



## RABBIT PRODUCTION: A VIABLE INSTRUMENT IN PROMOTING MEAT SECURITY IN EBONYI STATE

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### ABSTRACT

Farmers in Nigeria produce over 5% of the meat consumed by our teeming population. The demand for more meat to meet the ever increasing Nigerian population posed a serious challenge to livestock producers. The paper investigated the production of rabbit as ways of promoting meat availability and affordability. The area of study is Ebonyi state of Nigeria. The design of the study was survey design. The population for the study was 203; farmers sample for the study was 156, rabbit farmers in the state. The researcher developed an instrument called rabbit production for meat promotion questionnaire. (RPMQ). It was face validated by three experts. One in measurement and evaluation in the department of science education two in Agric Education Department of Technology And Vocational Education of the same faculty and university. Cronbach Alpha reliability coefficient was used to test the internal consistent which yielded 0.78. That was good enough for the study. The instrument was administered on the farmers; data collected was answered using mean score and standard deviation. The result revealed that common feed materials are used in rabbit production, for more meat within each household. That different houses and breeds are available for farmers to use in their environment to produce more meat. It was recommended that government should provide improved stock to farmers as ways of encouraging them.

**KEY WORDS:** *Rabbit, Viable, Instrument, Meat, Security, Farmers, Ration.*

### INTRODUCTION

Rabbit is small burrowing mammal of the hare family with long ear, short tails and long hind legs. Their foods are roughages, homegrown vegetable, cereal grains, concentrate made into pellets, grasses among others. Nweke (2006). In the same vein Nwankwo, (2008) stress that rabbit is efficient animal for converting kitchen waste and nonconventional feed stuff into meat. He maintains that rabbit adapt to simple environment, in hutches, that all the breeds of rabbit are prolific breeders. Ezeilo (2008) maintain that rabbit is a good source of white meat, with low fat, and cholesterol, with useful wool (fur), skin, manure. In the same vein Odo, (2009) is of the view that for, an item to be viable, means to be a sellable item, important, and workable item. Sellable item, important, and workable item. Adeyemi (2005) see viable as able to exist, capable of developing and surviving without outside help he maintain that viable instrument is an aspect of tools capable of promoting and surviving meat availability. While instrument was explained as tools, materials, for doing work. Therefore, viable instrument in this contest is workable tools to be used in raising meat from rabbit for human consumption, in the view of Ogba, (2008), to promote is to elevate, is to give higher position or rank, therefore, rabbit production is a working tools for raising more meat, and ensuring. Its availability and affordability, to generate protein opportunity to our citizenry. Since, rabbit production, is a viable instrument in promoting meat availability, to meet the protein requirement of our teeming population in Ebonyi State and Nigeria in general. Ogba (2008) explained meat security as the availability of meat and ones access to it. It is a

condition in which people do not lack basic meat intake to provide them with the emerging and nutrients for fully productive lives. In the same vein, Okafor, (2009) stress that, meat security is the state of having sufficient quantity and quality of meat to eat on continued basis, which may apply to individual, families, or nation, as in personal or national meat security. That a household is considered meat secure when its occupants do not live in hunger or starvation of meat.

Food and Agricultural organization F.A.O (2005) explained the three pillars of meat security as:

**Meat Availability:** Sufficient quantity of meat that is available on constituent basis.

**Meat Access:** Having sufficient resources to obtain the appropriate meat nutrients as diet.

**Meat Use:** That is the appropriate use of meat that is based on knowledge of basic nutrition and care.

However, the production of rabbit has become a very important venture, that need to involve, more farmers, in the business, this is to use rabbit production, to generate more money for the farmers and supply the protein requirement of our citizenry.

### Statement of the problem

Rabbit production has become so popular and prolific for fast money making from its meat. The animal has the ability to convert kitchen waste into high meat production, the skin is used in making carpet or rugs, jackets, and head gears, and it is used in making decorative or households. Besides, the rabbit manure contains high nitrogen and phosphorous, which is used to improve soil fertility for vegetable garden within the farmer's environment; rabbit

is known as worldwide for research purpose: as a laboratory animals many institution require the animal. Therefore, it calls for research investigation to determine how best to use rabbit production in promoting meat security in Ebonyi State. This is to meet the demand for protein intake for human development. The skin is used in domestic industries and give employment to the unemployed, develop more research centers reduce poverty among others.

#### The Purpose of the Study

The purpose of the study is to identify how best to use rabbit production in promoting meat security in Ebonyi State.

