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# The Regional Contribution of Agriculture to the Republic's Gross Domestic Product

by

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Recently the agricultural sector's contribution to the Republic's gross domestic product for the years 1954/55 to 1959/60 had been calculated on a magisterial district basis. In view of the fact, however, that there were 277 magisterial districts in 1959/60, the statistical tables would be too bulky to be published and discussed here in full. Consequently the information in respect of 1959/60 only (and also only according to the economic regions as indicated on the map) will be dealt with briefly. (This division of the Republic into 51 economic regions was done by the Bureau of Market Research of the University of South Africa in 1951).

The agricultural sector's contribution to the gross domestic product, or, as it is also called, the net value of agricultural production, comprises the remuneration which labour, capital, land and the entrepreneur receive; it is calculated by deducting the current expenditure in respect of raw materials and services from the proceeds of agriculture.

The net value of agricultural production in each of the 51 regions, the area utilised for agriculture in each region according to the 1959/60 agricultural census, and the average net value of production per morgen in each region, appear in Annexure I.

It should be mentioned that, in view of the fact that the average size of farming units varies from region to region and from province to province, a deduction cannot simply be made from the average net value of production per morgen in order to determine the income per farming

unit. The existing statistics in respect of the size of farming units should be applied cautiously. Consequently no "average income per farming unit comparison" has been made.

The agricultural sector's contribution to the Republic's gross domestic product amounted to almost R547 million in 1959/60. The Cape Province, which is in extent 59 per cent of the total area of the Republic, was responsible for 40 per cent (R219.2 million) of this contribution; the Transvaal, which is in extent 23 per cent of the total area, for 29 per cent (R159.6 million); the Free State, which is in extent 11 per cent of the total area, for 19 per cent (R103.6 million); and Natal, which is in extent 7 per cent of the total area, for 12 per cent (R64.5 million).

With the agro-economic division of the country as basis, the 51 economic regions can, for the purposes of this article, be grouped into 17 major areas, which are in fact much bigger and less homogeneous than the agro-economic regions. The classification of these 51 regions in more homogeneous farming areas are, however, not possible, in view of the fact that the economic regions are determined by district boundaries, which are not defined according to economic-technical considerations.

## I. THE CAPE PROVINCE

The Cape Province can be divided into the following major areas:

- (a) The winter-rainfall area, comprising economic regions 1 to 4;
- (b) the coastal area (regions 5 to 9);
- (c) the sheep-grazing area (regions 10 to 15);
- (d) the cattle-grazing area (regions 16 and 17); and
- (e) the Eastern Cape (regions 18 to 21).

(a) The winter-rainfall area  
(regions 1 to 4)

Annexure I shows that this area is the most intensive farming area in the Cape Province, and that the net value of agricultural production per morgen in 1959/60 varied between R9.56 in region 4 and R67.80 in region 1. Fresh milk and vegetables were mainly responsible for the high net value of production per morgen in region 1, which is relatively small. As a matter of fact, these two products were responsible for almost 62 per cent of the total gross value of agricultural production in this economic region.

The winter-rainfall area's importance as fruit and wheat area is also well known.

(b) The coastal area  
(regions 5 to 9)

The net value of agricultural production per morgen in the coastal area is appreciably lower than that in the winter-rainfall area and varied between R5.41 and R8.31 in 1959/60. Fruit, for example apples in the Langkloof apple area, citrus in the Gamtoos valley, pineapples, vegetables, dairy products, chicory and also sheep farming are some of the most important branches of farming in this area. An important part of the Republic's timber plantations is also concentrated in this area. The proceeds thereof have, however, not been included in the calculated value - with the result that the net value of production per morgen in this area is in fact higher than as indicated in Annexure I.

