

Marketing of Some Selected Vegetables: In Yola- North and South Local Government Areas of Adamawa State, Nigeria.

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-----ABSTRACT-----

The study was carried out to examine the marketing of sweet pepper, spinach and tomato in Yola North and Yola South Local Government Areas of Adamawa State. Seventy five (75) vegetable sellers were randomly selected (through purposive and simple random sampling techniques) within six wards of the study area namely: Jambutu, Damilu, Luggere, Namtari, Ngurore and Yolde- pate. Data were collected from primary and secondary sources. The primary data was collected with the aid of structured questionnaire. The data was collected within the period October to December 2012. Simple descriptive statistics, marketing margin as well as gross margin analyses were employed in the analysis of the data. The study showed that majority of the respondents (53.33%) were female. The middle aged people constituted 46.67% while 53.33% were illiterates. Total average gross and marketing margin analyses for all the vegetables gave ₦10,871.91 and ₦1,291.91 respectively. The total average net income of all the vegetable sellers was found to be ₦10,711.91 indicating good profit level. The study however, revealed that poor storage, inadequate transportation network and shortage of capital were the major problems facing the respondents. To this end, there is need for the government to intervene by providing the marketers with adequate transportation network, good storage facilities and loans to facilitate their business. The marketers on their side should form cooperatives to give them a better bargaining power in their business. Also further studies on vegetable storage in the study area is hereby recommended.

KeyWords: Marketing, Margin, Respondents, Transportation, Vegetables
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I. INTRODUCTION

Agricultural Marketing deals with the performance of all business activities which directs the forward flow of agricultural goods and service to customers in order to accomplish the producer's objectives (Olukosi and Isitor, 1990). It involves all the legal, physical and economic services which are necessary to make product from the farm available in the form, place and time required by the consumers. Usman *et al.* (2008) also describe marketing as the process of planning and executing the conception, pricing, promotion and distribution of ideas, products and services to create exchange that will satisfy the needs of individuals and organization. Good marketing system reduces the marketing costs, ensures high level of income to the producers, provides good quality of agricultural produce at affordable price to the consumers and minimizes the number of intermediaries Raj *et al.* (2007).

Marketing of vegetables in both rural and urban areas brings about natural sources of food that can supply all the nutrients especially minerals, vitamins, and crude fibre. They are rich in, and are comparatively cheaper sources of vitamins and minerals (Thamburaj and Narendra, 2001). Nutritionists are of the opinion that fresh fruits and vegetables are very important sources of vitamins and minerals that are essential for healthy human diet Chidi, (2012). Vegetable production constitutes an important part of Nigeria's economy as today's horticultural crops contribute about 25% of the total agricultural exports of the country (Thamburaj and Narendra, 2001). Effective marketing of agricultural products in Adamawa State have become the main concern of the farmers and policy makers alike. With the down turn of the economy in recent season and the need for serious diversification, agriculture is once again coming back to be at the fore-front of the state's economy.

Vegetables are of different origins and require different environments for their growth. Several vegetables are grown both in the tropics and in the temperate region (Tindall, 1986). Ecological zones of production in Nigeria for maximum yield include Jos, Kaduna, Zaria as well as most parts of southern Nigeria (Extension Guide, 1976). Vegetables can be best grown by irrigation (Extension Bulletin, 1986). Irrigation scheduling is used to attempt to supply water efficiently. In Yola, vegetable production and bulk marketing is restricted mostly along the bank of Benue valley where farmers take the advantage of the residual moisture from the receding river. In addition, farmers take the advantage of cheap source of water from Lake Gerio to irrigate their vegetable farms. This in essence enables the farmers to engage in productive economic activities ranging from active farming to vegetable marketing throughout the season. Fresh vegetables have become important source of income to producers and marketers alike. Recently in Adamawa State, more attention has been paid to the production of vegetable ranging from rain-fed to irrigated. Literature is scarce in the marketing of vegetables. However, this research which focuses on the marketing of vegetables (Pepper, spinach and tomato), will help to identify strategies associated with vegetable marketing.

