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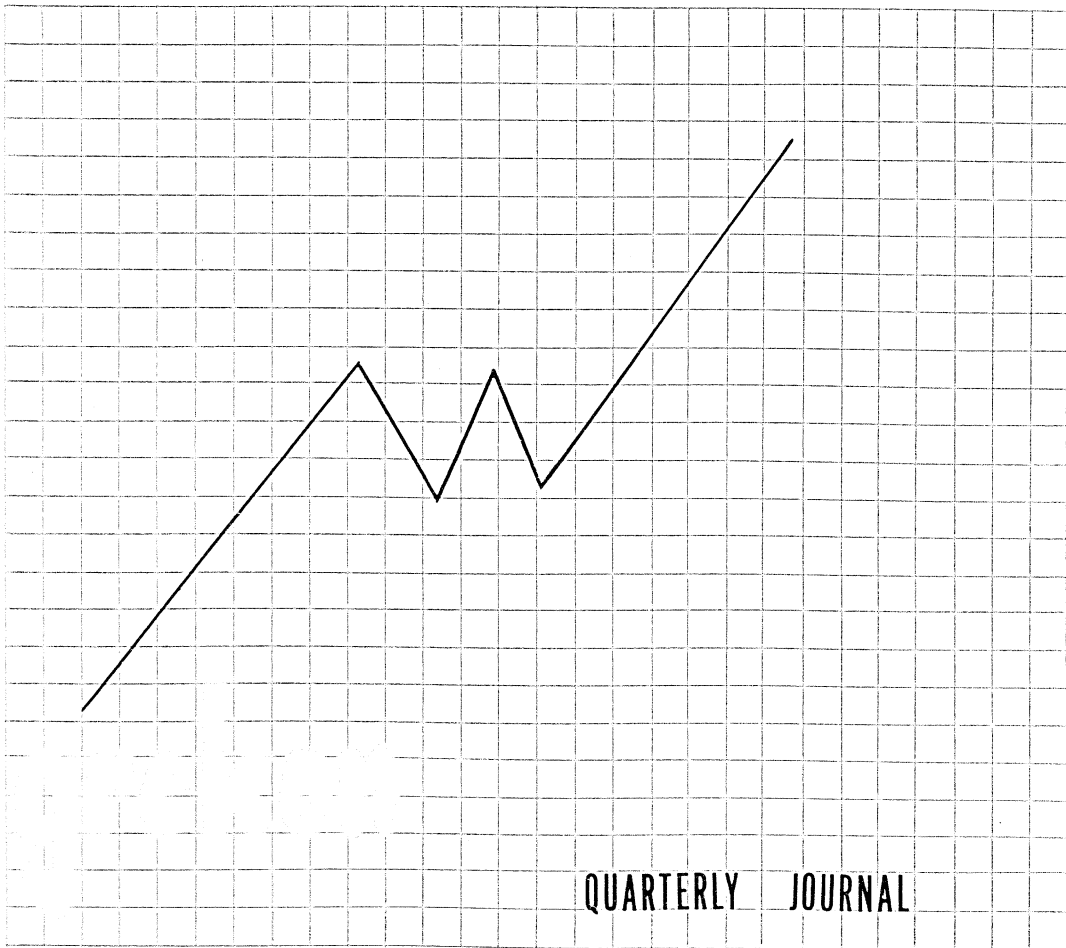
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Deserving articles in the field of agricultural economics, for publication in this journal, will be welcomed.

These articles should have a maximum length of 10 folio pages (including tables, graphs, etc.), typed in double spacing. All contributions should be submitted in triplicate (preferably in both languages) to the editors, c.o. Department of Agricultural Economics and Marketing, Pretoria, and should be received by the editors at least one month prior to publication date.

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The Agricultural Economy of the Natal Region*

by

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In giving a review of agriculture in Natal, it is convenient to take the area as embracing the "Natal Region", which includes East Griqualand and the Pongola irrigation settlement. Recent statistical analyses of Natal agriculture, which are here outlined, are then in respect of the region as a whole.

