

ECONOMIC ANALYSIS OF SMALL SCALE SORGHUM PROCESSING IN DAR ES SALAAM, TANZANIA

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Introduction

- Sorghum is an important crop in Tanzania due to its draught resistance and food security role.
- Sorghum producing regions in Tanzania are Dodoma, Singida, Manyara, Shinyanga, Mara, Lindi and Mtwara.
- Most sorghum is produced under small holder farming with low input use and poor technologies.

Introduction cont...

- Despite sorghum production being under small holder farming surplus production is experienced especially when the weather conditions are good.
- Surplus sorghum production has attracted small scale sorghum processing and especially after intervention program on sorghum processing technologies by SIDO/UNIDO and SUA (Dept of Food Science) to small scale food processors in Dar es Salaam and Dodoma, Tanzania.

Problem statement and justification

- Several entrepreneurs dealing in small scale sorghum processing have emerged in Tanzania and especially in urban centres such as Dar es Salaam.
- This was due to small scale food processing initiatives in Tanzania
- The recent initiative that has contributed to this is the SUA-INTSORMIL Project that started in 2005.

Problem statement and justification cont...

- However, despite such initiatives being received by many entrepreneurs:
 - Very few economic studies have been conducted to assess the benefits obtained by sorghum processing entrepreneurs and
 - The challenges they face are not well explained.

Problem statement and justification cont...

- This study therefore assessed costs and benefits obtained by small scale sorghum processing entrepreneurs in Dar es Salaam and the challenges they face.

Study objectives

- The main objectives of the study was to assess costs and benefits of small scale sorghum processing in Dar es Salaam, Tanzania.

Specific objectives

- Specifically, the study assessed the following:
 - Sorghum based foods produced and costs incurred;
 - Sorghum based foods sold and revenue accrued; and
 - Sorghum based food processing and marketing challenges faced.

Sampling frame

- The sampling frame was the small scale sorghum processors who have received support from SUA
- The surveyed processors are located in Ilala, Kinondoni and Tememe Municipalities in Dar es Salaam City.
- The total sample size was 31 processors.

Findings

The study findings are presented in the following sub-sections

- Sorghum processing entrepreneurs social economic characteristics
- Trends in sorghum supply purchased, costs incurred and prices in DSM
- Sources of sorghum supply
- Sorghum products processing challenges

Findings cont...

- Trends in processed sorghum sales and selling prices in DSM
- Sorghum products produced
- Sorghum products target markets
- Sorghum products selling strategies
- Sorghum Gross Margin and Net Profit trends from 2000 - 2009
- Sorghum products marketing challenges

