

INCOME GENERATING POTENTIALS OF STREET FOOD VENDING BUSINESSES IN OGUN STATE, NIGERIA

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ABSTRACT

Street foods businesses have become common and important features of urban towns in many developing countries including Nigeria. Apart from providing incomes for those involved, they also provide a ready source of food for the urban population. This study determined the profitability of the street food business in southwest Nigeria. Since food safety is now an integral part of food security, the study also assessed the hygienic practices of the vendors. Married women in their early forties dominate the sector. Most of them had primary education, did not belong to any food vending associations. The cost and returns analysis showed that the businesses are profitable with average monthly profits of N28, 023.35, profit margin on sale of 12.3% per month and a rate of return on investment of 13.4 % per month. Some of the vendors used family labour, but on the average, daily wages were about N 125.00. Indeed most vendors possess operating licences but the environment and facilities under which the meals are prepared are not constantly monitored to ensure good hygienic practices. It is recommended that the National Agency for Food and Drug Administration (NAFDAC) should extend its efforts to the street food sector and engage in training and education of food vendors on safe food handling and preparation.

INTRODUCTION

Street foods are “ready-to-eat” foods and beverages prepared and sold by vendors and hawkers especially in the street and other similar public places. The variety and forms of food sold depend largely on local eating habits, and the socio-economic environment (FAO, 1997). Street foods are common features of urban centres in many developing countries and are important because they provide a source of income for low-income persons and are convenient for busy urban dwellers constituting a ready source of cheap and nutritious food (Cant and N’Diaye, 1996).

The abundance of street foods stands in Nigerian cities reflects a great demand in the urban growing population. They have been a common feature of Nigerian urban scene for a very long time (Akinyele, 1992). In recent times, the importance of street foods in the informal economy has grown considerably. Despite the tremendous potential to improve both nutrition and food security among the urban population, street foods sometimes cause concern with respect to their potential for serious food poisoning outbreaks due to microbiological contamination, improper use of additives and the presence of other adulterants and environmental contaminants

(FAO, 1995).

It has been established that most of the street foods become unsafe as a result of improper handling, unhygienic practices among food vendors and due to unsanitary environments. The vendors are frequently unlicensed and untrained in food hygiene or sanitation. They also work with crude implements and in unsanitary conditions. This can cause food poisoning and serious health problems (Johnson and Yawson, 2000). FAO (2001) notes that lack of hygiene and poor access to clean water and waste disposal can turn a quick meal into a nasty bout of food poisoning.

The Codex Coordinating Committee of the World Health Organisation (WHO) in 1996 gave out guidelines on safety requirements for street foods for consumption worldwide. In the late fifties, the Nigerian Government had enacted laws such as the Nigerian Public Health law of 1957 and the Foodstuffs and Regulated Premises adoptive Byelaws of 1957 aimed at ensuring food safety. In recent times, the National Agency for Food and Drug Administration and Control (NAFDAC) oversees such food safety issues. NAFDAC was established with Decree No 15 of 1992, to perform food and drug safety regulatory functions such as:

- Regulate and control the import, export, advertisement, distribution, sales and use of food, drugs, cosmetics, medical devices, bottle water and chemicals;
- Compile standard specifications and guidelines for the production, import, export, sale and distribution of food, drugs, cosmetics, medical devices

bottled water and chemicals.

- Make pronouncements on the quality and safety of food, drugs cosmetics, medical devices, bottled water and chemicals after appropriate analysis.

The agency has put up tremendous performance in recent years. There has been massive enlightenment programmes for consumers on dangers inherent in taking uncertified food and on their rights and responsibilities.

The level of awareness, compliance and enforcement of the WHO guidelines and, indeed, the outdated laws among the general public in Nigeria, in particular the street food vendors is not known. Furthermore, despite the fact that the number of street food stands has increased over the years in Nigeria, little has been documented about their operations. In other developing countries like Ghana, Malaysia and Peru, governments have stepped into monitoring and control of the street food sub-sector.

