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# **ANALYZING MARKET CHAIN OF RED ONION MARKETING**

**A case study of structure, conduct and performance of red onion market in Dudga distict, Eastern shoa zone of Oromiya region**

**A Project Paper Submitted to Jimma University College of Business and Economics in Partial Fulfillment of the Requirement for the Award of Master Degree in Business Administration**

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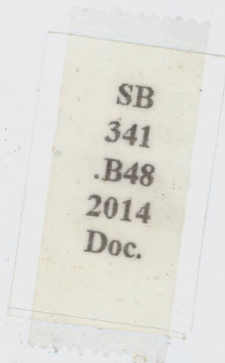
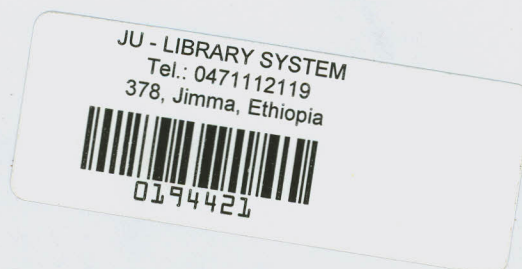
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## Declaration

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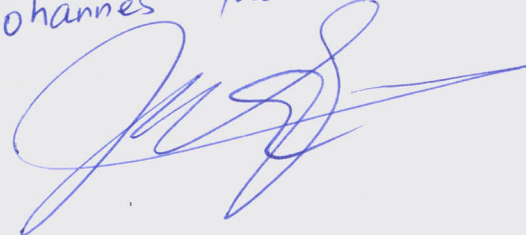
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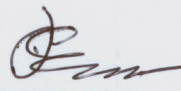
**Jimma University**  
**College of Business and Economics**  
**School of Graduate Studies**

**MARKET CHAIN ANALYSIS OF RED ONION MARKETING**

*A case study of structure, conduct and performance of red onion market in dudga Distict, eastern shoa zone of oromiya Region*

**By: Betelhem Melese**

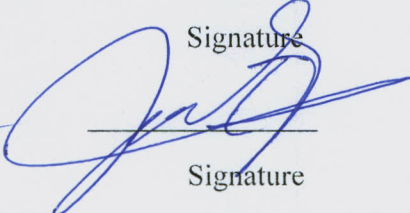
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## **Acknowledgement**

First and for most my deepest gratitude goes to my advisor A.Ramakrishnan (Ph.D) and Co adviser Yohannes Tadesse for thier invaluable comments, criticism and professional advice from the inception to completion of the thesis.

And I wish to present my special thanks to the enumerators and all respondents who spent their valuable time in filling questionnaires. My special thanks also go to my families and all my friends who assisted me in different aspects throughout my study.

To this, truly outstanding people and to many others too, my heartfelt gratitude!

## Abstract

*This paper aims at, to analyze the market chain of red onion in Dugda distict. Eastern shoa zone of Oromiya region. Specifically the study attempts to identify the market structure and investigating market conduct of red onion in dugda district. The study also studies the performance of the market and identifies major marketing problems in trading of Red onion in Dugda district. The market structure, conduct and performance model was adopted for this study. A total of 360 (148 to producers and 10 for brokers,71 for wholesalers and 122 to retailers),questionnaire was distributed using time location sampling resulted in 332(134 from producer,10 from brokers, 67 from wholesalers and 121 from retailers.) viable responses. The net profit obtained by the different market chain actors is indicated as follows. From simple calculation, on the average, a producer profited 213.04, per quintal production (assuming an average price of 250 ETB per quintal,). On top of these wholesalers and retailers profitability from the aforementioned crop were 351ETBper quntal and , 305.61ETB per quintal. However, this potential benefit is under challenges of imperfect marketing. The market conduct is characterized by unethical practices of cheating and information collusion that led to uncompetitive market behaviour even though the calculated concentration ratio did not indicate oligoposony market behaviour (13.08%). Therefore some corrective measures are required by the government as well as institutions like cooperatives.*

**Key terms: market chain , Market structure, Market conduct, Market performance**

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## Acronyms

CSA:	Central statics Authority
FAO:	Food and Agricultural organization
Ha:	Hectare
Kms	Kilometers
ILRL	International livestock research institution
GDP	Gross domestic product
MOI	Ministry of information
SCP	Structure, conduct and performance
SPSS	Statics package for social science
TGMM	Total gross marketing margin
GMMp	Gross marketing margin for producers
GMMW	Gross marketing margin for wholesalers
GMMR	Gross marketing margin for retailers
ETB	Ethiopian birr
Qt	Quintals
FAOSTAT	Food and agricultural organization statistics division

# CHAPTER ONE

## INTRODUCTION

The purpose of this chapter is to communicate the major elements of the study and to set the stage for subsequent chapters. This chapter includes the following major sections; background of the study, a statement of the problem, research questions, objectives of the study, the significance of the study, definitions of terms, limitations and organizations of the study.

### 1.1 Background of the Study

Agriculture has highest role in reducing unemployment rate and poverty which in turn improve economy growth of any country (Meijerink & Roza, 2007; Mellor & Dorosh, 2010). This role is higher in developing countries, like Ethiopia, where Agriculture is the backbone of the country's Economy. It plays a great role in Ethiopia in meeting the national food and industrial raw material demand by securing better purchasing capacity to producers and help for development of other sectors as a source of raw materials, in turn use as source of hard currency for importing technology (MOI,2002). Agriculture contributes about 40% for GDP, for about 80% of employment and 70% of export earnings in 2013 (Ethiopia - African Economic Outlook, 2013).

The competitiveness of firms in today's fast changing business world depends on how effectively and efficiently tasks are performed in the entire system of the organization (porter, 1998). Creating linkage and instigation with different parties and participants in the business process is essential in building and maintaining competitive advantage (porter, 1998). Riedel (2009) also states that the cooperation between producers and corresponding actors in the business is the main source for success of firms. To this end, companies often analyze their entire system to identify the strength and possible source of improvements.

This can be done through Value chain analysis which helps to identify both strengths and weaknesses the firm that can, in part, determine how well a firm will (Riston 2011).



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Analyzing the strength and relationships among the activities that comprise a firm's value chain can be a means of uncovering potential strength and weakness of competitive advantage for the firm and the activities within the firm (Kaplinsky & Morris, 2000).

Value chain analysis has an indispensable role in improving the performance of the firms in any industry (porter, 1998). One of the sectors that highly benefits from value chain is Agriculture sector (Anandajayasekeram & Gebremedhin, 2009). As Silva & Filho (2007) agricultural value chain is chain of activities involved in getting products from the producer to the consumer. These activities occur in a chain and are carried out by different participants, including producers, traders, processors and retailers. Each connection in the chain adds value to the product. This hence results in improving the performance of all the parties involved in the sector at large enhancing the economic growth of the country (Kaplinsky & Morris, 2000).

The wide ranging agro-ecological zones and diversified resources, helps Ethiopia to grow all types of cereals, fiber crops, oil seeds, coffee, tea, flowers, fruits and vegetables (EBDSN). Various kinds of vegetables are produced in Ethiopia such as lettuce, potatoes, green beans, okra, melons, white and red onions, shallots, cabbages, leeks, beetroots, carrots, green chilies and tomatoes etc (EBDSN). These products significantly contribute to national income and employment among the rural population of Ethiopia (Univ, 2013). These products are produced in different areas of Ethiopia. According (Boselie, et. al, 2011) the Rift Valley, including the Upper Awash and the lake region in Eastern Showa, is currently the main fruit and vegetable (mango, avocado, onions, tomatoes, green beans, etc) producing area in Ethiopia.

*Alliums cepa* (red onion) is one of onion species which is produced in a wide range of latitudes and altitudes in Europe, Asia, North America and Africa (Opara, 2003). Because of their storage characteristics and durability for shipping, onions have always been traded more widely than most vegetables. Onions are versatile and are often used as an ingredient in many dishes and are accepted by almost all traditions and cultures (Chris B. Watkins, 2012).



Ethiopia is also one of the red onions producing county in Africa. It used as source of income for the farmers/producers. Moreover it support to food security in times of drought, famine and food shortage and employment opportunity (Univ, 2013). According CSA (2008) vegetable cover 453, 608.8 hectar from the total land of horticultures and an annual production of 18,124,613.5 quintal was estimated from vegetable by the same year.

Onion takes 315,628.44 ha with expected production of 1,488,548.9 quintal. Different regions of Ethiopia produce onions on various rates based on their natural and environmental factors. Oromia is the most important production region for onions (64%), followed by Amhara (30%) among other regions of Ethiopia (Boselie, et.al, 2011).

Dugda, where this study focuses, is one of the naturally endowed districts in terms of capacity to grow Red onion products. The favorable climate and lakes along with the strategic location, location to main roads from Addis Ababa, helps for production and marketing of red onion products (AVIS, 2012). According, to the district agricultural office on field survey most of producers economy depends on the sales of these products. Red Onion production in the district is both for home consumption and market. Based on the personal observation and pilot survey interview made with the producers and the district agricultural office several actors mainly, brokers, wholesalers, retailers participate in delivering the red onion to the consumers.