1.2 Objectives of the study

The main objective of the study is to examine the marketing of vegetables in Yola-North and Yola-South L.G.As of Adamawa State. The specific objectives include, to:

- 1) describe the socio-economic characteristics of vegetable marketers in the study area.
- 2) examine the performance of vegetables marketers in the study area.
- 3) determine the costs and returns associated with vegetable marketing in the study area.
- 4) identify the constraints in vegetable marketing in the study area.

II. METHODOLOGY

2.1 The study area

This study was carried out in Yola- North and South Local Government Areas of Adamawa State. They are the administrative headquarters of the state, with a total land area of 733.603 and 115,252 square kilometres respectively and a growing population of 199,674 and 196,197 persons respectively. It is situated on latitude $9^{\circ}14$ North and longitude $12^{\circ}38$ East, Yola is bordered on the east and south by Fufore, North and west by Girei and Demsa respectively (Adebayo and Tukur, 1999; NPC 2006). It is endowed with forest reserve area of 86.37 square kilometres and mean annual rain fall of 910.8mm per year (Akosim, *et. al*, 1997). The area has an agro based economy with numerous agricultural potentials. Major segment of the population are farmers. Vegetables produced include: Tomato, Spinach, Sorrel and Pepper while food crops produced are Maize, Rice and Guinea-corn. Cattle rearing and fishing also predominate.

2.2 Data collection and analysis

The study employed a purposive sampling technique to collect primary data via administration of questionnaire and personal interview with the marketers. Seventy five (75) vegetable marketers in six (6) wards of the study area were randomly sampled. The analytical tools adopted in analyzing the data included simple descriptive statistics such as frequency tables and percentages which were employed to analyse the socio-economic characteristics as well as problems encountered by the vegetable marketers. Marketing margin was employed to determine the marketing performance of the vegetable marketers. The formula as given by Olukosi and Isitor (2005) is:

$$\text{Marketing Margin} = \frac{\text{Total selling price} - \text{Total cost price}}{\text{Total selling price}} \times 100$$

The Gross margin was used to determine the costs and returns associated with vegetable marketing. Gross margin is the difference between total revenue and the total variable cost of vegetables (Olukosi and Isitor, 2005). The formula is given as:

$$GM = TR - TVC$$

Where:

GM = Gross Margin

TR = Total revenue (Gross income or total income)

TVC = Total variable cost.

Thus, the net incomes were determined using

$$NI = TGM - FC$$

Where:

NI = Net Income
 TGM = Total Gross Margin
 FC = Fixed cost

III. RESULTS AND DISCUSSIONS

Table 1: Demographic Characteristics of Respondents

Parameters	Frequency	Percentage %
Gender		
Male	35	46.67
Female	40	53.33
Total	75	100.00
Age		
15-25	9	12.00
25-35	35	46.67
35-45	25	33.33
45 above	6	8.00
Total	75	100.00
Marital Status		
Single	12	16.00
Married	44	58.67
Divorced	19	25.33
Total	75	100.00
Education Background		
Non-formal education	40	53.33
Primary school education	35	46.67
Secondary school education	00	00.00
Post Primary School	00	00.00
Total	75	100.00
Occupation		
Marketing only	70	93.33
Marketing and Farming	05	06.67
Total	75	100.00

Source: Survey Data, (2012).

Table 2: Marketing Characteristics of Respondents

Parameters	Frequency	Percentage%
Experience in Marketing		
Bellow 5 years	20	26.67
5-10 years	37	49.33
11-20 years	14	18.67
Above 20 years	04	05.33
Total	75	100.00
Source of Capital		
personal savings	42	56.00
Loan from relatives	33	44.00
Financial institutions	00	00.00
Total	75	100.00
Mode of Transportation		
Vehicle	58	77.33
Motorcycle	13	17.33
Bicycle	04	05.34
Total	75	100.00
Source of vegetable		
Directly from farm	21	28.00
From other sellers in the market	54	72.00
Total	75	100.00
Problems Encountered		
Capital	30	40.00
Storage	35	46.67
Transportation	10	13.33
Total	75	100

Source: Survey Data, (2012).

