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Economics Efficiency of Rabbit (*Oryctolagus Cuniculus*)Production in Anambra State, Nigeria (A Stochastic Frontier Profit Function Approach)

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Abstract— *The study estimated the economic efficiency of rabbit production in Anambra State of Nigeria employing a stochastic Profit Function Approach. The study was based on primary data obtained from sixty randomly selected rabbit farmers in Anambra State. Stochastic Cobb - Douglas profit function and descriptive statistics technique were used to analyse economic efficiency level and the constraints in rabbit production respectively. The results analysis of the data revealed that wage rate, price of feed/feed supplement, flock size and price of drug and medications were the determinants of the profit level of the enterprise. More so, level of education, farming experience, membership of cooperative and access to credit were the major determinant factors to economic efficiency of rabbit enterprise. The major factors that limited rabbit production in the study area were poor access to credit, poor extension contact, feeding problem, high mortality rate, pests and diseases problems. There is the need to increase farmers access to credits, encouraging youth and experienced farmers to remain in rabbit production through provision of improved inputs at subsidized prices, encouragement of adult education, workshops and semina,r and motivation of the extension agents in order to be efficient in their duties.*

Keywords— Economic efficiency, Stochastic Frontier, Rabbit production, Anambra State, Nigeria.

I. INTRODUCTION

The import of food security in the socio-economic stability of any nation as it helps to sustain household energy, health and to meet nutritional requirements is well acknowledged (Egwu, *et al* 2010, Ume, 2010). Food security is a widely debated development issue and yet remains a global challenge, as food insecurity becomes acute especially among vulnerable groups (marginal population, dependent population and victims of conflict) of the world (Unammah, 2003; Ojo, 2006). In addition, insecure foods, low animal protein intake has remained a major nutritional problem, especially for the low income and non-wage earners which has predisposed them at various ages to varied protein deficiency diseases. At present, for instance, the average protein consumption per day particularly animal protein in most developing countries stood at 17g, which is below the Food Agricultural Organisation (FAO) recommendation of 20g for developing countries (Amaefulue *et al*, 2010).

Abating this impasse, governments in most developing nations in Sub Saharan African at various times instituted livestock programmes aimed at addressing this plague. For instance, successive governments in Nigeria have instituted micro credit scheme for livestock and establishment of livestock parent stock at community levels to ensure mass production of livestock to alleviate the dearth (Agwu and Duru, 2010). Studies show that the most viable option to bridge the protein malnutrition between the resource-poor world people and the resource-rich citizens is the utilization of short gestation unconventional livestock, especially monogastric animals(Rabbits, Pigs and Poultry), of which rabbit is the most favoured (Akintola, (2009). The preference could be allied to intrinsic qualities of the animal which include: short gestation period, ease of management and, its highly prolific ability. Its practice of caecotrophy enhances its performance, relatively low cost of production compare to other monogastrics, high rate of reproduction, early maturity, small body sized, rapid growth rate comparable to that of broiler chicken (Amata, and Bratt, 2008; Ironkwe, 2009), high genetic selection potential, efficient feed and land space utilization. Other qualities include ability to thrive on green forage, food wastes and agricultural by-products, potential income generation and limited competition with humans for similar food (Ensminger**,** 1991 and Egbo, 2001). Rabbit meat has high nutritional value with high protein (56%), low fat (9%), low in cholesterol, sodium and calories (8%) and contain 28%

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phosphorus, 13% iron, 16% zinc, 14% riboflavin, 6% thiamin, 35% B12 and 48% niacin – making it ideal meat for hypertensive patients. Also, rabbitary requires comparatively low level of capital set - up; requires a little space and is well-adapted to domestic rearing (Akintola, 2009). Moreso, the skin is used in making carpet or rugs, jackets, and head gears. Besides, the rabbit manure contains high nitrogen and phosphorous, which is used to improve soil fertility for vegetable garden within the farmer's environment (Ezea, 2004)

Despite the potentials of this animal, studies show that in most developing countries, rabbit production is largely traditional, non-commercially oriented, family consumption targeted, and smallholder type operation comprising 2-7 does and 3 bucks with Nigeria and Ghana as cases in point (Ekpeyong and Biobaku, 1986). bHowever, the farmers are generally confronted with problems of high cost of concentrates, relatively smaller weight gain during the dry season, non-readily available market when the farmers are ready to sell their stock and inadequate knowledge and information about the advantages of eating rabbit meat (Ironkwe, 2004). The above scenario significantly dwarfed the production and productivity of this animal by the farmers compared to what is typical in temperate region.

