Factors that Influence Demand for Beans in Malawi
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INTRODUCTION

The common bean *Phaseolus vulgaris* is one of the most important legumes, grown by smallholder farmers in Malawi. Farmers usually grow a wide range of bean varieties that vary tremendously in grain size, colour, shape and plant growth habit. Over the years, a lot of effort has been put in research for development to improve bean varieties, so that farmers have access to better and more productive bean varieties. Such efforts have translated into release of several bean varieties, 9 by Bunda and 8 by Chitedze, which add on to framers own landrace varieties. It is a known fact that farmers grow a wide range of varieties, and that part of their produce is sold in the markets, but very little is known about consumer preferences, which influence choice of beans in the market. It is also a known fact that bean varieties have different characteristics that could in one-way or another determine their attractiveness to consumers. This study was therefore undertaken to assess some of the social factors that determine choice of beans on the market, and how that relates to price of beans.

METHODOLOGY

The study was conducted between March and April 2004, which was soon after bean harvest. A two-stage cluster sampling approach was applied. The first stage involved purposively targeting the major bean markets, mainly in southern and central parts of the country (Fig 1). The second stage involved bean traders who were randomly selected and where possible taking into consideration the presence of wholesale and retail merchants. A total of 74 bean merchants were interviewed using a structured questionnaire, to capture such information as:
1. Factors that influence the choice of bean in the market
2. Factors that influence the price of beans and sales volumes
3. Information sharing between traders and producers

RESULTS

Popular bean types in the markets
Traders used different names for the same variety depending on location, for instance Napilira which is red mottled in colour was also called Kachiyata (or simply Chiata), where as the common red kidney bean was referred to as Phalombe or Chimbamba or Thyolo, depending on which market one visited (Table 1).

Table 1: Names of bean varieties used by traders in markets

Name	Grain Colour	Count (N=74)*	Percentage (%)*
Nanyati	Cream mottled (sugar)	53	71.6
Khaki/Mulanje	Cream	25	33.8
Napilira/Kachiyata	Red mottled	48	64.9
Phalombe/Chimbamba/Thyolo	Red kidney	57	77.0
Kaulesi	Purple/greyish	25	33.8
Mixed Beans	Various colors	9	12.2
Total		*	*

Total count and percentage exceeding 74 and 100% respectively due to multiple responses.
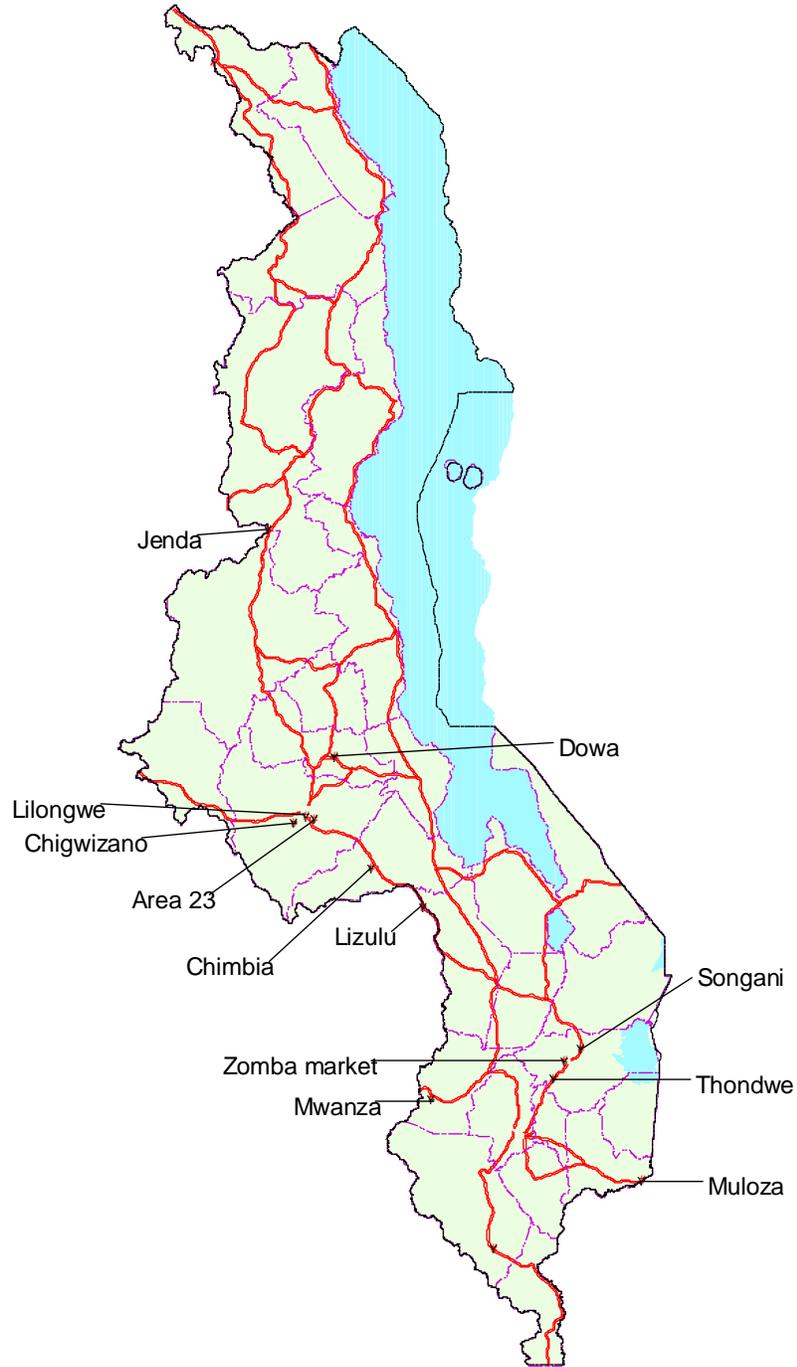
Figure 1. Market sites captured in the study