(c) The sheep-grazing area  
(regions 10 to 15)

This area, which is in extent almost 54 per cent of the total area of the Cape

Province, was in 1959/60 responsible for only 20 per cent of the net value of agricultural production in this province. This area is, of course, an extensive farming area and the net value of agricultural production varied between R0.59 per morgen in the west and R2.27 per morgen in the east, where the farms are smaller. As indicated by its name, the most important branch of farming in this area is wool-sheep farming. In 1959/60 this area accounted for 38 per cent of the Republic's total wool clip.

(d) The cattle-grazing area  
(regions 16 and 17)

Although the Vaalharts and Kakamas irrigation schemes are situated in this area, it is on the whole an extensive farming area. The net value of production per morgen in 1959/60 amounted to R1.67 in region 16 and R3.02 in region 17. The Vaalharts irrigation scheme falls in region 17, and is partly responsible for the relative higher value per morgen in this region. Livestock farming in this region is also more intensive than in region 16. In addition, maize is also produced (especially in the eastern parts).

(e) The Eastern Cape  
(regions 18 to 21)

The net value of agricultural production per morgen in 1959/60 varied from R13.08 in region 18 to R3.94 in region 19. This indicates that the nature of the various regions grouped together are very divergent. Region 18 is relatively intensive along the coast and is the major pineapple-producing area in the Republic. Region 19 is a diversified farming region where cattle, sheep and crop farming are practiced. Region 20 comprises exclusively the Transkei, whereas region 21 falls partly in a Bantu homeland.

## II. NATAL

Natal can be divided into the following areas:

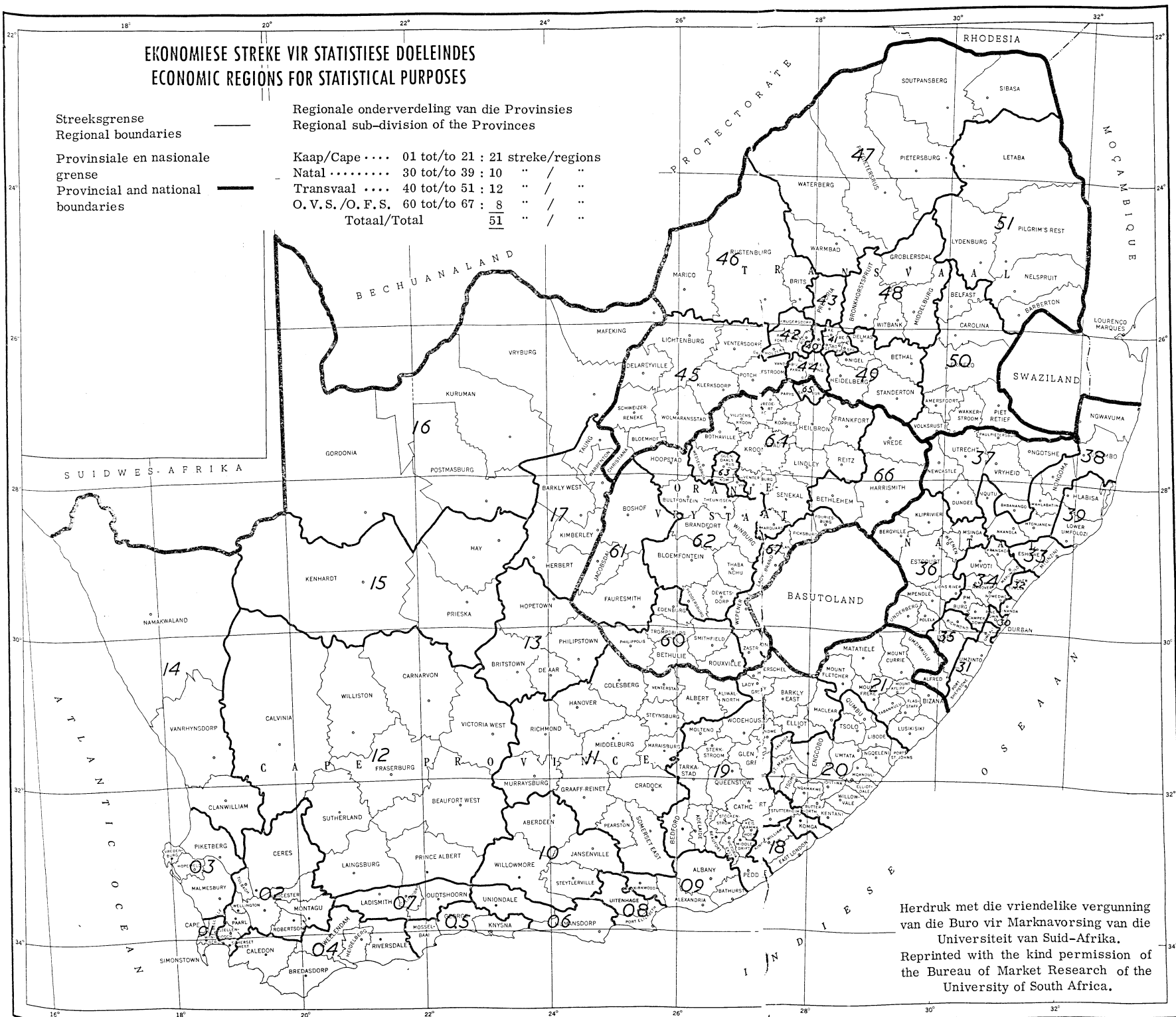
# EKONOMIESE STREKE VIR STATISTIESE DOELENDES ECONOMIC REGIONS FOR STATISTICAL PURPOSES