The dwindling in rabbit production could be credited to poor resource use by the farming population. The efficiency of resource use according to Ewuziem *et al* (2010) is a very important factor of productivity growth, especially in developing countries where the resources are meagre and opportunities for developing better technologies have started dwindling. Resource use efficiency and productivity are influenced by variety of factors, including level of capital utilization, type of technology, the commitment of the labour force and level of skill acquisition both material and technical (Egwu *et al*, 2010).

However, to enhance rabbit production and productivity requires that resources should be efficiently used with attention paid on profit maximization at minimum cost (Kolawole, 2009). Considerable researches have been done on examining the technical and allocative efficiencies of rabbit farmers in Nigeria (Ume, 2010), but there is paucity of data in measuring profit efficiency of the farmers even when the prices of inputs and output are known in an attempt to estimate allocative efficiency. The physical productivity consideration (technical efficiency) is important for improvement in production efficiency but profit efficiency will lead to greater benefits to livestock producers in the country (Effiong, 2005). Research is needed therefore, to determine if traditional rabbit production as practiced in Anambra State is efficient in resource conservation in order to attain profit maximization, as information relating to this seems to be lacking. Specifically, the objectives of the study were to: describe the farmers' socioeconomic characteristics, analyse farmer's economic efficiency and the determinants and identify the constraints to rabbit production

Theoretical Framework of Stochastic Profit Function

There are numerous empirical researches on economic efficiency of farmers both in developed and developing countries but more in developed countries (Coelli, 1993). Such works using Cobb-Douglas stochastic profit function include: Effiong and Idiong, 2008). They reported that the efficiency of rabbit production among Akwa Ibom farmers are significantly related to their household size, age and educational status of farmers. Kumbhahaker *et al* (2001) emphasized that educational level of cereal farmers in Ethiopia positively influenced their level of efficiency, technically and economically.

More so, Wang *et al* (1996) stipulated that household educational level, farm size, and per capita income were positively related to production efficiency but off farms employment are negatively related to efficiency in Chinese agriculture. Baltese and Coelli (1995) expressed stochastic frontier profit function model as $\pi = f(P_L, ZK) \exp (V, U)$

Where ;

π is the normalized profit of the j^{th} farm defined as gross margin revenue less variable cost divided by the farm specific output price.

F(f) represents an appropriate function (e.g. Cobb-Douglas, trans-log etc)

Pij is the price in the I^{th} variable input faced by the j^{th} farms divided by the price of the output.

Zkj is the level of the K^{th} fixed factors of the j^{th} farm.

Vj is a random variable which is assumed to be N (O, G) i.e. half normal distribution.

If UJ = O, the farm lies on the profit frontier obtaining maximum profit given the prices it faces and level of fixed factors.

If U > O, the farm is insufficient and loses profit because of inefficiency.

Profit function relates maximum profits to the prices of products and inputs so as to other exogenous variables such as fixed inputs or agro climatic and social variables.

Profit function unlike the production approach combines both technical and allocative concepts in a profit relationship and any errors in production decision are

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translated into lower revenue for the producer, hence lower profit efficiency (Ali, 1994).

Profit function had advantage of avoiding the simultaneous bias that occurs in the estimation of production function (Rahman, 2003). Two profit functions can be distinguished, depending on wether or not market forces is taken into account, the standard profit function and the alternative profit function.

The standard profit function assumes are perfectly competitive. Given the input (w) and output price vectors (p), the firm maximizes profits by adjusting the amount of input and output. Thus, the profit function can be expressed implicitly as

$\pi = f(P,W,V,U)$ and in logarithm terms in $\pi + \theta = \ln F(P,W) + (V - U)$

Where θ is a constant added to the profit of each firm in order to attain positive values, enabling them to be treated logarithmically. Thus, alternative profit function is defined as

$\pi_a = \pi_a$ (Y, W, V, U) in which the quantity of output (Y) produce replaces the price of output (P) in the standard profit function.