Market chain analysis is supposed to be the current approach working in studies of agriculture production and marketing problems (Scarborough and Kydd, 1992). Analysis of the system in terms of market structure, conduct and performance used to identify the bottlenecks and come up with precise possible solution (Scarborough and Kydd, 1992). Even though Red onion is economical and socially important to the society in Dudga district as stated by district office , no adequate study has been made in the study area to improve the sector. This study therefore, has attempted to contribute to filling the information gap by investigating the Red onion marketing chains and factors affecting red onion marketing in Dudga District.



## 1.2 Statement of the Problem

As agriculture is back bone for most of developing countries specially Ethiopia, its is not satisfactory(ECX, 2009). This can be due to insufficient market information, poor quality, unstable price, lack of trust among trading partners, and uncoordinated markets (Gabre-Madhin & Goggin,2005). The lack of market information creates fluctuating prices and huge price overhead on the consumers. Farmers are getting only a small portion of the profit due to weak access to storage, telecommunication and transportation infrastructures and existence of multiple middle men at every stage of the market chain ( Gabre-Madhin & Goggin, 2005).

Different researchers also support this thing while undertaking different areas. Like Tadesse, 2011 in Gonder;Turner,2011 in Oromiya and Weldelassie, 2007 in Amhara; Hassen et al,2009 in Pakistan; Idah et al,in Nigeria). These studies use structure conduct performance model to analysis the market chain. This model show that the structure (number of buyers and sellers , barriers to entry and transparency of market information)affect the conduct(producers selling and buying, pricing strategy )which in turn affect the market performance(market margin share of players i.e., producers, brokers, wholesalers, retailers and consumers) (Caves & E.R., 1992).

Under this analysis the agriculture marketing imperfect ( not benefit all parties involved in marketing of agricultural product) due to intermediaries' malpractices, lack of market information, transportation, storage, and packaging facilities as problems in marketing of agricultural products . In addition to these, they also add shortage of irrigated land, weight cheating, unfair pricing of products by wholesaler, weak cooperative agreement with strong wholesaler by local traders to producers, deliberate hiding of information by brokers and wholesalers and price instability as marketing problems in the value chain of fruit and vegetables.

However, there is no such study in the Dugda district as it has highest capacity to produce vegetables, specially Red onion, the best of the researchers' knowledge. Besides, studies done elsewhere are in the general context without specifically considering red onion. Consequently, this study tried to investigate the marketing activities in the value chain of red onion.

### **1.3 Research Question**

The basic research questions addressed are as follows;

1. What is the market structure of Red onion in Dugda district?
2. What is the market conduct of Red onion in Dugdai district?
3. What is the performance of Red onion market in Dugda district
4. What are the problems observed in the marketing activities within the value chain of red onion in Dugda district?

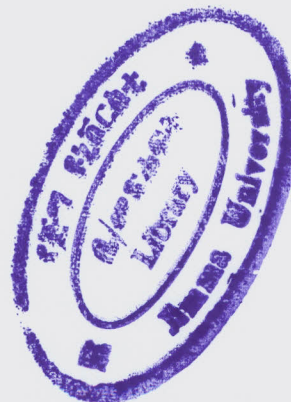
### **1.4 Objective of the study**

#### **1.4.1 General objectives**

The general objective of this research is to analyze the market chain of red onion in dugda distict.

#### **1.4.2 Specific Objectives**

1. To identify the market structure of red onion in Dugda district
2. To investigate market conduct of red onion in Dugda district.
3. To describe performance of the market of red onion in Dugda district
4. To identify major marketing problems in trading of red onion in Dugda district.
5. To give recommendation that will help to overcome the marketing problems



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### **1.5 Significance of the study**

The study gives detailed information on how red onion marketing chain is currently functioning in Dugda District. It point out factors that constrain Red onion marketing system. The study also generate information that help how to formulate Red onion marketing development programs and guidelines for interventions that would improve efficiency of the Red onion marketing system. This study could also help to make appropriate decisions by the producers, consumers, traders, investors, and others, who need the information for their respective purposes. The document also would serve as reference for researchers to embark upon similar or related work in other parts of the country.

### **1.6 Scope of the study**

The scope of this study can be seen from three main perspectives namely; conceptual, geographical and time.

Conceptually, the study investigating the structure, conduct and performance of the Red onion market along with major problems that the players face in their business undertakings

Geographically, this study considers producers and brokers in Dugda district, wholesalers in Addis Ababa Paisa market (As per the pilot survey result 80% of red onion produced in Dugda district for sale was supplied to Addis Ababa ‘Piassa’ marke) , and Retailers from Addis Ababa in Gulele sub city( Based on data from Ministry of trade” Gulele” subcity has the highest number of (323) licensed) fruit and vegetables Retailers than the other Nine sub cities found in Addis Ababa)

Time wise, the scope of this study is limited to those producers and traders (brokers, wholsellers and retailers) who participate in the trading of Red onion within the period between March 1 to April 1, 2014



## 1.7 Limitations

Some limitations still remained in this study despite many efforts made by the researcher to overcome limitations. These limitations include;

The limitation of this study is that; given time and cost limitation, the researcher used only questionnaire and interview to collect data for this study.

Likewise, the data for this study were collected only from producers and brokers in Dugda and Wholesalers and retailers in Addis Ababa market. Since, producers and trades in the other market might have difference in marketing activities.

## 1.8 Definition of terms

### I. Definition of operational terms

- **Market structure;** is characteristics of the organization of a market in terms of the size and distribution of the firms in the industry , the degree of market information transparency and barrier to enter into the market, (Bain, 1968 as cited in Kibiego,
- **Market conduct:** refers to the behavior of firms or the strategies on those activities (pricing, buying, selling) that may need the firms to participate in informal cooperation or collation (Dessalegn, et al., 1998) .
- **Market performance:** is shown the impact of structure and conduct as measured in terms of variables such prices, costs, and volume of output.( King., 1995 ) and Cramers and Jensen, 1982
- **Market chain ):** is the term used to describe the various links that connect all the actors and transactions involved in the movement of agricultural goods from the producer to the Consumer
- **Producers:** those individuals who produce and sell red onion



- **Traders ;** those individuals who participate on red onion trading, this can be;
  - **Brokers ;** those individuals who communicate producers and wholesalers / retailers
  - **Wholesaler ;**those who buy and sell red onion in large amount
  - **Retailers;** those individuals who buy and sell red onion in s mall amount when compared with wholesalers.

### **1.9 Organization of the paper**

This paper has been arranged in to five main chapters;

**The first chapter** is the introductory chapter which describes the background of the study, a statement of the problem, objectives of the study, research questions and significance of the study.

**The second chapter** deals with a review of related literature and conceptual framework which will be used as a base for the study.

**The third chapter** describes the research design and methodology; it depicts the study area, source and tools of data collection, sample size procedure and sampling method, statistical methods used for data analysis.

**The fourth Chapter** will discuss the results and the findings of the study.

**The final chapter** encloses the summary of findings, conclusions drawn and implication.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

This chapter aims at presenting review of literature which will provide background knowledge for this study. Generally it has two parts. The first part discuss concepts of market, marketing, agricultural marketing, market channel and market chain analysis. In relation to these issues, the chapter highlights about production and marketing of vegetables and major constraints in vegetables marketing in Ethiopia. The second part deals with analysis of empirical studies that are concerned with variables that affect marketable of agricultural commodities. Finally, based on these literatures, research propositions will be developed, and a proposed conceptual framework for this study will presented

#### **2.1 Theoretical Review**

##### **2.1.1 Status of onion production in Ethiopia**

“Onions are a source of vitamin C and dietary fiber. As a vegetable, onions are low in fat and calories. These crops are rich sources of a number of phytonutrients (act as antioxidants to lower blood pressure and prevent some kinds of cancer .Onions can be red, yellow, green, or white. The taste of onions does depend on the color. Onions can be sweet or savory. Onions can be sliced, chopped, diced, or grated. They mix well with almost any type of food. Raw onions are great in salads and on sandwiches and hamburgers. Cooked onions are used to season everything from soups, stews, meats, beans, potatoes to other vegetable dishes. It should be Store in a cool, dry place. (Center for Nutrition, 2013).

Onion is considered as one of the most important vegetable crops produced on large scale in Ethiopia both for home consumption and market. (Univa, 2013) It also occupies an economically important place among vegetables in the countr9( Univa, 2013 The area under onion is increasing from time to time mainly due to its high profitability per unit area and ease of Production and the increases in small scale irrigation areas. According to the CSA (2011) onion cover (22035 ha crops) of the total land of vegetables .

