

**AMBO
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Market Supply and Value Chain Analysis of Wheat: The Case of Tiyo and Hetosa Districts in Arsi, Ethiopia

M.Sc. Thesis Presentation

By:

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INTRODUCTION

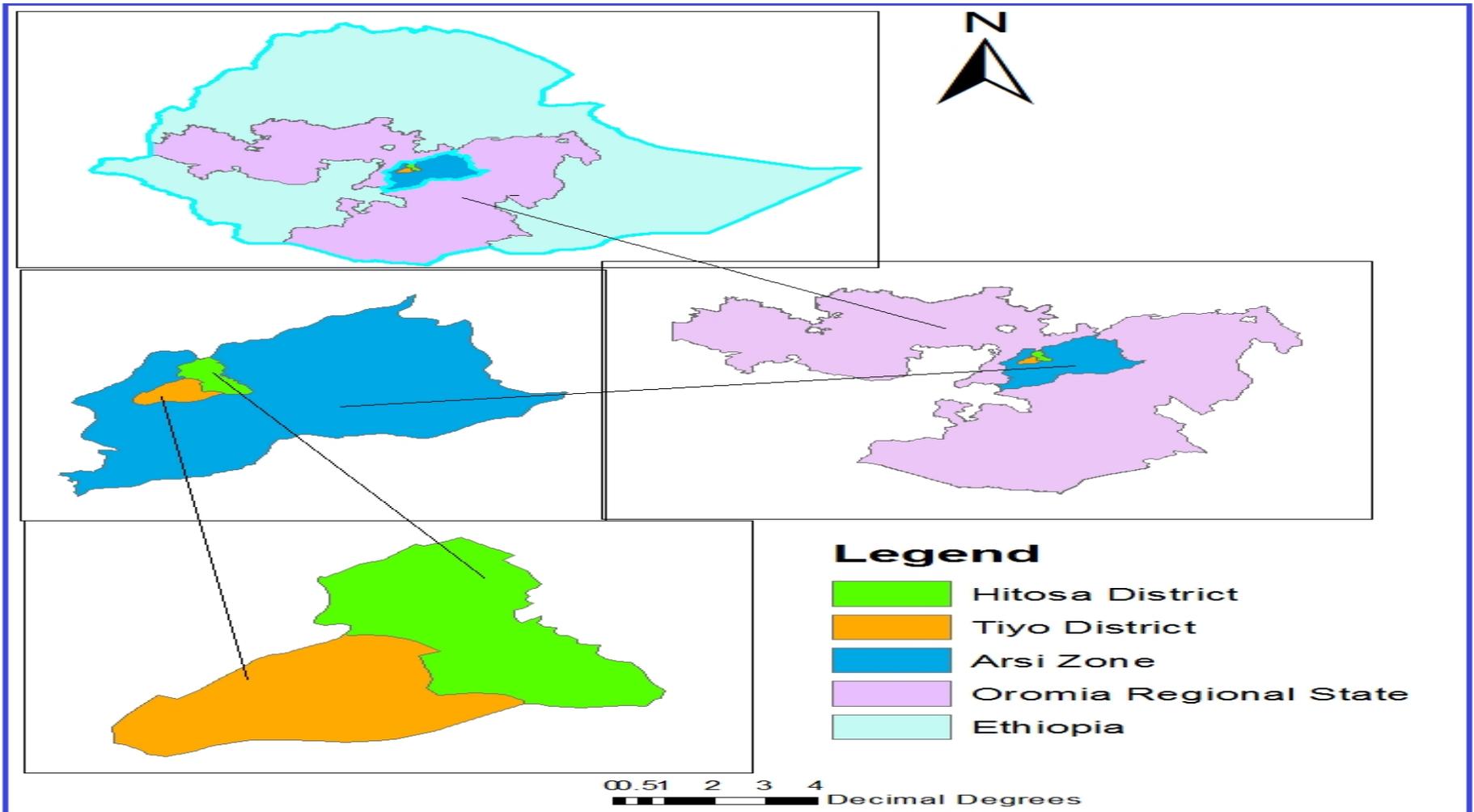
- Wheat is one of the most important cereals cultivated in Ethiopia.
 - It ranks fourth after Teff, Maize and Sorghum, in area coverage and third in total production (Schulthess *et al.*, 1997).
 - In spite of potential for production and growing demand for wheat, in the country market, the supply is constrained by different factors in the country.
- To exploit the opportunity of the current growing demand for wheat and wheat products, development programs and approaches which bring all wheat actors together is fundamental to improve quality and strengthen linkages.

