



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

FINANCIAL POSITION OF SOME N.S.W. FARMS.
A SURVEY IN THE S.W. SLOPE AND RIVERINA—1943-44

BY

P. VAIDYANATHAN, M.A., M.LITT.

Economics Branch.

Introduction.

Early in 1943, the Division of Marketing and Agricultural Economics devised a simple system for the keeping of records by farmers. Three different record books, each embodying the basic principles of the system worked out, were then prepared for the three major types of farming, viz., wheat and sheep farming, dairying and orcharding and vegetable growing. Out of 150 farmers from the wheat belt of New South Wales, who undertook to keep records for 1943-44, about 100 farmers returned satisfactory records. In this article it is proposed to survey the financial position of 38 farms in the wheat-sheep districts in the Riverina and South Western Slope for the season in question.

Aim of the Farm Records.

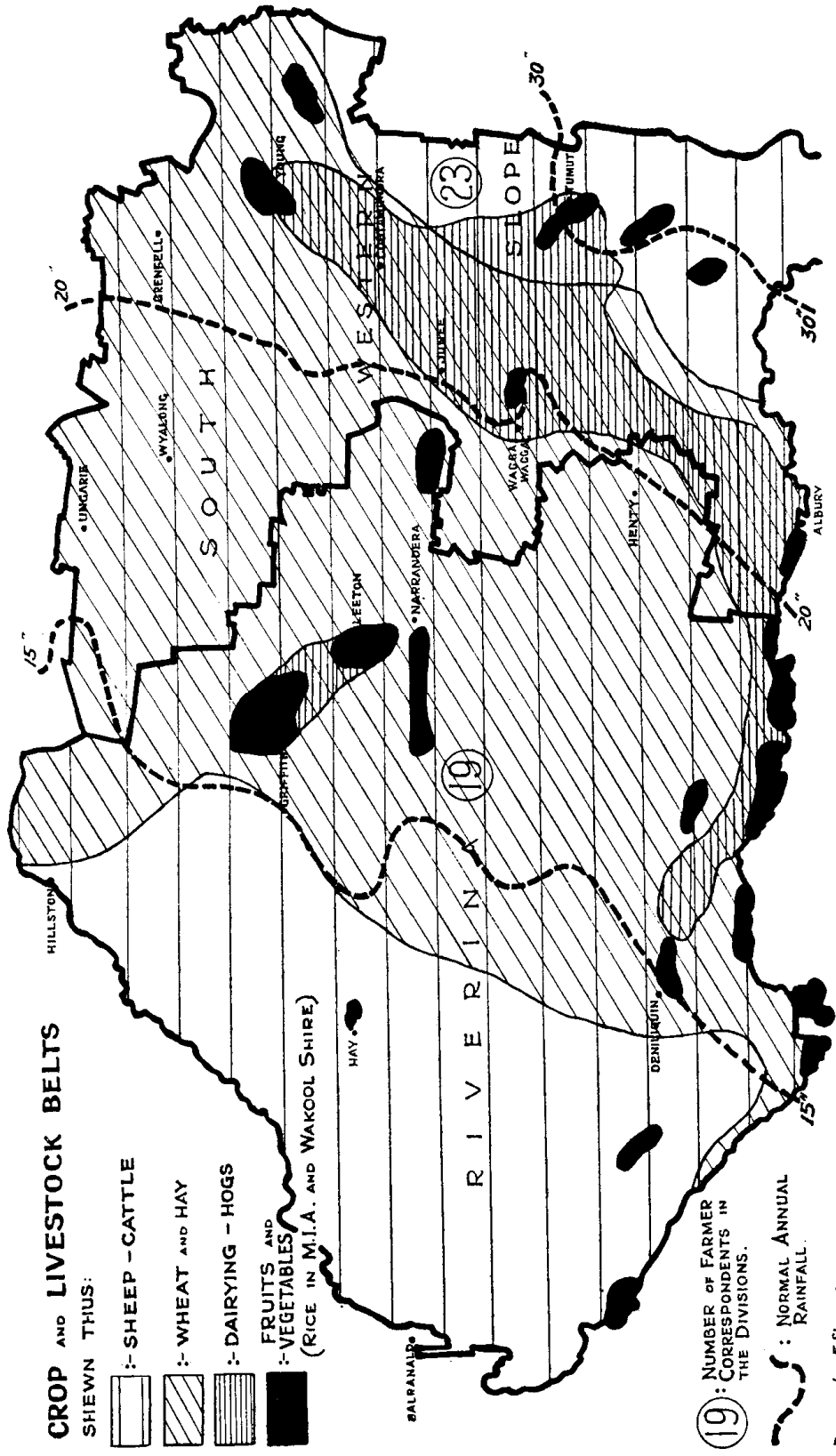
The aim of the Farm Records Project is to help the farmer to get an insight into the business side of his farm and to enable him to plan production on the farm, on the basis of results disclosed by the records over a few consecutive seasons. If the financial records (inventory, cash receipts and expenses) and the physical records (feed, labour, crop and livestock) are accurately kept, they should enable the farmer to judge his efficiency in operating his farm and plan to improve his farm management. Records kept accurately by farmers for four or five seasons in succession in limited geographic units enable the research worker to gather and analyse important economic factors in particular types of farming.

