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Analysis of Costs, Returns and Constraints of Bull Fattening in Rogo and Karaye Local Governments Areas of Kano State

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Abstract

This study was carried out to examine costs, returns and constraints of bull fattening in Rogo and Karaye Local Governments areas of Kano State. Seven villages from each local government were randomly selected from which sixty five bull fatteners were randomly sampled and interviewed using questionnaire. Descriptive statistics and a farm budgeting technique were used to analyze the data. The average total cost of bull fattening was N55,591.30 and initial cost of purchasing a young bull occupies the largest proportion (77.56%) of it. Bull fattening in the Area was profitable, with a net farm income of N22,578.70 per bull and a rate of returns on investment of 41%. The major constraints faced by the fatteners include inadequate capital, inaccessibility of loans, poor quality feed, poor market, weather conditions, diseases and substandard drugs and vaccines.

Keywords: Bull Fattening, Costs, Returns and Constraints.

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Introduction

Livestock sub-sector particularly beef cattle plays an important role in the Nigerian economy. Trading of beef cattle is the largest livestock enterprise in the Northern Nigeria. Millions of people engaged in various aspects of the enterprise from transportation of the live ruminant's animals to the southern parts of the country and those involve in sales of the livestock and livestock products such as hides, skin milk and meat (Nuru and Bunanendran1984). According to (Mbanasor, 2000), he stated that livestock sub-sector contributes about 5% to the nation's GDP and 15.3% of the total agricultural sector. Beef fattening plays a significant role in poverty eradication by financially empowering the farmer from the proceed which is in line with the campaigns of the federal government of Nigeria (Oni, 2006). Beef is one of the end products of bull fattening which is one of the most important sources of animal proteins, fats and vitamins to human diets. The waste product of the animals (feaces) are sold as manure to the farmers for purpose of improvement of soil fertility and as a source of fuel for cooking andalso the entrepreneur makes additional proceed from hides and skin sold to manufacturing industries. Animals feed producers and Veterinary services earn income from the fattening enterprising, so also the federal government of Nigeria from the chains of tax collections.

Breeds of cattle fattened in Nigeria include Red Bororo, Ndama, Bunaji, Muturu, Sokoto Gudali, Abore and Mbala. Predominantly bull fattening are practice in the Savanna and semi -arid zone of the northern Nigeria were tsetse fly infestation are minimal (Nuru, 1982, Onucheyo, 1999 and Mbanasor, 2000). Fattening can be practiced on small animals such as sheep and goat but, it has been reported that bull fattening generates more profitable than those of small ruminants particularly when bulls with improved genetics qualities, kept in an ideal environmental condition free of parasites and managed with quality feeds (Pagot, 1993). The major constraints of bull fattening in Kano state (Rogo and Karaye Local Government Areas, in particular) has been recognized to include environmental factors, poor genetic qualities of the breed, diseases, stealing and poor quality feeds. Aduku (2000) asserted that pastoral grazing, poor husbandry management and lack of good feed supplement can leads to ticks, nematodes and disease manifestations in ruminants and livestock in general.

Oni, (2006) reported that beef fattening can be practiced by even the working class since its methodology quite simple, requires little time, Labor and minimum supervision However, the major problem confronting bull fattening enterprise in Nigeria includes accessibility to credits facilities to enhance the business (Onucheyo 1999), Analysis of cost and returns in bull fattening among rural farmers becomes imperative in providing adequate information for financial institutions and policy makers to evaluate the direct and indirect impact of the enterprising in realization of government policy of poverty eradication and diversification of the nation economy from over dependent on oil sector. . This study was therefore carried out to analyze the cost of production, profits generated and possible constraints encountered in bull fattening enterprise in Rogo and karaye local government area of Kano State.

Materials and Methods

This study was carried out in Rogo and Karaye Local Government Areas (LGA) located in the south-western part of Kano State, they are among the forty four local government areas of the state. The two Local Governments were selected for this study because large proportion of the villagers is engaged in cattle fattening enterprises. The following villages were selected randomly for the study, Zarewa, Beli, Fulatan, Nasarawa, Zoza, Jajaye and Sundu in Rogo LGA, while Dederi, Tudu-kaya Kurugu, Turawa, Daura, Yola and Magaji-Haji were villages selected from Karaye LGA. The data used for this study were collected from primary and secondary sources. The primary data were collected by interviewing the bull fatteners using structured questionnaires, while the secondary data were obtained from record books and surveys conducted by National Animal Production Research Institute (NAPRI) Zaria.