Table 2.1 Onion production trend in Ethiopia 2006-2011

Year	Area (h	Production(	Yield (ton/	Annual production
2006	16578.7	175919.2	10.61	
2007	21391.7	178474.2	8.34	1%
2008	18012.5	175106.1	9.72	-2%
2009	15628.4	148854.8	9.53	-15%
2010	17588.4	169316.8	9.63	14%
2011	22035.8	236922.1	10.75	40%
Averag	18539.2	180765.6	9.75	5.2%

Source central statics Authority 2006-2011 (CSA)

As Univa, (2013) different types of onion cultivars are available in Ethiopia. The major once are;

- ❖ **Adama Red.** It is a dark red colored and firm, very pungent, flat globe shaped and susceptible to purple blotch disease. It flowers and set seed very easily. It is accepted both by producers and consumers and is successfully produced by small farmers and commercial growers in most regions of the country. The cultivars are grown in awash valley and Lake Region in larger quantity.
- ❖ **Melkam:** High yielder but light red in bulb color than Adama Red. It is similar in all the remaining characteristics to Adama Red.
- ❖ **Red Creole:** Red colored and firm, very pungent, not easily bolting, relatively tolerant to purple blotch disease.
- ❖ **Bombay Red:** Thick flat shaped, light red, light pungent, susceptible to purple blotch disease. It has a high proportion of split bulbs and have short shelf life compared to Adama Red.
- ❖ **Dereselgn :** Early maturing, medium red, large bulb sizes and fits to short growing seasonable.



## **2.1.2 Definitions and Concepts of market and Agricultural marketing**

### **I. Market:**

To be effective and profitable in this fast growing world, production is not the enough rather there must be also need market, place where business activities are organized and facilitate to get answer for economic questions like what to produce, how much to produce, how to produce, and how to distribute production” (kohls& Uhl, 1985). This market can be making up by potential consumers based on their desire and ability to by specific product (Eric & Kerin, 2000).. Market can be also defined by Kariuki & Kilingo, (2001.) as an institution within which those forces of demand and supply operate, sellers, and consumers are in stable communication, and there is change of title to goods and/or services. Under this filer different activities are performed to get the desired objectives. These activities can be called as marketing that include, the planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives, (Eric & Kerin, 2000. Marketing has basic productive value, in that it adds time, form, place and possession utilities to products and commodities (Robert & Stephen, 2004). The technical functions of storage, processing and transportation, and through exchange, help marketing to increases consumer satisfaction from any given quantity of output (Mendoza, 1995).Marketing is essentially for different sectors like farming, manufacturing, mining or construction (Beckman & Davidson, 1962).

### **II. Agricultural Marketing**

The term marketing has been a very debatable concept and defined in so many different ways by different scholars. This is because marketing, or more specifically agricultural marketing, projects different impression to different groups of people in a society, like farmers, traders and consumers (kohls & Uhl, 1985). Marketing of agricultural products consists the movement



of products from production sites to points of final consumption. In this regard, the market performs exchange functions as well as physical and facilitating functions.

The exchange function involves buying, selling and pricing. Transportation, product transformation and storage are physical functions, while financing, risk bearing and marketing information facilitating marketing (Branson & Norvell, 1983). This was also supported by FAO, (1997) as Agricultural marketing is more than transporting agricultural product from the farm (where it produce) to the consumers or manufacturer, rather it include the marketing of production supplies to farmers like fertilizer, pesticide, chemicals, machinery, animal feed, tools and equipments.

### 2.1.3 Market channel and marketing chain analysis

**Marketing channels:** The term channel is derived from the Latin word *canalis*, which means canal. According to Backman and Davidson, (1962), marketing channel is a large canal or pipeline through which products, their ownership, communication, financing and payment, and accompanying risk flow to the consumer. It can be also define as a sequence of intermediaries through which goods pass from producer to consumer ( Abbot (1958) . under this channel different parties like transports intermediaries are participate (Kotler & Armstrong, 2003).

The marketing channel can be direct or indirect based on kind and quality of the product marketed, available marketing services, and prevailing social and physical environment (Haque, Islam, & Mail, 2001). Under this chain three functions are performed ; use up scarce resources, performer better through specialization, and shifted among channel members (FAO, 2005) cited in Tadesse,(2011).

**Market chain analysis:** as firm or organization, the entire system must be analyzed through market chain analysis. These analysis helps to identifies and describes all parties in the chain (producers, traders, transporters, processors, consumers),prices in and out at each point, functions performed at each point/ who does what?, market demand/ rising, constant, declining, approximate total demand in the channel, market constraints and opportunities for the products". (Weldeslassie, 2007).

#### 2.1.4 Approach to study Agricultural marketing

Different conditions involved in the marketing of agricultural products, and the unique product characteristics, require a different approach for analyzing agricultural marketing problems (Johan, McCoy, & Shaharan, 1988). The major and most commonly used approaches are functional, institutional and commodity approaches.

##### 2.1.4.1 Functional approach

In this approaches the whole marketing process breakdown into specialized activities performed in accomplishing the marketing process (Branson and Norvell, 1983,Kohl's and Uhl, 1985,). The Commonly accepted functions are: exchange (buying and selling, pricing), physical (processing, storage, packing, labeling and transportation), and facilitating (standardizing, financing, risk bearing, promoting and market information) (Branson and Norvell, 1983,Kohl's and Uhl, 1985,). As Kohls Uhl, 1985; Cramers and Jensen, 1982); and Andargachew,( 1990) this approach helps to evaluate marketing costs for similar marketing middle men and/or different commodities and costs and benefits of marketing functions.

##### 2.1.4.2 Institutional approach

This approach focuses on the examines the activities of business organizations or people engaged in marketing (producers, wholesalers, agents, retailers, market stabilization agencies, board of foreign trade, etc) and pays special attention to the operations and problems of each type of marketing institution. (Cramer & Jensen, 1982).

An institutional approach for the marketing of agricultural product important in solving the three basic marketing problems, namely consumers' demand for agricultural products, the price system that reflects these demands back to producers and the methods or practices used in exchanging title and getting the physical product from producers to consumers in the form they require, at the time and place desired, (Johan, McCoy, & Shaharan, 1988).

#### **2.1.4.3 Commodity approach**

In a commodity approach, a specific commodity or groups of commodities are taken and the functions and institutions involved in the marketing process are analyzed. (kohls & Uhl, 1985) The detail analysis includes the classification of products, characteristics of products, source of supply, persons engaged in the exchange process, transportation of the product, its financing, storage, and advertisement (Branson & Norvell, 1983). This approach helps to identify the specific marketing problems of each commodity as well as improvement measures (Branso and Norvell, 1983; Kohls and Uhl, 1985; Mendoza, 1995).

#### **2.1.5 Framework for Evaluating of Agricultural Marketing System Structure, Conduct and Performance (SCP) model**

The SCP approach was developed in the United States in 1951 by Brain, as a tool to analyze the market organization of the industrial sector and then applied to assess the agricultural system. (Wolday, 1994) cited in Meijer, 1994). The basic view of this approach is that, the structure of an industry or market determines conduct of buyers and sellers which influence its performance (Solomon, et.al 2003).subsequently the view change to . SCP model used in the functioning of markets in agricultural sector, and served as a tool to evaluate the performance of the commercial system (Wolday, 1994) cited in Meijer, 1994. In agricultural context SCP show that the structure (number of farmers and traders, number and composition of vegetable markets, quality and quantity of infrastructure support) affects conduct (production and marketing practices including pricing), and finally conduct affects performance (prices, quantities and profits).Milagrosa, (2007).



But there are several limitations that characterize the structure, conduct, performance model and the performance dimensions employed to measure the efficiency and competitiveness of agricultural markets (Scarborough and Kydd, 1992).

The first drawback, SCP assumes that competition will exist as the number of firms increase and will hence lead to a better market performance. But due to the existence of economies of scale, where there are thin and isolated markets, as in the case of Ethiopia, the number of traders that can operate profitably in an area can go down. Hence, in this case the low number of traders may not necessarily mean that non-competitive environment exist or would large number of small traders handling small quantities of goods indicate that per unit marketing costs are reduced and the market is performing (Dessalegn et al., 1998:5).

The second one is that market performance was evaluate by looking at the marketing margins; but as default marketing costs does not necessarily indicate that the market is performing well or not. This is because if technologies are used in the marketing system and it can reduce the risks and high costs in the system, and if more developed institutions and coordination arrangements were implemented that can absorb risks of investment in new technology and reduce transaction costs of exchange, the approach would not apply(Samad, 2008); (Hook, 2003). This is because the analysis of marketing system performance on the bases of the consistency of marketing margins and marketing costs fails to take into account the dynamic issues of technological and effective management development in a marketing system (Jayne, 1997).

However, in the Ethiopian context – where there is a lack of technological development and effective institutions which could have enable the existence of low cost and efficient firms or traders in the marketing system .the structure-conduct-performance approach seems applicable in the marketing system analysis and would potentially generate useful information that can help improve the performance of the marketing system (Feyissa, 2009). It was on this ground that the SCP approach was selected to be used in the analysis of the marketing system in this research.



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## I. Market structure

As discussed early the structure of the market can be seen in terms of the number of buyers and sellers, their size distribution, the degree of product differentiation, and the ease of entry of new firms into an industry (Abbott & Mekeham, 1990), (Cramer & Jensen, 1982). This shows how the market operates in order to get and provide benefit for all of the participants in the firm or industry.