Objectives of the Study

- General objective of the study is to analyze market supply and wheat value chain in the study area.
- The specific objectives of the study were :
 - To map the value chain actors and their value addition in the study area;
 - To analyze performance of wheat market in the study area;
 - To estimate the intensity and determinants of marketed surplus of wheat.

RESEARCH METHODOLOGY

- Description of Study Area



Types and Methods of Data Collection

- Qualitative and quantitative type from:

- primary and

- secondary data sources.

- Sampling Procedure and Sample Size

- Three-stage random sampling technique were implemented

Random sampling method was used to select sample traders, processors and consumers.

- Methods of Data Analysis

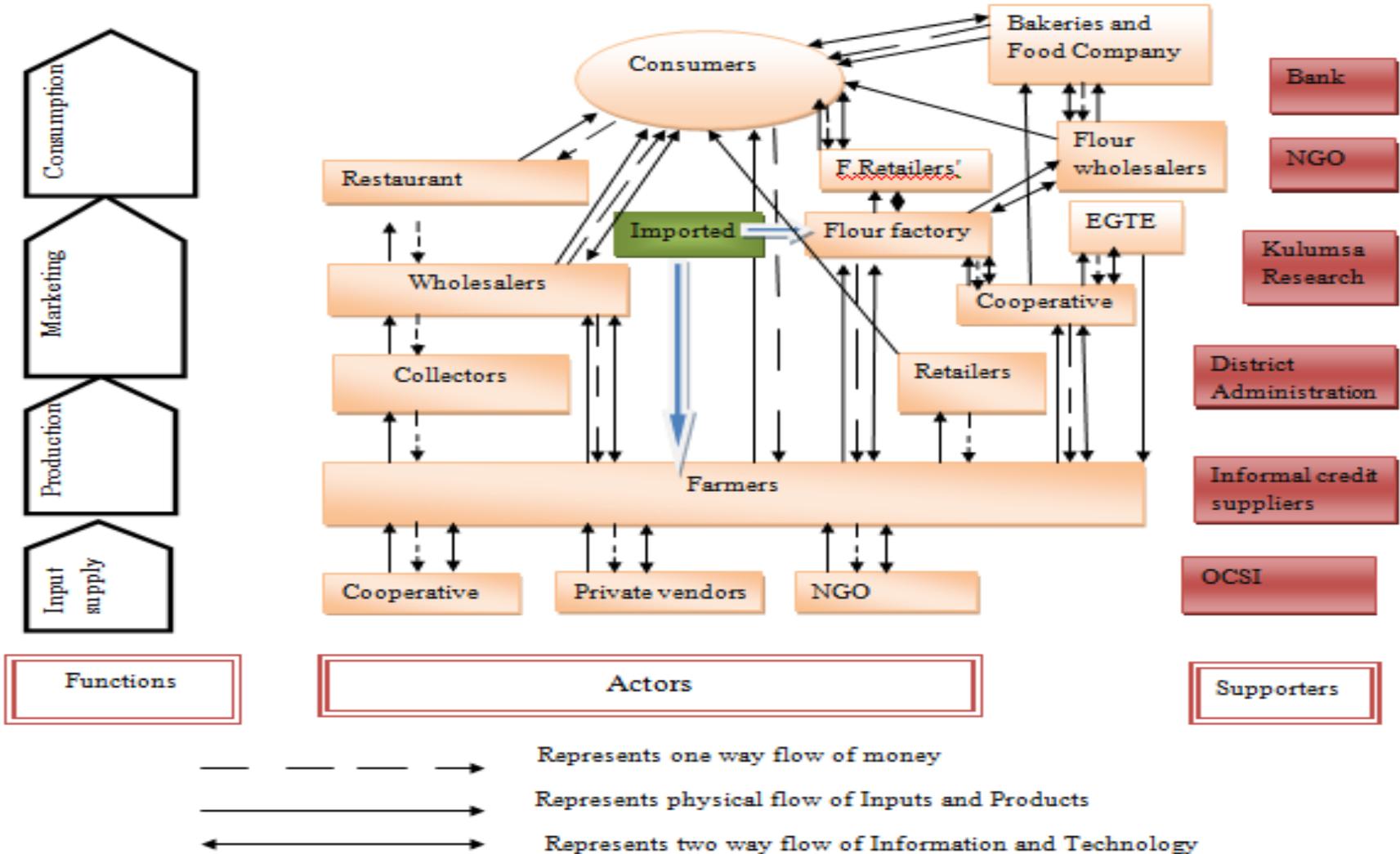
- Two types of data analyses:

- ✓ Descriptive statistics

- ✓ Econometric analysis

Results and Discussion

Wheat Value Chain



Structure ,conduct and Performance of Wheat Market

Structure of the wheat market

- market concentration,
- the degree of clearness and
- entry conditions.