The accompanying map shows the distribution of farming land in this region - the shaded area being Bantu territory. A division of the land into agro-economic sub-regions has been made by the Division of Economics and Markets (now the Division of Agricultural Economic Research) and this classification is also shown on the map, lettered as follows:-

- A - Irrigation regions.
- D - Mountain grazing regions.
- E - Diversified farming regions.
- F - Thornveld regions.
- H - Coastal regions.

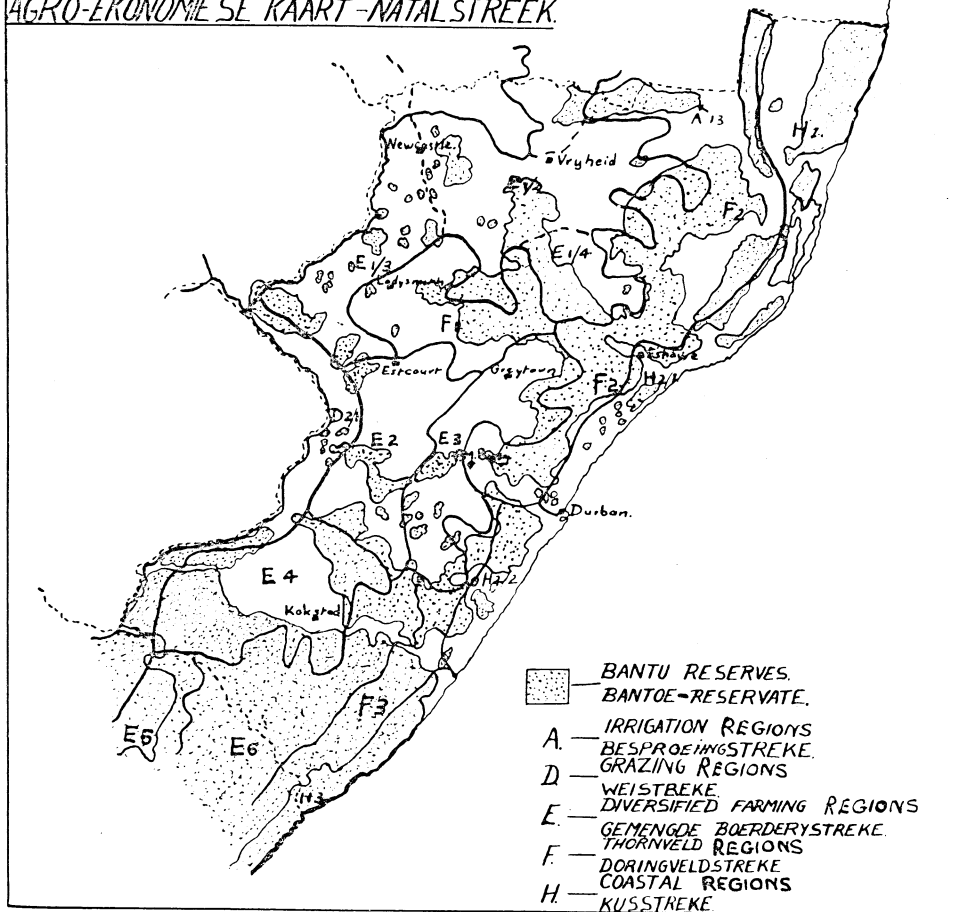
About 45% of the Natal Region is Bantu-occupied land - mainly as Bantu territory (33%), but to a lesser extent also as Bantu-owned land (12%). Statistical information on Bantu agriculture is scant because it consists to a very large degree of subsistence farming. Most commercial agriculture is confined to the European-owned farming areas, which, of course, have large numbers of Bantu workers in employment. The figures below are in respect of European-owned farms in the Natal region.

