



*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](mailto: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.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# Agrekon

VOL. 11 No. 3

JULY 1972

## EDITORIAL COMMITTEE

Mr A.J. du Plessis (Chairman),  
Mr H.J. van Rensburg, Dr J.J. Gregory and Prof. J.A. Groenewald,  
Mr G.J. Wissing (Editor), Mr Q. Momberg (Technical editing)

## REQUIREMENTS FOR CONTRIBUTIONS

Articles in the field of agricultural economics, suitable for publication in the journal, will be welcomed.

Articles should have a maximum length of 10 folio pages (including tables, graphs, etc.) typed in double spacing. Contributions, in the language preferred by the writer, should be submitted in triplicate to the Editor, c/o Department of Agricultural Economics and Marketing, Pretoria, and should reach him at least one month prior to date of publication.

The Journal is obtainable from the distributors: "AGREKON", Private Bag X144, Pretoria.

The price is 25 cents per copy or R1 per annum, post free.

The dates of publication are January, April, July and October.

"AGREKON" is also published in Afrikaans.

# *Contents*

	<u>Page</u>
I. EDITORIAL .....	1
II. ECONOMIC TRENDS IN SOUTH AFRICAN AGRICULTURE .....	3
III. ARTICLES	
1. Factor subsidies and certain policy implications .....	5
- W. L. Nieuwoudt, University of Natal	
2. The effect of resource availability on optimum organisation in irrigation farming .....	9
- H. P. Hancke, Division of Agricultural Marketing Research J. A. Groenewald, University of Pretoria	
3. Cost-benefits analysis as a method for better public investment decision-making .....	17
- J. A. Döckel, University of South Africa	
IV. STATISTICS .....	25

## ERRATUM

Volume 11, No. 1, January 1972, page 26: Prof. W.E. Kassier and Mr P.H. Spies of the University of Stellenbosch and Mr H.J. Geyer of the K.W.V. were jointly responsible for the paper "The prerequisites of agricultural policy management."

# Economic trends in South African agriculture

Developments in certain agricultural economic fields are reflected in the accompanying graphs. Additional information appears in the Statistical Annexure. The latest trends may be summarised as follows:

## MAIZE

The production of maize usually exceeds the consumption. In 1971 8,6 million tons were produced, of which approximately 5,1 million tons were consumed locally. Industrial consumption increased from 21 800 tons in 1949/50 to 73 000 tons in 1970/71. According to the fourth crop estimate the 1971/72 crop will amount to about 10,115 million tons. In 1971 maize and maize products to the value of approximately R62 million were exported as against only R5,4 million in 1966. Comparative figures in respect of average production and consumption are as follows:

Period	Production	Consumption
	1 000 metric tons	
1951/52 - 1954/55	3 301,8	2 645,4
1955/56 - 1958/59	3 930,3	2 923,4
1959/60 - 1962/63	5 416,3	3 257,9
1963/64 - 1966/67	5 896,8	3 988,0
1967/68 - 1970/71	6 342,5	4 725,5

## WHEAT

The production of wheat exceeded the consumption for the first time in 1964/65. It is estimated that the 1970/71 crop of 1,396 million tons exceeded the consumption by 149 000 tons. The 1971/72 crop is estimated at 1,62 million tons, representing an increase of 50 per cent over the past five years. Approximately 45 per cent thereof was produced in the Western Cape, 42 per cent in the Orange Free State and 13 per cent in the rest of the Republic. Five years ago the comparative percentages were 56, 34 and 10, respectively.

## MEAT

Cattle numbers on farms of Whites increased from 7,0 million in 1966 to approximately 7,8 in 1971. Commercial cattle slaughterings totalled 1 711 000 in 1970/71, representing an increase of 12,6 per cent over the previous year's figure. However, the average carcase weight decreased to 201,9 kg in 1970/71 as compared with 207,6 kg the previous year. This represents a decrease of 2,8 per cent. The average price of beef at the Newtown market amounted to 44,86c per kg in

1970/71 as against 24,27c per kag in 1960/61. The consumption of meat during the past six years was as follows:

	Beef and veal	Small stock	Pork	Total
	1 000 metric tons			
1965/66	532,1	164,4	59,6	756,1
1966/67	525,0	161,6	65,3	751,9
1967/68	519,7	174,7	63,7	758,1
1968/69	502,5	197,2	69,0	768,7
1969/70	535,9	210,2	81,0	827,1
1970/71	540,0	225,6	79,6	845,2

## CREAMERY BUTTER

The production of butter showed a declining trend during the past three seasons. In 1968/69 there was a record production of 55 434 tons of creamery butter, which then decreased to 47 267 tons in 1969/70 and 43 964 tons in 1970/71. During the three seasons respectively 52 348 tons, 54 020 tons and 53 353 tons of butter were consumed.

## FACTORY CHEESE

In 1968/69 the production of factory cheese amounted to 22 100 tons as compared with 17 625 tons in 1969/70 and 17 680 tons in 1970/71. Consumption, on the other hand, increased from 19 793 tons in 1968/69 to 21 100 tons in 1969/70 and 21 963 tons in 1970/71. Comparative figures in respect of production and consumption are as follows:

	Production	Consumption
	Metric tons	
1965/66	14 166	16 532
1966/67	18 532	16 948
1967/68	20 673	18 107
1968/69	22 100	19 793
1969/70	17 625	21 100
1970/71	17 680	21 963

## EGGS

From as early as 1947/48 the production of eggs has exceeded the consumption. In 1970/71 production exceeded consumption by 15 million dozen. During 1971 eggs in the shell to the value of approximately R658 000 were exported as against R1,1 million the previous year.

EKONOMIESE TENDENSE IN DIE SUID-AFRIKAANSE LANDBOU/ECONOMIC TRENDS IN SOUTH AFRICAN AGRICULTURE

Produksie en verbruik van sekere belangrike Landbouprodukte/  
Production and consumption of certain important Agricultural products

