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SESSION I:5

RABBIT PRODUCTION IN ZAMBIA

by

J.P. LUNGU

Department of Agriculture P.O. Box RW 291 Lusaka Zambia

#### SUMMARY

Very little can be said about commercial rabbit farming in Zambia. No scientific research or experimental work has yet been carried out. The little that is known about rabbits is as a result of work done elsewhere. In the University and Research Institutes, rabbits have only been used for experimental purposes in other fields of biological research.

There is need therefore for research to be carried out in housing, health, feeding and breeding under Zambian conditions. Also, the extension workers still have to be taught the fundamentals of rabbit husbandry and intensify the campaign among the masses to popularize rabbit meat consumption.

#### SCOPE

Although the introduction of large commercial rabbit farming has been slow, there is every indication that rabbit meat production will at one time be part of the major livestock industry. Over the years, poultry broiler industry has expanded well above all other livestock, mainly because (according to Urwick, Lugg and Could, 1971) of the general shortfalls of other meat products, and the relative price advantage poultry meat has in relation to the alternative meats. The retail prices of pre-packed meat in large supper-market, Lusaka, were as follows: Beef depending on the cut, went from 35 ngwee per pound for mince to 65 ngwee per pound for rump-steak; mutton and lamb from between 45 to 65 ngwee per pounds; chickens were 35 ngwee per pound for boilers and 39 ngwee per pound for broilers (young chickens).

The present prices in supermarkets (Kwachas) are: beef steak K3.00 per kilogram, chickens K2.00 per kilogram, rabbits K5.00 per kilogram. The relative market demand for each type of meat seems to be reflected in the levels of these prices. All retail meat prices are controlled. No attempt has been made in working out the economics of producing rabbits but the picture looks attractive at the moment.

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The rapid growth of the broiler industry in comparison with other livestock can also be said to be due to other reasons like:

- a) The short length of the production cycle which is only about one tenth of the period required for beef production;
- b) The availability of expertise in breeding, housing and health;
- c) The big emphasis placed on poultry by the Government at the time of independence in 1964, which was necessitated by the increasing demand for animal protein following the gradual rising of living standards. This, together with the lack of well organized and reliable source of rabbit breeding stock and the apparent unpopularity of rabbit meat among some Zambians, has resulted in rabbit farming taking a back seat.

Fortunately, the climatic conditions in Zambia seem to answer some of the requirements of rabbit breeding. Although Zambia is situated in the tropics, the climatic conditions are favourably affected by the great Central African Plateau. As described by Webster and Wilson (1966), we have three distinct seasons:

- a) The wet season from December to April with minimum and maximum mean temperature ranging from 16°C to 27°C and the relative humidity not exceeding 80%;
- b) The cool dry season from May to August with wide temperature range of up to 20°C with the minimum and maximum daily means being between 6°C to 26°C;
- c) The hot season from September to November with the daily mean temperature ranging from 15°C to 32°C with relative humidity just above 40%.

We know that breeding rabbits for instance (according to J.I. Portmouth), do well in temperature ranging from 10° to 16°C and fattening stock at 15.6-18.2°C with humidity in the range of 75%.

Under our conditions therefore, the first attempt with rabbits was in about 1965 with the introduction of a nucleus breeding stock of Californian rabbits (N.L. Davies 1967). There was a growing interest for rabbits, especially among schools and other farming clubs and even among individual farmers who kept them along side poultry and pigs. However, due to lack of breeding stock this interest died down. Today there are quite a few farmers using imported breeding stock having units which are capable of producing 1 000 meat rabbits per year. A majority of the people keep them as a hobby or for educational purposes. Management in many of these units leaves a lot to be desired.

### FIELD PRACTICE

# Housing

Housing for rabbits in Zambia in most cases is simple. A majority of building materials consist of local bush poles and burnt or unburnt bricks for the construction of open sided shelters which house hutches. Roofing materials can either be of grass thatch or iron roofing sheets. The use of wire cages has been practised in some larger units. Temperature regulation in these houses is done by either leaving the sides of the sheds completely open during warmer months or closed with hessian sacks at night and during cold months. Hutches may be constructed with bush timber and wire mesh used in chicken houses.

## Feeding

Being bulk feeders, rabbits fit in the present situation very well as it is almost impossible to always find concentrated balanced food. Where they have been kept in small numbers as a hobby or for home consumption rabbits have been raised successfully on scrap foods such as the waste products from the kitchen and garden. A wide variety of this type of food has been given; for example, scraps of bread, fruit peelings, carrots, groundnuts, green lettuce, soft banana leaves, etc. Those who have tried rabbits on commercial scale have in addition made arrangements with the National Milling Companies to have rabbit pellets compounded for them. A wide range of feeding equipment too is used, such as clay pots and empty oil tins which have been cut in half and adapted for the purpose.

### Diseases

It is difficult to say which diseases have caused mortality without veterinary research on the subject. A pathologist (Dr. L. Benko) at the Veterinary Research Station in his review of the rabbit diseases published in the local farming magazine in 1977, gave an impression that quite a number of diseases had been diagnosed in Zambian rabbits. These included pasteurellosis, salmonellosis and coccidiosis.

### FUTURE PROSPECTS

The advantages of rabbit keeping in villages are obvious. Being less dependent upon concentrated feeds than poultry, rabbits would provide quicker and cheaper means of increasing the supply of the much needed animal protein in human nutrition. In peri-urban areas, rabbits would provide a quick turnover than any other farm animals because of its higher meat output in relation to its body size, weight and space requirements over an average lifespan of three years.