With a relatively small number of farms (11,800 or 11% of European farms in South Africa in 1955), this region plays an important role in the Republic's farming economy, particularly in respect of certain products. As shown in Table 1, certain types of farming account for considerably more than 11 per cent of our total production. The region, for example, has 14 per cent of the cattle, 12 per cent of the poultry and 15 per cent of the pigs; and produces 24 per cent of industrial milk and 15 per cent of fresh milk of the entire country.

In fodder production the region is especially important. Indeed, its dairy-farming potential seems to be based on the fodder that is produced. The 1954-55 census revealed that the Natal region produced 32 per cent of the maize silage, 72 per cent of soybean hay, 16 per cent of teff-grass hay and 58 per cent of veld-grass hay. Established pastures are also highly important in Natal - in that 25 per cent of the total area of such pastures lies in the region, which, as already stated, has only 11 per cent of the country's European farms. Along with fodder production, animal husbandry in its various forms is thus highly important.

* From time to time similar reviews, based on most recent census data, will be published in "Agrekon" in respect also of the other agricultural regions in the Republic - Editor.

AGRO-ECONOMIC MAP - NATAL REGION
 AGRO-EKONOMIESE KAART - NATALSTREEK



Certain crops are uniquely suited to this part of South Africa. For all practical purposes 100 per cent of the sugar-cane is grown in the region. Planted along a narrow coastal strip, with isolated inland patches of production, the sugar-cane crop is next in importance in the Republic's cropping economy to maize, wheat, fresh and dried fruits. The annual value of the sugar-cane crop is about one quarter of the value of the total maize crop; half of the value of fresh and dried fruit and three quarters of the value of the wheat crop.

In wattle-bark and timber production Natal is also of major importance, because in 1955 the region had 57% of the country's total area under plantations and accounted for 66% of the total value of bark and timber produced. Although the wattle industry has recently suffered price reductions, there is little doubt that it will continue to be a major line of farming - contributing an important by-product in its timber, which has so many uses in industry and other branches of economic activity. The wattle tree is also valuable in other respects; for example, being a legume, it may be brought into the rotational plan of the farm as a soil builder for crops that follow. With the fall in the price of bark, wattles will probably play a greater role in the next few years as

TABLE 1 - Branches of European agriculture in the Natal region of importance in the South African farming economy, 1954-55

Branch of farming	Unit	Percentage of total country production, etc. by Europeans
		%
Cattle	No.	14.1
Poultry	No.	12.2
Pigs	No.	14.6
Milk sold -		
industrial milk	(R)	23.8
fresh milk	(R)	14.5
Hides sold	(R)	14.0
Maize silage	Short tons	31.8
Soybean hay	Short tons	71.8
Manna hay	Short tons	34.7
Teff hay	Short tons	16.0
Veld hay	Short tons	57.5
Established permanent pasture	Morgen	25.1
Soybeans	200 lb bags	43.3
Cotton	lb	25.8
Other fibre crops	Morgen	69.6
Sweet potatoes	120 lb bags	13.2
Bananas	Morgen	49.3
Flowers	Morgen	12.2
Sugar-cane	Short tons	100.0
Naartjies	No. of trees	20.3
Litchis	No. of trees	27.8
Pecan nuts	No. of trees	34.6
Tung nuts	No. of trees	40.4
Timber and wattle plantations	Acres	57.1
	Value (R)	66.2

soil builders than they have in the past.

Other crops that are important in Natal, in relation to the production of other regions, are cotton and other fibre crops (particularly sisal), litchis, pecan and tung nuts and bananas. All these crops grow well and in the course of time their production will no doubt expand.

Recent estimates of the gross value of agricultural production in the Natal region for 1954-55 (Table 2), show that sugar-cane is undoubtedly the most important farm product, accounting for 43% of the total production of European farms. Sugar-cane

is followed by dairy products (13%) and by wattle-bark and timber (12%). The value of livestock slaughtered is about equal to the value of wattle-bark and timber. Egg and poultry production is next in importance, being half the value of livestock slaughtered. Other livestock products, such as wool, hides and skins, exceed in value all vegetables and fruit sold from farms. Relatively little maize is sold in Natal, because most is fed to livestock and, apart from sugar-cane, crop production for sale is of negligible importance.