Market structure can also be defined as characteristics of the organization of a market, which seem to strategically influence the nature of competition and pricing behavior within the market (Bain, 1968). Structural characteristics may be used as a basis for classifying markets. Markets may be perfectly competitive; monopolistic; or oligopolistic (Scott, 1995). This in turn shows trends in the number and size of firms relative each other and to the number of consumers and producers in particular time (Malhaotra, (1996.) Different scholars use different dimensions to measure structure of the market in terms of different aspects. (Branson & Norvell, (1983). Use the following three dimensions.

- A. Degree of buyers and sellers concentration: Number and size distribution of buyers and sellers in the market.
- B. Barriers to potential entrants of exit: Refers to the relative ease or difficulty with which new dealers may enter into market. Technological, economic, regulatory, institutional, and other factors that inhibit firms from engaging in new businesses or entering new markets, and
- C. Degree of product differentiation: Refers to the extent to which competing products in a market are differentiated and it is expected to influence the competitive interrelationships of sellers in the market.

The organizational features of a market should be evaluated by Wolday (1994) in terms of the degree of seller concentration, entry barriers (licensing procedure, lack of capital, know-how, and policy barriers), degree of transparency and degree of product differentiation that condition or influence the conduct and strategies of competitors.

According to (Kohls and Uhl, 1985; (Abbott. 1958), It explains about Presence /absence, the levels and nature of entry barriers distribution of market information and its adequacy in sharpness of prices and quantity compositions and individual risk.

As (FEWSNET, 2008). It include the number of buyers and sellers of food commodities in the market, the number of sellers of agricultural inputs such as fertilizer and veterinary drugs, barriers to entry into the market(factors that restrict the participation of households or traders in the market and the nature of trading relations (vertical coordination mechanisms i.e. whether traders buy produce directly from farmers, middlemen, or transporters ) among market participants. It consists of the relatively stable features of the market that influence the rivalry among the buyers and sellers operating in a market

## **II. Market conduct**

Marketing conduct refers to the patterns of behavior (price setting behavior , buying and selling practices) that enterprises follow in adopting or adjusting to the markets in which they sell or buy (FEWSNET, 2008). It shows the analysis of human behavioral patterns that are not readily identifiable, obtainable, or quantifiable (Bain, 1968). Thus, in the absence of a theoretical framework for market analysis, there is a tendency to treat conduct variables in a descriptive manner (Pomeroy and Trinidad, 1995).this analysis helps to know in what way do they compete? Are they looking for new techniques and do they apply them as practicable? Are they looking for new investment opportunities, or are they disinvesting and transferring funds elsewhere (Abbott & Mekeham, 1990), (Cramer & Jensen, 1982). Bain (1968) see the market conduct in two aspects:

- Buying /Selling decisions: the method by which, the different sellers coordinate their decision and action, to each other, or succeed in marketing them mutually, which in turn they react to demand for their products in a common market.
- Pricing decisions; the character of pricing policies and related market policies that the sellers in the industry adopt; assessed in terms of individual or collective aims or goals that they pursue as they determine their selling prices, their sales promotion outlays, the designs and qualities of their products and so forth.



In same way Abbott & Mekeham, 1990) also analyze market conduct in two

- ❖ Buying and selling strategy , in analyzing the buying and selling practices, the source of product, informal marketing groups that affect the bargaining power, the nature of the buying/selling practices in place, the distribution channels used, and observed trading practices that were unethical were taken into consideration.
- ❖ Pricing strategy. during the analysis of pricing behavior, the following things were seriously considered. These were, the chief determinants of price (one buyer or many buyers), price setting mechanisms (the degree of personal contact among market participants), factors that influence the setting of price (example, basic supply and demand conditions or artificial price restraint).

Market conduct refers to the behavior of firms or the strategies on those activities (pricing buying , selling ) that may need the firms to participate in informal cooperation or collation (Dessalegn, et al., 1998) . On the other side(Cramer & Jensen, 1982). Consider the existence of formal and informal marketing groups that affect the bargaining power and the availability of price information as well assist impact on prevailing prices while analyzing the market chain. ((Cramer & Jensen, 1982).

Since there are no agreed up on procedures for analyzing the elements of market conduct, the following few questions were taken into consideration to systematically detect indicators of unfair price setting practices and conditions in places or areas where such market injustices are likely to prevail(Cramer & Jensen, 1982).

### **III. Market performance**

Different authors define Market performance in different aspect. As (Bressler & King., 1995 ) and Cramers and Jensen, 1982. It refers to the impact of structure and conduct as measured in terms of variables such prices, costs, and volume of output. It is the composite of end results which firms in the market arrive at by follow different conduct in the dimensions of price, output, production and selling cost, product design, and so forth (Wolday, 1994). According to Abbott and Makeham (1981), market performance is how successfully the firm's aims are accomplished, which shows the assessment of

how well the process of marketing is carried out. As a method for analysis the SCP paradigm postulates, there exists a relationship between the three levels distinguished. One can imagine a causal relations starting from the structure, which determine the conduct, which together determine the performance (technological progressiveness, growth orientation of marketing firms, efficiency of resource use, and product improvement and maximum market services at the least possible cost) of agricultural marketing system in developing countries (Meijer, 1994). The performance of a certain market or industry depends on the conduct of its sellers and buyers which, in turn, are strongly influenced by the structure of the relevant markets (Scarborough and Kydd, 1992).Market performance can be evaluated by analyzing the costs and margins of marketing agents in different channels(Getachew, 2002).

A commonly used measure of system performance is the marketing margin or price spread. Margin or spread can be a useful descriptive statistics if it used to show how the consumer's food price is divided among participants at different levels of marketing system (Getachew, 2002).

### **I. Marketing costs**

It refers to those costs which are incurred to perform various marketing activities in the Transportation of goods from producer to consumers (Holloway and Ehui, 2002).while marketing product we will incur different costs like handling cost(packing and unpacking), costs of searching for a partner with whom to exchange, screening potential trading partners to ascertain their trustworthiness, bargaining with potential trading partners (officials) to reach an agreement, transferring the product, monitoring the agreement to see that its conditions are fulfilled, and enforcing the exchange agreement (Holloway and Ehui, 2002).

### **II. Marketing margin**

It is a commonly used measure of the performance of a marketing system (Abbott and Makeham, 1981). It is defined as the difference between the price the consumer pays and the price that is obtained by producers, or as the price of a collection of marketing services, which is the outcome of the demand for and supply of such services (Cramers and Jensen, 1982 and William and Robinson, 1990; Holt, 1993). The size of market margins is largely dependent upon a combination of the quality and quantity of marketing services provided the cost of providing such services, and the



efficiency with which they are undertaken and priced. For instance, a big margin may result in little or no profit or even a loss for the seller involved depending upon the marketing costs as well as on the selling and buying prices (Mendoza,1995).Under competitive market conditions, the size of market margins would be the outcome of the supply and demand for marketing services, and they would be equal to the minimum costs of service provision plus “normal” profit.(Holt, 1993 ).Therefore, analyzing market margins is an important means of assessing the efficiency of price formation in and transmission through the system.

There are three methods generally used in estimating marketing margin

- Detailed analyses of the accounts of trading firms at each stage of the marketing channel (time lag method);
- Computations of share of the consumer’s price obtained by producers and traders at each stage of the marketing chain; and
- Concurrent method: comparison of prices at different levels of marketing over the same period of time (Mendoza, 19985 and Scarborough and Kydd, 1992)

According Mendoza(1995) determining marketing cost in agricultural marketing chain is difficult , because marketing costs are cash and imputed costs, so gross marketing margin will calculate rather than net marketing margin as marketing margin. He advises marketing researchers to emphasize on gross marketing margins in reporting their findings.

In similar way, in this study, gross marketing margin was considered instead of net marketing margin, as it was difficult to estimate the implicit costs incurred during transaction of red onion.

## **2.2 Empirical Review**

Different researchers done different research on different areas in the world using Structure, conduct and performance model to analyze the agricultural market. These researchers use different factors under the structure, conduct and performances to analyze the market. Beside this they also had shown different problems related to the production and marketing of agricultural products. But due to lack of enough research done on this area we will consider on few once.

### **I. Market structure**

The market structure can be analyzed in terms of different factor for different researchers. For example Teka, (2009) in his study Analyzing fruit and vegetable (onion, tomato and papaya ) marketing chains in Alamata District, southern zone of Tigray , measured in terms of concentration ration , and market transparency. Tadesse, A. (2011). On study on Market Chain Analysis of Fruits for Gamma Woreda, Jimma Zone, Oromia National Regional Sate, degree of market transparency, and barriers to entry. And others also use other factor. On the analysis on structure of the market teka (2009) use CR4 method and found that the market is no oligopoly (24.56%). This was also supported by (ABEBE, 2009) the honey market concentration ratio in the study area was 35.82 percent suggesting a lose oligopoly market type.

Abebe, (2009) research on honey market chain analysis, the respondents get market information On the market information the respondents get Market information (on price, product demand, product supply, market place and buyers and sellers.) from observation, friends, traders and cooperatives. Teka (2009) also support it.

They are also different factors that hinder respondents to enter in to the market. Teka (2009), measure it in terms of stare, license and credit, but they are not barriers because the only measure is capital rather license. The credit also gains from themselves (traders.) on other hand due to lack of standard and grades buyers decided price of commodities through eye ball pricing.