Normalized profit function was developed by researchers from profit function with advantage of being handy for theoretical and econometrical viewpoint. This is because it reduces the number of explanatory variables by one and provides wider choice of the functional form. Normalized profit function is related to relative price not actual price of inputs and output as profit function uses (Effiong and Idiong, 2008).

The normalized profit function can be derived as follows:

Farm profit measured in terms of gross margin (GM) which equals to the differences between total revenue (TR) and total variable cost (TVC).

$$GM = \sum TR - TVC = \left(\sum PQ - Wx\right)$$

To normalize the profit function: gross margin (II) is divided on both sides of the equation by P, which is the market price of the output (rabbit).

$$\frac{\pi}{P} = \sum \frac{(PQ - Wx)}{P} = \frac{Q - Wx}{P} = f(X,Z) - \sum P_1 X_1$$

Where TR = Total revenue, TVC = Total variable cost, P = Price of output

X = quantity of optimized input used

Z = price of fixed inputs used

$P_1 = {}^{W}/_{P}$ = normalized price of input X_1

While F (X,Z) represents production function (Kolawole, 2009).

The economic inefficiency effects U_1 is defined as

$$U_1 = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8$$

Where x_1 = age of farmers in years; x_2 = years of rearing experience (in years); x_3 = household size (no.); x_4 = membership of organization(dummy); x_5 = access to credit (₦); x_6 = extension contacts (no. of visit); β_0 = coefficient; β_1- β_7= parameter estimates

Hypothesis

Ho: Rabbit farmers were not fully economically efficient in their productions.

II. MATERIALS AND METHODS

Anambra State was the study area and consists of 21 local government areas. It is bounded in the east by Enugu State, in the North by Kogi State, in the South and West by Kogi and Delta States respectively. Anambra State is located between longitude $6^0$36' $7^0$21'E of Greenwich Meridian and latitude $5^0$38' $6^0$47'N. The state has population of 4.182 million people (NPC, 2006) with land mass of 4415.54km^2. It has four agricultural zones; Aguata, Anambra, Awka and Onitsha. The state has 24 blocks and 120 circles. The state is agrarian with varieties of crops and animals being produced.

Structured questionnaire and structured interview were used to capture information of farmers' socioeconomic characteristics such as age, educational level, farm size, membership of cooperatives, prices of inputs and output. The secondary data was collected from journals, textbooks, proceedings and other periodicals.

Multi - staged random sampling procedure was used to select zones, blocks, circles and goat farmers. In stage I, three zones were randomly selected from four; Anambra, Aguata and Awka. In stage II, two blocks each were selected randomly from the zones, given 6 blocks. In stage II, two circles each were randomly selected from each block totaling 12 circles. Finally, 10 farmers were randomly selected from each circle. This brought to a total of 120 farmers for detailed study.

Percentage response was used to capture the rabbit farmers' socioeconomic characteristics and constraints to rabbit production. The normalized Cobb Douglas profit function model was used to analyse the economic efficiency and the determinants in rabbit farmers' production. This can be specified as follows:

$$\pi^* = \pi/p = Fi^*(x_1 z)$$

where;

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π = normalized profit of the enterprise; xi = vector of variable input prices;
z = vectors of fixed inputs prices.
The above equation can be written in Cobb Douglas form as stated below

$$\ln\pi\theta_0 = \ln A^* + \theta_1 \ln W + \theta_2 \ln Fe + \theta_3 \ln Dg + \theta_4 \ln FL +$$

θ^* = intercept or constant term
W = wage rate normalized by the price of rabbit per farmer
Fe = price of feed and feed supplement normalized by the price of rabbit
Dg = price of livestock feeder normalized by the price of goat per farmer
X_1 = capital inputs measures in Naira, including depreciation charges on equipment, implement transportation interest charges on loan
X_2 = farm size measured as total number of herd size housed during the production period per farmer.
$\theta_1{*}\theta_2{*}\theta_3{*}\theta_4$, $x_1x_2{*}A$ are the regression parameter to be estimated
V_1 = Normal random error which are assumed to be independently and identically distributed having $N(0\sigma^2)$.
U_1 = Non negative random variable associated with the economic efficiency of the enterprise. It accounts for inefficiency and also under the farmers' control.

