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ECONOMICS OF RABBIT PRODUCTION IN SOUTH - WESTERN NIGERIA.

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Target Audience: Rabbit farmers, researchers, policy makers.

ABSTRACT

This study was designed to understand the socio-economic circumstances of rabbit farmers, determine the profitability (or otherwise) of rabbit production, in Ondo State of Nigeria.

A sample of fifty rabbit farmers was randomly selected and interviewed using structured questionnaire. The primary data collected were subjected to descriptive statistics like frequency counts, percentages and gross margin analysis.

Majority (82%) of the respondents fell within the age bracket of 31-50 years. Sixty-two percent of respondents had 11-30 rabbits while seventy-four percent claimed to engage in rabbit production for both commercial and subsistence reasons.

From the study, the average gross margin per rabbit varied from N11.25 to N27.30 while the returns to owners capital varied between 17.84 %, and 43.36 %, across the local government areas.

Three major constraints limiting rabbit production in the study area include, low capital investment, perception of rabbits as pets rather than dietary protein source, and market resistance arising from there. There is the need for aggressive campaign by government agencies to promote the production and consumption of rabbits.

Keywords: Rabbits, profitability, peasant farming, dietary protein, credit.

DESCRIPTION OF PROBLEM

Livestock production is a socio-economic activity that could lead to improved income and quality of rural life. Protein from livestock is needed for physical and intellectual development as well as for developing immunity against diseases (1).

Government and private efforts have been directed at the production of various classes of livestock in Nigeria like cattle, poultry, sheep, goats, etc. Very little attention has been paid to rabbit production. Efforts should be directed to animals that are prolific with short generation interval to meet the protein intake of more people (2). One of such species of animals is rabbit.

About 82 % of the world's production of rabbit meat takes place in the developed nations. This implies that 18 % of total rabbit meat production occures in developing countries where critical national meat shortages exists (3). Therefore, a discrepancy is apparent between world distribution of rabbits and those countries needing inexpensively produced rabbit meat.

In Nigeria, for the past decades, meat production has been lagging behind the ever increasing demand of the rapidly growing population. Between 1981-1983 for instance, human ratio to goat and sheep population was 1:0.34 (4). The problem has persisted due to the fact that 85 % of the country's meat supply comes from the fulani cattle rearers whose nomadic system does not encourage rapid production. The high cost of investment, high risk also affect sheep and goat production.

Pork could probably have held better prospects but the religious discrimination against it is a limiting factor. While, high cost of feed and poultry equipment has drastically affected poultry production meat especially with Structural Adjustment Program in the country. In view of these factors there is the need to consider another alternative to meet the 51.07g per day protein requirement by man.

Rabbit production with its high prolific rate, early maturity, rapid growth rate, high genetic selection potential, efficient feed and land space utilization and lack of restricted taboos and beliefs against its production fits into Nigeria's need for accelerated meat production program. Hence, the need to study the economics of rabbit production in South Western, Nigeria.

Methodology

The study was carried out in five local government areas of Ondo and Ekiti States in South Western Nigeria, namely, Ado Ekiti, Akure South, Ondo, Owo and Akoko North East. The local governments were randomly selected and fifty farmers who had their farm sizes ranging from 18 to 200 rabbits were drawn from the population.

Structured questionnaire to obtain information on the socio-economic characteristics of the farmers and those related to production was prepared. The questionnaire was administered using interview technique on fifty farmers. The questionnaire was earlier pretested on farmers at Ikole local government area of Ekiti State.

Analytical Techniques

The data collected was analysed using descriptive statistics which included frequency counts, percentages and bar chart for the socio-economic characteristics of farmers. The gross margin analysis was used to estimate the profitability of rabbit production.

RESULTS AND DISCUSSION

From the study, 82 % of the respondents fell within the ages of 31-50 years: this could be attributed to urban - rural migration of the youth. The implication

of this is that there is the possibility of decline in production due to old age of the farmers.

About 72% of the respondents had a family size of 1-6 while 28% had between 7-12 family size. This implies that majority of farmers had small family sizes and that availability of labour was not a limiting factor to rabbit production in the area.

A total of 1,560 rabbits were produced in the study area. The smallest farm had a farm size of 11 rabbits, while the average farm size in the area was 25, this is shown in Table 1.

Table 1: Distribution of farm size of rabbit farmers in the area of study.

| Farm size (no of rabbits) | Frequency | Cumulative Frequency | Percentage | |
|------------------------------|-----------|-------------------------|------------|--|
| 11-20 | 13 | 13 | 26 | |
| 21-30 | 18 | 31 | 36 | |
| 31-40 | 3 | 34 | 6 | |
| 41-50 | 8 .42 | | 16 | |
| >50 | 8 | 50 | 16 | |
| Total (| 50 | | 100 | |

Source: Computed from survey Data

From the Table 1 above, 26 % of the farmers had between 11-20 rabbit, 36 % had 21-30 rabbits, 6 % had between 31-40 rabbits and 32 % had above 40 rabbits. The reason why some of the farmers had small farm size could be attributed to financial constraints and lack of experience in rabbit production. This is because during the study only 16 % of the respondents claimed that they had been in rabbit production for 3 years and above.