This study estimated the costs and returns of some street foods vending businesses in the south western part of Nigeria and assessed the safety and hygienic practices of the vendors.

METHODOLOGY

Study Area

Data were collected from 180 street food vendors randomly selected along some streets of Abeokuta, Sagamu, Ijebu-Ode, Ilaro and Sango Ota which are major towns of Ogun State one of the seven states in the South west of Nigeria. The data were largely on socio-economic characteristics of vendors, the types and quantities of in-

puts used; their safety awareness and perceptions. Visual observations of the hygienic practices were also made in order to determine the environment in which these vendors operated.

Analytical procedures

The data were subjected to simple analysis such as descriptive statistics to describe the socio-economic characteristics of the vendors. In addition, budgetary analysis was used to analyse cost and returns and the net profit of food vending business in the study area. Cost and return analysis of food vending business included the cost structure, the gross margin analysis and profitability analysis such as net profit, net operating margin on sales, (NOM) and profit margin on sale (PMS).

According to Adegeye (1982), the total cost (TC) is the addition of the total variable cost (TVC) and the total fixed costs (TVC). The total fixed cost in the street food business include the rental value of the food stalls, interest paid on loans, costs of cutleries, tables and chairs.

The variable costs include the cost of raw (uncooked) food, the condiments, labour cost, firewood, charcoal, kerosene costs, electricity as well as cost of water.

The following expressions were used to obtain the relevant indices:

(1) The net profit

$$\Sigma\pi = \Sigma TR - \Sigma TC$$

where $\Sigma \pi$ = Total Net Profit from all the

ΣTR = Total Revenue form all the meals sold.

ΣTC = Total cost

(2) The cost structure

This shows the percentage of total cost

which goes to each cost items which went to each of the cost items).

For Variable Cost, it is given as $[TVC/TC] * 100$

(3) Gross Margin

This is the difference between the total revenue and the total variable cost. Any business can still continue to operate in the short run if it can still cover its variable cost.

$$GM = \Sigma TR - \Sigma TVC.$$

Where GM = gross margin

(4) Profit Margin on Sales (PMS)

$$PMS = \text{Net Profit} / \text{Sales}$$

Net profit refers to operating income less fixed expenses. The profit margin on sales indicates the relationship between profit and sales. An increasing profit margin on sales is also an indication of good business.

(5) Rate of Return to Investment (RRI)

According to Adegeye (1982) is the ratio of net profit to the total costs:

$$RRI = [\Sigma\pi / TC] * 100$$

RESULTS AND DISCUSSION

The supply side of the street foods sector is dominated by females who are mainly primary school certificate holders. Their mean age is 42 years and the mean years of food vending experience are 10 years. This result confirms an FAO (1989) study of an average age of 41 years and 79% and 80% domination in the Philippines and Thailand, respectively (See table 1). Most of the food vendors (70%) went into the street food vending business because they thought it would be profitable, while some of them inherited the businesses from their

parents. Others (8.3%) went into the business because they could not get employed elsewhere. This corroborates Canet and N’Diaye (1996) that street foods provide employment for men and women who would have been unable to get employed somewhere else.

Majority (77%) of these vendors are mainly small scale entrepreneurs using hired labour with an average of four attendants per vendor (Table 2). This is a little above the finding of Tomlins *et al* (2001)

among street vendors of the same scale in Ghana who reported three attendants per vendor.

The types of meals prepared by the vendors varied, but it was possible to identify two main classes even though some vendors prepared both types of meals: The main classes of meals are bolus (rounded mass foods) like *eba*, *amala*, *fufu*, *iyan* and *ebiripo*, and non-bolus foods such as rice, beans with additions such as fried plantain (*dodo*).

