



## SOCIO-ECONOMIC ANALYSIS OF CASSAVA PRODUCTION IN IKOLE LOCAL GOVERNMENT AREA OF EKITI STATE.

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### Abstract

The study was carried out in Ikole Local Government Area of Ekiti State. Structured questionnaire was used to collect data on socio-economic variables, costs and revenues of the farmers. One hundred food crop farmers cultivating cassava were randomly selected for the study. The result revealed that most of the farmers were young and educated. The mean household size was eight people. Land tenure through inheritance was the major method of acquiring farmland. Most farmers are small scale farmers operate mostly on owner's equity. The gross margin of cassava production was #172, 920.00 per hectare. Cassava production was profitable by returning 2.07 for every one naira invested in the study area. Among the recommendation made to boost production in the area was granting of small loans to farmers by commercial banks and land should be made available and allocated to the farmers to increase output and productivity of cassava production in the study area.

**Keywords:-** Socio-economic, Analysis, Cassava and Production.

### Introduction

Cassava [*manihot utilissima*] is an important root crop that is widely grown throughout the tropical area. It ranks fourths in term of production and output after wheat, rice and maize (IITA, 1995). Nigeria is the largest producer of cassava in the world with animal output of 38million metric tons (FAO, 2006). Cassava is a cheap and reliable source of food for more than 700 million people in the developing world (FAO, 2003). It is estimated that 250 million people in Sub-Saharan Africa derive half of their daily calories from cassava and hence, the Africa's second's most important staple food after Maize in terms of the calories consumed (FAO, 2005). Cassava is widely cultivated in Nigeria and hence, plays a vital role in the food security of the rural economy because of its capacity to achieve bumper harvest even under marginal soil condition and its tolerance of drought (Ezedinma, et al 2006).

Federal government of Nigeria in year 2002, launched presidential initiative on cassava, this has since helped in its increases production. The aim of the initiative was to develop cassava as the engine of economic growth and also diversify Nigeria's economic base away from its mono-products which is crude oil. The requirements of consistent supply of large volume of fresh roots by cassava-based industries cannot be supported by the current subsistence production systems. The critical constraint under such production system is agricultural labour, costs, which have been estimated to be between 70-90% of the total labour cost (Ezedinma, 2000) in small holder farming agriculture community typical of the study area. With increase in the rural-urban migration and the ageing of the people left to farm in the rural areas, rural farm labour is likely to remain inelastic and expensive for agro-industrial purposes (Ezedinma et. al, 2006). The objective of this paper is to analyze the socio-economic characteristics of the farmers and also determine costs and returns to cassava production in Ikole Local Government Area of Ekiti State.

### Methodology

The study was carried out in Ikole Local Government Area of Ekiti State. Primary data were used for the study. The data were collected through questionnaire technique. 100 cassava farmers were randomly selected and interviewed using two stage random techniques. The first stage involved selection of four towns randomly within the local government and the second stage involved random selection of twenty-five respondents mostly food crop farmer engaging in cassava production from each of the villages. Data were collected on gender, age, educational level, and household size, method of land acquisition for farmland, farm size and sources of capital. Cost and revenue data were also obtained from the respondent farmers. Descriptive statistics such as means, frequency distribution and percentages were used for the analysis and gross margin was used to analyze the cost and revenue data. In analyzing the production data, costs incurred for all the hectares were summed up and the total cost (TC) was divided by the number of hectares to get the average cost (AC). In the same way, the revenue data collected for all the hectares were summed up and the total revenue (TR) was divided by the number of hectares to get the average revenue (AR). Fixed cost of cassava production in the area is made up of costs of cutlasses and hoes whose depreciation were negligible and so were ignored when calculating the profitability of cassava production. This method was a follow-up to the method adopted by Olukosi and Erhabor, 1988. Gross margin was  $GM=TR-TVC$ ; where  $GM$ = gross margin,  $TR$ =total revenue and  $TVC$ =Total variable cost. Hence the gross margin was obtained by subtracting the average cost from the average revenue.

### Results and Discussion

The socio-economic characteristics of the cassava farmers are presented in Table 1. Most of the farmers (85%) were males because of the tedious nature of cassava production and the predominance of male in farming



activities in the study area (Toluwase, et al 2009). The average age of the farmers was 44 years and most of them had secondary school certificates. The average household size was 8 persons. Most of the farmers inherited their farmlands. This led to fragmentation of land holdings with 92% of the farmers operating on less than five hectares, which are characteristics of the farmers in the study area and this was however supported by Olayide, (1982) in his study on characteristics, problems and prospects of small scale farmers in Nigeria. The farmers used personal saving (owners' equity) for the operation of their farms and this was however, been supplemented by loans from other sources as revealed by the farmers.