On the production objective, it was discovered from the study that 18 % of the farmers produced rabbit for subsistence purposes, 5 % for commercial purposes, 4 % by government regulations and 74 % for both commercial and subsistence reasons.

This shows that many people are not yet involved in rabbit production for commercial purposes because market for rabbit is limited. Apart from this, there are some other limitations such as capital, feeds, drugs and labour as shown in Table 2.

From Table 2; 70 % of the respondents were constrained mostly by financial problem, 20 % had feed as a major problem, 6 % had labour as limiting factor and 4 % had drugs as a problem to the expansion of their production. All the farmers claimed to have problems with disease attack on their rabbits. The implication is that most of the farmers could not meet the financial

Table 2: Problem of rabbit production by the respondents

| Farm size (No. rabbits) | Frequency | Cumulative | Percenta ge | |
|----------------------------|-----------|------------|--------------------|--|
| Capital | 35 | 35 | 70 | |
| Feeds | 10 | 45 | 20 | |
| Drugs | 2 | 47 | 4 | |
| Labour | 3 | 50 | 6 | |
| Total | 50 | | 100 | |

Source: Computed from survey data.

requirements for rabbit production, most especially the construction of cages for rabbits and procurement of inputs that are required for production.

Majority of the farmers did not have problems with feed because supplementary sources were available. This was through the use of nutritious leaves of some plants such as *Aspilia africana* which is cheap and was readily available to supplement the compounded ration. With a conducive environment and proper sanitation measures the problem of outbreak of diseases could be reduced, thus limiting the use of drugs on the farm.

The above enumerated problems have to some extent affected returns per rabbit to owners capital which is shown in Table 3.

Table 3: Estimated costs and returns per rabbit in sampled local government areas of Ondo and Ekiti States, Nigeria (N)

| Item | Ado-Ekiti | Akoko North East | Akure | Ondo | Owo |
|------------------------------|----------------|---------------------|----------------|----------------|----------------|
| AVC | 57.09 | 53.75 | 57.75 | 57.70 | 56.67 |
| AFC | 1.44 | 1.41 | 1.50 | 1.59 | 1.48 |
| ATC | 58.53 | 55.16 | 59.25 | 59.29 | 58.15 |
| ATR | 75.0 | 65.0 | 0.08 | 85.0 | 70.0 |
| Gross Margin | 17.91 | 11.25 | 22.25 | 27.30 | 13.13 |
| (ATR-ATC) ATR-ATC ×100 ATC | 16.47 28.14 | 9.84 17.84 | 20.75 35.02 | 25.71 43.36 | 11.85 20.38 |

The estimated figures in Table 3 indicated that Average Total Revenue (ATR) from the sales of rabbit ranged from N65.00 to N85.00 per rabbit in the area of study. Also, the average gross margin ranged from N11.25 to N27.30 per rabbit.

The returns to the farm owners capital was between 17.84 % to 43.3 % per rabbit in the sampled areas.

CONCLUSIONS AND APPLICATIONS

The study has made attempt to explore the socio-economic characteristics of rabbit farmer in South Western Nigeria, estimated the profitability level of their production and examined the constraints to rabbit production.

The favourable attitude shown by the consumers towards rabbit meat as a source or dietary protein (as there are lack of taboos and beliefs against its production), shows the high potential of rabbit as a means of boosting protein consumption.

From the study, there was low returns to owners capital which was between 17.84 % - 43.36 %. This could be attributed to small farm sizes of rabbit product and inadequate utilization of rabbit by-products. The farmers should be encouraged to increase their farm sizes while efforts should be made to sell the rabbit by-products to increase their farm income.

It was also observed that rabbit is being perceived as pets rather than food producing animals and there is limited marketing opportunities for rabbit in the area of study. There is therefore, the need for public awareness of the advantages of rabbit meat to encourage the producers.

In the study, seventy percent of the farmers had capital as a limiting factor to their production. The various tiers of government in the country and non-governmental organisations should provide financial aid and input to the rabbit farmers to enhance their rabbitry production.

REFERENCES

- Atinmo, O. and Akinyele, O. 1983. Nutrition and food policy in Nigeria published by National Institute for Policy and Strategic Studies, Kuru, Jos. pp 3-10.
- 2 Clubanjo, F.O. 1970. Production of Meat form Ruminant Animal. Nigeria Journal for Animal Production Vol 3(1).
- 3 Lebas F., Coudert P., Rouvier R. and De Rochambeau H. 1984 The Rabbit: Husbandry, Health and Production Rome FAO.
- 4 United Nations Food and Agricultural Organization FAO. 1983. Year Book Animal Production and Health. Published by FAO. Rome, Italy p 62.