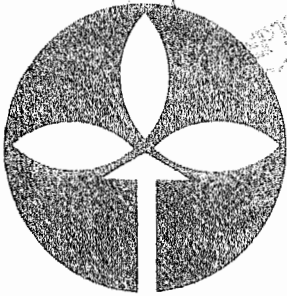


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DEPARTMENT OF AGRICULTURE, SOUTH AUSTRALIA

## Agronomy Branch Report

THE AGRICULTURAL POTENTIAL OF

KANGAROO ISLAND - 1970

By F.C. Gross

Report No. 16

THE POTENTIAL FOR AGRICULTURAL PRODUCTION

ON KANGAROO ISLAND - 1970

An estimated 400,000 acres of land is now cleared and developed. Production from this land can be further increased as it becomes more intensely developed and used and as the fertility of the soils improve. 250,000 acres of arable land is still covered with virgin scrub and forest. This can be brought into production with clearing and development.

Present farm production on Kangaroo Island will be more than doubled when eventually all the arable land available is developed and put to its full use. Progress in Kangaroo Island agricultural production is indicated as follows:-

Area cleared & developed by 1944		130,674 acres
Cleared 1945-55 by Land Development Executive		115,760 "
Cleared 1945-55 by private interests		106,797 "
Cleared since 1955		47,000 "
Cleared & developed by 1970		400,231 "
Dry sheep equivalents - 1947		200,000
carried on K.I. - 1957		430,000
		800,000
		1,122,000
Area of Kangaroo Island		1,070,000 acres
Unsuitable for development		280,000 "
Flinders Chase (Reserve)		147,000 "
Estimated area of arable land		653,370 "
Estimated area developed		400,000 "

10 Years' Progress, 1959-1969:

		<u>1968-69</u>
No. of holdings	422	448
Area of holdings (total)	630,000	760,177 acres
Topdressed pastures	302,223	310,000 "
Wheat - area	800	3,676
- total yield	17,328	58,785 bush.
Barley - area	6,215	7,498 acres
- total yield	155,695	139,695 bush.

10 Years' Progress (Contd.)

Oats - area	7,584	15,000 acres
- total yield	190,000	308,745 bush.
Peas - no commercial growing		
Fertiliser used	25,192	22,093 tons
No. of sheep	427,200	836,150
Sheep & lambs shorn	485,750	915,000
Wool produced	4,500,000	9,700,000 lbs.
Lbs. wool per head	9.18	9.7 lbs.
Lambs marked	154,154	220,000
Beef cattle	2,944	16,558
Dairy cattle	3,246	1,177
Pigs	1,102	3,548

Livestock Transported from Kangaroo Island to Pt.  
Adelaide

1968-69

Sheep	115,500
Cattle	4,570
Pigs	4,230
Wool	24,400 bales

Fertiliser Transported to Kangaroo Island 1968-69

21,000 tons

In the immediate post war period (1947-1957) production doubled (200,000 dry sheep equivalent increased to 430,000 dry sheep equivalent). This resulted from clearing, sowing down to pasture and commencing to stock large areas (223,000 acres) of scrub and forest land.

In the next 12 years, 1957 to 1969, production again more than doubled (430,000 dry sheep equivalent increased to 1,122,000 D.S.E.). In this period, 47,000 acres of land were cleared. Increased production resulted from consolidating development of the land cleared and sown down in the previous ten years.

For the past 25 years agricultural production increase had been at the average rate of 10% per year.

Potential:

1. Livestock

In terms of dry sheep equivalents Kangaroo Island could eventually carry sheep and cattle equal to 2,300,000 dry sheep. At present 1,100,000 D.S.E. are carried on Kangaroo Island.

Factors limiting the achievement of the Island's potential are:- economic, finance, markets, transport, water supply, manpower. The interaction of these factors will determine the rate of progress in the future. It is anticipated that low prices, transport costs and difficulties will considerably slow down the rate of progress made in the past 10 years. Water supplies which can only be safe-guarded with more reservoirs, could become limiting as stock numbers increase in the future.

Wool is the main item of livestock production because of ease and low cost per unit value of transport. Also, there are less production difficulties with wool on land which is being developed. The potential for wool could be another 4,000 tons (at present 4,330 tons) produced each year.