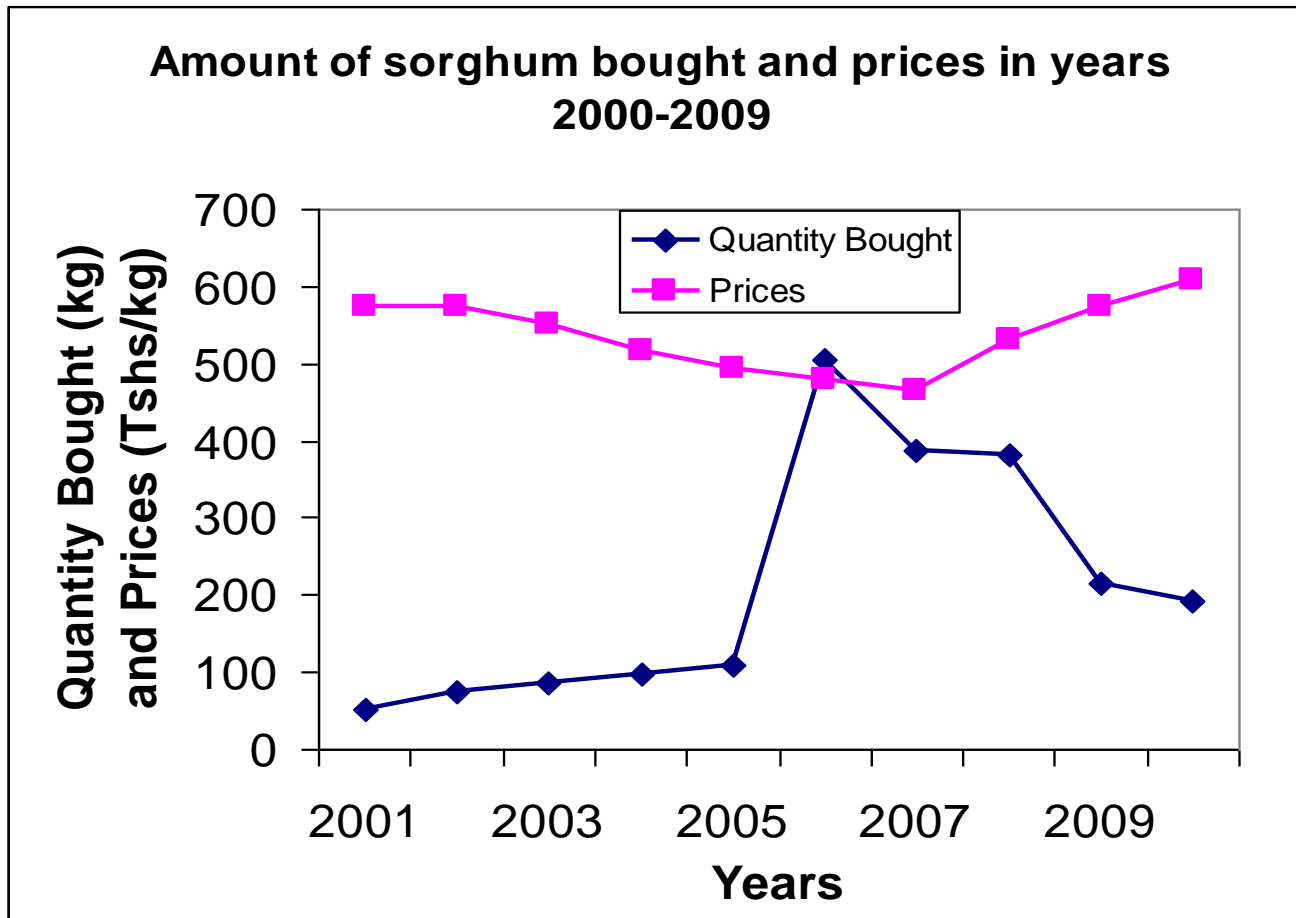
Social economic characteristics of sorghum entrepreneurs

Variable Description	Freq	%
<i>Sex of respondents</i>		
Females	26	83.9
Males	5	16.1
Totals	31	100.0
<i>Marital status</i>		
Single/Not married	6	19.4
Married	18	58.1
Divorced/Separated	1	3.2
Widowed	6	19.4
Totals	31	100.0

Social economic characteristics of sorghum entrepreneurs cont...

Variable Description	Freq	%	Cum %
<i>Educational level of respondent</i>			
Adult education	1	3.2	3.2
Primary education	16	51.6	54.8
Secondary education	11	35.5	90.3
College education	3	9.7	100.0
Totals	31	100.0	
	Mean	Std Dev	
<i>Age of respondents (Years)</i>	47	8.19	
<i>Household size</i>	5	2.12	

Trends in sorghum supply purchased and costs prices in DSM



Sources of sorghum supply

Main source of sorghum supply	Freq	%
Buying from the market	28	90.3
Supply advance from farmers	1	3.2
Ordering from farmers in Mtwara and Dodoma	2	6.5
Totals	31	100.0

