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Financial Analysis of Small Scale Cattle Fattening Enterprise in Bama Local Government Area of Borno State, Nigeria

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Abstract
This study was conducted to determine the financial analysis of Small-Scale beef Cattle enterprise in Bama Local Government Area of Borno. Purposive method of sampling was use to select the two districts based on the prevalence of Cattle Fattening Enterprise. The second stage sampling involved random selection of 45 fatteners from a sampling frame of 450 sample frame. The data was collected through the use of structured questionnaire. The data collected include information on the output and the inputs used and their prices using the questionnaire method of data collection. The data collected were analysed using the Net farm income analysis, gross profit margin ratio, current ration and debt/asset ratio. The result of the Net farm income analysis showed ₦208,310.00 per head of cattle fattened. The result of the gross profit margin ration revealed a ratio of 0.43:1, implying that for everyone naira invested in the fattening enterprise, 43 kobo will be realized. Similarly, the result of the current ration revealed a ratio of 172:1, implying that the current assets can more than pay for the current liabilities in the event of bankruptcy. And the debt/asset ratio indicates the ratio of 6032:1, implying high solvency. Therefore, the study revealed that the small-scale cattle fattening enterprise is profitable and viable venture. The main constrain militating against the smooth operation of the enterprises is the lack of access to formal credit facilities. This implies that the small fattening enterprises have no access to any formal credit institutions in the study area.
Keywords: Financial analysis, profit ratio, cattle fattening enterprise.

1. Introduction

Credit is a fundamental input for most business that is absolutely essential for purchasing input necessary for production. It is the main source of capital for financing the existing enterprise. Therefore, credit condition facing a sector of the nation's economy especially agriculture which employ a greater percentage of the population, is an important feature in the health of the economy (Jettrey and Moore, 2007).

The Nigerian livestock sector has been a source of well-being for many citizens, particularly for the rural dwellers. The sector is the second largest employer of labour, next only to cropping enterprise, contributing about 25% of annual agricultural GDP and over 5% of total national GDP (Mbanasor, 2000). The cattle fattening enterprise being a major component of the livestock sector play a vital role in the economic development of the nation (Omolehin, *et al.* 2009).

Cattle fattening which is the preparation of the animal for marketing through increased weight gain play a vital role in the economic development of the nation. Among the major contribution of the Cattle fattening enterprise include provision of employment, income and animal protein (Umar, 2008). Many people earn their living from the fattening enterprise as veterinary doctors, feed millers, transporters, marketers and drug manufacturers (Omolehin, *et al.* 2009). Thus, it is believed that increase in the scale of operation of the fattening enterprise could accelerate the phase of economic development of the nation. However, one of the basic constraints militating against the fattening enterprise is finance. It is reported that small-scale cattle fattening enterprise in Nigeria lack finance. The small cattle fatteners lack capital to expand and modernize their operation (Umar, 2007 and Ibrahim, 2008). Since, the greater proportions of small farmers in Nigeria are poor. They could not mobilize enough savings to fund the operations of their enterprise.

Hence, credit remains the main source of capital to further increase the scale of their operation. If only the small fattener in Nigeria could have access to formal credit facilities at the right time, right amount and the appropriate condition, the nation could witness a rapid and sustained economic development. It is on the basis of the above, that this study was undertaken to determine the financial analysis of small-scale cattle fattening enterprise in Bama Local Government Area of Borno state. The main objectives of the study are to determine the profitability of the fattening enterprise, estimate the gross profit ratio of the fattening enterprise, measure the liquidity ratio of the enterprise, determine the solvency of the enterprise and identify the main constraint faced by the fattening enterprise

2. Analytical Techniques

The data collected were analyzed through the following tools of analysis; net farm income analysis, gross profit margin ratio, current ratio, debt/asset ratio, and descriptive statistics.

2.1 Net Farm Income Analysis:

The net farm income for the enterprise is given as follows;

$$NFI = \sum_{i=1}^{n} piYi - \sum_{j=1}^{m} px_j \; \mathrm{X_{j-}} \sum_{k=1}^{k} F_k$$

Where:
NFI = Net Farm Income.
Y_i = output (price of cattle fattened per batch).
P_i = Unit price of cattle fattened (₦).
X_j = Quantity of variable input (where j = 1, 2, 3 …M variable input).
P_iX_j = Price per unit of variable input (₦).
F_k = Cost of fixed input (₦) where k = 1, 2, 3 … k fixed inputs).
∑= summation (addition) sign.

This was use to compute the net farm income of the fattening enterprise.

2.2 Gross Profit Margin Ratio: The gross profit margin ratio measures the relative profitability of the enterprise's sale after the cost of sale is deducted. The ratio indicates the return on every single Naira invested on the fattening enterprise. It is computed as;

$$\text{Gross profit margin ratio} = \frac{\text{Sales – cost of sales}}{\text{Sales}}$$

The higher the ratio, the higher would be the profitability.

2.3 Current ratio: The current ratio measures the creditor's margin of safety and indicates the relationship between current assets and current liabilities on monetary basis (Moyer, *et. al.* 2001). A low ratio indicates that the enterprise would be unable to meet its short term debt in an emergency, while a high ratio is considered favourable to creditors (Helmkamp, *et. al.* 1999). The current ratio is given by the formula:

$$\text{Current ratio} = \frac{\text{current assets}}{\text{Current liabilities}}$$

2.4 Debt/asset ratio: The debt/asset ratio measures what part of total asset is owed to lenders. The ratio of one means debt or liabilities equal assets and therefore equity is zero. The debt/assets ratio is computed as;

$$\text{Debt/assets ratio} = \frac{\text{total liabilities}}{\text{Total assets}}$$

Ratio greater than one, indicates insolvency while ratio less than one implies solvency (Moyer, *et al.* 2001).