Sixty five farmers engaged in bull-fattening enterprise were randomly selected five from each village, exception were Zoza and Jajaye villages of Rogo LGA where three and two farmers were sampled. Information of the entrepreneur in each village were collected, folded, dropped in a container, thoroughly mixed, and thereafter the required numbers randomly picked. Descriptive statistics (such as frequency, percentages and mean) and farm budget technique were used to analyze the data. Farm budget technique is the detailed of physical and financial operational plans of a farm for a certain period of time (Olukosi and Erhabor, 1988).

Results and Discussion

Costs and returns analysis of bull fattening are presented in Table 1, which shows that the average variable, fixed and total cost of bull fattening incurred by the respondents were N54,780.53, N810.77 and N55,591.30, respectively. Cost of purchasing bull for fattening recorded the highest proportion (77.56%) of the total cost followed by the cost of feeding (13.82%). Medications and water supplied had lower percentages of 2.34%, and 1.88%, respectively, whereas hired labor recorded the least proportion (0.97%) of the total cost of production. The Table revealed that bull fatteners in Rogo and Karaye local governments had recorded average revenue and net farm income of N78, 170.00 and N22,578.70 for every bull fattened, which shows that bull fattening in Kano State is a profitable enterprise that can boost farmers' incomes. Further analysis revealed the fatteners had a revenue-cost ratio and average rate of returns on investment of 1.41:1 and 41%, respectively. This means that the fatteners had generated revenue of N1.41 and profit of N0.41, for every naira invested in bull fattening, this results shows that bull fattening is a profitable enterprise therefore, farmers should be encouraged to go into fattening of bull to bridge the widen cap of animal shortage experienced in sub-saharah as reported by (Okai *et al.*, 2005).

The constraints faced by bull fatteners in Rogo and Karaye local governments are presented in table 2. It's indicates that lack of credits facilities, poor quality feeds and marketing of the fattened bulls were the major

constraints encountered by the bull fattening entrepreneurs. The results proportionally show that 46.15% of the respondents stated that they experienced challenges of inadequate capital. While 38.46%, 23.08% and 15.38% admitted that access to credits facilities, poor quality feed and marketing bureaucracy were the major constraints. It can be seen that apart from the problem of inadequate capital, the bull fatteners also found it difficult to obtained loans, especially from financial institutions. It was observed that most of the fatteners used ordinary crops residues such as corn stalk, straws cowpea hay, groundnut hay, kitchen wastes, Although the entrepreneurs recorded averaged rate of returns on investment of N0.41, they could have earn more profit if quality feed ingredients were used. (Schroeder, 1999) opined that ruminants animals ultimately produce quality products when fed with quality feed supplement such as Cashew nut and soya bean meals.

Conclusion and Recommendations

The costs and returns analysis has shown that even though most of the bull fatteners in Rogo and Karaye Local Governments were using local breeds of cattle for fattening; the farmers were making appreciable profit from enterprise. The bull fatteners were faced with some production constrains such as poor quality of the feed, poor market, weather problem, diseases, lack of credit and lack of professional skills in the fattening process. Based on the findings of the study, it was recommended that the farmers to produce more qualitative meat so as to meet the protein requirement of the average Nigerian, Government should provide financial support to the fatteners by providing them with agricultural loan so that they can boost and expand their fattening production, Government should establish standardized cattle market so that farmers can have good prices for their animals, Improved breeds which grow and develop faster should be developed or introduced into the area to boost the productivity of the farmers, Government should teach the fatteners how to formulate feed, so that a required amount should be given to the animal at a particular time, for effective growth performance of the animals, fatteners should be taught how to give a recommended dose of the drugs and vaccines being administered to the animals and Farmers should always be seeking for advice and services from experts about the appropriate hygiene and medications to applied to their animals.

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Tables**Table 1:** Average cost of fattening one bull by the respondents.

Items	Average Cost(₦)	Percentage of Total
VARIABLE COSTS		
Fattening bulls	43,119.23	77.56
Family labour	1,095.38	1.97
Hired Labour	536.92	0.97
Feed Medications	7681.07	13.82
Water cost	1303.07	2.34
Total variable cost	1044.86	1.88
FIXED COSTS	54,780.53	98.54
Depreciation on farm tools		
Pens and shades	122.31	0.22
Total fixed cost	688.46	1.24
Total cost of production	810.77	1.46
RETURNS	55,591.30	100.00
Increase in Live weight/ kg		
Gross farm income (GFI)	104.32	
Gross margin	78,170.00	
	2,389.47	
Net farm income (NFI)	22,578.70	

Source: Field survey, 2009.

Table 2: Distribution of fatteners according to various constraints problems

Problems	Frequency	Percentage
Poor quality feed	15	23.08
Inadequate capital	30	46.15
Diseases	5	7.69
Substandard drugs and vaccines	2	3.08
Weather conditions	3	4.62
Inaccessibility to loan	25	38.46
Poor market	10	15.38
Total	90*	

Source: Field survey, 2009.

*Multiple response