Description of the Area.





The number of farmer correspondents distributed in the important wheat-sheep belt of South Western Slope and Riverina Statistical Divisions is forty-two. Most of the farmers chosen for this survey are within the "experience lines" of profitable wheat-growing in the area. It may be said that the wheat belt of Australia reaches its greatest width in the South Western Slope and Riverina (150 miles). (See accompanying map.)

The two divisions present a diversity of physical and agricultural conditions. From the well-watered eastern fringe of the slope, with average rainfall varying from 25" to 40", one passes westward through a zone of diminishing rainfall until the Shires of Carrathool, Waradgery and Windouran are reached near the western boundary of the Riverina, and here semi-arid conditions prevail with average annual rainfall well below 15".

The chief types of soils are (1) the *pod sols* in the well-watered eastern fringe of the Slope; (2) red-brown earths occurring in the western part of the Slope and the eastern half of the Riverina; (3) grey and brown soils of heavy texture (important pastoral



CROP AND LIVESTOCK BELTS

- SHOWN THUS:**
-  :- SHEEP - CATTLE
 -  :- WHEAT AND HAY
 -  :- DAIRYING - HOGS
 -  FRUITS AND VEGETABLES
(RICE IN M.I.A. AND WAKOOL SHIRE)

19 : NUMBER OF FARMER CORRESPONDENTS IN THE DIVISIONS.

--- : NORMAL ANNUAL RAINFALL.

Drawn by E. Starnor.

soils) in the semi-arid regions of the Riverina (under irrigation, many of these soils have proved useful for rice-growing and pasture production); and (4) solonized brown soils (mallee soils) in the north-western corner of the Riverina.*

The main pattern of farming in the area, where the farmer correspondents are distributed, is wheat, sheep and cattle, with intensive agriculture in the Murrumbidgee Irrigation Area. In the well-watered eastern and southern section of the Slope and along the River Murray the pattern of farming is wheat and sheep, with dairying outstanding.

Patches of intensive farming of orchards and vegetables under irrigation are distributed in the area. In fact, the two divisions occupy a dominant position in the agricultural regimen of the State, as the following figures in Table I indicate.

Table I—Crop and Livestock Statistics (1943-44).

	South-western Slope.	Riverina.	As % of N.S.W.
Wheat (grain), acres	620,459	585,702	45
Oats (grain), acres	100,063	120,178	67
Barley (grain), acres	5,020	6,355	56
Hay (Wheat and Oats), acres ...	120,053	121,573	54
Grapes (productive), acres ...	275	7,592	51
Citrus Fruit (productive), acres ...	32	6,211	22
All other orchard (productive), acres	7,035	6,173	41
Sheep, Number	7,976,395	6,139,510	25
Cattle, Number	240,020	92,920	11

Farm Organisation.

The average area of wheat and sheep farms of farmer-correspondents in the South Western Slope was 1,232 acres, of which 204 acres were in wheat for grain. In the Riverina, the average area was 1,523 acres, of which 184 acres were sown to wheat. Table 2 sets out the relative importance of crops, with the number of sheep and lambs carried.

Table 2—Relative Importance of Crops.

Crops.	South-western Slope.	Riverina.
	(average)	(average)
Wheat—(acres)	204	184
" yield per acre (bushels)	26	24
Other grains (mainly oats) (acres)	50	67
Improved pasture and green fodder (acres) ...	155	198
Hay (acres)	25	37
Sheep and lambs (No.)	943	1,168

*C.S.I.R. Bulletin 177: A Soil Map of Australia, by J. A. Prescott.