2.5 Descriptive Statistics: The following tools of descriptive statistics such as the frequency, mean, percentage and ranking would be used to describe the major problems encountered by the small cattle fatteners in the study area.

3. Data

Primary data was used for the study, which was collected with the aid of structured questionnaire designed to elicit the appropriate information. The information gathered include those on input used such as costs of feeder cattle, feeds, labour used, water, salt lick and veterinary services. Others include the cost of fixed inputs such as land rent, feeders, drinkers and other equipment used as well as the revenue realized from the sale of the cattle and the constraint faced by the small cattle fatteners.

4. Results and Discussions

Table 1 revealed the net farm of ₦208,310.00 per batch of cattle fattened for the average duration of three months. Thus figure is quite high considering the fact that it could be realized in the period of three months. This implies that the cattle fattening is highly profitable. As such it could as poverty reduction programme by the three tiers of government.

Table 1: Net Income Statement for the Fattening Enterprise

Expenditure		**(₦)**		**Revenue**	**(₦)**
A.	**Variable Cost:**		**A.**	Beef Cattle Sales	487,500
	Beef Cattle	200,000			
	Feeds	58,000.00	B.	Manure sales	7,000.00
	Drug/Vaccine	5,000.00			
	Casual labour	6,000.00			
	Water	8,400.00			
	Patash/salt	200.00			
	Subtotal	277,600.00			
B.	**Fixed Cost:**				
	Feeders	200.00			
	Drinkers	200.00			
	Rake	20.00			
	Spade	2,500			
	Wheel barrow	2,500			
	Buckets	200.00			
	Land rent	20.00			
	Taxes	1,500.00			
	Transportation	1,000.00			
	Appreciation	400.00			
	Sub total	8,590.00			
C.	**Total Cost**	286190, 00			
	Net farm Income	208, 3100			
	Total	494,500.00		**Total**	494,500.00

The result of the gross profit margin ratio analysis revealed a ratio of 0.43:1. This implies that for every one Naira invested in the fattening enterprise, return of 42 kobo will be realized. This ratio of 0.43:1 also aggress with the work of (Okoruwa, *et. al.* 2005) who reported a ratio of 0.30:1 in fattening programme in Ibadan. This confirms that the cattle fattening enterprise is highly profitable business venture in the study area.

The result revealed a current ratio of 17.2:1. A current ratio greater that 1.0 implies that current assets can more than pay for the current liabilities (Olukosi, and Erhabor, 2005). The high current ratio can be attributed to the lacks of access to credit facilities by the cattle fatteners in the study area. Similarly, the feeder cattle which is the main asset of the fattening enterprise can be readily marketed whenever the need arise. This implies that whenever the need arise the farmers can sale their flock to arise the capital required to pay off their immediate liabilities. Therefore, this business is able to pay its immediate liabilities without affecting its current production.

Table 2: Balance Sheet of the Fattening Enterprise

Assets (₦)		Liabilities (₦)	
A. Current Capital		**A. Account payable in one year**	
Cash at hand	12,000.00		
Cash receivable	-	Water	5,880.00
Beef cattle	2,000.00	Wages	10,000.00
Dung	4,000.000	Vet. Services	2,500.00
Sub-total	316,000.00	Sub-total	18,380.00
B. Working Capital			
Feeding trough	1,000.00	B. **Intermediate Liabilities**	
Drinking trough	1,000.00	Bank	-
Rake	-	Relatives	2,000.00
Wheel barrow	3,500	Friends	2,000.00
Spade	300.00	sub-total	4,000.00
Bucket	150		
Water Vessel	1,200.00		
Supplies:		C. **Long term Liabilities**	
Feed	60,000.00		
Drugs	1,000.00		
Salt & potash	500.00		
Sub total			
C. Fixed Capital			
Land	100,000.00		
Building	100,000.00		
Stores	50,000.00		
Subtotal	310,000.00	**Total Liabilities**	**22,380**
D. Total asset (A + B + C)	683, 770.00	D. **Net worth**	69,770.00

The result of debt/asset ratio indicates the ratio of 0.032:1. Since the solvency ratio of 0.032:1 is much lesser than 1.0, implying that the cattle fattening enterprise is highly solvent. The implication here is that, in the event of bankruptcy, the assets of the farm could be sold out to settle its liabilities.

The major constraints faced by the small-scale cattle fattening enterprises are the lack of access to formal credit (42) which ranks highest. This implies that the small-scale cattle enterprises in the study area lack any access to formal credit facilities. This might be possible due to the fact that small farmers in Nigeria have nothing to offer as security. High cost of feed (38) ranks second, followed by high cost of veterinary services (14), price instability (56), disease incidence (8) and lack of extension services rank least (4).

Table 3: Constraints Faced by the Ram Fattening Enterprise

Item	Frequency	Percentage	Rank
Lack of credit Facilities	42	35.59	1st
High feed cost	38	32.20	2nd
High cost of Veterinary services	14	11.86	3rd
Price instability	12	10.17	4th
Incidence of disease infestation	8	8.78	5th
Lack of extension services	4	3.39	6th
Total	**118**	**100**	

5. Conclusions

Based on the results obtained, the small scale cattle fattening enterprise is highly a financially successful and viable venture. At every given joint in time, the enterprise could be in a position to settle both its current and future liabilities without affecting its current production activities. This implies that the financial institutions willing to extend credits to the fattening enterprise has a wider margin of safety in the event of bankruptcy.

The main constrain militating against the smooth operation of the enterprises is the lack of access to formal credit facilities. This implies that the small fattening enterprises have no access to any formal credit institutions in the study area.

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