Table 1: Distribution of Socioeconomic characteristics of food vendors

Sex	Frequency	Percentage	Mean
Female	160	100	
Male	-	-	
Total	180	100	
Marital status			
Married	174	96.7	
Single	6	3.3	
Age			
21 –30	21	11.7	
31 – 40	63	35	
41 – 50	66	36.7	42
51 – 60	24	13.3	
61 – 70	6	3.3	
Total	180	100	
Educational level			
No Education	51	28.3	
Primary School	81	45	
Senior School	45	25	
OND	3	1.7	
Total	180	100	

Field Survey, 2004

Table 2: Distribution of vendors by household size, reasons for Food Vending Years of Vending Experience and labour use patterns

	Frequency	Percentage	Mean
Reason for going into business			
Profitable	126	70	
Can't get other job	15	8.3	
Like cooking	15	8.3	
Inherited	24	13.4	
Total	180	100	
Household size			
1 – 2	9	5	
3 – 4	66	36.6	
5 – 6	57	31.6	5
7 – 8	42	23.3	
9 – 10	6	3.3	
Total	180	100	
Years of Vending experience			
≤ – 5	66	26.7	5.5
6 – 10	63	35.0	
11 – 15	21	7	
16 – 20	12	6.7	
21 - 25	12	6.7	
26 - 30	6	3.3	
Total	180	100.0	
Labour use pattern			
Hired only	138	76.7	
Family only	21	11.6	4
Hired & Family	9	5	
Self	12	6.7	
Total	180	100	

Field Survey, 2004

Costs and Return analysis

The cost structure analysis shows that only about 5% of the total cost of the business is spent on fixed items for all the vendors (Table 3). The fixed items include rent, electricity, cooking utensils, cutlery

and furniture. The monthly profits ranged from N22, 114.98 for vendors who prepared non-bolus foods to N34, 313.60 for vendors who prepared all types of meals (Table 4). The average profit for vendors as a whole was N28, 023.35.

Table 3: Cost structure of Food vending Businesses in Ogun State, Nigeria

Cost item	Amount (N)	Percentage of Total
Bolus foods		
Variable cost	273,208.30	95.4
Fixed cost	13,068.86	4.6
Total cost	286,277.16	
Non-bolus foods		
Variable cost	101,525.10	94.6
Fixed cost	5,771.72	5.4
Total cost	107,296.82	
Bolus and non-bolus foods		
Variable cost	195,102.60	93.9
Fixed cost	12,572.44	6.1
Total cost	207,675.04	
All vendors		
Variable cost	189,417.20	94.6
Fixed cost	10,777.95	5.4
Total cost	200,195.10	

Field Survey, 2004

The profit margin on sales (PMS) ranged 0.076 for vendors who prepared the bolus foods to 0.17 for vendors who sold non-bolus meals. On the whole the average PMS was 0.123. This shows that for every one naira sale, a profit of about twelve kobo is made.

Table 4: Profitability Analysis per month for Food vendors in Ogun state, Nigeria

	TVC	TFC	TR	p	PMS	RRI
Bolus meals	273,208.3	13,068.86	309,963	23,686.14	0.0764	0.083
Non-bolus meals	101,525.10	5,771.72	129,411.80	22,114.98	0.17	0.206
Bolus and non-bolus foods	195,102.60	12,572.44	241,988.70	34,313.66	0.142	0.165
All vendors	189,417.20	10,777.95	228,218.50	28,023.35	0.123	0.134

Field Survey 2004

The rate of return on investment ranged from 8.2% for vendors with bolus meals (meaning that for every naira invested, a profit of eight kobo is made) to 21% for vendors with non-bolus diets. The average rate of return on investment was 13.4%. Although the vendors who prepared the non-bolus meals seemed to do much better judging by the various ratios, those who prepared all types of meals invested more in the business with an average of N195,102.60 on variable cost items compared with N101,525.10 for vendors who prepared non-bolus meals.