Average yield per acre of wheat in these statistical divisions, as given by the Government Statistician, was 21 bushels for the South Western Slope and 18 bushels for the Riverina in 1943-44. The divisional averages are lower in each case than the averages for the farmer correspondents. However, about 30% of the farms examined showed a yield per acre lower than the divisional averages. Over 35% of the Riverina farmers' returns showed a poor yield, which may be directly due to the drought in 1943.

Generally, there is a definite relationship between yield per acre of wheat, on the one hand, and net farm income and return from capital invested in the farm on the other. Table 3 sets out a few examples relating the three factors.

Table 3—*Relation of Production to Net Farm Income and Return on Capital.*

Farm No.	Yield per acre.	Net Farm Income.	Return on Farm Capital.	
			£	%
	Bushels.	£	£	%
South Western Slope (average)	26	1,301	916	8.9
2	15	425	87	1.1
5	13	855	514	3.7
49	19	237	— 299	...
53	20	929	591	6.8
64	12	1,221	883	8.5
Riverina (average)	24	1,280	828	7.4
83	9	513	175	1.6
36	14	840	502	3.7
13	20	736	398	5.0

However, before establishing such a relationship, care should be taken to include only those farms where wheat is the main enterprise. Also, there are further qualifications to be made. For example, even though wheat may be the main enterprise, if income from wool or the number of sheep is higher than the average for wool and sheep, the relationship between net farm income and average yield of wheat per acre will not hold. If the capital value of the farm is disproportionately small compared with the area of the farm, or if the net worth of property had increased markedly during the year, the above relationship between yield per acre and net farm income will not apply. When farms, with cross relationships with other factors, are eliminated, the relationship between yield per acre and net farm income and return on capital holds good in all other cases.

Capital and Net Returns.

The total capital investments in the South Western Slope averaged £10,292 per farm in 1944 and £10,389 in 1943. In the Riverina, the corresponding figures were £11,264 in 1944 and £11,049 in 1943. Table 4 sets out the amount and distribution of capital per farm in the two divisions at the end of the financial year, viz., 30th June, 1944.

Table 4—Distribution of Capital.

Nature of Capital.	South Western Slope.	Riverina.
Capital—Total	£ 10,292	£ 11,264
	%	%
Fixed Capital—Land and Improvements	73	71
Working Capital—Machinery	9	10
Livestock	11	13
Current Capital	7	6
Increase (+) or decrease (—) in capital during the year	— 0·9	+ 2·2

The average capital distribution in the two areas is nearly identical, and this is partly due to the selection of farmer-correspondents mostly within the wheat belt. More than 70% of the capital is invested in land and improvements, as the dominant pursuit in this area is wheat-farming. Net farm earnings on capital invested was 7.4% in the Riverina and 8.9% in the South Western Slope. About 40% of the farmers who kept records in the Riverina, and 48% in the South Western Slope, had less than the average earnings from farm capital per farm. About 35% in both the Divisions had earnings less than 5%, which is considered to be the minimum earning if the operator's earnings for his labour and management were to be £338.

Debt Position and Net Worth of Property.

Total debt per farm in the South Western Slope in 1944 was £2,539 and, in the Riverina, £3,008. About 98% in both cases represented fixed debts and 2% current debts. In many cases, current capital could easily meet current debts. Most of the debts incurred were to the Crown, banks and private mortgagees. Total debt in the South Western Slope formed 25% of the capital invested in the farm, and in the Riverina, 27%.

Net worth of property derived by deducting total debts from total capital was £7,753 in the South Western Slope and £8,260 in the Riverina. Increase in the net worth of property during the year was 5% per farm in the two divisions. Table 5 sets out the position of debt and net worth of property per farm in the two areas.

Table 5—Debt Position and Net Worth of Property.

Debt and Net Worth of Property.	South Western Slope.	Riverina.
Total debt, 1943	£ 3,015	£ 3,232
Total debt, 1944	2,539	3,008
Fixed debt in 1944	% 98	% 98
Current debt in 1944	2	2
Net worth of property in 1944	£ 7,753	£ 8,260
Increase during the year	% 5	% 5

Where the return from capital is less than 5%, net worth of property shows a decrease during the year generally. In some cases there may be a slight increase but still it is less than the average rate of 5%. However, the reverse is not true.

Gross Receipts and Cash Expenses.