On contrary Tadesse (2011) on his study on market chain analysis of avocado and mango , measure barriers enter in to the market in terms of Managerial know-how(trading experience, education background., working capital, legal and policy constraints . he found that except trading experience other are barriers to enter in to the market. On Mmasa, Msuya, & Mlambiti, (2013) study credit also barriers to entry ,because respondent in this area were not deliberately targeted for credit schemes like SACCOS or other financial institutions to improve their performance. Moreover, acquisition of credit from formal institutions such as bank follows very long and bureaucratic producers.

To perform well in the market the size and distribution of firms in the market is not only measure, rather market information also need. This market information can be gained from different source, but it must be Aqua rate, correct and continuous, otherwise it creates difference on benefit between actors in the market. Even though TAMPA and regional cooperative promotion office collect and distribute price information and amount of supply on selected horticultural and grain commodities to farmers in Tekas (2009) study, the information was not analyzed, interpreted and designed for future development planning .this creates the market information collusion. Mmasa, Msuya, & Mlambiti, (2013) also support this , In the study area, on proceed products market transparency is not good due to the pre-conditions (like empowerment of farmers on modern technology training and equipment and information on price of processed products) for a high degree market transparency are poor. Also quality of products obscures market transparency. These are due to poor agronomical, handling, processing, and distribution practices.

## **II. Market conduct**

Under this the analysis considers the selling and buying strategy of respondents and pricing strategy. In connection to this we will also consider the cooperation in producers and traders.

Teka, (2009)in his study of Analyzing fruit and vegetable (onion, tomato and papaya ) marketing chains in Alamata District, southern zone of Tigray ,use Structure-conduct-performance model to analyze vegetable marketing, showed that The market conduct is characterized by unethical



practices of cheating (by traders) and information collusion (Market information (price) supply was not transparent between levels that Created price discrepancy and differences among selling farmers especially in onion.) that led to uncompetitive market behavior. Weldesslase (2008) conducted research on vegetable market chain analysis in fogera district also get same result.

Due to unethical practices of cheating and information collusion that led to uncompetitive market behavior the market is affected

On selling and buying strategy on Teka (2009) . About 64 percent of the onion and 62 percent of the tomato producers reported that they sold their produce to their regular customers. The selling strategy of the remaining respondent 72 farmers was open to any buyer. On the other hand, 65.6 percent of papaya producers sell their produce to anybody as far as they offer better price, on contrary Bezabih & Hadera, 2007) in their paper on opportunities and constraints of vegetables marketing in rift valley stated that there are three options for selling horticultural crops similar to Fogera; right in the field (common for onion and tomato), sell at nearby markets, and least proportion option to access distance markets. They added that in terms of volume about 93 percent of the total produce was sold to wholesalers.

On pricing strategy Teka (2009),in his study 75 percent of the tomato and 85% of the papaya producers believe price was decided through negotiation while 65% of the onion producers' believed that price setting was made by buyers. However, wholesalers were the dominant source of information that could decide the current price and hence 'negotiation' is not real. Bezabih & Mengistu, (2011) also support this in his study Conduct a on "Potato Value Chain Analysis and Development in Ethiopia (Case of Tigray and SNNP Regions)".he found that Potato price fluctuates based on the season of harvest. The traders who increase or decrease the price considering the supply situation set prices. Wholesalers are the value chain regulators and the role of producers in value chain management is minimal.

This pricing strategy make the producers or farmers have less power in barging power , as Bongiwe & Micah, (2012) In his study describe the performance of vegetables supply chain in Swaziland, farmers are not well integrated that make them has less barging power. Gupta (1979)



research on analyzed the performance of vegetable marketing in Delhi , also showed there is no cooperatives at both producer and consumer levels and problems availability of market information, storage facilities, and processing plants . on Teka (2009)study on vegetables this problem also appear , farmers are not organized this led them to be price taker (has less or no power to negotiate with different actors to get normal).

(Mmasa, Msuya, & Mlambiti, 2013) In the study area, producers/processors did not organize themselves to form a cooperative (they operate randomly) or union in which they would monopolize the business in the area, though they are still the ones to determine buying and selling prices or mode of payment to be adopted.

### **III. Market performance**

The market performance of the market mainly showed how much profit was gone to each market participants from the price paid by the consumers. , beside it also shown how much cost inured and profit achieved by each participant. Mari, (2009) in his study on structure and efficiency analysis of vegetable( onion , tomato and Chile) production and marketing in sindh, use both primary data collected by survey method using a pre-tested questionnaire and secondary data were gathered from statistical bulletin. In his study the relationships across marketing chains involved in the selected vegetable were studied by investigating marketing margins a gross marketing margin.

The market margin analysis done through calculating the difference between what the consumer pays for final product and the amount the producer receives by considering (, distribution of costs and net returns across the functionaries. (Adeyokumnu, 1973). Generally on the results of price spread across marketing chain revealed that share of producer in consumer rupee was 58, 66 and 65 percent for onion, tomato and chilies respectively, while the rest goes to commission agents, wholesalers and retailers.

Specifically on onion the share of producers and other market agencies in the consumers' rupee was calculated by expressing the absolute cash margin of the agency as a proportion of the retail

price of the specific commodity. The producer share in consumer's rupee was 58% in Sindh, when producer marketed their own produce.

The other intermediaries obtained 5%, 22% and 16% as commission agents; wholesalers and retailers respectively. This shown that producers are more benefited than other actors in the chain. While the cost producers incurred higher cost( Rs 273 per bag or 100kg ) followed by Wholesalers had costs of Rs. 12 per bag and Commission agents Rs. 10 per bag .

On the other hand. In, Gupta (1979) research on analyzed the performance of vegetable marketing in Delhi, the data collected from a sample of market intermediaries using an econometric model to measure the effects of consumer price variations on margins and costs. The results revealed that producers received 38 percent of the consumer price, and those middlemen margins were excessive give the level to risk and marketing activities. This was contradicted with the previous Moris (2009) study , in that producers(58%) get highest profit than trades. So a producer in sindh was benefited while in Delhi dis-benefited.

Bongiwe & Micah, (2012) In his study describe the performance of vegetables supply chain in Swaziland. A descriptive research design was used in the study and data were collected using personal interviews from 100 randomly selected vegetable farmers. Data were analyzed using market margins and marketing channel analysis to identify existing marketing channels used by vegetable farmers. Based on the result the largest producer's share was obtained through direct sale to consumers. Channels that included restaurants had high total gross margins and low producer's share of the consumer price.. This was same as Mari, (2009) as he get 58% of producers share in consumer's rupee was 58%, but contradict with Gupta (1979) 38%.

Teka, (2009) Analyzing fruit and vegetable (onion, tomato and papaya ) marketing chains in Alamata District, southern zone of Tigray use Structure-conduct-performance model to analyze vegetable marketing. on market performance tomato market chain performed well with gross marketing margin( of 28.66%for assemblers, 31.66% for wholesalers and 39.68% for producers.46.93 % total gross marketing margin was added to onion price when it reached the final consumers (wholesaler) at domestic markets. From the total gross marketing margin, 21.07 % was



gross marketing margin of assemblers (received by assembler) while 25.86% was that of wholesalers.

The profit of farmers per quintal suggests that there is a profit of 117.34ETB per quintal which seems greater than the profit obtained by wholesalers and assemblers which was about 47.80ETB and 35.04ETB, respectively.

Weldesslase(2008) conducted research on vegetable market chain analysis in fogera district on , cost-revenue calculation results indicated that on the average a farmer profited 8,191ETB from shallot, 13,141ETB from onion, and 5,111ETB from tomato per hectare production (Assuming an average price of 1.75 ETB, 1.65 ETB and 0.75ETB per kg prices in that order).

Generally on Sindi a Mori (2009) and Alamata Teka (2009) producers are benefited by getting highest margin from the consumers paid price, while on Gupa (1979)and Bongiew and Micha 2012 **producers** are less benefited

#### IV. Marketing problems

There are different vegetables marketing problems in different areas of Ethiopia , the major once are discuss as follow. Bezabih & Mengistu, (2011) conduct a study on “Potato Value Chain Analysis and Development in Ethiopia (Case of Tigray and SNNP Regions)”. The potato value chain is constrained by many problems. This problem includes Shortage of improved and quality seed: Damaged and spoiled seed due to poor transporting and handling, Low yield &Low irrigation facility; Poor disease control, less targeted. to seed production, Perish ability, storage facility; Low skill in post harvest management; Lack of storage facility, Lack of processing facilities; Low skill and technology for processing, Lack of facilities; Lack of capital and Limited dishes/ recipes.

Msuya, & Mlambiti, (2013) also support **this**, In the study area, on proceed products The data revealed that three factors: lack of improved seeds (33.1%), low capital (26.8%) and unpredictable weather (20.6%) were the critical problems in sweet potato sub-sector business expansion. Other impediment factors were pests attack in the field, lack of storage facilities and manpower.