III. RESULTS AND DISCUSSION

Results computed from the data analysis showed that the mean number of 400/head/flock of rabbit was recorded over sampled area with standard deviation of 6750.2. The result of variability as measured by standard deviation indicated that the majority of the rabbit farmers recorded average number of goats close to the average number recorded in the sample area. More so, an average of ₦3,200 per rabbit was recorded in the sample area as price of output. The summary result of variables for estimation of stochastic frontier model is presented in table I. The mean total number was 106,114, while the standard deviation was 98144.

Table 2 showed the maximum likelihood estimates of the profit function for rabbit farmers in Anambra State. The estimated coefficients of the parameters of the normalized profit function based on the assumption of competitive market are negative in line with the apriori expectation with exception of flock size that is positive. The coefficient of wage rate was significant at 1% and had inverse relationship with profit level of the enterprise. This implies that a unit increase in price of labour will cause a short fall in profit level of the enterprise by 18.5%.

The price of feed was negative and significant at 10% level of probability. This infers that 10% increased in feed price will tantamount to decrease in profit level of the rabbit enterprise by 4.9%. Studies infer that level of profit in animal enterprise is primarily determined by price of feed and this single factor contribute more than 45% of total cost of production (Effiong and Idiong, 2008). The coefficient of drugs and medication was negatively signed and significant at 5% probability level. This implies that increase in the cost of drugs and medication by 5% will dwarf the profit level of the goat enterprise by 0.216%. Effiong (2005) reported that high cost of drugs as well as adulterated are having adverse affects in animal industry, predominantly in most developing countries where drug regulatory and audit agencies are either nonexistence or less effective. The coefficient of flock size was positive, imply that flock size has direct relationship with farmers' level of profit.

The sigma square estimate was 4.20 and statistically significant at 1% probability level. This indicates a good fit and the correctness of the specified distributional assumption of the composite error term. The gamma estimate was 0.875, which implies that 87.5% of the total variation in farm profit was as a result of profit inefficiency.

Determinants of Economic Efficiency of Rabbit Enterprise

From the estimated results on efficiency factor in Table 3 shows that the coefficient of education attainment was positive and statistically significant at 1% probability level. This relationship between education and economic efficiency could be explained by the fact that education attainment is a desirable condition for agricultural development, since it augured well for extension services in transferring research results to farmers for sustainable food and animal productions (Nto *et al*, 2010). Effiong, (2005) and Effiong and Idiong, (2008) reported that the level of educational attainment by a farmer would not only increase his farm productivity but also enhanced his ability to understand and evaluate new production technologies. Furthermore, the estimated coefficient for membership of organisation was positive and statistically significant at 10%, implying that it has contributed positively to economic efficiency of the farmers in the study area. This assertion did not concur with Nwaru and Ekumankama, (2002), who revealed that farmers who belonged to different organizations hardly find time for farming hence affecting

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their technical and allocative efficiencies. Effiong (2005) emphasized that farmers that belong to cooperative organization have more access to training, credit, production inputs and agricultural information, which enhances their efficiencies. In contrary, Abdulail and Huffman, (1988) observed that level of education accomplishment reduces technical and economic efficiencies respectively. This could probably be explained by the fact that high level of education reduces the desire for farming. Therefore, the highly educated farmers probably devoted much of their time on salaried employment instead. Therefore, policies for ensuring education attainment amongst farm households through enhanced formal and informal educational programmes that would impact positively to farmers' efficiency and therefore should be encouraged

In addition, the statistical test for the coefficient of extension contact in line with apriori expectation had direct relationship with economic efficiency and significant at 1% risk level. This could be related to the fact that extension agents helps in disseminatins of agricultural production packages and information to farmers in order to enhance their efficiency level (Ayibefun *et al* 2007). The coefficient of farming experience and access to credit were positive and significant at 10% and 5% respectively. The implication is that the more experienced and access to credit a farmer has, the higher the level of economic efficiency. The level of farming experience one acquired in a particular occupation, as reported by Egwu, *et al* 2010), could contribute significantly to his/her level of managerial ability and decisions in farm operations, hence resulting in high level of competence in utilization of resources for optimal productivity. The positive sign of the coefficient of credit is synonymous with Idiong (2005) but disagrees with Onyenweaku, (2000), who opined that the diversion of loan to nonagricultural activities may have accounted for the negative sign.

