

CHAPTER 10 – Agricultural profile of Esk Shire

Introduction

The following agricultural profile includes information on the agricultural commodities produced in the portion of the Esk Shire that sits within the South East Queensland NRM region (pastures and grasses, crops, livestock, and livestock products) and information on agricultural practices (cultivation techniques, treatment of stubble, fertiliser use, and soil conditioner use).

An estimate of the number of agricultural holdings in the Esk Shire at June 2001 was 477. This estimate was derived from the Agricultural Census 2000-01.

Commodities

Pastures and grasses

Native or naturalised pastures represented 96.7% of the pastures in the Esk Shire in 2000-01, sown pastures represented 1.9% and pastures cut for hay represented 1.4%. Pastures and grasses in the Esk Shire represented 6.8% of the total agricultural holdings for the South East Queensland NRM region.

Table 10.1: Volume and value of pastures and grasses, Esk Shire, 2000-01

Pastures and grasses	Volume		Area		Value		Production of commodity as a percentage of Queensland total		
	t '000	ha '000	% of total ag. holdings in region	\$ '000	% of total ag. value in region	Vol	Area	Value	
Pastures cut for hay	12.7	1.6	0%	2,392	0%	4%	3%	4%	
Sown pastures	N/A	2.3	0.1%	N/A	N/A	N/A	0%	N/A	
Native or naturalised pasture	N/A	117	6.8%	N/A	N/A	N/A	0%	N/A	

N/A – Not Applicable

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Crops

Vegetables (\$36.7m) produced the highest value of production for crops in 2000-01 in the Esk Shire. The second highest value of production came from fruit and nuts (\$0.8m). Vegetables produced in the Esk Shire represented 6% of the total value of production for vegetables produced in Queensland.

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Table 10.2: Volume and value of crops, Esk Shire, 2000-01

Crops	Volume		Area		Value		Production of commodity as a percentage of Queensland total		
	t '000	ha '000	% of total ag. holdings in region	\$ '000	% of total ag. value in region	Vol	Area	Value	
Cereals for grain	3.3	0.7	0%	615	0%	0%	0%	0%	
Crops for hay	2.3	0.4	0%	N/A	N/A	1%	1%	N/A	
Soybeans	0.5	0	0%	241	0%	4%	2%	4%	
Peanuts	1	0.2	0%	520	0%	2%	1%	2%	
Fruit and nuts	N/A	0.2	0%	787	0%	N/A	0%	0%	
Vegetables	N/A	2.3	0.1%	36,692	4%	N/A	6%	6%	
Total	6.9	4.2		38,855					

N/A – Not Applicable

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Livestock

The highest value of production for livestock in the Esk Shire in 2000-01 came from cattle and calves (\$40m). The second highest value of production was from pigs (\$1m). The value of production for cattle and calves in the Shire represented 4.4% of the total agricultural value in the region.

Table 10.3: Volume and value of livestock, Esk Shire, 2000-01

Livestock	Number		Value		Production of commodity as a percentage of Queensland total	
	No. of stock '000	\$ '000	% of total ag. value in region	No.	Value	
Cattle & calves	83 ^a	40,332 ^b	4.4%	0.7%	1.4%	
Sheep & lambs	0.1	0.1	0%	0%	0%	
Pigs	3.63	1,018 ^b	0.1%	0.6%	0.6%	
Poultry	ND	0.23 ^b	0%	0%	0%	

ND – No data or insufficient data.

(a) The number of stock for cattle and calves includes the number of meat cattle and dairy cattle combined.

(b) These values represent the value of all slaughtered animals not the value of total livestock.

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

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Livestock products

The main livestock product in the Esk Shire in 2000-01 was cow's milk, with a value of production of \$7m. Cow's milk production in the Esk Shire in 2000-01 represented 3% of the total value of production for cow's milk in Queensland.

Table 10.4: Volume and value of livestock products, Esk Shire, 2000-01

Livestock Products	Volume		Value		Production of commodity as a percentage of Queensland total	
	Vol '000	\$ '000	% of total ag. value in region	Vol	Value	
Wool (t)	0.0	1	0%	0%	0%	
Cow milk production (L)	20,620	7,296	0.8%	2.4%	3%	
Eggs (dz)	1	1	0%	0%	0%	

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Agricultural practices

Cultivation techniques

Approximately 2,238ha of land was prepared for cropping in the Esk Shire in 2000-01; this represents 7.4% of all land prepared for cultivation in the South East Queensland NRM region. Most land prepared for cropping was prepared using 1 or 2 cultivations (56.5%) or using other cultivation techniques (40.9%). Only 2.5% of land prepared for cropping was prepared using no cultivation.

Table 10.5: Cultivation technique, Esk Shire, 2000-01

Cultivation Technique	Area cultivated		Cultivation technique as a percentage of Queensland total
	ha '000	% of total area cultivated in region	Area
No cultivation	0	0%	0%
1 or 2 cultivations	1.3	4.3%	0%
Other cultivation technique	0.9	3.1%	0%

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Treatment of stubble

Ploughing stubble into the soil (71.7%) was the most common method of stubble treatment used in the Esk Shire in 2000-01, followed by mulching stubble (13%) and removing stubble by heavy grazing or baling (10.6%). Stubble treatment in the Esk Shire represented 7% of the total area of stubble treated in the South East Queensland NRM region.

