

ASPECTS OF LIVESTOCK PRODUCTION IN SOUTH AFRICA

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The Republic of South Africa, situated between $\pm 22^{\circ}$ and 42°S , has climatic conditions ranging from wet tropical, semi-desert to Mediterranean climates. The largest part of the country falls within a summer rainfall zone with dry winters. The two factors dominating livestock production are the rainfall and the topography of the country.

Annual precipitation drops from more than 40 inches a year in the east to less than 5 per year in the west. A mountain range stretching from north to south approximately 200 miles from the east coast divides the country into a coastal area which is a broken terrain with many steep-sided river valleys, and a high, relatively flat inland area. A considerable proportion of the reliable rainfall occurs on the east coast which is inhospitable and non-arable. The inland high veld west of the escarpment is arable but lacks a reliable rainfall. Because of these factions only 12% of the country is arable. The grazing animal, therefore, remains the most important means of utilizing the remaining areas.

Number of livestock in the white farming areas of the RSA in 1986: cattle - 7.9 million; sheep 27.4 million (16.5 million Merinos, 4.5 million other woolled breeds, 5.7 million non-wooled breeds, 0.7 million Karakul); goats - 2.8 million, and swine - 1 million. Weighted consumers prices of meat in July 1986 were (c/kg): beef - 516.1, mutton - 789.5, pork - 507.3, and chicken - 291.0. The South African consumer has a preference for lamb and mutton.

A generalized distribution of agricultural regions in the RSA is given in Figure 1. Intensive livestock production occurs mainly in the higher rainfall areas and in the vicinities of metropolitan areas. These include swine and poultry production and dairy farming. In the mixed farming areas, livestock utilizes non-arable areas as well as cultivated pastures, e.g., for dairying and fat-lamb production. In these higher rainfall areas, natural pastures are lush in summer, requiring only salt and phosphorus supplements; they deteriorate rapidly towards winter to become indigestible and unpalatable with a low nitrogen and mineral content in winter. This type of grassland is called "sourveld" (constituting about 10% of the grazing area). In winter it provides only a maintenance level of nutrition, even with winter licks, which could be molasses and urea supplements or poultry manure. Substitute feeds such as grass hay, crop residues, and corn silage are also used to overwinter stock. Production systems are arranged to fit into this fluctuation of feedflow throughout the year.

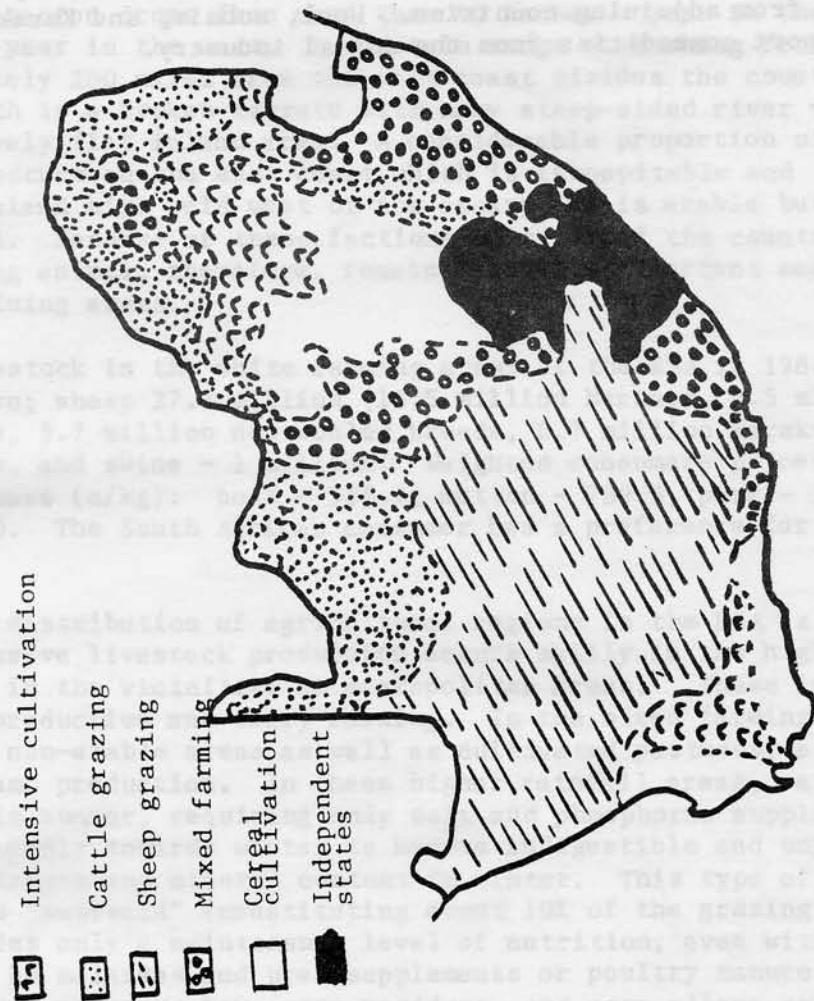
Cattle ranging areas with a savannah type of bushveld are found in the northern regions and constitute 32% of the total pasture area. These are low rainfall areas with carrying capacities of ± 20 acres/Animal Unit. Extensive small stock farming is found in the Cape Province, $\pm 46\%$ of the total pasture area. This is a semi-desert with a carrying capacity of 40 acres/A.U.

These so-called "sweatveld" areas have palatable vegetation throughout the year with a P deficiency in the grassveld areas. The dominating feature in these areas is a shortage of feed with frequent droughts. A major problem in the "sweatveld" areas is the deterioration of the natural vegetation from overgrazing, accompanied by the intrusion of undesirable plant species, erosion and, in general, expansion of the desert. A national grazing strategy has been implemented recently with strict stipulations regarding stocking rates in an attempt to curb this deterioration of the natural rangelands.

South Africa is self-sufficient in most of its animal products, except when protracted droughts occur, though because of trade agreements beef is imported from adjoining countries. Wool, mohair, and Karakul pelts are the major export commodities from the animal industry.

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Figure 1. Agricultural regions of South Africa



PREVIOUS LIVESTOCK FIELD DAY REPORTS
EASTERN OREGON AGRICULTURAL RESEARCH CENTER

These reports are available upon request from Eastern Oregon Agricultural Research Center, Squaw Butte Station, Star Rt. 1, 4.51 Hwy. 205, Burns, Oregon 97720.

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