Bezabih & Hadera, 2007) in their paper on opportunities and constraints of vegetables marketing in rift valley furthermore stated that low product prices, intensive influence of speculators and brokers in reducing the bargaining power of farmers, poor market access, and poor access to transportation, and intensive competition among producers are major constraints in marketing of horticultures.

On the other hand Bezabih and Hadera (2007) identified absence of direct transaction or linkage between the producer and the large buyer also another problem in horticulture marketing. Buyers accept contact persons who identify vegetables to be purchased, negotiate the price, and purchase and deliver the products. They categorized actors in the marketing channel as producers, intermediaries/ brokers, traders and consumers.

The above listed problems also found in Teka (2009) study on, the marketing system for onion, tomato and papaya, it was predominantly constrained by a number of troubles like shortage of irrigated land, weight cheating, unfair pricing of products by wholesaler, brokers and watering farm field prior uprooting by farmers and weakened cooperative agreement with strong wholesaler by local traders to producers were some of the major once. Besides this among the different market players, brokers and wholesalers were the most benefited in the system. In Weoldesslase(2007) study on vegetables, Imperfect pricing system- Absence of law enforcement on standards ,Lack of coordination among producers - Market research and information-Lack of improvement for other actors in the channel also sated as major problems.

### **2.3 Conceptual frame work for the study**

Conceptual frame work for the study of analyzing the market chain of red onion has been adopted from the frame work developed by Milagrosa, (2007), on vegetables market, Dessalegn, Jayne, & Shaffer, and 1998 FEWSNET and 2008 on food grain market, Discuss above and the researcher made modification on it as it feet to the subject under study. The basic view of this approach is that, the structure of an industry or market determines conduct of buyers and sellers which influence its performance .The framework presented and discussed below.

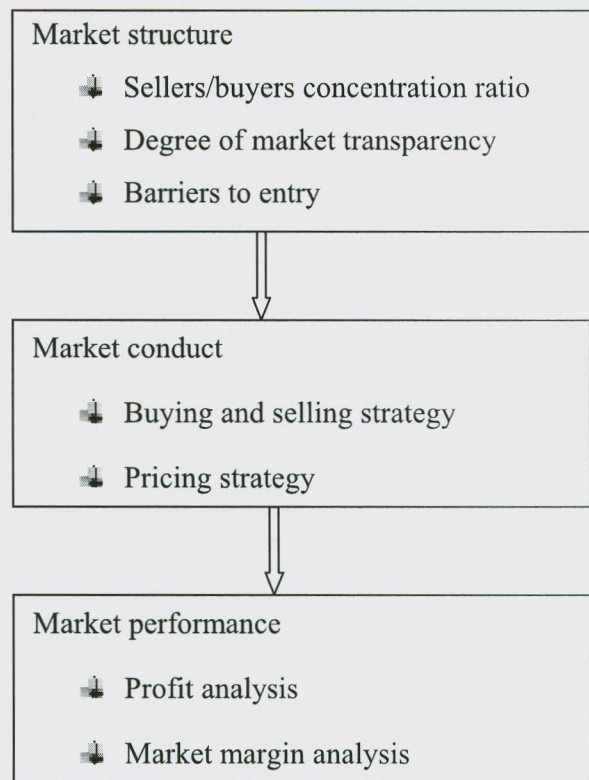


Fig 2.1 Conceptual frame Work for the study that analyze the market chain of Red onion

### Conceptualization of the market Structure

The market structure analyzed through the seller's concentration ratio, barriers to entry and degree of market transparency.

The sellers' concentration is measured through the proportion of total industry sales accounted for by the four large enterprises in the industry (CR4 for wholesalers by considering an average load a wholesaler took per day in the study period).

Barriers to entry also analyzed through considering Managerial know-how, working capital, price fluctuation, and inability to compete with unlicensed traders may barrier for producers and traders to enter into the market based on the data we have on those who are already enter in to the market.

Degree of market transparency; analyzed in terms of the timeliness, reliability (dose they get true information) and adequacy of the market information.

- ❖ Timeliness; whether or not the information reach to the market player(producers and traders) in continues base
- ❖ Reliability ; dose the market players get true or correct information about the market(price, demand , supply)
- ❖ Adequacy; dose the market players get complete of full information about the market.

#### **Conceptualization of the market conduct**

The market conduct also analyzed with the produces and traders buying and selling strategy and their pricing strategy. In their buying and selling strategy from whom they purchase red onion and for whom they sell red onion. On pricing strategy the study see who will set the price they purchase and sell the red onion.

#### **Conceptualization of the market performance**

The market performance analyzed through profit analysis (the producers and traders cost, revenue and profit), market margin (share of each player from the price paid by consumers of red onion).

When there are several participants in the marketing chain, the margin is calculated by finding the price variations at different segments and by comparing them with the final price to the consumer. The consumer price is then the base or the common denominator for all marketing margins. Comparing the total gross marketing margin (TGMM) is always related to the final price or the price paid by the end consumer and then expressed as a percentage (Mendoza, 1995).



$$\text{TGMM} = \frac{\text{Endbuyerprice} - \text{Firstsellerprice}}{\text{End buyer price}} \times 100 \quad (6)$$

End buyer price

Where, TGMM = Total gross marketing margin

It is useful to introduce the idea of 'farmer's portion', or 'producer's gross margin' (GMMp) which is the portion of the price paid by the consumer that goes to the producer. The producer's margin is calculated as:

$$\text{GMMp} = \frac{\text{Endbuyerprice} - \text{marketinggrossmargin}}{\text{End buyer price}} \times 100 \quad (7)$$

End buyer price

Where, GMMp = the producer's share in consumer price

The net marketing margin (NMM) is the percentage of the final price earned by the intermediaries as their net income after their marketing costs are deducted. But as stated early we consider gross market margin as net marketing margin.

$$\text{GMMw} = \frac{\text{sellingpriceofwholesalers} - \text{producersprice}}{\text{End buyer price (retail price)}} \times 100$$

End buyer price (retail price)

Where, GMM w= the wholesalers share in consumer price

$$\text{GMMR} = \frac{\text{sellingpriceofretailers} - \text{producersprice}}{\text{End buyer price}} \times 100$$

End buyer price

## **Chapter Three:**

### **Methods and Instruments**

#### **3.1 Description of the study areas**

Dugda district is one of the district in eastern Shewa zone of Oromiya region . it has 36 rural KAs and the wereda town." Meki " is its capital , it found about 170 km southeast of the city of Addis Ababa. It is situated in the central rift valley system, where the altitude ranges from 1610 to 2090 metres above sea level (masl). The major food crops include "Teff", "wheat" and "maize" and the principal cash crops include "Soyabean", "Teff" and different vegetable crops like onion and tomato. The total households (HHs) within the 36 rural KAs are estimated to be about 20,000 with an average land holding of 3.0 ha/HH and 3 land parcels/HH. The key biophysical and socio-economic attributes.

In this area then access to land and natural resources for the younger generation who are coming of age is very restricted and the prime means of access is through inheritance and gift and a variety of short-term leasehold arrangements. Income generation opportunities from the nonagricultural sectors are also very limited in scope and scale, and the few lucky ones who successfully complete their education pursue different careers in near-by towns and cities. The majority, however make a living from a range of semi-subsistence activities such as "fishing" from Lake Ziway, selling "sand" for construction and working as laborers for better-off farm households and in near-by towns. Recently, the government issued a directive to facilitate "access" the common lands (i.e. common pasture and forest/shrublands) with priority given to the landless younger generations that are organized in "youth associations". onion and onion seed is an important cash crop. These districts represent one of the major vegetable crop growing areas in the country where improved varieties are adopted by farmers.

### **3.2 Research methods and design**

A descriptive and cross sectional survey design is used in this study. The study is descriptive since it aims at describing the existing value chain. Cross – sectional survey design was used since the data were collected from respondents at a point in time. Kumar, 2010 pp 93-94 also state that cross sectional survey design is suitable to pin out the existence of the situation as it stands during the time of study.

### **3.3 Target Population**

Target population for this study includes producers (who produce Red onion), traders (wholesalers, Brokers and retailers) who are operating in Red onion trading. The target population for this study specifically contains;

- Producers who are producing Red onion in Dugda district of ‘Meki’ Town.
- Brokers who are actively engaging in facilitating the transaction between producers and wholesalers/retailers at Dugda district.
- Wholesalers from Addis Ababa in payasa market , the country’s largest vegetable market.

As per the pilot survey result 80% of red onion produced in Dugda district for sale was supplied to Addis Ababa ‘Piassa’ market. Beside this as “Paisa” is the main fruits and vegetables market in Addis Ababa, most of the retailers purchase Red onion from this area.

- Retailers from Addis Ababa in Gulele sub city for their large number of retailers of Dugda red onion products out of ten sub cities in Addis Ababa.



Based on data from Ministry of trade” Gulele” subcity has the highest number of (323 licensed) fruit and vegetables Retailers than the other Nine sub cities found in Addis Ababa.

### **3.4 Sample size and Sampling procurers**

#### **3.4.1 Sample Size**

Preliminary information about the study area was obtained through pilot survey which was undertaken to generate important information for questionnaire preparation and to select sample representatives for the final project paper. Beside this , The pilot survey helps to obtain detailed information about the variables addressed in the study and to identifying ways of distributing and collecting questionnaires from the target groups.