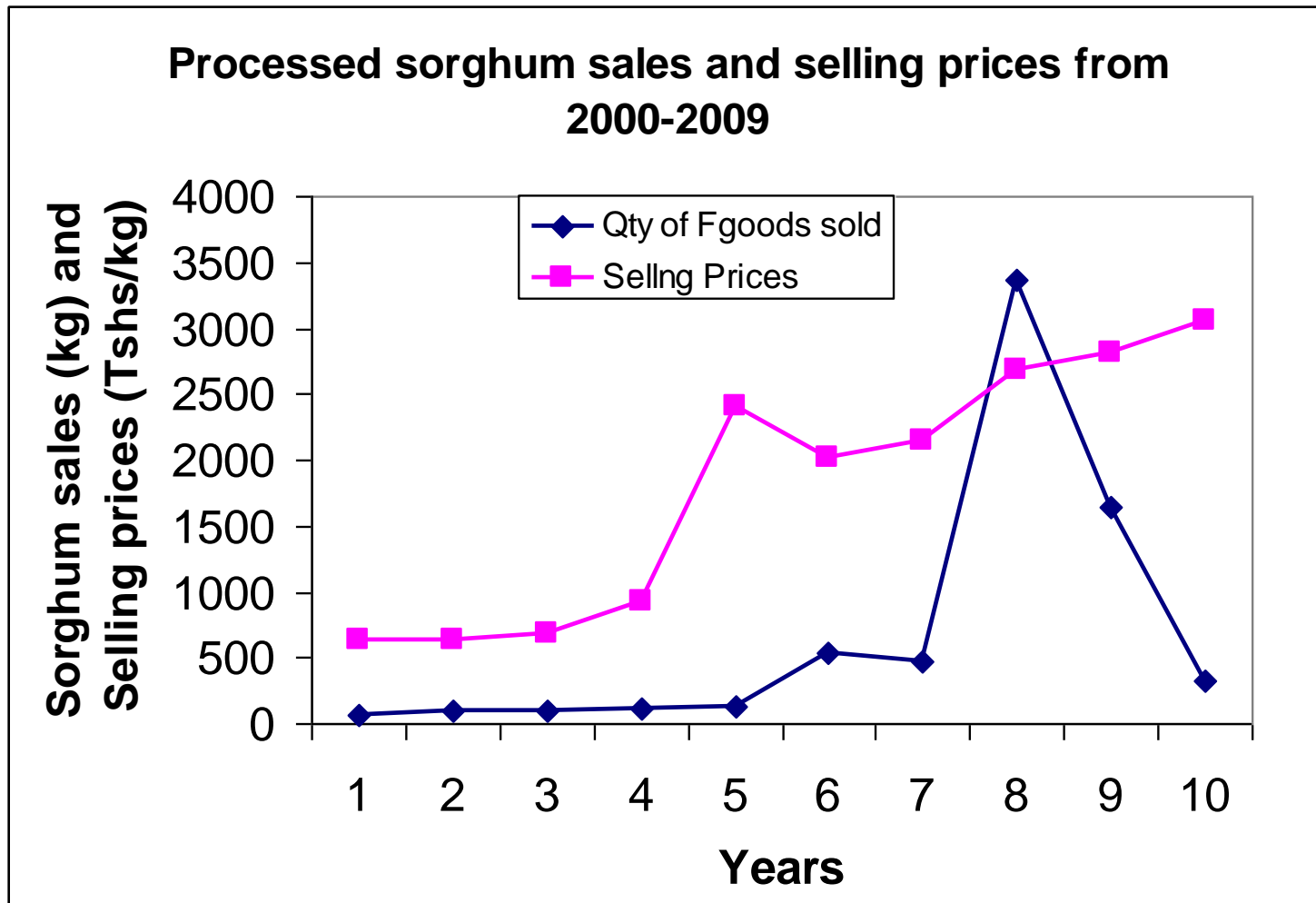
Sorghum products processing challenges

Main sorghum processing challenges	Freq	%
Contaminants (Sand % Dust)	28	90.3
High sorghum prices	2	6.5
Lack of capital	1	3.2
Totals	31	100.0

Processing challenges cont...

Other sorghum processing challenges	Freq	%
Processing machines are far from home	1	14.3
Poor finished products storage facility	5	71.4
Power interruptions	1	14.3
Totals	31	100.0

Trends in processed sorghum sales and selling prices in DSM



Sorghum products produced

Sorghum products produced	Freq	%
Nutritional/Weaning flour	25	80.6
Sorghum flour	6	19.4
Totals	31	100.0

