorities.

13.10 FLOCK COMPOSITION, TASMANIA (At 31 March)

Type of sheep	1990	
	('000)	(%)
Rams	50.3	0.9
Breeding ewes	2 101.4	39.4
Other ewes	247.1	4.6
Wethers	1 484.0	27.8
Lambs and hoggets	1 453.9	27.2
Total	5 336.8	100.0

(Source: ABS Catalogue No. 7114.6).

WOOL FLOOR-PRICE SCHEME

The wool floor-price scheme, introduced about 17 years ago, was ended in 1991.

The reserve floor-price was put in place with the objective of bringing stability to wool prices. It set a guaranteed minimum price for wool sold. In 1987 the *Wool Marketing Act* gave the Australian Wool Corporation (AWC) permission to set its own floor price. In 1988 a floor price of 870 cents per kilogram was set for wool. At this price, most of the wool being offered at auction was being bought by the AWC.

The high floor-price for wool, combined with market disruption caused by international events, led to buyers staying out of the market. The AWC was then forced to buy an increasing proportion of the wool offered at auction. In December 1989 the AWC had a stockpile of 1.7 million bales of wool. Its borrowing ceiling was set at \$1.5 billion.

By early 1991 the stockpile had grown to a massive 4.7 million bales (about 825 million kilograms). By comparison, the annual national wool clip received by brokers in 1989-90 was 1050 million kilograms and in 1988-89, 889 million kilograms. The AWC debt needed to finance the buying and storage had reached \$2.8 billion by the end of 1990.

During 1990 the floor-price scheme came under increasing scrutiny. The wool floor-price was dropped, coming back to 700 cents per kilogram in May 1990. However, the AWC continued to buy around 70 per cent of the wool offered at auction.

In February 1990 the Wool Council voted to implement a 15 per cent grower levy on producers. This was to help finance the AWC's buying activities and increasing debt. In May 1990 legislation was introduced to increase this rate to 20 per cent, and in October it went up to 25 per cent. However, both the stockpile and debt continued to grow. In February 1990 the AWC borrowing limit was raised to \$2.6 billion. By the end of the year the debt had reached \$2.8 billion. The cost of storing the massive stockpile was about \$50 million annually, and the AWC was faced with an annual interest bill of \$280 million.

The situation finally led to government intervention. Wool sales were suspended on 29 January 1991 with the wool floor-price scheme being abandoned in February. The first wool sales under a free market system took place in Melbourne and Sydney on 25 February. These were the first auctions without a floor price for about 17 years. In the final week of February the market indicator closed at 428 cents per kilogram clean for sales. This was a drop of 278 cents per kilogram from the final market indicator price under the reserve price scheme.

The initial buyer reaction to the free market system of wool selling was one of caution. However, after February the market stabilised, buyers re-entered and pass-in rates dropped. Demand from Japanese and European buyers was good. In April the market indicator reached 591 cents per kilogram clean. This led to the release of wool from the AWC stockpile. At the end of May the market indicator was 574 cents.



Photo: Department of Primary Industry

13.1 1 SHORN WOOL PRODUCTION AND VALUE OF ALL WOOL, TASMANIA

Year	Shorn wool (tonnes)	Value (a) (\$m)
1984-85	20 295	73.3
1985-86 (a)	20 427	83.7
1986-87	20 449	108.7
1987-88	19 317	162.4
1988-89	18 738	154.7
1989-90	21 408	161.9

(a) Relates to agricultural establishments with estimated value of agricultural operations of \$20 000 or more; earlier years agricultural establishments with estimated value of agricultural operations of \$5000 or more.

(Source: ABS Catalogue Nos 7114.6, 7501.6).

Composition of the Sheep Flock

The structure of Tasmania's sheep flock has been fairly stable over the past two decades. The main change has been in the proportion of wethers, kept for wool production, which dropped from around 25 per cent in the 1970s to about 20 per cent in the early 1980s. It has since climbed back up to around the 25 per cent level. The recovery in the proportion of wethers is a reflection of buoyant wool prices experienced throughout the 1980s.

Wool

Tasmania has gained a reputation in the international wool market as a producer of top quality fine merino fleeces. Tasmanian producers have regularly held the record price for fine merino wool sold at auction. However, in terms of the overall fleece sold, the proportion of Tasma-

13.12 SHEEP NUMBERS AND WOOL PRODUCTION, TASMANIA

Year	Sheep numbers ('000) (a)	Shorn wool production (tonnes)
1985-86 (b)	4 822.5	20 427
1986-87	4 954.0	20 449
1987-88	4 746.4	19 317
1988-89	4 933.0	18 738
1989-90	5 336.8	21 408

(a) At 31 March. (b) Relates to agricultural establishments with estimated value of agricultural operations of \$20 000 or more.

(Source: ABS Catalogue No. 7114.6).

nian wool falling into the very fine category (20 microns or finer) is below the national level. This is a reflection of the different breed structure of the Tasmanian flock. A smaller proportion is merino than for the national flock.

The average price of wool sold at Tasmanian auctions in 1989-90, while still more than double the level a decade earlier, nevertheless showed a marked decline. Overproduction, declining demand and the high value of the Australian dollar forced international buyers out of the market. The Australian Wool Corporation was compelled to intervene to support the reserve price of 700 cents a kilogram. After the AWC stockpile had risen to 4.7 million bales, the reserve price scheme, which had operated for 17 years, was finally suspended.