#### Specifically, the study tends to:

1. Determine the available feed materials for farmers to use in feeding their rabbits?
2. Determine the available house for farmers to keep their rabbits.
3. Determine the available breeds for farmers to use as their initial stock.

#### Research Question

1. What are the available feed materials for farmers to use in feeding their rabbits?
2. What are the available houses for farmers to keep their rabbits?
3. What are the available breeds for farmers to use as their initial stock?

#### METHODOLOGY

The area of the study is Ebonyi State of Nigeria. The state is located at South-East Geo-political zone of the country. The design of the study is survey research design. The population for the study is 203 rabbit farmers in the state. 150, rabbit farmers was randomly selected as sample of the study. The instrument for data collection was structured questionnaire developed by the researcher. The instrument was face validated by three experts' one in measurement and evaluation, in the Department of Science Education and the two in the agric. Education in Department of Technology and Vocational Education in the same faculty and University. Their correction was properly effected. The internal consistency of the instrument was tested using crownback Alpha reliability coefficient. Which yielded 0.78 that were good enough for the study? Two research assistant helped the researcher in administration of the instrument to rabbit farmers in the State. One hundred and fifty was completed and returned. The data collected was analyzed using means score and standard deviation. The result showed that the best way to improve rabbit production is to enhance the quality of farmer's initial stock by using improved breeds, and crossed breeds. That farmers need to supplement the kitchen waste and roughage with growers mash. While different materials should be used for making hutches, for rabbits. It was recommended that government should introduce better and improved breeds to the farmers and supply some feeds at the initial stage for encouragement to the farmers.

**Research Question I:** What are the available feeding materials for farmer to use in feeding their rabbits.

#### Table Title: Available food materials

**Table I:** indicate general acceptance of all the item statements as feed materials used by rabbit farmers. In feeding their rabbit. The items dealt on different rations which are, common within every household; the feed stuff is roughages, carrot, grains, forages, grasses, beans husk, kitchen scraps among others, which is cheap and affordable.

| S/N | Item Statement                                      | Options |      | Remark   |
|-----|---|---------|------|----------|
|     |   | X       | SD   |          |
| 1   | Rabbit ration is made of roughages.                 | 2.78    | 0.21 | Accepted |
| 2   | Rabbit ration is made of carrot.                    | 2.65    | 0.26 | Accepted |
| 3   | Rabbit ration is made of cereal grains              | 2.70    | 0.22 | Accepted |
| 4   | Rabbit ration is made of concentrate into pellets,  | 2.83    | 0.21 | Accepted |
| 5   | Rabbit ration is made of forage crops               | 2.60    | 0.24 | Accepted |
| 6   | Rabbit ration is made of grasses.                   | 2.73    | 0.21 | Accepted |
| 7   | Rabbit ration is made of kitchen scraps             | 2.80    | 0.20 | Accepted |
| 8   | Rabbit ration is made of left over                  | 2.72    | 0.21 | Accepted |
| 9   | Rabbit ration is made of beans.                     | 2.65    | 0.22 | Accepted |
| 10  | Rabbit ration is made of clean water in the trough. | 2.81    | 0.20 | Accepted |

**Research Questions II:** What are the available houses for farmers to keep their rabbits?

**Table Title:** (Available Houses for rabbit)

**Table II:** Sort information on the type of houses. Which rabbit farmers keep their rabbits, their nature and measurement. For household rabbit farming.

| S/n | Item Statement   | Options |       |
|-----|--|---------|-------|
|     |  | X       | SD    |
| 1   | Open house with wire mesh are available                          | 2.61    | 0.25  |
| 2   | Rabbit are kept in chicken houses with wooden cages.             | 2.72    | 0.22  |
| 3   | Traditional hutches are used in rabbits                          | 2.81    | 0.21  |
| 4   | Rabbit are kept in individual cages,                             | 2.93    | 0.20  |
| 5   | Rabbit are kept with their mothers pen.                          | 2.83    | 0.22  |
| 6   | Rabbit are reared in colonies                                    | 2.64    | 0.025 |
| 7   | Hutches of 60 x 120cm for big breeds                             | 2.56    | 0.027 |
| 8   | Hutches of 60 x 120cm for big breeds                             | 2.66    | 0.23  |
| 9   | Hutches of floor spaces 2.6 meters for doe till 82kws            | 2.73    | 0.24  |
| 10  | Hutches, constructed about 50cm above the grounds.               | 2.81    | 0.22  |
| 11  | Hutches, constructed of single, double and three tiers unit.     | 2.77    | 0.23  |
| 12  | Rabbit nest box of 30cm high x 45 x 30cm wide with movable lids. | 2.80    | 0.22  |

