INTRODUCTION

The purpose of this report has been to give the writer an opportunity to carry out a fact finding survey, to meet and obtain general background information of the local people being dealt with; their resources and first and foremost, to give the writer an introduction to peasant agriculture.

This report deals with nearly every aspect of concentrates and their feeding, that is of concern in the Island. Only a relatively small part of the report concerns peasants, although they are by far the largest proportion of the population. Had this report dealt with peasant feeding alone, not very much could have been reported, for the peasant has very little idea of scientific feeding, and in many cases little or no concentrates are fed.

There is very little factual data obtainable about concentrates in Trinidad. Im ports and their contents and the only home produced concentrates - coconut meal and rice bran - by-products of industry, are the only ones for which reliable figures can be obtained. Otherwise there is no information on hand to assess the total quantity of feeding stuffs produced and available for the nutrition of the livestock population.

In the 1946 census, there are stated the acreages under all crops, but there is no distinction between the amount used for human consumption and the amount for stock feeding. Hence the position regarding the origin and quantity of feeding stuffs available in the country is a matter for conjecture.

At best it is extremely difficult to assess the output of certain agricultural products such as grass with any close degree of accuracy, but the full picture, livestock numbers and all feeds available for livestock are necessary if the problems of concentrate feeding are to be tackled. The writer is quite satisfied that on all available data present, this picture cannot be made up.
From the figures available and with a certain amount of approximation, there is no doubt whatever that the limiting factor in the feeding of livestock in the colony is shortage of protein. This fact can be seen all the way through the report wherever peasants are mentioned. The grass they feed is protein deficient, and if concentrates are fed, they are not in large enough quantities to make up for this deficiency.

The definition of the word "concentrate", is feeds that are low in fibre and high in total digestible nutrients. Attention should be called to the fact that concentrates may be either low in protein or rich in protein. This is often misunderstood and the term used only for protein rich feeds of concentrated nature. This the writer believes is an illusion that many of the peasants in Trinidad are under. They grow maize, they can buy it as a concentrate and hence think that if they can grow their own and feed it, they have a concentrate, which in their minds gives the same results as high protein food. In actual fact it has a ratio of protein to starch of just under $1:10$, whereas the ration they ought to feed for production is $1:4\frac{1}{2}$.

The large farmers, people keeping any class of livestock in large numbers, and about half the medium farmers feed their stock scientifically. Of the remainder, some have rudimentary ideas how to feed, others have none at all.

It must be borne in mind that $1/3$ of the livestock concentrates are imported, but this $1/3$ is responsible for half the P.E. (Protein Equivalent) of all concentrates consumed. One-fifth to one-quarter of the total livestock are fed reasonably, i.e. fed for production; the rest live entirely on grass and produce grown by the peasant.

The grass used by the peasant is usually cut from the roadside, wasteland or rice lands; only a very few peasants have any land on which grass is grown specially for feeding. The grass from the roadside and wasteland is very low in protein and fibrous content, because it is usually cut when very mature. Only the large farmers and some of the medium farmers grow cultivated /grasses-
grasses for their livestock. It is therefore essential that concentrates should be fed for both maintenance and production.

The scope of this report covers all the various classes and kinds of livestock, kept by whom, purpose of keeping such stock, methods of feeding and management. The local and imported concentrates, their nutritional value and use, and the compounding of rations from local concentrates for each class of livestock, and the economics of concentrate feeding has also been dealt with.

were brought over by the Spaniards and Portuguese from their African colonies may have had African blood. The inability of European breeds (like Taurus) to stand up to local climatic conditions, their susceptibility to disease, poor fertility, the absence of natural pasture land, and the poor quality of the grasses led to rapid degeneration and so to un thriftiness.

Zebu of different breeds were imported from India, and crossed-bred with European stock was started at the Government Stock Farm. The European breeds which have been tried locally, and - Jerseys, Daawgs or, and Fell, Devon, Ayrshire, Shorthorn and Holsteins (1) [Shanees].

The Crossbreeds so produced are now the common cattle of the Island and it is quite impossible to state what percentage of European or Zebu blood the majority of the cattle in the Island have in them. Since 1953 the Government policy has been to use only Holstein cattle for the crossing, as the visible signs of European blood in the cattle are Holstein.

The Dairy Stock are kept by:

1. Peasants.

2. Small Farmers.

3. Large Dairies.

Peasants keep the majority of the dairy stock in the Island. There are very few small dairy farmers and the number of large dairies is even smaller. Satarino (Carini Limited), the, Madeleine, Union, and the Government Stock Farm, all three of which have been visited by the writer, and on which certain Peasants will follow.