#### University of Nebraska - Lincoln

#### DigitalCommons@University of Nebraska - Lincoln

**INTSORMIL Presentations** 

International Sorghum and Millet Collaborative Research Support Program (INTSORMIL CRSP)

2-22-2011

#### Sorghum Clear Beer Value Chain

Bernadette C. Chimai University of Zambia, chimaibernadette@yahoo.com

Follow this and additional works at: https://digitalcommons.unl.edu/intsormilpresent

Part of the Agricultural Economics Commons, Agronomy and Crop Sciences Commons, and the Food Processing Commons

Chimai, Bernadette C., "Sorghum Clear Beer Value Chain" (2011). *INTSORMIL Presentations*. 15. https://digitalcommons.unl.edu/intsormilpresent/15

This Presentation is brought to you for free and open access by the International Sorghum and Millet Collaborative Research Support Program (INTSORMIL CRSP) at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in INTSORMIL Presentations by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# SORGHUM CLEAR BEER VALUE CHAIN

Bernadette C. Chimai

Department of Agricultural Economics

University of Zambia

Lusaka, Zambia

chimaibernadette@yahoo.com

#### INTRODUCTION

• The markets and industrial utilization of agricultural commodities have undergone considerable change in the last few decades.

 In Zambia, sorghum was considered a traditional crop with limited industrial uses

#### INTRODUCTION CONT'D.

• Research and transformations in consumer tastes and preferences have led to the development of new uses for sorghum.

• Potential markets for industrial utilization of sorghum have been identified as food processing, beer brewing, feed concentrates and energy production.

#### INTRODUCTION CONT'D

 One of the success stories in industrial utilization of sorghum has been Eagle, a sorghum based clear beer produced by Zambian breweries

• The study reported in this paper aims to examine the main linkages in Eagle lager value added supply chain

#### **OBJECTIVES**

The main objectives were to:

 Identify the key players in the supply chain

• Examine the value addition activities performed by the chain players

#### Industrial Utilization of Sorghum

• Industrial utilization is still low in sub-Saharan Africa (Rorhbach).

• Less than 3% of the sorghum produced in sub-Saharan Africa undergoes commercial processing.

#### CONCEPTUAL FRAMEWORK

 A value chain analysis provides useful information on the main activities and operations of a supply chain

• A value chain has the following primary components; inbound logistics, operations, outbound logistics, marketing, and sales and services (Porter, 1980)

#### **METHODS**

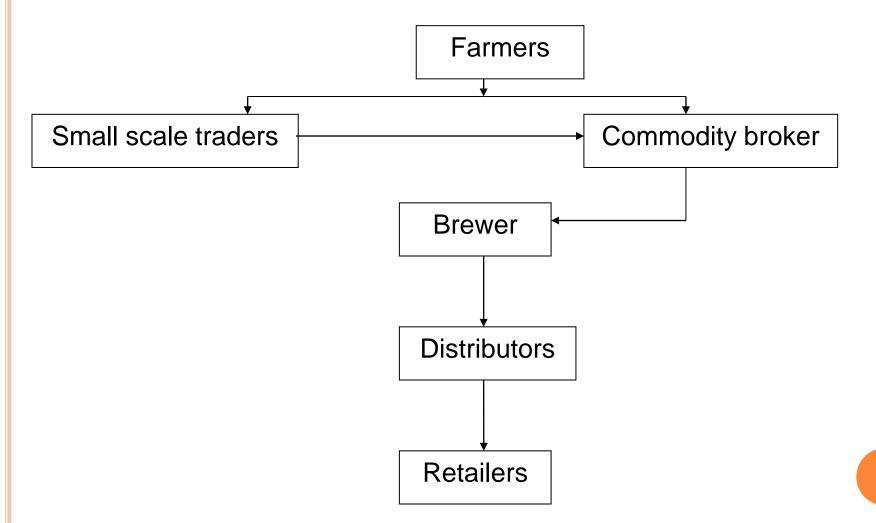
• The study involved a questionnaire based industrial survey of Lusaka-based Eagle lager value added supply chain players.

• Interviews were conducted with key informants at CHC commodities, Zambian Breweries, Nenima trading, R.S distributors, Dandiker Holdings and Jonathan Njobvu bar.

### EAGLE LAGER SUPPLY CHAIN

- Eagle lager was introduced on the Zambian market in 2005
- Started out by contracting 2,500 small scale sorghum farmers in the 2004/2005 agricultural season (Inspiris, 2006).
- The key players in this value added supply chain are sorghum farmers, traders, brewers, distributors and retailers.

### EAGLE LAGER SUPPLY CHAIN



10

#### COMMODITY BROKER

- Currently, Zambian Breweries (ZB) gets all of its sorghum supplies from a local commodity broker, CHC commodities
- It purchases sorghum from small scale farmers, small traders and large scale farmers
- Prices were K960,000-K1,125,000 per metric ton

#### COMMODITY BROKER

• The sorghum collection point for CHC Commodities was based in Kabwe District, Central Province.

• During the 2005/2006 marketing season, the broker purchased 2,900 metric tons of sorghum.

#### **Brewers**

• Eagle lager is brewed by Northern Breweries, a subsidiary of Zambian Breweries, in Ndola

• The company produces 4-6 brews in a week with each brew yielding 30,000 litres of beer from 3.8 metric tones of sorghum

#### Brewers

• The beer is bottled in 300 and 375 ml glass bottles and packed in crates of 24 bottles

• distributed to the main Zambian breweries depots around the country

 Eagle lager is advertized in print media, promotion and road shows

#### DISTRIBUTORS

• Responsible for distributing eagle lager to retailers around the country

• The main distributors are R.S. Distributors, Nenima Trading, Anthion Distributors, Pray and Shavon

#### RETAILERS

• Responsible for distributing the beer to the ultimate consumers through bars and bottle stores

 Most outlets sell at recommended prices of K2,500 and K3,000 for the 300mls and 375mls bottle respectively

#### OPPORTUNITIES AND CHALLENGES

 provided employment and business opportunities to the distributors and their employees

• Retailers are now able to improve the variety of beer offering to their customers

• Consumers are offered a clear beer at a lower price than that of other clear beers

## OPPORTUNITIES AND CHALLENGES

• The introduction of Eagle lager has benefited all the stakeholders involved in the supply chain

 provided sorghum farmers with a ready market for their produce

 ensuring reliable reasonably priced sorghum supplies to Zambian breweries

## OPPORTUNITIES AND CHALLENGES

• Eagle lager enjoys 15-17 percent clear beer market share and is reportedly growing at 5-10 percent per annum

• The commodity broker, CHC commodities, encounters insufficient supply during slack periods of the year

#### CONCLUSION AND RECOMMENDATIONS

 Zambian breweries should invest more in improving the image of eagle lager

 Zambian breweries should follow up on pricing and beer strength complaints expressed by consumers

## THANK YOU!