

Palm Fruits Processing And Rural Infrastructural Development in Imo State, Nigeria

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ABSTRACT

The study was an attempt to estimate the gross income accruing to women palm oil and palm kernel processors in three Local Government Areas: Aboh-Mbaise, Obowo and Ezinihitte areas of Imo State. Thereafter their contributions towards rural infrastructural development were assessed based on gross income calculations. The gross income realized was reasonable for meaningful rural development projects, although full participation in rural development infrastructure was hindered by certain socioeconomic constraints posed mainly by societal gender inequality.

Introduction

Jibunuoh (198) described infrastructure as an element with technical, economic and institutional character with a social component as an integral part. Idachaba and Olayide (1980) on their part defined rural infrastructure to include the system of physical, human and institutional forms of capital, which enable rural residents, to better perform their production, processing and distribution activities as well as help to improve the overall quality of life. Rural infrastructure can therefore be viewed as those specialized elements in the development process, which bring about improvements in the socio-economic welfare of rural communities. Their presence represents an index of development and social well-being.

Rural infrastructure is the product of economic activities. The rural economy is largely dependent on on-farm activities. In 1963 over 70 percent of the agricultural workforce in Eastern Nigeria, including Imo State, was employed in the agricultural industries, especially in processing palm produce (Usoro, 1974). Women are the major actors in the palm produce industry, notably in palm fruits processing, in spite of their gender disadvantages. Thus as women are more actively engaged in agricultural production, processing, storage and marketing, it is believed that they earn income to enable them participate in development process.

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Altes (1985) reported that women have a long tradition of playing significant role in rural development through injecting their resources from palm produce to the provision of public services like health, education and food distribution. Dijk (1986) pointed out that women from majority of the rural population and the core of any rural self-help project. They mobilize the rural communities to participate in a variety of income generating infrastructure and social development projects.

Women participation in agricultural development account for 70 to 80 percent household production in sub-Saharan African, 65 percent in Asia and 45 percent in Latin America and the Caribbean (AFPRI, 1995). In spite of these achievements, women contribution in development process is still regarded as naïve. This perception has negative implication for agricultural development, indicating stagnation in the sector. If women are excluded in development process according to William (1978), the Nigerian society will lose the substantial contribution of an important segment of the population, which will fail to reach their full human potential. The primary objective of the study is to estimate the gross income of women in the palm fruits processing industry and assesses their contribution in rural infrastructure development.

Methodology

A random sample of 120 women palm oil and palm kernel producers were interviewed with structured questionnaires. Respondents were selected from 30 villages within three Local Government Areas comprising Obowo, Ezinihitte and Aboh-Mbaise areas in Imo State of Nigeria. These were selected based on the fact that they form among others, the major producers of palm oil in the State.

The study instrument was structured to obtain information relating to the socio-economic characteristics, costs and revenue accruable to producers so as to compute a figure for the gross income. The gross income analysis was employed when it was discovered that more than half of selected producers had formal education ranging from primary, secondary to tertiary levels. Records can however only be kept by literate farmers who show interest and are working towards maximizing profit (Adegeye and Dittoh, 1985).

The gross income analysis is used to compute the difference in terms of costs and benefits, and hence determine the profitability of an enterprise. Thus subtracting direct costs incurred in the production of the good sold from the revenue, gives the gross income (or gross profit) (Gittinger, 1982).

Results and Discussion

1. **Socio-economic Characteristics:** Table 1 describes the mean values of the socio-economic characteristics of the respondents. Mean age of producers was 52 years (46.7 percentage) while 58.3 percent of the respondents reported an average of 5 persons in their respective families. An average number of 75 or 62.5 percentage of the producers obtained formal education ranging from primary, secondary to

tertiary levels. This figure was relevant and influenced the choice of the analytical tool employed.

Table: Socio-economic Characteristics of Palm Fruits Processors In Selected Areas 1998/99.

Characteristics	Mean Values	
	Frequency	Percentage
Age (years)	56	46.7
Household size	5	58.3
Education	75	62.5
Other Activities		
- petty trading		
- handcraft	60	50.0
- other farming activities		
Experience in palm fruits processing	55	45.8

Source: Field Survey 1998/99

Apart from palm fruits processing, respondents also engaged in other minor activities to sustain livelihood. Up to half, 50 percent fell within this category while 55 persons, or 45.8 percent had good experience in palm fruits processing. Producers with less experience in palm fruit processing depended on hired labour and other dealers to achieve their production objective.

- Costs and Revenue to Producers:** In order to estimate the profitability in palm oil and palm kernel processing industry, the costs and returns to the operations were computed and results presented in table 2. The calculations were based on the volume of palm oil and palm kernel produced during the production season under study. From the analysis, the gross income of ₦133,470.00 accruable to producers during the season was reasonably high for participation in any meaning rural development project, especially when resources are pooled together. This level of profit was realized after satisfying domestic needs, and making gifts in kind to friends and close relations.
- Scope of Women Involvement in Developing Rural Infrastructure:** From table 3, more women, 19 from Aboh-Mbaise contributed to erecting cottage industries, followed by 12 in Obowo. Only 2 participated in Ezinihitte. This may be explained by 38.3 percent of the respondents who complained about gender discrimination (table 4) below.