The region thus has a threefold pattern of production: Sugar-cane mainly along the coast; wattle-bark and timber further inland; and animal husbandry, in its various forms, particularly in the Midlands, Northern Natal and Zululand, as well as towards the Drakensberg. The natural advantages of Natal are such that this pattern of production is economically desirable, and the region makes a worthy contribution to the South African economy.

In all cases the gross value of production includes cash payments made to farm labour, and the total income represents income of European farmers as well as of their labourers.

On the sugar-cane farms and, to a lesser extent, on the wattle and timber farms more labour is employed; consequently the cash payment to workers constitutes a bigger proportion of gross income earned than with other types of farming in Natal. In addition, most sugar-cane labour, and much of the wattle and timber labour, is migratory - so that part of the total income paid to workers is remitted to the Bantu areas.

In other types of farming most of the labour consists of squatter-tenants, who are themselves agricultural producers on the farms where they work. Consequently the gross income estimates for sugar-cane farming, and to a lesser extent for wattle and timber farming, exaggerate the incomes actually received by the farmers and workers living permanently on the farms. On the other hand, total production is under-estimated on farms where squatter-tenants are employed.

Table 3 shows the estimated total value of agricultural output for the Natal region, distributed according to agro-economic sub-regions. The North Coast and Zululand sugar belts show up clearly as the most important agricultural zone, with 38% of the total agricultural production coming from this area. This figure is again biased, because nearly 40% of the total income is paid as wages to recruited agricultural labour, while for most other regions income earned by squatter-tenants from land and grazing allotted to them is not shown as part of the gross output from the farms concerned. The Pongola irrigation area, and the northern and southern coastal strips, are shown to have the most intensive farming, as indicated by the gross output per morgen of farm land. The next most intensive farming region is the wattle belt, followed by the Drakensberg foothills area (from Bergville to Newcastle) and the East Griqualand area. The most extensive farming area is the Drakensberg grazing region.

Gross output per farm along the North Coast is very high, partly because the farms include mill estates and some large sugar estates which produce 50,000 and more tons of cane per farm. These producing units exert excessive weight in the determination of any average figure. High gross outputs of over R6,000 per farm are also shown in the wattle belt and in East Griqualand. Lowest gross outputs per farm of less than R4,000 are shown in the Drakensberg grazing region, the foothills near Vryheid, the north-eastern Zululand coastal strip and the thornveld from Pietermaritzburg to northern Zululand. These figures of gross output per farm

TABLE 2 - Estimated total value of agricultural production in Natal Region, 1954-55

	(R)	Percentage of group total	Percentage of regional total
		%	%
<u>CROPS</u>			
(Excluding crops fed to livestock)			
Sugar-cane	27,517,412	88.9	43.1
Maize	2,702,106	8.7	4.2
Peanuts	448,140	1.4	0.7
Other crops	292,622	1.0	0.5
TOTAL	30,961,280	100.0	48.5
<u>LIVESTOCK</u>			
Cattle, sheep, goats and pigs slaughtered	7,225,720	32.3	11.3
Dairy products	8,364,976	37.4	13.1
Eggs and poultry	3,434,586	15.3	5.4
Other livestock products	3,352,910	15.0	5.3
TOTAL	22,378,192	100.0	35.1
<u>VEGETABLES AND FRUIT</u>			
Vegetables	1,544,352	53.7	2.4
Citrus	755,218	26.2	1.2
Potatoes	337,288	11.7	0.5
Sweet potatoes	123,338	4.3	0.2
Bananas	55,860	1.9	0.1
Other	62,440	2.2	0.1
TOTAL	2,878,500	100.0	4.5
<u>WATTLE-BARK AND TIMBER</u>			
TOTAL	7,573,382	100.0	11.9
GRAND TOTAL	R63,791,354		100.0