The pilot survey result indicated that there are four major players like producers, brokers, wholesalers’ and retailers’ in the Red onion value chain market. A total of 148 producers, 10 brokers, 71 wholesalers and 122 retailers were selected for this study. The number of samples taken for each population for each market participant (producers, wholesalers and retailers) was determined based on Coheran formula for “n” in sampling for finite population. The researcher had used the most frequently chosen confident value of 95 % (1.96). In addition, large sample size would also result when p is 0.5 (Anderson 2009, pp, 313-316). The detail of each selection described as follow:

#### **3.4.2 Sampling procedures**

##### **I. Producers survey**

In this study a two stage purposive and simple random sampling methods was employed. On the first stage from a total of 36’s Red onion producing Keble’s in Dugda district 3 Keble’s were selected using purposive sampling method. The three kebeles were selected due to lack time and cost to cover other kebeles. The Keble’s identification was made through the interview with the

district agricultural office on production of the red onion in those 36's kebele's. In the second stage, 148 producers were selected from identified Red onion producers using simple random sampling technique taking into account proportional to size (number). Accordingly, the number of respondents in each rural Kebele's is shown in table below.

Name of the Keble'	Total number of onion producin	Sample producers selected
Jewe Buffo	226	56
Abbuno Gebreil	123	30
Bayumme Gussa	251	62
Total	600	148

$$n = n_0 / 1 + (n_0 - 1) / N$$

$$n_0 = z^2 pq / d^2$$

$$n_0 = (1.962)(0.5)(0.5) / 0.072$$

$$n_0 = 196$$

$$n = 196 / 1 + (196 - 1) / 600$$

$$n = 148$$

Where:

n=sample size

d=margin of error N=population size

p=population proportion (desired Precision level) (Cochran, 1977)pp75and 76

The research had followed the method of proportional allocation under each size of the sample from the three sampled Kebele's and kept proportional to the size of the agent.  $n_i = nN_i/N$

Where  $n_i$  refers to producers selected from  $i^{\text{th}}$  kebele

$n$  refers to total sample

$N_i$  refers to total number of producers in  $i^{\text{th}}$  kebele

$N$  refers to total number of producers under in all kebeles (Kothari 2004, Pp 62-63)

$$n_i(\text{JeweBuffo}) = 148 * 226 / 600 \quad n_i = 56$$

It is sample from Jewe buffo kebele, the sample for other kebeles was calculated likewise

## II. Brokers' survey

As per the pilot survey the Brokers in Dugda district are not licensed for broking activities, this made the counting of each broker in this district difficult. As a result a total of 10 Red onion brokers were selected through purposive sampling technique. Besides, since the activities performed by each brokers are almost similar this method is expected to obtain the intended information easily.

## III. Wholesalers survey

The sites for the Red onion wholesalers surveys, Addis Ababa "Payaisa" market, which is the main Red onion marketing sites to Dugda district, was selected purposely based on the pilot survey. As per the pilot survey result 80% of red onion produced in Dugda district for sale was supplied to Addis Ababa 'Piassa' market. Beside this as "Paisa" is the main fruits and vegetables market in Addis Ababa, most of the retailers purchase Red onion from this area. According to Arada sub city, the sub city that the sample market exist, there are 110 Red onion



licensed wholesalers, among them 71 wholesalers were selected through simple random sampling based on Cochran formula for “n” in sampling for finite population.

The calculation to determine sample size of wholesalers.

$$n = n_0 / 1 + (n_0 - 1) / N$$

$$n_0 = z^2 pq / d^2 \quad n_0 = (1.96^2)(0.5)(0.5) / 0.07^2 \quad n_0 = 196 \quad n = 196 / 1 + (196 - 1) / 110$$

$$n = 71$$

Where: n=sample size

d=margin of error N=population size

p=population proportion (desired Precision level) (Cochran 1977, Pp 75 and 76)

#### IV. **Retailer**

Based on data from Ministry of trade “Gulele” subcity has the highest number of (323) licensed fruit and vegetables Retailers than the other Nine sub cities found in Addis Ababa. Among them 122 Retailers purposively select who sell Red onion based on Cochran formula for “n” in sampling for finite population. .

The calculation for sample size of retailers.  $n = n_0 / 1 + (n_0 - 1) / N$

$$n_0 = z^2 pq / d^2 \quad n_0 = (1.96^2)(0.5)(0.5) / 0.07^2 \quad n_0 = 196$$

$$n = 196 / 1 + (196 - 1) / 323 \quad n = 122$$

Where: n=sample size

d=margin of error N=population size

p=population proportion (desired Precision level)

### **3.5 Data Type and Source**

Both primary and secondary sources were used to address the objectives of this study. The primary data were collected from all players, i.e. Producer's Brokers, Wholesalers and Retailers by using questionnaire. Similarly, the data on cost and return obtained were interview. Secondary data's were collected through Desk research by reviewing empirical researches, websites of chamber of commerce, CS

### **3.6 Data Collection Techniques and Instrument**

The researcher has used interview questionnaire data collection tool. The researcher hired two data enumerators to assist the data collection process. The enumerators were chosen based on their education and language skills in Afan Oromo since it's the language that the farmers in the area are mainly using to communicate. They were also given detail orientation regarding the purpose of the study and data needed. Besides, the student researcher has done a strict supervision up on the data enumerators during the data collection periods.

There were two type of questionnaires prepared for collecting data for this study; one for the producers and one for traders (Wholesalers, Retailers and Brokers). Both questionnaires has two parts; part one contain question items concerning Socio-demographic characteristics of the respondents and part two which was the main part of the questionnaire that aims at finding out Primary data regarding the market concentration, market transparency, pricing, selling and buying strategy and market margin and barrier to entry. The questionnaire which was adopted from various studies like (Tadesse, 2011) (Mulugeta, 2011), (Abay, 2010) contains both open ended and close ended questions. Besides, the researcher has made discussions with different people (the research advisors) those who have done research in value chain of marketing activities regarding the content of the questionnaires.

Before the distribution of the questioner to the respondent the pilot survey was made to make sure that the questioner use clear and easily understandable language, dose the statement short and brief, dose use proper punctuation and the like as suggested by several authors ((Kothari, 2009).

### **3.7 Instrument development**

The instrument (questionnaire) used in this study was developed by considering the objectives and research questions. Care was also given to maintain the principles of good questionnaire; like, using clear and easily understandable language, making the statement short and brief, using proper punctuation and the like as suggested by several authors (e.g. Bagozzi, 1994; Boynton, 2004; Kendall, 1998; Murray, 1999; Kothari, 2004; Kumar, 2008).

#### **3.7.1 Validity**

The validity of an instrument depends on the extent to which the item measures what it intends to measure (Creswel, 2009). The questionnaire was pilot tested before conducting the survey to make sure that the structure and language used in the questionnaire are proper and feasible enough to collect the data meant to be collected by the instrument and to find out and correct deficiencies, if any. The pretest was done using convenience sampling since the estimate of actual value can be obtained quickly in this type of sampling and it is also relatively inexpensive (Tull and Hawkins 1984). The researcher was distributed 20 questionnaires in the dugda and piyasa Red onin market in february 20 and 24, 2014 before starting the actual survey. The respondents were provided questionnaire consisting space for comments and they were asked to present any difficulties they faced and provide suggestions for improvement. Discussion was made with each respondent regarding problems they found while filling the questionnaire, such as whether they face any difficulties in understanding the meaning of the questions. The respondents were also requested to provide comments on how well they understand the instructions. Time taken to answer the questionnaire was recorded in order to properly plan on the final survey. Any major difficulties found in this stage were given considerable attention and



thoroughly corrected for the final survey questionnaire.

### **3.7.2 Reliability**

With respect to reliability, this measures the consistency of the instrument. The questionnaire was tested for reliability on the pilot test respondent's response . With respect to reliability, this measures the consistency of the instrument. The questionnaire was tested for reliability on the pilot test respondent's response and a cronbacha  $\alpha$  of 0.810 for each factor (structure, conduct and performance) was obtained proofing the measurement is reliable to be applied. A Cronbach alpha value of above 0.7 is usually considered to offer reasonable reliability for research purposes (Creswell, 2009, Pp.190-92)

### **3.7.3 Ethical consideration**

Permission was assured from the selected study area administrative bodies before starting field work Respondents were also informed of the purpose of the study prior to responding the questions. The selected study participants were also requested kindly whether they agreed to participate in the study. They were assured that any information concerning them would never pass to another party. Privacy of the respondent is also maintained since the respondents were not asked to disclose their names , address and the analysis is made for collective responses using collective names such as 'respondents'.

## **3.8 Method of Data processing and Analysis.**

After the data has been edited and organized, EpiData(V3.1) was used for data entry so as to attain maximize data accuracy (Lauritsen & Bruus, 2004) .Descriptive statistics specifically table and percentages were used to analysis the data presented using pie charts and bar graphs. In addition to this, Structure- Conduct and Performance (S-C-P) model to analyze the market has been used in order to study Market structure, Market conduct and Market performance.