Safety and hygiene practices

Some of the food vendors (43.3%) had leftover food at the end of the day's business (Table 5). These are usually mixed with the following day's stock or sold first

the next morning. Since most of these vendors do not have adequate means of preserving the food, there would be deterioration in the quality of the food which could cause health problems for the consumers. This is a worrisome situation because even when the equipment is available, the electrical power to run such equipment is expensive. These vendors may not be able to afford alternative power supply sources such as generators. In this respect, the formation and participation in Food Vending Associations and Cooperative Societies should be better encouraged as the pooling together of resources could help in easing the acquisition of refrigeration equipment. Only about 45% belonged to the association while less than 18% were members of Cooperative societies.

Table 5: Distribution of vendors by leftovers at the end of the day

	Frequency	Percentage
Whether there are leftover foods		
Yes	78	43.3
No	102	56.7
Total	180	100

Field Survey, 2004

Visual Observations

Visual observations showed that some of the stalls were dirty and located in dirty environments with hordes of flies. Some were also located near sources of contamination such as sawmills and carpentry sites; refuse dumps, and along dusty roads. Half of the stalls were poorly ventilated. In terms of the personal appearance, some of the vendors appeared dirty and

rough. None of the vendors wore gloves and very few wore aprons.

The Food Vending associations can assist in getting the vendors together for education and training essential food handling and hygienic practices. Indeed, Howes *et al.* (1996) establish links between attitudes and continued education of food handlers towards the sustainability of safe food han-

dling practices. In addition, there should be enforceable regulations that ensure that simple hygienic practices are observed. Elsewhere, bare hand contact with served foods and other unhygienic practices are a violation of the City health codes and the vendors are obligated to provide a barrier between the bare hands and the served foods (Burt *et al.*, 2003).

Majority of the vendors (71.7%) said health officials inspected them once in a year (Table 6). Once is not enough because once the premises have been certi-

fied, the standards may not be adhered to which could consequently have adverse effects on the consumers. None of the vendors were visited by NAFDAC personnel. There should either be a return to the early days, when the health inspectors commonly referred to as “*wole-wole*” would visit the facilities to ensure compliance with hygienic practices or in the alternative, NAFDAC should spread its tentacles into this informal food sector. It is important that in the event that the inspection is left to the health officials, they should be trained in modern techniques of inspection.

Table 6: Distribution of vendors by Health officers inspection

	Frequency	Percentage
Not inspected at all	27	15
Not regular	21	11.7
Monthly	3	1.7
Yearly	129	71.7
Total	180	100

Field Survey, 2004

Awareness of diseases

The vendors all claimed to be aware that diseases could occur from unsafe foods eaten by man and majority (93%) were aware that there are regulations guiding

the preparation of food in order to ensure safety (table 7). It is true that there are laws, but they are obsolete and are not enforced.

Table 7: Distribution of vendors by awareness of regulations guiding food preparation.

	Frequency	Percentage
Yes	168	6.7
No	12	93.3
Total	180	100

Field Survey, 2004

However, from the present results, it would appear that getting the vendors to meet up with essential hygienic behaviour that would make the foods sold to be more safe would require some additional costs whether for training, purchase of equipment or even for relocation of stalls. Additional cost necessarily means additions to the price of a meal which consumers may be willing to pay because the average consumer is no longer only interested in the convenience of street food; there is a recent interest in its safety, quality and hygiene and a willingness to pay more for safe foods (Akinbode, 2005).

CONCLUSION

Street food vending has come to stay in Nigeria. It is a profitable enterprise, which could serve as a primary occupation to earn a living and also serve as a source of employment generation. However the level of hygiene and hence the safety of the food is questionable. The Nigerian laws aimed at sanitizing the street food sector are grossly outdated. These laws fail to state how often the Health Officer must inspect the premises of sale of food and food. They also fail to describe in explicit terms, the levels of cleanliness expected of the regulated premises and the penalties attached to violations of the clauses need to be reviewed. For instance in South Africa, the government and FAO have created educational products to help vendors, food inspectors and consumers to make the sale of street foods a safer and more profitable enterprise (FAO, 2001). It is recommended that the government in Nigeria should intervene in this sector as it has been done in other developing countries in training, education and supervision of food vendors to raise the hygiene and

profit levels in this informal food sector.

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