Gross receipts do not represent money borrowed or money received through the sale of capital goods or livestock used as working capital on the farm. Gross receipts represent actual sale of farm produce sold during the year, such as wheat, oats, lambs, pigs, calves, etc. This will give an idea of the actual cash value of current farm produce. Cash expenses constitute expenses involved in current farm operations not involving capital outlay. Tables 6 and 7 set out the average gross receipts and cash expenses in the two divisions.

Table 6—Gross Receipts (Average). (Sale of Commodities Produced on the Farm not including Capital Livestock.)

Receipts.	South Western Slope.	Riverina.
Total per farm	£ 1,997	£ 1,961
Income from main enterprise	% 51	% 43
Wheat	£ 842	£ 750
Wool	518	532
Sheep and lambs	264	317
Pigs	51	98
Other grain and fodder	172	227

Table 7—Major Cash Expenses (Average). (Current Production Only.)

Expenses.	South Western Slope.	Riverina.
Total Cash Expenses	£ 549	£ 638
Fertiliser and Seed (purchased)	33	43
Feed (purchased)	23	42
Fuel and Power	97	116
Bags and Twine	45	73
Cartage	74	72
Maintenance of Improvements	12	15
Maintenance of Machinery	75	79
Wages	110	101

The amount and sources of receipts are mainly derived from wheat in the two divisions. However, the receipts are fairly well distributed among five major items of income, and this partly is responsible for the fairly high operator's earnings in the area. Actual cash expenses in current farm production form less than a third of the actual gross receipts from farm produce. Cash expenses should not be regarded as farm costs, as gross receipts, minus cash expenses, cannot be regarded as net farm income.

Division of Farm Costs.

Total farm costs are calculated on the basis of current production and creation of new assets on the farm, not involving money outlay—*e.g.*, stocks of feed and seed used. In calculating the division of farm costs for the year it was necessary to allow a certain amount for the labour and management of the operator, and a sum of £312 was allowed for the operator's labour and £26 for the latter. Value of unpaid family labour was allowed at the dairying industry award rates, and interest of 5% was allowed on capital invested in the farm. Table 8 sets out the division of farm costs in the two divisions.

Table 8—Division of Farm Costs.

Cost Items.	South Western Slope.	Riverina.
Total Farm Costs	£ 1,847	£ 2,109
Overhead Costs	% 59	% 62
Variable Costs	41	38
Land and Improvements	27	31
Machinery	12	12
Livestock	3	3
Labour	31	26
Costs involved in Current Production	27	28

Too high or too low a departure from the average costs of labour in total farm costs, without any results either in the building of capital or in the increase in income from sale of produce, always leads to a low return for the operator. This has been so in about 40% of the cases in the Riverina and 35% in the South Western Slope.

Overhead costs, if they are far above the average proportion, show a low return on capital. This was more true of farms with wool as the main enterprise.

Conclusion.

The number of farms included in this study of the Farm Record Project is limited and the results are only for one year. Thus it is not possible to arrive at any definite conclusions. However, it is possible to arrive at some general deductions. About 35% of farms examined both in the South Western Slope and the Riverina showed less than 5% return on capital invested, and the operator's earnings in all these cases were less than £338. In about 18% of the farms the labour costs were higher than the average, and the net farm income and the percentage of return from capital were far below average. In other words it is an indication of the inefficiency of labour. About 18% of the farms examined had lower labour costs and lower net farm income and return from capital than the average. This may be an indication of less labour being used than is needed when the labour capacity of the farmer is only average or less than average.

GENERAL NOTES AND NEWS.

Advice has been received from the Commonwealth Department of Supply and Shipping that the prohibition on the export of broom millet fibre, which has been in operation over the past three years, has now been lifted.

An official forecast of pome fruit production in New South Wales this year, based upon the outlook at 6th February, 1946, is for a total yield of 1,052,000 and 208,000 packed bushel cases of apples and pears, respectively. However, it should be borne in mind that the occurrence of damaging factors, such as hail, disease, pests, etc., could reduce the quantity of fruit finally harvested. Production, so far as apples are concerned, is thus likely to be substantially ahead of last season, when the total yield was approximately 500,000 bushels. Pear yields in that year totalled about 270,000 bushels.

The Division has been called upon to advise the Minister as to the suitability of a site in the metropolitan area for the erection of a large cold-storage plant for fruits, vegetables, meat, eggs, etc. A preliminary inspection has been carried out and a recommendation is being made to the appropriate authorities. Should the venture finally assume concrete form, the present inadequate cold-storage facilities for fruits and vegetables will be substantially improved.