**Research Question III:** What are the available breeds for farmers to use as their initial stock.

**Table Title:** (Available breeds for initial stock).

**Table III:** Dealt with available breeds used by rabbit farmers as their initial stock. The table indicate that all the item statement were generally accepted as breeds which farmers can obtain when one want to farm on rabbit.

| S/N | Item Statement                                  | Options |      |          |
|-----|---|---------|------|----------|
|     |   | X       | SD   | Remark   |
| 1   | Local breed                                     | 2.93    | 0.22 | Accepted |
| 2   | Crossed breed.                                  | 2.81    | 0.21 | Accepted |
| 3   | Imported breed like chinchilla, (French rabbit) | 2.74    | 0.22 | Accepted |
| 4   | Newzealand breed red.                           | 2.71    | 0.23 | Accepted |
| 5   | Newzealand breed white                          | 2.73    | 0.22 | Accepted |
| 6   | Flemish Giant                                   | 2.74    | 0.22 | Accepted |
| 7   | Californian white breed                         | 2.81    | 0.21 | Accepted |
| 8   | Belgian hare breed                              | 2.83    | 0.22 | Accepted |
| 9   | Angora breed (German)                           | 2.78    | 0.23 | Accepted |
| 10  | Angora breed (Russian)                          | 2.65    | 0.25 | Accepted |
| 11  | Angora breed (British)                          | 2.81    | 0.21 | Accepted |
| 12  | Angora breed (Russian)                          | 2.72    | 0.23 | Accepted |
| 13  | The lop breed.                                  | 2.81    | 0.21 | Accepted |
| 14  | The Butch breed                                 | 2.61    | 0.26 | Accepted |
| 15  | The beveren breed                               | 2.58    | 0.27 | Accepted |

### Major Findings

1. That rabbit rations are common and within the reach of each house hold, since, most of the ration are vegetable, fruits leftover grains, beans husk, among others which are cheap and affordable.
2. Those different types of houses are used in keeping rabbits with different measurement. Which indicate that rabbit can stay in any structure and perform efficiently in meat production?
3. Those different breeds are available for farmers to use as their initial stock. Which indicate that farmers can contact different livestock centres for Rabbit supplies?

### DISCUSSION

**Table I:** Indicates that rabbit rations are many and affordable. That kitchen scraps grasses, vegetable, fruit leftovers, bean husk, among others are used to feed rabbit. Which each household can produce within their environment. This indicates that since, its ration are common keeping rabbit at backyard will provide meat and help the farmers to make more money. This study is in line with study of Ayodele (2006) which revealed that farmers can use their farm left over to keep rabbit and produce

meat for his household and others. This is practicable for study, since most of their rations are obtained within the farmer's family.

**Table II:** Indicates that different types of houses are used in keeping rabbit, with different measurement. This indicates that rabbit can stay in different structure and survive, produce the desired meat, fur, skin, manure pet, and research purpose. This study is in line with study of Nwite (2007) which revealed that rabbit survive in any houses and yet give in return effective and efficient meat production required by the farmers. This implies that rabbit requires cheap and affordable houses for raising them within the backyard in order to supply the needed meat protein.

**Table III:** Indicate that different breeds are available for farmers to use as their initial stock. This indicates that sources of breeds can be obtained from different sources. This study is in line with study of Abdulhaim (2008) which revealed that different types of rabbit can be located in different research centres, farmers, Agricultural development centres among others. He stressed that

farmers should request for better breeds of rabbit from farmers or scientific centres.

#### RECOMMENDATIONS

The following were recommended

1. Rural farmers need improved rabbit as their initial stock.
2. Farmers need to give extra or supplement feed to their rabbit different from kitchen scraps and grasses, like growers mash in pellet form.
3. Farmers need to provide good hutches for rabbit to enable them produce more meat, fur, skin manure, and for scientific research.
4. Clean and good environment with principles of management are required by rabbit farmers.

#### CONCLUSION

Most of the meat produced in Nigeria comes from the rural farmer's livestock. The demand for more meat in Nigeria daily is a continuous exercise. The only ways to meet the meat demand is to educate the rural farmers within the new technological skills for different animal domestication within their backyard. Which rabbit is one of them? The critical reviews about the feed materials available, types of houses available to keep rabbit and the available breeds of rabbit, and principles management, has proved the assurance of using rabbit to promote meat availability and affordability. The need for more meat production should provoke our youth to face this threatening condition in human race by supporting rural farmers.

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