Table 3 shows economic efficiency estimates obtained from the Stochastic Frontier. The difference between maximum and minimum efficiencies among rabbit farmers ranged between 30% and 96% with a mean economic efficiency of 72%. The mean economic efficiency estimate of 72% is an indication of efficiency in resource use by the farmers. More so, there exist a gap between the efficiency of best economically efficient farmer and that of the worst farmer. The average best farmer from the best 10 would require a cost saving of $(1 - 0.72/0.96) \times {}^{100}$, 25% to become the best economically efficient farmer in the sampled group while the worst farmer in the worst 10 would need a cost saving of (1.0 – 30/0.96) 100, 68.75% to become the best efficient farmer in their group.

Table 4 shows test of hypothesis. Generalized likelihood ratio test statistics was used to test the hypothesis (H_1), which states that farmers are economically efficient in goat production. However, since the critical value is greater than log likelihood, H_1 rejected. This means that economic inefficiency existed in the production of the enterprise in the study area.

The constraints to increased rabbit production in the study area as perceived by the respondents are presented in Table ٥. Majority (86.7%) of the farmers interviewed complained of poor access to credit. Ume *et al* (2009) reported on the importance of credit in purchasing improved inputs and payment of hired labour. Unfortunately, this important productive input eludes the poorer farmers who cannot afford to meet up with collaterals, high interest rate and short-term loan repayment periods as required by lending agencies.

More - so, 80% of the respondents encountered the problem of poor extension contacts. Extension services help to disseminate information on mode of application or usage of the technology as well as availability of technological inputs. However, frequent extension services could likely minimize doubts among farmers and ensure timely procurement of inputs. These would probably encourage sustained usage of the improved technologies (Unammah, 2003).

Nevertheless, this lofty extension function is sparingly performed, since the extension agents among others are poorly motivated (Ume, *et al*, 2010). Furthermore, 78.3% of the respondents encountered problem of pests and diseases. Rabbits do not suffer any peculiar disease in Nigeria precisely, however, mange and coccidia infections are very common (Hassan and Owolabi, 1996)). However, several reports of farmers' rabbit farms being decimated by pests and diseases are documented (Ajasin, et al 2004).

In addition, 70% of the total respondents complained of feeding problem. Although, forage can contribute up to 50% of rabbit diets but feeding rabbits solely on some forage species in the tropics have resulted in negative effects of weight loss. Also, the use of compounded concentrate alone has not also given optimum results, However, rational combination of both could boost the animal production ((Aduku, 1993). Also, forages sometimes are the limiting factor in successful rabbit production especially conventional forages such as groundnut hay in which there is competition between rabbit and ruminant animals. (Egbunike**,** 1997). Inadequate forage for browsing

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by rabbit is more pronounced during dry seasons, when the forages are dried up and the effect is drastic reduction in the animals' weight (Egbo, et al 2001).

Also, high mortality was encountered by 56.7% of the sampled farmers. Oduguwa, (2006) observed that there are high pre - and post-natal mortalities, and overall mortality between birth and marketing was estimated at 30-40%, being highest in the young rabbits.

Moreover, poor marketing characterised rabbit markets as complained by 70 % of the total respondents. Markets for rabbit meat exist in Nigeria and many other developing countries but not organized or festival-targeted. This is unlike beef cattle, sheep, goats, broiler or spent laying chickens and the reason could be the subsistence level of rabbit production. Nonetheless, the increasing popularity of rabbit among the populace is gradually expanding the market for rabbit meat (Amata and Bratt, 2008). Rabbits in Nigeria are marketed live or processed by roasting or removal of skin, and cutting into parts. Consumers prefer smoked rabbit probably because it reflects the traditional preparation of game animal (Ezea, 2009).

IV. CONCLUSION AND RECOMMENDATIONS

The result of the production factor showed that price of feeds and feed supplement, price of feeder livestock and prices of drugs and medications were statistically significant and rightly signed as well, while flock size was positive and significant. The determinant factors to economic efficiency are level of education, farming experience, membership of organization and access to credit and extension contact. The major constraints to rabbit production were poor access to credit, inadequate extension contact, pests and diseases problem and scarcity of forages during dry season.

Based on the findings, the following recommendations are proffered;

(1) There is need to increase farmers access to credit through Micro Finance Banks commercial banks and other lending agencies.