Streeksgrense  
Regional boundaries

Provinsiale en nasionale  
grense  
Provincial and national  
boundaries

Regionale onderverdeling van die Provinsies  
Regional sub-division of the Provinces

Kaap/Cape	01 tot/to 21 : 21 streke/regions
Natal	30 tot/to 39 : 10 " / "
Transvaal	40 tot/to 51 : 12 " / "
O. V. S. / O. F. S.	60 tot/to 67 : 8 " / "
Totaal/Total	51 " / "



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University of South Africa.

- (a) The coastal area, comprising economic regions 30 to 33 and 39;
- (b) Central Natal (regions 34 and 35);
- (c) the diversified farming area (regions 36 and 37); and
- (d) Northern Natal (region 38).

(a) The coastal area (regions 30 to 33 and 39)

The net value of agricultural production per morgen in 1959/60 varied from R10.44 in region 39 to R88.52 in region 32 - the highest in the Republic. This area's major source of income is, of course, its sugar-cane plantations. In addition, subtropical fruit is also produced.

(b) Central Natal (regions 34 and 35)

The net value of production per morgen in this area was also relatively high in 1959/60 viz. R6.15 in region 34 and R7.40 in region 35. Wattle bark is the major agricultural product in this area. Dairy and beef farming are also important in these regions.

(c) The diversified farming area (regions 36 and 37)

The net value of agricultural production per morgen in regions 36 and 37 amounted to R4.72 and R4.13, respectively, in 1959/60. The major branch of farming here is cattle and sheep farming. In addition, wattle bark and maize are produced.

(d) Northern Natal (region 38)

The net value of agricultural production per morgen in this diversified farming area amounted to R0.90, which is relatively low in comparison with other regions in Natal. As soon as the Makatini-valke irrigation scheme, which is at present under construction and which would be situated in this area, is completed, however, the net value of production per morgen should show a marked increase.

### III. TRANSVAAL

The large districts of especially the Northern and Eastern Transvaal, together with the fact that some of these districts fall in more than one agro-economic region, are partly responsible for the fact that the economic regions in Transvaal sometimes differ more from the agro-economic division.

As an example Rustenburg district may be mentioned. This district, which was in extent 2.7 million morgen in 1959/60, can be divided mainly into two farming regions, viz. the intensive irrigation-farming area and the extensive cattle-farming area. (This district has since been divided into three separate magisterial districts). We find this also in economic regions 46, 47 and 51. The Transvaal can nevertheless be divided into the following main areas:

- (a) The Rand area, including regions 40 to 44;
- (b) the dryland crop area (regions 45 and 49);
- (c) the eastern irrigation area (regions 48 and 51); and
- (d) the grazing area (regions 46, 47 and 50).