The majority of traders were dealing with sorted beans by variety, except 12% of the merchants. The market places were dominated by only 3 bean varieties, which were traded by more than 50% of the merchants: Phalombe (77%), Nanyati (72%) and Napilira (65%).

Factors that influence the choice of beans in the market

a. Preferred bean types
The majority of the traders (64%) mentioned Phalombe as the bean type that is highly demanded on the market followed by Nanyati (34%) and Napilira (20%) (Table 2.). At least 50% of the merchants at Lizulu, Chigwirizano, Chimbiya, Mitundu, Lilongwe- Central, Mwanza, Muloza, Thondwe and Zomba markets reported that Phalombe had the highest demand. The exceptions were Area 23 market where Nanyati was mentioned by 80% of the traders.

Table 2: Bean varieties mostly preferred in the market

Variety	Count (N=74)*	Percentage (%)*
Phalombe	47	63.5
Nanyati	25	33.8
Napilira	15	20.3
Khaki	8	10.8
Mixed	4	5.4
Total	**	**

**Total count and percentage exceeding 74 and 100% respectively due to multiple responses.

b. Basis for choice of bean types
The majority of the traders (ranging from 39-41%) mentioned grain colour, cooking time and taste as some of the factors that influenced demand for beans on the market (Table 3). Traders were however, not very clear on what type of taste consumers preferred, as taste is difficult describe – but were quick to say consumers liked beans with 'good' taste. This means that taste subjectively influenced consumers' choice of beans, based on their perceptions of 'good taste'. Further probing revealed that most consumers liked Phalombe because it is dark red in colour. When cooked, this bean variety provides a deep red bean sauce which makes a good contrast with the white maize based dish, a staple food commonly consumed in Malawi. Although traders reported that bean varieties with short cooking time, sold faster, there was no consensus to which specific variety had less cooking time. Some traders mentioned Phalombe to cook fast while others were of the opinion that Phalombe did not cook fast at all. Some traders frequently mentioned Nanyati as one of the varieties that cooked fast.

Other traders (24%) indicated that sometimes consumers have to choose what is available on the market. For example, although Phalombe was the most preferred bean type, it was not readily available on the markets. In this case, consumers were compelled to purchase other varieties that were available.

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Table 3: Factors influencing demand of beans

Factor	Count (N=74)*	Percentage (%)*
Taste	30	40.5
Cooking time	29	39.2
Grain colour	29	39.2
Availability	18	24.3
Damage level	6	8.1
Brightness	4	5.4
Grain size	4	5.4
Total	**Add**	**Add**

Total count and percentage exceeding 74 and 100% respectively due to multiple responses.