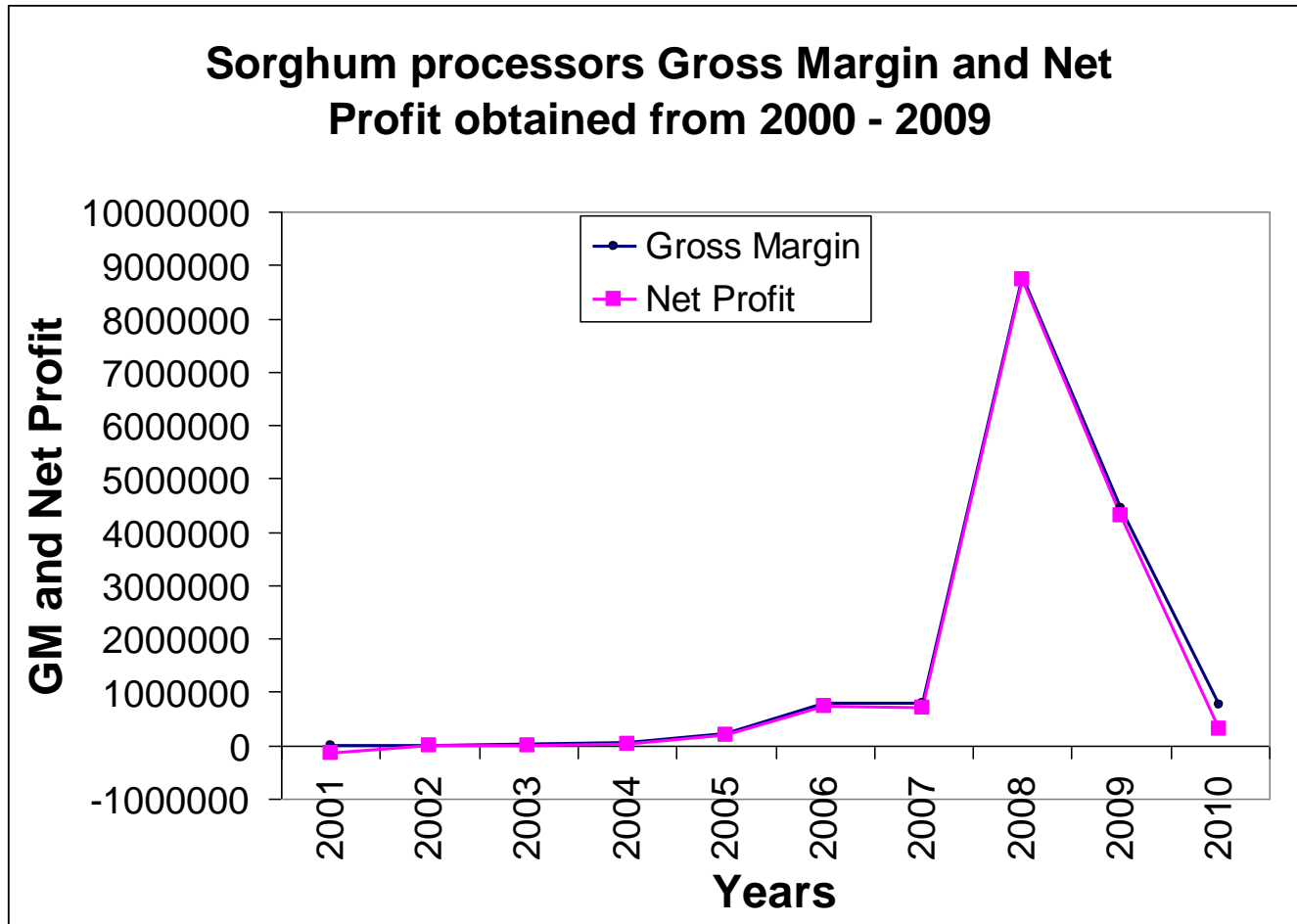
Sorghum products target markets

Sorghum processed products target markets	Freq	%
District/Village markets	25	80.6
Personal selling to office workers	1	3.2
Selling to retailers	4	12.9
Selling to wholesalers	1	3.2
Totals	31	100.0

Sorghum products selling strategies

Sorghum products marketing strategies	Freq	%
Product advertising	14	45.2
Participating in exhibitions/trade shows	2	6.5
Credit sells to customers	6	19.4
Vendoring/Milk run sales	8	25.8
Telemarketing	1	3.2
Totals	31	100.0

Sorghum Gross Margin and Net Profit trends from 2000 - 2009



Sorghum products marketing challenges

Sorghum marketing challenges	Freq	%
Customers' inadequate information on the use of sorghum products	11	35.5
Short shelf life of processed sorghum products	4	12.9
Lack of transportation facility	7	22.6
Lack of reliable market	1	3.2
Low repayment rates from the credit sales	5	16.1
Weather (Difficult to sell during rainy seasons)	2	6.5
Totals	31	100.0

Conclusion and Recommendations

- Development programs and interventions have attracted people to venture into sorghum processing enterprises in the urban centres and especially women.
- Sorghum products marketing is expanding despite the challenges it faces of low consumer awareness, contaminants from sorghum suppliers and lack of storage facility for processed sorghum products.
- Therefore, it is recommended that sorghum products marketing and consumer awareness campaigns should be stressed as well as quality training for sorghum suppliers.

Sorghum based products



Sorghum products in display



Sorghum products on display



Sorghum on sale



Sorghum products advert



Sorghum processors





Sorghum based products



Sorghum products



SUA Researcher visiting Sorghum processing plant



**Thank You
for
Listening**