(a) The Rand area (regions 40 to 44)

Due to good rainfall, irrigation farming generally occurs in these regions. In addition, the concentration of population brought about intensive farming in this area. The net value of agricultural production per morgen in this area is accordingly the highest in the Transvaal, and varied in 1959/60 from R13.11 in region 43 to R57.08 in region 40. Vegetables, poultry products and fresh milk are inter alia intensively produced here.

(b) The dryland crop area (regions 45 and 49)

Economic regions 45 and 49 are of the Republic's major maize-producing regions. Almost 35 per cent of the 1959/60 maize crop derived from these two re-

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(b) Central Natal (regions 34 and 35)

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(b) The dryland crop area (regions 45 and 49)

Economic regions 45 and 49 are of the Republic's major maize-producing regions. Almost 35 per cent of the 1959/60 maize crop derived from these two re-

gions. Apart from other summer crops produced in this area, livestock farming is also important - especially the production of fresh milk. The net value of agricultural production per morgen in 1959/60 amounted to R11.36 in region 45 and R13.93 in region 49.

(c) The eastern irrigation area  
(regions 48 and 51)

Although irrigation-farming generally occurs in this area, it also includes large grazing areas. Consequently, the net value of production per morgen in the area as a whole is much lower than in the dryland crop area for example. The relatively low yield in the vast Bantu homelands situated in this area also contributes to the fact that the net value of production per morgen in this area is relatively low, viz. R4.94 in region 51 and R6.16 in region 48. Vegetables and subtropical fruit are produced on a large scale, while crops such as wheat, maize, cotton, etc. also occur. Cattle farming is also important in this area.

(d) The grazing area  
(regions 46, 47 and 50)

The average net value of agricultural production per morgen varied from R2.99 in region 47 to R5.13 in region 50. This area is largely utilised for livestock farming. Some of the Republic's major cattle-grazing areas occur in economic regions 46 and 47, whereas region 50 was responsible for 57 per cent of the Transvaal's wool clip in 1959/60. As mentioned previously, this area also includes major irrigation and crop-farming areas - with the result that the average figures for these three regions lose much of their value.

#### IV. THE ORANGE FREE STATE

The Orange Free State can be divided into the following areas:

- (a) The dryland crop area (regions 63 to 65);
- (b) the diversified farming area (regions 62 and 67);
- (c) the mountain grazing area (region 66); and
- (d) the sheep-grazing area (regions 60 and 61).

(a) The dryland crop area  
(regions 63 to 65)

These regions yielded the highest net value of agricultural production per morgen in the Free State, viz. R18.97, R11.79 and R15.83, respectively. These figures are, however, much lower than the highest values in the other provinces. The major farming activities in this area are the production of maize and other summer cereals as well as wheat. Dairy farming also occurs in this area.

(b) The diversified farming area  
(regions 62 and 67)

The average net value of agricultural production per morgen in this area (R6.64 and R8.32) is noticeably lower than that in the dryland crop area of the Free State. In this area, and mainly in the eastern parts, more emphasis is laid on livestock farming. Crop farming also occurs generally but is not so important as in the dryland crop area.

(c) The mountain grazing area  
(region 66)

The average net value of agricultural production per morgen in this economic region amounted to R7.27 in 1959/60, which is appreciably higher than that in the sheep-grazing area in the Southern Free State. Although sheep farming generally occurs in this region, cattle farming is also a major branch of farming. In addition, crops such as maize are also produced.



(d) The sheep-grazing area  
(regions 60 and 61)

These two regions yielded the lowest net value of agricultural production per morgen in the Free State, viz. R2.47 in region 60 and R3.17 in region 61. The Rietrivier irrigation scheme is situated in the latter region, and it may be the reason why the net value per morgen in this region is slightly higher than in region 60. The net value of production per morgen in these two regions is again higher than that in the sheep-grazing regions in the Cape Province, where region 11 yielded the highest value, viz. R2.27 per morgen.