Factors that influence the bean market price

Bean prices varied within and across markets as well as across the bean types based on preference. Some of the bean types captured at the merchants sales depots were Nanyati, Napilira, Phalombe and Khaki. Khaki beans had the highest average wholesale price of US$0.50/kg followed by Phalombe at US$0.46/kg. Last on the list was Napilira, which had the cheapest average selling price of US$0.36/kg. In general, the wholesale prices ranged from US$0.30/kg to US$0.80/kg across the varieties. The study revealed that price of beans mainly depended on availability (57%). However, some variety characteristics such as cooking time, grain colour and taste also influenced price of the bean varieties (Table 4).

Table 4: Factors influencing bean price

Factor	Count	Percentage (%)
Availability	42	57
Cooking time	16	22
Grain colour	16	22
Taste	8	11
Grain size	4	5
Damage level	1	1
Others	22	30
Total	******	******

**Total count and percentage exceeding 74 and 100% respectively due to multiple responses. The percentages are out of 74

Estimates of monthly sales volumes of beans were obtained from wholesalers. This information confirmed that there were no direct relationships between preference for specific bean types and volumes of sale. It was the availability that in turn was associated to the sales volume. Napilira, which was the 3rd most preferred type but had the highest average sales volume, about 8800 kg in a month (Figure 2). Traders attributed this mainly to its high yielding ability, which made the variety to be the most abundant on the market at the time of harvest. Thus merchants had no choice but to trade the varieties that were readily available in the market.
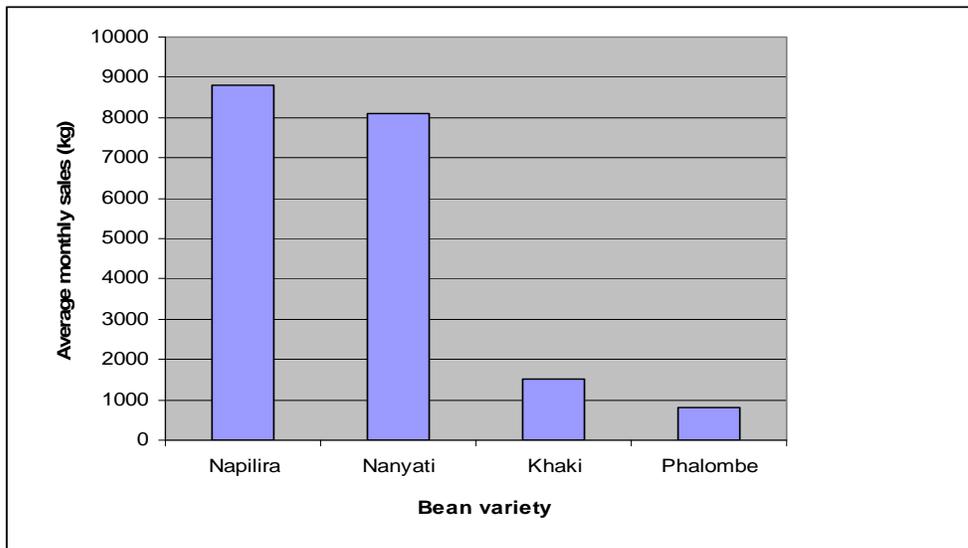
Figure 2: Wholesalers Average Bean Sales

Trader-producer market information sharing

Over half of the merchants (about 68%) reported that they did not pass information to farmers about the highly demanded bean varieties. Some merchants perceived that passing such information to producers was a waste of time because they thought producers were already aware. Others expressed the fear that passing such information to producers would make them demand higher farm-gate prices for the beans.

Lesson learnt

The choice of beans in the market is influenced by grain colour, which is usually associated with consumers' prior knowledge of such factors as familiarity, cooking time and taste of the variety. Phalombe was the most popular variety, but scarce and highly priced. Price of beans in the market was mainly influence by supply and demand principles, although social factors like cooking time and grain colour were associated with price. The relatively new variety in the market, Napilira released in 1995 was the most abundant and cheapest on market at harvest time. There was evidence from the study that traders did not share much market information on highly demanded bean types with producers (farmers) for fear that farmers would demand higher prices for their commodity. This results in shortage of highly demanded bean types, resulting in high prices for such bean types. Thus there is need to bring traders and farmers together so that there is proper linkage between production and markets.