Lambs & mutton sheep. Fat lamb raising on Kangaroo Island is confined mainly at present to the older districts. Economic fat lamb raising will become possible over all of the Island as clover disease is overcome and nutritional problems are solved. More flexible and speedier transport would encourage fat lamb raising. Considering the sheep potential, Kangaroo Island could eventually produce 250,000 fat lambs a year if all factors were favourable. For the immediate future a steady increase in fat lamb raising over the present levels is anticipated. The number of dry sheep sold mainly for slaughter will double eventually, but increase each year in proportion to the total number of sheep on the Island.

Cattle. Beef cattle raising will increase as pastures are improved with perennial grasses, and also when water supplies are consolidated and made safe for dry seasons. At present cattle raising represents 12% of the total livestock activity. The beef cattle potential is at least double existing numbers which would be 33,000

head, but based on cattle numbers in relation to sheep in older higher rainfall districts of the State, it could be as high as 50,000 head.

The estimated potential increases for sheep plus cattle of 1,200,000 D.S.E. will be achieved by:-

- (a) Full development, improvement and use of the approximately 400,000 acres of land now in production. This land is carrying an average of 2.8 D.S.E. per acre. The estimated potential of this land is an average of 4 D.S.E. per acre. This is an additional 1.2 D.S.E. per acre or 480,000 D.S.E. for the 400,000 acres.
- (b) Clearing and fully developing and improving the 240,000 acres of arable land still covered with scrub. It is estimated that this land, which generally is not as good as the land already in use, will eventually carry an average of 3 D.S.E. Therefore the potential of this land is 720,000 D.S.E.

Potential of the whole Island then is:-

400,000 acres land now in use	480,000 D.S.E.
240,000 acres land now under scrub	<u>720,000</u> "
	1,200,000 D.S.E.
Present carrying	<u>1,100,000</u> D.S.E.
Livestock numbers that K.I. eventually will carry	<u>2,300,000</u> D.S.E.

Dairying. Dairy farming has declined by 60% in the past ten years. This industry is not likely to revive in the immediate future. Any future development of dairying will be associated with the tourist industry and any future intensive demand for dairy products. Increase in dairy cow numbers would be at the expense of beef cattle and sheep numbers.

Pigs. Pig raising as a farm sideline has increased steadily in recent years. This increase is expected to continue in the immediate future. It is impossible to determine the potential for pig raising. Conditions are favourable for the pig industry on Kangaroo Island. Expansion will be influenced by markets, prices for pig meats and improved transport facilities.

Minor Livestock Industries. There is a potential for the poultry and beekeeping industries. Transport difficulties have hampered the poultry industry. Feed grains can be produced cheaply, the climate is good, the Island is free of foxes and isolation is a favourable factor for disease control.

### Crops

Oats have proved to be the most satisfactory cereal crop. Present production of around 300,000 bushels is almost entirely used for stock feeding on the Island. Oats are exported from the Island in seasons when the price is high. The potential for oats could be as high as 800,000 bushels, most of which would be required for local use as stock feed.

Barley growing has been static over the past ten years. No increase in the present 8,000 acres sown to barley is expected in the immediate future. If prices for barley improve, barley growing could increase and start to move towards an estimated potential of 16,000 acres to yield 340,000 bushels.

Wheat is grown regularly on the better drained soils and the drier parts of the Island. Only 3,500 acres of wheat is grown at present. Quota restrictions will reduce this to 2,700 acres for the immediate future. Present production of wheat of 60,000 bushels could be eventually increased to a potential of 200,000 bushels when there is a demand for wheat at a profitable price.

Small Seeds. Oil seeds (linseed and safflower) and pasture seeds (perennial ryegrass) have been successfully grown on Kangaroo Island. There is a potential for the small seeds crops.

Cash crops will become more important on Kangaroo Island as the fertility of the soils improve with pasture, as agriculture becomes more intense, and as crop growing techniques are improved.

The agricultural potential of Kangaroo Island is set out in the following summary of produce for export from the Island:-

<u>Present</u>		<u>Estimated</u> <u>Potential</u>
Wool	4,330 tons	8,330 tons
Sheep	115,000	250,000 lambs) 220,000 sheep)
Cattle	4,600	15,000
Pigs	4,230	9,000 +
Barley	3,500 tons	8,500 tons
Oats	Depends on local use & prices	
Wheat	167 tons (approx.)	5,600 tons
Fertiliser	22,000 tons (import)	37,000 tons (import)