TABLE 3 - Estimated agricultural output, Natal Region, according to agro-economic classification, 1954-55

Agro-economic region	Gross output		Percentage income from					Gross output	
	Per 100 morgen	Per farm	Crops	Live-stock	Vegetables and fruit	Wattle-bark and timber	Total	R1,000	%
A 13 Pongola irrigation	5,694	5,824	89.1	9.5	1.4	0	100	582	0.9
D 2/1 Drakensberg grazing	350	3,992	2.6	89.4	6.0	3.0	100	344	0.6
E 1/2 Diversified foothills (Vryheid)	536	3,446	13.0	71.3	3.0	12.7	100	4,168	6.5
E 1/3 Diversified foothills (Bergville to Newcastle)	730	4,946	17.0	79.8	1.3	1.9	100	5,024	7.9
E 1/4 Diversified foothills (Babanango - Melmoth)	504	5,352	3.4	42.6	1.3	52.7	100	1,386	2.2
E 2 Diversified sourveld (Midlands)	666	5,126	6.5	68.2	9.0	16.3	100	4,460	7.0
E 3 Diversified temperate (Wattle belt)	1,302	6,744	10.6	32.6	6.4	50.4	100	8,128	12.7
E 4 Diversified - East Griqualand	718	6,568	8.7	79.5	10.8	1.0	100	3,534	5.6
F 1 Thornveld - Ladysmith, Weenen	514	4,072	12.5	62.3	24.7	0.5	100	2,192	3.4
F 2 Thornveld - Pietermaritzburg to N. Zululand	600	2,676	5.8	72.1	13.7	8.4	100	3,212	5.0
H 1 Coastal - N.E. Zululand	516	3,364	0.6	55.3	1.3	42.8	100	356	0.6
H 2/1 Coastal - N. Coast and Zululand (sugar)	9,524	14,576	92.7	3.3	1.6	2.4	100	24,590	38.5
H 2/2 Coastal - S. Coast	3,818	4,494	73.5	15.7	5.1	5.7	100	5,816	9.1
All Natal Region	1,256	6,298	48.5	35.1	4.5	11.9	100	63,792	100.0

probably give a fair indication of the relative profitability of farming in the different agro-economic sub-regions.

A study of Table 3 shows which types of farming tend to predominate in each agro-economic region. The important cropping regions are seen to be the North and South Coasts, Zululand and the Pongola irrigation area. In each of these areas the agriculture is based almost exclusively on sugar-cane. The important livestock regions are the Drakensberg grazing and foothills areas of Northern Natal, the East Griqualand and Midlands area and the thornveld from Pietermaritzburg to Zululand - including the Ladysmith and Weenen thornveld areas. The Weenen irrigation settlement, within the thornveld area, is the most important vegetable growing area in Natal; this largely accounts for the 25% of gross output from vegetables and fruit in the F1 (Ladysmith/Weenen) region. Wattle-bark and timber are important in the diversified temperate Midlands, in north-eastern Zululand (exclusively timber) and Babanango - Melmoth (wattles).

A further unique feature of Natal agriculture merits mention, and this is the somewhat controversial question of farm labour and resources. With 11 per cent of the European farms, the region has 22 per cent of the Bantu in South Africa in service on European farms. Two main forms of labour are employed, namely squatter-tenants (which are characteristic of the Midlands and Northern Natal) and migratory Bantu, used particularly in the sugar and wattle industries. Without this large labour force, production would be much smaller. Squatter-tenants, moreover, are themselves producers on European farm land. For example, one-sixth of the maize produced on European farms is by Bantu tenants or squatters. In addition, 27% of the cattle on European farms is owned by natives, while natives on European farms in Natal produce 23% of the kaffir-corn, 49% of the potatoes and 38% of the sweet potatoes produced by all natives on European farms in the Republic.

Acknowledgements

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