# **Short Refereed Articles**

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# Baseline studies on the marketing of Amaranthus in Tamale

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#### Abstract

This paper examined the marketing of amaranthus in terms of handling, access to market information and consumer demand in four major markets in the Tamale metropolis. The study was done in May 2011 by employing a semi structured questionnaire for interviewing 50 randomly sampled respondents. Results from the study showed that females are the retailers of amaranthus. Majority (56%) of the respondents had no formal education and the percentage of respondents with secondary education (28%) was more than those with primary education (16%). Retailers had their daily consignments from 8 areas in and around Tamale with Choggu (36%) and Gumbihini (34%) dominating in supplies of amaranthus to Tamale markets. Retailers (76%) fixed market prices based on farm gate prices agreed on by farmers at the beginning of a production period. 30% of the respondents always washed their consignments before display. Fifty two (52%) percent of retailers observed that consumer preferences were for flavour (18.7%), maturity (18%), quality grades (15%) and packaging (19%). A major constraint strongly indicated by all (100%) respondents is the high perishable nature of amaranthus under the high temperature environment that produce are displayed. The full potential of amaranthus as a market commodity will be harnessed when the post harvest handling and marketing activities are well organized for the up scaling of the commodity to formal markets (supermarkets) like Quality First.

#### Introduction

Indigenous vegetables play a highly significant role in food security and income generation of the underprivileged in both urban and rural settings (Schippers, 1997; 2000). *Amaranthus spp, Corchorus olitorius* and *Hibiscus sabdariffa* have been identified as the priority traditional leafy vegetables in Northern and Upper East Regions of Ghana (Clottey *et al.*, 2007). In Tamale, amaranthus is the indigenous leafy vegetable (ILV) with the highest market share (Osei-Kwarteng, In press). Increase in demand of these vegetables has been increasing with increase in consumption by different categories of people. However marketing of these products have been done in a nutshell or have been neglected in research (Lyatuu *et al.*, 2009). Generally leafy vegetables are highly perishable and a well informed market handling activities and access to timely marketing information would ensure good quality produce for consumers since initiatives to promote the postharvest sector cannot ignore inefficient marketing systems which serve the linkage between producers and consumers. This research aims to establish the existing market for amaranthus as the leading ILV in the metropolis. The information gathered will serve as a bases for any intervention to address specific market handling issues to improve the amaranthus commodity chain for better quality produce and higher returns to the various actors in the commodity chain particularly producers and retailers.

## Methodology

A reconnaissance survey was conducted in May 2011 in 4 selected markets in Tamale. Four (4) major markets (Aboabo, Tamale Central, Lamashegu and Kukuo) of status national and urban markets for the first two and last two respectively, were purposively selected for the study. A semi structured questionnaire aided the interviewing of the sellers / retailers of amaranthus. The questionnaire covered issues on handling of produce in the market, source of market information and consumer demand of their produce. A total of 50 respondents were randomly selected for the study based on the total number of amaranthus' retailers in the various markets. Data collected was analysed by Statistical Package for Social Sciences (SPSS) version 17.0 and Microsoft Excel and descriptively represented in tables and pie charts.

#### **Results and discussion:**

## **Demographic characteristics**

Table 1 shows the socio-economic characteristics of amaranthus' retailers in the 4 markets sampled in Tamale metropolis. Majority of the retailers (76 %) were aged between 26-45 years indicating the employment opportunity given to the youth via the marketing of amaranthus. Thus the value ILVs (amaranthus) in the provision of household incomes to the rural and urban livelihoods cannot be overemphasized (Lyatuu *et al.*, 2009). All respondents were women indicating the key role of women in the marketing of vegetables (Schippers, 2000) and also the main occupation of most women in the Northern region is trading (Sowley *et al.*, 2011).

 Table 1: Social economics characteristics of respondents.

Characteristics	Categories	Frequency	Percentage
A. Age (years)	15-25	8	16
	26-35	21	42
	36-45	17	34
	46-55	4	8
	55 above	0	0
B. Gender	Male	0	0
	Female	50	100
C. Education	Non formal	28	56
	Primary school	8	16
	Junior high school	12	24
	Senior high school	2	4
	Tertiary	0	0

#### Source: Market survey, 2011

Majority (56 %) of the respondents had no formal education (Table 1) The percentage of respondents with secondary education (28 %) was more than those with primary education (16 %) only 2 % of the respondents had senior high school education and their presence in the market may be due to their inability to further their education for one reason or the other and the absence of alternative jobs. The generally low educational level of the respondents can impede the transfer of technologies in the handling of produce and accessing market information.

## Source of produce

The sources of daily amaranthus consignments for retailers were from 8 production areas in Tamale with Gumbihini and Choggu suburbs being dominant areas. Figure 1 indicates the percentage of consignments from the various production areas mentioned. As the production sites are within the Tamale metropolis, it is advantageous for the availability of fresh produce in the market.



Figure 1: Source of amaranthus consignments to Tamale markets.

Handling of produce

The study showed that 30 % of the respondents washed their consignments and tied them into bundles of weight 320 g - 460 g for sales. A fairly good percentage (24 %) of retailers made it a must to sprinkle water on their produce when on display. This is to reduce transpiration and maintain to an extent a certain degree of freshness of the produce. Trimming and resizing of amaranthus bundles were done when the need arises during sales.

## Access to Market information

From the study, 76 % of retailers indicated that farmers set prices for amaranthus at the beginning of the production period at a meeting, therefore the prices per unit weight is almost the same at each production area. Hence retailers also decide their market prices from the prevailing farm gate price and further reduce the bundle size in the markets. However 24% of retailers had no idea on prevailing farm gate prices. The price quotation for various units of vegetables are generally the same in a particular market because sellers use their previous experience in deciding units of sale and also depend to a large extent , on units of sale of their fellow retailers in the market (Alordzinnu,1989). One major constraint strongly indicated by all (100 %) respondents is the high perishable nature of amaranthus under the high temperature environment that produce are displayed. All respondents called for other simple postharvest technologies other than sprinkling of water that would maintain the postharvest life of amaranthus so as to earn better profit margins.

## **Consumer demand**

Sixty four percent (64 %) of retailers confirmed consumer's preference in terms of bundle size. Fifty two (52 %) percent of retailers observed that consumers normally prefer smaller bundles while 48 % said consumers prefer bigger bundles. Generally retailers observed that consumers from individual households normally preferred smaller bundles. Nineteen percent (19%) of retailers indicated consumers' preference for fresh and dark green leaves. Other preferences were for flavour (18.7 %), maturity (18 %), quality grades (15 %) and packaging (19 %).

# Conclusion

Amaranthus, an indigenous leafy vegetable with a high market share in Tamale, has the potential as a commodity when the post harvest handling and marketing activities are well organized. The study revealed the need of making postharvest handling information available to retailers thus addressing postharvest losses in the market. Retailers must be given training on simple postharvest technologies to maintain the shelf life of amaranthus on market display. The study also revealed consumer preferences for amaranthus which indicates the opportunity for amaranthus to be up scaled to supermarkets as happening in countries like Kenya.

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