(2) There is need to encourage new entrants, especially young and educated into rabbit production to absorb the available labour in order to reduce poverty rate in the society. These could be enhanced through provision of improved production inputs at subsidized prizes.

(3) Policies aimed at encouraging farmers to form cooperatives /associations in order to help members' in capacity building, acquisition of credit, training and provision of production inputs to the members at reduced cost.

(4) There is need to strengthen the current policies on education such as the universal basic education, adult education and nomadic education in order o improve the farmers' economic efficiency.

Table.I: Summary Statistics of Variable for Estimation of Stochastic Frontier Model

Variable	Minimum	Maximum	Mean	Standard Deviation
Gross margin	13,010	117,410.7	106,114.3	98111.1
Average wage rate (man day)	72.38	300	150.4	67.19
Average price of feed and feed supplement	60.04	100.7	72.29	71.27
Average price of drug and medication (dose)	150	800.2	709.7	68.21
Average price of feeder	65.9	720.00	541.11	451.29
Capital input in Naira	6,450.1	14,321	6211.2	5,071.2
Farm size (No)	3	14	13.24	18.71
Age (yrs)	24	78	46.37	32.31
Level of education (yrs)	4	16	15.27	9.22
Farming experience (yrs)	3	32	20.19	13.27

Source: Field Survey, 2015

Table.II: Maximum Likelihood Estimate of the Stochastic Profit Function for Rabbit Enterprise

Production factors	Parameter	Estimated Coefficient	Standard Error	t-value
Intercept	A*	2.743	0.662	4.143***
Wage rate	θ_1*	-0.185	0.267	-0.693
Price of feeds (kg)	θ_2*	-0.500	0.213	-2.347**
Price of drug				

Medication/tablet	θ_3*	-0.623	0.0547	11.389***
Price of feeder	θ_4*	-0.306	0.165	1.855*
Capital input	β_1	-0.227	0.168	1.351*
Flock size	β_1	1.659	0.399	4.158***
Inefficiency Factors				
Intercept	∂_0	0.0040	0.0003	13.333***
Age	∂_1	0.0150	0.0246	0.609
Level of education	∂_2	0.089	0.027	3.296***
Farming experience	∂_3	0.352	0.178	1.978*
Membership of cooperative	∂_4	0.645	0.334	1.931*
Flock size (No. of herds)	∂_5	0.0086	0.0123	0.699
Access to credit	∂_6	1.966	0.964	2.039**
Household size	∂_8	-0.567	0.641	-0.885
Extension contact	∂_9	0.922	0.167	5.521***
Diagnostic Statistics				
Sigma squared	Σ	0.398	0.058	6.863***
Gamma	Γ	1.4428	0.3092	4.666***
Log likelihood function		-349	40233	

Note: ***, **, * are statistically significant at 1%, 5% and 10% levels respectively.
Source: Computed from MLE Result/Field Survey, 2015

Table.III: Distribution of Economic Efficiency Estimates of Rabbit Farmers

Economic Efficiency		**Frequency**	**Distribution**
0.10 – 0.20		4	6.7
0.21 – 0.40		3	5
0.41 – 0.60		7	11.7
0.61 – 0.80		15	41.7
0.81 – 0.90		10	16.7
0.91 – 1.00		1	1.67
Total		**60**	**100**
Maximum value	=	96%	
Minimum value	=	30%	
Mean economic value	=	72%	
Mean of worst 10	=	68.75	
Mean of best 10	=	25	

Source: Field Survey, 2015

Table.IV: Generalized Likelihood Ration Estimate for Testing Economic Efficiency

Efficiency Type	**Selected Model**	**Log Likelihood Ratio**	**Critical Value**	**Decision**
Economic efficiency	Cobb Douglas	-43.722	89.42	Reject

Derived from Table 4. critical value where obtained from Onyenweaku (2000)
Source: Field Survey, 2015

Table.V: Constraints to Rabbit Production

Constraints	Frequency	Percentage
Poor access to credit	52	86.7
Pests and diseases infestation	47	78.3
Marketing problem	42	70
Feeding problem	42	70
High mortality	38	56.7
High cost of building material	18	30
Inadequate extension contact	48	80
High cost of labour	18	30

* Multiple responses

Source: Field Survey, 2015

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