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Table 10.6: Treatment of stubble, Esk Shire, 2000-01

Treatment	Area treated		Stubble treatment as a percentage of Queensland total
	ha '000	% of total area treated in region	Area
Stubble ploughed into soil	1	5%	0%
Stubble mulched	0.2	1%	0%
Stubble left intact	0.0	0%	0%
Stubble removed by baling or heavy grazing	0.17	1%	0%
All other methods	0.07	0%	0%

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Fertiliser used

The volume of fertiliser used in the Esk Shire in 2000-01 represented 7.4% of the total amount of fertiliser used in the whole of the South East Queensland NRM region. Urea was the most common fertiliser used in the Shire in terms of both volume used and area treated.

Totals for hectares treated have not been included in Table 10.7 below; if more than one fertiliser was used on one hectare that hectare was counted twice in the agricultural census 2000-01, the total for hectares treated would therefore overestimate the number of hectares treated with fertiliser in the region.

Table 10.7: Fertiliser used, Esk Shire, 2000-01

Fertiliser	Quantity used	Area treated	Fertiliser use as a percentage of Queensland total	
	t	ha	Area	Vol
Urea	1259	4184	0%	1%
Ammonium Sulphate	59	250	1%	1%
Ammonium Nitrate	51	188	1%	1%
Single Superphosphate	211	991	1%	1%
Double Superphosphate	18	38	0%	1%
Muriate of Potash	64	410	0%	0%
Potassium Sulphate	27	167	1%	0%
Potassium Nitrate	37	294	2%	1%
Mono Ammonium Phosphate	14	86	0%	0%
Di Ammonium Phosphate	90	463	0%	0%
Other	980	3049	1%	0%
Total	2809			1%

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Soil conditioner used

Most of the soil conditioner used in the Esk Shire in 2000-01 was used to correct physical soil problems (68.5%). Gypsum (68%) was the most common soil conditioner used for the treatment of physical soil problems and lime (26.9%) was the most common soil conditioner used to stabilise soil acidity.

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Table 10.8: Soil conditioner used, Esk Shire, 2000-01

Soil conditioner	Quantity used		Area treated		Soil conditioner use as a percentage of Queensland total	
	t'000	ha'000	% of total ag. holdings in region	Area	Vol	
Lime - to correct or stabilise soil acidity	0.37	0.15	0.01%	0.5%	1%	
Dolomite - to correct or stabilise soil acidity	0.06	0.04	0%	1%	0%	
Dolomite - to correct physical soil problems	0.01	0.01	0%	0%	0%	
Gypsum - to correct physical soil problems	0.9	0.3	0.02%	1%	1%	

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Area irrigated

The total area of agricultural holding for the Esk Shire in 2000-01 was 236,417ha; of this area 7,119ha was irrigated. The area irrigated represents 15.3% of the total area of land irrigated in the South East Queensland NRM region. The area irrigated in the Esk Shire represents 1% of all land irrigated in Queensland.

Table 10.9: Area irrigated, Esk Shire, 2000-01

	Area		Area irrigated as a percentage of Queensland total
	ha '000	% of total ag. holdings in region	Area
Total area of holding	244	14%	0%
Irrigated - total area	7	15.3%	1%
Non-irrigated - total area	236	14.1%	0%

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Natural resource management profile

Fencing to exclude grazing

Fencing to exclude grazing in the Esk Shire in 2000-01 was constructed for the following reasons; to protect creeks and rivers (16.3%), to protect remnant native vegetation (15.3%), to protect planted trees and shrubs (14.3%), to protect other degraded areas (6.1%), to protect saline areas (3.1%), and all other reasons (44.9%). Total fencing to exclude grazing in the Esk Shire represented 13% of the total length of fencing constructed to exclude grazing in the South East Queensland NRM region.

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Table 10.10: Fencing to exclude grazing, Esk Shire, 2000-01

Reason	Length		Fencing to exclude grazing as a percentage of Queensland total Length
	km	% of total length of fencing constructed in region in 2000-01	
To protect remnant native vegetation	15	2%	3%
To protect planted trees and shrubs	14	2%	3%
To protect creeks and rivers	16	2%	1%
To protect saline areas	3	0%	2%
To protect other degraded areas	6	1%	1%
To protect other areas	44	6%	1%
Total fencing for all reasons	98	13%	

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).

Tree seedlings planted

The majority of tree seedlings planted in the Esk Shire in 2000-01 were planted for the production of timber and wood pulp (60.7%). Tree seedlings were also planted to protect land and water (16.1%), to enhance production (6.9%), and for nature conservation (6.8%). The total number of tree seedlings planted in the Esk Shire in 2000-01 represents 4% of the total number of tree seedlings planted in the South East Queensland NRM region in 2000-01.

Table 10.11: Tree seedlings planted, Esk Shire, 2000-01

Purpose of Planting	Number planted		Area planted		Seedlings and trees planted as a percentage of Queensland total	
	No. '000	% of seedlings planted in region in 2000-01	ha	% of total ag. holdings in region	No.	Area
Seedlings planted for nature conservation	1	0%	5	0%	0%	0%
Seedlings planted for timber and wood pulp	7	3%	11	0%	1%	2%
Seedlings planted for enhanced production	1	0%	784	0%	1%	0%
Seedlings planted for protection of land and water	2	1%	22	0%	1%	3%
Seedlings planted for all other purposes	1	0%	3	0%	1%	1%

Source: ABS data, Agricultural Census, 2000-01 (as reported in QRBIS).