**Table 1: Socio-economic characteristics of the cassava farmers.**

Variables	Frequency	Percentage
Sex		
Male	85	85.00
Female	15	15.00
Total	100	100.00
Age (Years)		
≤ 20	4	4.00
21-30	16	16.00
31-40	32	32.00
41-50	38	38.00
51-60	5	5.00
Above 60	5	5.00
Total	100	100.00
Mean= 44 Years		
Educational Level		
No formal education	20	20.00
Primary school	22	22.00
Secondary school	48	48.00
Tertiary school	10	10.00
Total	100	100.00
Household size		
1-5	17	17.00
6-10	50	50.00
11-15	20	20.00
16-20	8	8.00
Above 20	5	5.00
Total	100	100.00
Mean = 8 persons		
Method of farm land acquisition		
Inheritance	80	80.00
Lease hold	8	8.00
Rent	5	5.00
Government allocation	7	7.00
Total	100	100.00
Farm size (Ha)		
1 - 2	54	54.00



3 – 4	38	38.00
5 – 6	6	6.00
7 – 8	3	3.00
Total	100	100.00
Sources of capital		
Personal saving	100	100.00
Private money lenders	30	30.00
Friends and relatives	20	20.00
Cooperatives	42	42.00
Total	192	192.00

### Multiple responses

Source: Field Survey, 2012.

Analysis of costs and returns of the cassava production per hectare is shown in Table 2. The cost of production is made up payments for cassava stems, and fertilizer. The cost amounted to about #20,000.00 per hectare. Labour accounted for the highest proportion of the cost of producing cassava. The total cost of labour for the various operations was #118,400.00. The cost of the transportation of the cassava roots after harvesting was #60,000.00 while #23,630.00 was the opportunity cost of the variable inputs. Labour input was the major input in cassava production in the study area because majority of the farmers inherited their farmland and hence does not pay for its usage so also, the cost arising from depreciation of hoes and cutlasses was negligible. The total variable cost of producing cassava per hectare was #162,080.00. The revenue items were made up of receipts from cassava roots and stems. The total receipts from cassava roots and stems were 335,000.00. The gross margin for cassava production was #172,920.00 while the benefit cost ratio was 2.07:1.00

**Table 2: Analysis of Costs and Returns of Cassava Production (sole crop) per hectare.**

S/N	Budget items	Unit	Quantity	Price per unit (#)	Total (#)
A	Revenue				
	Cassava roots	Tons	20	15,000.00	300,000.00
	Cassava stems	Tons	10	3,500.00	35,000.00
	Total				335,000.00
B	Variable Costs				
	Consumable inputs				
	Cassava stems	Tons	4	3,200.00	12,800.00
	Fertilizers	Bag	4	1,800.00	7,200.00
	Total cost of consumable inputs				20,000.00
C	Cost of labour	Man/days			
	Land preparation	Man/days	20	800.00	16,000.00
	Planting	Man/days	10	600.00	6,000.00
	Weeding (2 times before harvest)	Man/days	42	600.00	25,200.00
	Harvesting	Man/days	16	700.00	11,200.00
	Transportation	2 lorry loads		30,000.00	60,000.00
	Total Cost				118,400.00
D	Opportunity cost of variable inputs at 20%.				23,680.00
E	Total Variable Cost (TVC) = B + C + D =				162,080.00
	Gross Margin = TR – TVC = (A – E) =				172,920.00



Benefit – Cost Ratio = (A/E) =	2.07 : 1.00
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Source: Field Survey, 2012.

## Conclusion

Cassava production is a profitable business in the area of study. This is because the gross margin was positive and high. The benefit - cost ratio was 2.07:1. This implies that for every naira spent on cassava production there was a profit of over another naira (#1.07). Farmers should be encouraged to grow more cassava because it is capable of bridging the gap between demand and supply of food and also capable of providing jobs for the numerous unemployed thereby alleviating the prevailing poverty situation witnessed in the study area and the country at large.

## Recommendation

Since cassava can grow well even on marginal soils, its production should be encouraged. The following recommendations are necessary for increased output of cassava.

- Farmers should be assisted with loans by government and commercial banks so that they can produce more cassava.
- Feeder's roads should be constructed and existing one rehabilitated to link rural areas with urban centres for easy evacuation of cassava products.
- Processing factories should be provided so that cassava roots can be processed into different products.

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