### CONCLUSION

In summarising, the distribution of the area in the Republic utilised for agriculture in 1959/60, according to the net value of agricultural production per morgen, is shown in Annexure II.

According to this table, the average net value of agricultural production on 26.5 million morgen (21 per cent of the total area in the Republic utilised for agriculture) was less than R1 per morgen.

On 78.9 million morgen (64 per cent of the area utilised for agriculture) it amounted to R4 and less, whereas on only 5 million morgen (4 per cent of the area utilised for agriculture) the net value exceeded R16 per morgen.

The above again confirms that the major part of the Republic is applied to extensive farming practices.

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ANNEXURE I. - Net value of agricultural production, 51 economic regions, 1959/60

Economic region	Net value of agricultural production	Area utilised for agriculture	Average net value of production per morgen utilised
	R million	Morgen	R
<u>Cape Province</u>			
01	4.1	59,976	67.80
02	36.2	1,956,286	18.50
03	15.5	1,233,656	12.57
04	17.8	1,865,079	9.56
05	3.5	540,857	6.40
06	4.6	856,444	5.41
07	4.0	691,963	5.83
08	3.0	408,143	7.37
09	9.1	1,101,200	8.31
10	4.5	2,494,035	1.80
11	16.4	7,199,370	2.27
12	8.8	14,867,491	0.59
13	3.0	2,797,622	1.09
14	6.6	6,314,288	1.04
15	4.1	7,044,169	0.59
16	21.8	13,042,777	1.67
17	7.6	2,527,043	3.02
18	5.2	397,445	13.08
19	19.2	4,863,059	3.94
20	12.5	2,580,146	4.83
21	11.6	2,381,984	4.85
Total	219.2	75,223,033	2.91
<u>Natal</u>			
30	1.1	35,196	30.95
31	7.7	406,065	18.92
32	14.3	161,453	88.52
33	5.3	360,887	14.70
34	5.5	897,816	6.15
35	4.3	585,292	7.40
36	9.7	2,056,051	4.72
37	8.9	2,161,292	4.13
38	1.6	1,752,604	0.90
39	6.1	583,063	10.44
Total	64.5	8,999,719	7.17

Transvaal	R million	Morgen	R
40	1.6	28,125	57.08
41	2.5	82,645	29.95
42	4.5	218,407	20.47
43	2.4	182,545	13.11
44	5.2	190,773	27.55
45	41.5	3,654,454	11.36
46	15.3	3,421,612	4.47
47	23.9	7,980,519	2.99
48	10.7	1,740,298	6.16
49	20.9	1,500,448	13.93
50	14.1	2,742,557	5.13
51	17.0	3,432,995	4.94
Total	159.6	25,175,378	6.34
Free State			
60	4.4	1,787,478	2.47
61	8.0	2,540,965	3.17
62	20.3	3,060,336	6.64
63	3.4	179,749	18.97
64	43.7	3,710,176	11.79
65	1.5	97,209	15.83
66	13.5	1,855,812	7.27
67	8.6	1,036,464	8.32
Total	103.6	14,268,189	7.26
Grand Total Republic	546.9	123,666,319	4.42

ANNEXURE II. - Distribution of farming area according to the average net value of agricultural production per morgen, 1959/60

Average net value of agricultural production per morgen	Area ( million morgen)				
	Republic	Cape Province	Natal	Transvaal	O. F. S.
Less than R1	26.5	25.2	1.3	-	-
R1 - R2	27.3	22.6	0.5	3.5	0.7
R2.01 - R4	25.1	12.1	2.0	8.3	2.7
R4.01 - R8	26.0	10.3	3.3	7.4	5.0
R8.01 - R16	13.8	3.0	1.1	4.3	5.4
More than R16	5.0	2.0	0.8	1.7	0.5
Total	123.7	75.2	9.0	25.2	14.3