Degree of market concentration

- The degree of market concentration was estimated for the licensed wheat traders in Eteya and Asella town using the four firm concentration ratios.

Table 16. Concentration Ratio for Eteya and Asela Market in, 2014

Traders	Eteya market Volume (in qt)	Market share (%)	Traders	Asela Market Volume (in qt)	Market share (%)
		3.8			
		6.4			
		7.3			
		5.1			5.2
Wholesalers6	2500	8	Wholesalers6	8365	17.5
All other traders	20262	65	All other traders	25521	52
Total			Total		

The levels of market concentrations (CR4) for Eteya market is: 26.8%
Indicate a low degree of concentration

The level of market concentrations (CR4) for Asela market is: 37.7%
Indicate a high degree of concentration as compared to Eteya market

Based on the concentration ratio we conclude that both Eteya and Asela market are classified as monopolistic competition forms market structure.

Wheat marketing costs and benefit shares of actors

Items(birr/qt)	Producers	Collectors	wholesalers	retailers	Processors	Horizontal sum
Purchase price	–	735	855	900	950	3440
Production cost	450					450
Marketing cost						64
Transport cost						4.5
Local cost						10
Overhead						
Payment						
margin						
total						
Total cost						6
Share of profit						75
Margin						35
share of profit						1
margin						
Pr						69
share of profit	0.34	0.04	0.01	0.04	0.56	1
margin						

- This disproportionate share of benefits is the reflection of power relationship among actors. Wheat producers added 34% of the total value of wheat in the districts. Collectors, wholesalers, retailers and processors are responsible for 4%, 2%, 4% and 56%, respectively.

Tobit model outputs of determinants of wheat marketed surplus

Variables	Coefficients		Marginal effects	
	Coefficient	Standard errors	Change among the whole	Change in probability
Value adding activities	10.42**	3.61	10.44	0.005
Livestock holding	0.12***	0.01	0.12	0.00001
District		2.83	4.24	0.0005
Sex of household head	2.51	2.73	2.80	0.0.0002
Education status of house hold	0.81	2.64		
Primary			2.1	0.0002
Secondary	5.26	3.10		
Tertiary	-0.08	8.60		
Wheat Farming experiences	-0.03	0.09	-0.02	-3.69e-06
Family size	-1.05***	0.34	-1.00	-0.00015
Distance to nearest market		2.22	-1.84	-0.00025
Distance to urban centers	0.13	0.12	0.15	0.000025
Land allocated to wheat		1.67	21.07	0.003
Off farm income	21.00**	2.12	-6.23	-0.00082
Access to credit	-5.90***	2.14	8.81	0.0021
Type of seed used	8.67***	2.10	5.93	0.0008
Perception to lag wheat price	5.96***	3.09	6.05	0.0008
Constant	-17.30	10.26		
Log likelihood			-523.11	
LR chi2(16)			323.82	
Pseudo R2			0.27	
Left censored observations			18	
Uncensored observations			132	

Conclusion

- The primary actors in a wheat value chain were input suppliers; farmers; traders; brokers; processors; retailers; and consumers.
- Compared to farmers, traders and processors operating expense is less than half (50%) but their profit margin is more than that of farmers. Wheat producers added 34% of the total value of wheat in the districts.
- Collectors, wholesalers, retailers and processors are responsible for 4%, 2%, 4% and 56%, respectively.
- Among the variables included in the tobit analysis seven variables such as value adding activities, livestock holding of household, access to credit, family size ,access to non-farm income ,type of see used and cultivated land for wheat influence the amount of wheat marketed surplus significantly. Therefore, these variables require special attention if marketed surplus is to be increased.

Recommendation

- Collectors operate without license. As they do well in linking buyers and sellers, they also distort prices to make hidden margin from the deal. It is suggested to advocate for licensing the functions of collectors where they will be accountable for their actions. Building their capacity on how cooperation in value chain development is beneficiary and their role.
- Organize and capacitate producers to enhance their negotiation power and skill by Creating value chain forum at district level where the different value chain actors come together and discuss the problems of wheat value chain and solve them.
- Wheat marketed surplus is positively and significantly affected by access to credit, value adding activities ,livestock holding and land allocated to wheat; Therefore, these factors must be promoted in order to increase the amount of marketed surplus of wheat.

Cont'''' ...

- The wheat value chains in Ethiopia need to be strengthened by encouraging small farmers to organize and to diversify and upscale their production and marketing. Investments in infrastructure, transportation, food industries and packaging industries are also required.
- Both the public and private sectors have a role to play in achieving this.

THE END!