Table 3. Average Gross and Marketing Margin per Minimum Size Basket or Bundle

Marketing Cost	Tomato (₦ : K)	Spinach (₦ : K)	Sweet pepper (₦ : K)	Tomato & sweet pepper (₦ : K)	Total for all Vegetables(₦ : K)
Cost of purchasing	500.00	420.00	4000.00	4,500.00	9,420.00
Variable Cost	150.52	125.35	250.85	401.37	928.09
Fixed Cost	20	20	50	70	160.00
Total marketing cost	670.52	565.35	4,300.85	4,971.37	10,508.09
Returns					
Selling Price	860.00	780.00	4,650.00	5,510.00	11,800.00
Gross margin	709.48	654.65	4,399.15	5,108.63	10,871.91
Net Profit	689.48	634.65	4,349.15	5,038.63	10,711.91
Marketing margin	189.48	214.65	349.15	538.63	1,291.91

Source: Survey Data, (2012).

It can be deduced from table 1 that majority (53.33%) of the respondents were women with 58.67% of the total respondents married. The reason for women being the majority may be attributed to the belief that in marketing women are better off in terms of favour and being able to attract customers than men. The table also reveals that (53.33%) of the respondents had no formal education and could not read or write effectively. This may be the reason why most of them (93.33%) are engaged in marketing of vegetables as full time affairs and do not have any other business apart from it. If the respondents were to be educated, they can make more profit as pointed out by Usman *et. al.* (2006), that educational level of a trader does not only raise his productivity but also increase his ability to understand and evaluate new techniques and processes for better marketing of his goods.

The result from Table 2. Indicated that 49.33% of the respondents had been in marketing of vegetables for 5 to10 years and only 5.33% were engaged in the business for more than 20 years. This showed that few of the respondents were in the business for long and many others were still coming in. While most of the respondents (56.00%) obtained their initial capital outlay from personal saving, none was found to have obtained loan from financial institution to augment his/her capital. These findings corroborate with the reports from previous studies that formal credit institutions were inactive in credit advancement for small and medium scale enterprises in Nigeria. This led to their(marketers) inability to operate large-scale business in the study area. The table further indicated that storage is the most (46.76%) serious problem encountered in the marketing of vegetable in the study area. This can attributed to the perishability nature of the crop, in which non-disposal of the products on time could lead to spoilage. This agrees with the findings of Usman *et al.*, (2013) who also reported poor storage and processing facilities course excessive losses of tomato at storage in Adamawa State.

The result of the gross and marketing margin analyses is presented in Table 3. The evidence gathered from the analyses revealed that sweet pepper is the most profitable vegetable with a gross margin of ₦4,399.15 and a marketing margin of ₦349.15 per basket, this could be attributed to the fact that it can be stored locally for a longer period of time than others. Another reason could be that it is the most frequently use in every soup in the study area. It is closely followed by spinach with a marketing margin of ₦214.65 while tomato is the least profitable vegetable with a net income of ₦689.48 The table also showed the total average net income of all the vegetable sellers to be ₦10,711.91 with a total average gross margin of ₦10,871.91 per basket. Therefore, the greater the work involved in changing the form of a product and providing services to satisfy the consumer, the greater the marketing margin. Marketing margin analysis also help to detect the level of marketing at which excessive and unjustifiable margins are charged by market intermediaries (Mafimisebi *et. al.* 2002). It is obvious, therefore, that the marketers of tomatoes as well as sweet pepper obtained higher marketing margins than others, most likely because the two vegetables are mostly sold together.

IV. CONCLUSION AND RECOMMEN-DATIONS

This study examined the marketing of sweet pepper, spinach and tomato in Yola-North and South L.G.A of Adamawa State. The results from the socio-economic characteristic of the respondents revealed that majority of them (53.33%) were female, middle aged (46.6%), married (58.67%) and were mostly illiterate (53.33%). The results from the gross and marketing margin analyses showed that vegetable marketing is profitable in the study area. The study further identified poor storage and inadequate capital as the most serious problems of vegetable marketers in the study area.

The study therefore, recommends that further studies should be intensified into effective methods of storage and packaging to preserve the perishable produce to ensure continuous supply during off season because their demand is relatively, constant all year round. The vegetable marketers should come together and form associations or cooperative society. This will go a long way towards exposing them to other markets opportunities where bulk of their produce would be sold. In addition, it will make it easier for the government to render assistance as well as grant loans. These will go a long way towards enhancing the viability of the sector.

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