Sheep and Lambs Slaughtered

While wool is the most valuable product from the sheep industry, sheep and lambs slaughtered for meat also contribute substantially to the estimated value of agricultural production. Between \$13 million and \$20 million is added annually to the value of agriculture from slaughtering. A considerable part of the meat produced is exported overseas. In recent years about 1.1 million to 1.3 million sheep have been slaughtered, providing between 19 000 and 22 000 tonnes of meat annually.

13.13 SHEEP AND LAMBS SLAUGHTERED, TASMANIA ('000)

Year ended 30 June	Sheep	Lambs
1986	466.6	665.7
1987	509.7	670.6
1988	630.0	656.0
1989	412.4	595.0
1990	532.3	588.8

(Source: ABS Catalogue No. 7114.6).

13.4.2 Cattle

One of the most common agricultural activities is grazing cattle for meat. This activity is frequently undertaken as an adjunct to other major activities such as sheep farming, dairying or cropping. About 70 to 75 per cent of agricultural establishments carry some cattle for meat production. Meat production as a sideline activity is illustrated by the fact that almost 50 per cent of

13.14 CATTLE AND CALVES SLAUGHTERED, TASMANIA (^{'000})

Year ended 30 June	Cattle	Calves
1986	143.2	32.2
1987	172.8	32.2
1988	181.9	35.6
1989	161.1	40.5
1990	191.7	34.9

(Source: ABS Catalogue No. 7114.6).

establishments with meat cattle carry under 10 per cent of the meat cattle herd. The top five per cent of agricultural establishments with meat cattle (those with more than 500 head) account for almost 40 per cent of meat cattle.

Dairying remains an important part of agricultural activity in Tasmania. Dairy products contribute approximately 15 per cent of the total value of agricultural production. However, over the past two to three decades the dairy industry has undergone major change.

The number of milk cattle has fallen by over 50 per cent while the number of establishments involved in the dairy industry has fallen by more than 80 per cent. While some of this decrease is due to a change in classification, most is due to a real fall in establishments in dairying.

13.15 CATTLE NUMBERS, TASMANIA (^{'000})

At 31 March	Cattle for meat	Cattle for milk
1986 (a)	368.6	139.9
1987	395.3	138.9
1988	407.7	134.0
1989	425.6	134.4
1990	432.8	135.8

(a) Relates to agricultural establishments with estimated value of agricultural operations of \$20 000 or more.

(Source: ABS Catalogue No. 7114.6).

THE SCHOOL OF AGRICULTURE AND HORTICULTURE

Farming and horticultural apprenticeships are available at the North West Regional College of TAFE's Burnie Campus to service the whole of Tasmania: providing training for farm managers, field officers, tradespeople, greenkeepers, landscapers, gardeners and nursery people. In 1990 there were 282 student enrolments. The courses offered range from apprenticeships and traineeships, mainstream and short courses, to labour market and specialised courses.

The School of Agriculture and Horticulture is based in an ideal location, with a diversity of agriculture and horticulture in the region, and the proximity of three research stations run by the Department of Agriculture. A 112 hectare commercial farm and the College grounds provide an invaluable base for training.

Apprenticeships are available in dairying, grazing, cropping, fruit growing, nursery practice, gardening, greenkeeping and landscape gardening. There is a strong emphasis on relating classroom to industry, practical training averages 50 per cent for each course.

Traineeships are available in dairying, vegetable growing, cereal production, silviculture and fruit growing. Mainstream courses are offered for Horticulture and Dairy Farm Management Certificates, Horticulture Technology and Associate Diplomas in Horticulture and Agriculture.



(Article and photograph contributed by the School of Agriculture and Horticulture.)

A contraction of the United Kingdom export market was the initial catalyst for the fall. Further pressure came from increasing production costs relative to returns and the need for large scale production to remain viable.

Over the past two decades the median size of the milk cattle herd has increased from 40 to over 120. Most of the dairy herd is located in the north-west of the State. The local government area of Circular Head has just on 30 per cent of the State's dairy cattle.

13.4.3 Other Livestock

Other principal livestock farming activities include pig farming, poultry and, on a few establishments, goats and deer. Pig farming has undergone similar changes to other farming activities with increasingly specialised and large scale operations.

13.16 PIGS, TASMANIA (^{'000})

Year	Number (a)	Slaughtered (b)
1985-86 (c)	42.1	84.4
1986-87	46.1	89.6
1987-88	47.6	97.5
1988-89	44.9	95.5
1989-90	42.2	86.7

(a) Number reported on establishments in scope of the agricultural census. (b) All pigs slaughtered at abattoirs. (c) Relates to agricultural establishments with estimated value of agricultural operations of \$20 000 or more; earlier years agricultural establishments of \$2500.

(Source: ABS Catalogue No. 7114.6).

13.5 BIBLIOGRAPHY

ABS Publications Produced by the Tasmanian Office:

Agricultural Statistics, Tasmania (7114.6), annual.

Value of Agricultural Commodities Produced, Tasmania (7501.6), annual.

ABS Publications Produced by the Canberra Office:

Agricultural Industries Financial Statistics, Australia, 1989-90 (7507.0), annual.

Agricultural Industries Financial Statistics, Australia, Preliminary, 1989-90 (7508.0), annual.

Agricultural Industries Financial Statistics, Australia, First Preliminary Estimate, 1989-90 (7509.0), annual.

Other Publications:

Evans, G.W., *A Geographical, Historical, and Topographical Description of Van Diemen's Land*, John Souter, London, 1822.