Table 2: Pooled Gross Income for the Production Period 1998/99

A. Costs:			
Item	Quantity	Price Per Unit (₦)	Variable Cost (₦)
Labour	200	100	20,000.00
Processing materials	-	-	11,000.00
Other expenses (Marketing Costs, transportation etc.)	-	-	8,000.00
Total Variable Costs (TVC)	-	-	39,000.00
- = No Values attached			
B Revenue:			
I. Item (Palm Oil)	Average Quantity Produced (litres)	Price Per Litre (₦)	Revenue (₦)
Palm Oil	4372.50	-	-
Quantity sold	3160.00	48.25	152,470
Quantity consumed	1000.00	-	-
Quantity given out as gifts to friends and relations	212.25	-	-
Sub-total			152,470
- = the values attached			
II. Item (Palm Kernels)	Average Quantity Produced (Kg)	Price per Kg (₦)	Revenue (₦)
Palm Kernel	1500	-	-
Quantity sold	800	25	20,000.00
Quantity used	400	-	-
Quantity given out as gift	300	-	-
Sub-total revenue	-	-	-
- = No values attached			
Grand total revenue from palm oil and palm kernel	=		N172,470.00
Gross Income	=		N133,470.00

Source: Field survey 1998/99

As high as 25 women out 40 reported they contributed to building of community health center in Ezinihitte, followed by 9 in Aboh-Mbaise. The low participation rate in Obowo also was explained by husbands' control over revenue as indicated by respondents and may have limited the use of funds for development purpose.

In general, nearly all the women sampled invested some part of the produce revenue in rural development infrastructure. Their interest centered on health care, cottage industries and water project. These of course, are among the major needs of the rural poor.

Table 3: Distribution of Women Participating in Rural Infrastructural Development by Local Government Areas.

Activities	Local Government Areas:		
	Aboh-Mbaise	Obowo	Ezinihitte
Cottage Industries	19	12	2
Health Care	9	8	25
Electricity	7	4	0
Market Stalls	3	7	0
Water Project	9	5	5
Civic Centre	3	0	2
Total	50	36	34

Source: Field survey 1998/99

4. **Constraints to Producers:** Table 4 indicated four major areas of constraints. These include gender discrimination, husbands' control over family funds, fuel and labour scarcity. These constraints were distributed among the local government areas studied. From the table, gender discrimination ranked highest in Ezinihitte (38.3 percent), followed by Obowo (32.5 percent). Husbands' control over revenue ranked highest in Obowo (39.1 percent), followed by Aboh-Mbaise (31.6 percent). Fuel and labour scarcity was a common problem in all the local government areas, but more acute in Ezinihitte (35.8 percentage).

Gender issues providing constraints include landownership rights often denied women; lack of right to economic trees, cultural taboos associated with harvesting palm fruits – these forbid women from climbing trees and harvesting palm fruits, leading to wastage. The problem of scarcity of labour was more pronounced during the very peak period of the year (January - April). This period according to respondents coincided with the farming activities, and creating a dual need for labour. Besides some respondents reported that the youths did not want to take active part in palm oil and kernel processing as an occupation. This negative attitude of the youths who regarded the operation as tedious, resulted in rotting away of many palm fruits and delayed early processing of harvested palm fruits, thus resulting to poor quality oil. Scarcity of labour made it increasingly difficult in both harvesting, processing and cracking of kernels.

Fuel scarcity is a common scenario in the Nigerian energy market, especially when dealers sense a rise in fuel prices. All these constraints have their consequences in the level of production, income in the agricultural sector and participation in rural development projects.

Table 4: Constraints to Palm Oil and Palm Kernel Processing

Constraints	Local Government Areas					
	Aboh		Obowo		Ezinihitte	
	-Mbaise	%		%		%
Gender discrimination	35	29.1	39	32.5	46	38.3
Husbands' control over						
Family revenue	38	31.6	47	29.1	35	29.1
Fuel scarcity	40	33.3	37	39.1	43	35.8
Labour scarcity	40	33.3	40	33.3	40	33.3

Source: Field Survey 1998/99

5. Summary and implications for Nigeria Agriculture and Rural Infrastructure Development

The study estimated the gross income of women engaged in palm oil and palm kernel processing with the aim to assess their level of involvement in rural infrastructure development. The gross income earnings were reasonable and enhanced women participation in infrastructure development. The revenue accruing to women palm oil and palm kernel processors however can only be meaningful if the women are given free hands in the production process. Serious constraint posed by gender inequality was an obstacle for meaningful participation in agricultural production and development process in general.

Women dominate the rural sector in sub-Saharan Africa and will continue to take upper hands in development process now and in the future. They get really involved and mobilize even their last resources. Screening them out of the development scene means delaying development pace in rural communities. There is therefore need to restructure rigid institutional social framework which impede gender equality, especially in areas relating to sharing household common property.

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