### **3.9 Model Specification and Interpretation**

The structure conduct performance (S-C-P) model was first developed in the United States as a tool to analyze the market organization of the industrial sector and then it was applied to assess the agricultural marketing system ((Pomeroy & Trinidad, 1995). The basic principle of the SPC is that structure (number of farmers and traders, number and composition of vegetable markets, quality and quantity of infrastructure support) affects conduct (production and marketing practices including pricing), and finally conduct affects performance (prices, quantities and profits) (Milagrosa, 2007)

.This method was employed by several researchers like Teka,(2009), Tadesse, A. (2011), Weldeslassie, A. A. (2007). Wolday A. (1994). to evaluate fruit, vegetables, food grain, pepper and cotton market respectively. Hence the study used S-C-P model to evaluate Red onion market.

#### **3.9.1 Measures of market structure**

Market structure is characteristics of the organization of a market that appear to exercise a strategic influence on the nature of competition and pricing within the market (Bain, 1968 as cited in Kibiego, Odhiambo, & kimani, 2003). Under this study we use three main elements stated in the conceptual farme work . The main elements under this are; buyers/ sellers concentration, market transparency , and entry/exit barriers of red onion .

##### **I. Buyers/sellers concentration ratio**

Market concentration is defined as the number and size distribution of sellers and buyers in the market. It affects the interdependence of action among firms. This will help to determine the market behavior within an industry (Dessalegn, Jayne, & Shaffer, 1998).)The commonly used measure of market power, or seller concentration, is given by the proportion of total industry sales

accounted for by the four large enterprises in the industry (Pomeroy and Trinidad, 1995). Kohls & Uhl, (1985) States a rule of thumb, that encompass the top four enterprise with concentration ratios of 50 percent or more strongly oligopolistic industry, of 33-50 percent as weak oligopoly, and less than that, as an un-concentrated industry. The greater the degree of concentration, the greater will be the possibility of non-competitive behavior, such as collusion, existing in the market (Kohls & Uhl, 1985).

The calculation for this is as follow.

$$s_i = v_i / (\sum v_i) \text{-----equation (1) Where } S_i = \text{market share of buyer } i$$

$v_i$  = amount of product handled by buyer  $i$   $\sum v_i$  = Total amount of the product

$$C = \frac{\sum_{i=1}^m s_i^2}{\sum_{i=1}^m s_i} \text{-----equation (2)}$$

$I = 1, 2, 3, \dots, m$

Where ; C- concentration ratio

$S_i$ - percentage share of the  $i^{\text{th}}$  firm  $m$ - Number of largest firms

## II. Barriers to entry/exist

This can measure the easiness /hardness of entry or exist in the market based on the competition in the industry ((Scarborough & J. Kydd, 1992) .(Stigler, 2005) Also suggests about four points that can create barriers to entry: legal barriers (license and patents), economies of scale, superior resources, and pace of entry. The modes of entry into trade, means of building capital, means of acquiring marketing skills and contacts, periods of apprenticeship, trader's perceptions of



barriers, the origins and levels of initial capital required for traders of different sizes (functions, or commodities), and the degree of mobility between functions and commodities can be used as centre of data to see the barriers to entry (Timmer et al., 1983).

In this study, interviewing producers and traders about barriers to entry might be difficult, while all have entered the market. Rather, observation of the Managerial know-how, working capital, price fluctuation, and inability to compete with unlicensed traders, can be considered.

### 3.9.2 Market conduct

Market conduct refers to the behavior of firms or the strategies on those activities (pricing buying , selling ) that may need the firms to participate in informal cooperation or collation (Dessalegn, et al., 1998) . Definition of market conduct implies analysis of human behavioral patterns that are not readily identifiable, obtainable, or quantifiable. Thus, in the absence of a theoretical framework for market analysis, there is a tendency to treat conduct variables in a descriptive manner (Pomeroy and Trinidad, 1995).

Since there are no agreed up on procedures for analyzing the elements of market conduct, the following few questions were taken into consideration to systematically detect indicators of unfair price setting practices and conditions in places or areas where such market injustices are likely to prevail. The issues that were taken into consideration were the existence of formal and informal marketing groups that affect the bargaining power and the availability of price information as well assist impact on prevailing prices.

In analyzing the buying and selling practices, the source of product, informal marketing groups that affect the bargaining power, the nature of the buying/selling practices in place, the distribution channels used, and observed trading practices that were unethical were taken into consideration. During the analysis of pricing behavior, the following things were seriously considered. These were, the chief determinants of price (one buyer or many buyers), price setting mechanisms (the degree of personal contact among market participants), factors that influence the setting of price (example, basic supply and demand conditions or artificial price restraint).

### 3.9.3 Market performance

Methods employed for the analysis of red onion market performance of Dugda district were marketing margins by taking into account associated marketing costs for key marketing participants . Hence, on the consideration of one month (March1 and April 1 ) production, costs and purchase prices of the participant , margin at producers , ' wholesalers and retailers,' level was conducted. Studies have found out that estimating marketing margin quite accurately through price surveys at all levels in the distribution channel during one week under normal conditions is normally recommended (Mendoza, 1995).

According Mendoza(1995) determining marketing cost in agricultural marketing chain is difficult because marketing costs are cash and imputed costs, so gross marketing margin will calculate rather than net marketing margin as marketing margin. He advises marketing researchers to emphasize on gross marketing margins in reporting their findings. In similar way, in this study, gross marketing margin was considered instead of net marketing margin, as it was difficult to estimate the implicit costs incurred during transaction of red onion.

When there are several participants in the marketing chain, the margin is calculated by finding the price variations at different segments and by comparing them with the final price to the consumer. The consumer price is then the base or the common denominator for all marketing margins. Comparing the total gross marketing margin (TGMM) is always related to the final price or the price paid by the end consumer and then expressed as a percentage (Mendoza, 1995).

$$\text{TGMM} = \frac{\text{Endbuyerprice} - \text{Firstsellerprice}}{\text{End buyer price}} \times 100 \text{ (6)}$$

End buyer price

Where, TGMM = Total gross marketing margin

It is useful to introduce the idea of 'farmer's portion', or 'producer's gross margin' (GMM<sub>p</sub>) which is the portion of the price paid by the consumer that goes to the producer. The producer's margin is calculated as:

$$\text{GMM}_p = \frac{\text{End buyer price} - \text{marketing gross margin}}{\text{End buyer price}} \times 100 \quad (7)$$

End buyer price

Where, GMM<sub>p</sub> = the producer's share in consumer price

The net marketing margin (NMM) is the percentage of the final price earned by the intermediaries as their net income after their marketing costs are deducted. But as stated early we consider gross market margin as net marketing margin.

$$\text{GMM}_w = \frac{\text{selling price of wholesalers} - \text{producers price}}{\text{End buyer price (retail price)}} \times 100$$

End buyer price (retail price)

Where, GMM<sub>w</sub> = the wholesalers share in consumer price

$$\text{GMM}_R = \frac{\text{selling price of retailers} - \text{producers price}}{\text{End buyer price}} \times 100$$

End buyer price



## **Chapter Four: Data Analysis and Discussion**

This chapter depicts data analysis and discussion to this end, the chapter is organized into three main sections. Section one deals with socio- demographic characteristics of the respondents( Producers and traders), section two presenting marketing activities( selling and buying practices, market information, price, packaging, storage and transportation) and section three deals with the analysis of quantifying costs and margins for each player participate in Red onion marketing in Dugda district. From the total Of 351 distributed quaternary only 332 were fully answered.

### **4.1 Socio- Demographic Characteristics of respondents**

#### **4.1.1 Socio – Demographic characteristics of producers**

The demographic characteristics of the producers are presented in Table 4.1 below. The respondent profile gives an indication toward respondent's gender, age group, educational level and farming experience and land ownership.

##### **4.1.1.1 Gender of the respondent**

Item one of the table deals about farming was mainly practiced by males as male respondents constituted a majority (82.1 %) while female respondents accounts only for 17.9 %. This shown that the females have less opportunity in producing red onion.



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Table 4.1 socio-demographic characteristics of the producers

Item	Description	Frequency	%
Gender	Male	110	82.1
	Female	24	17.9
	Total	134	100.0
Age of respondent	<30	34	25.4
	30-40	55	41.0
	41-50	32	23.9
	>50	13	9.7
	Total	134	100
Education level	Illiterate	19	14.1
	Primary education	65	48.5
	Secondary education	40	29.9
	Certificate and above	10	7.5
	Total	134	100.0
Farming Experience	1-5	72	53.7
	6-10	29	21.6
	11-15	24	17.9
	>15	9	6.7
	Total	134	100
Ownership type	Mine	17	12.7
	Rented	117	87.3
	Total	134	100

Source. Compiled from survey questionnaire, 2014

#### **4.1.1.2 Age group of respondent**

Item two deals with the age group of the respondents. A respondents in the age group between 30-40 years takes a major share (41 %) of the respondents, followed by age group 41-50 years which accounts 23.9 % and less than 30 which account 25.4 % of the respondents while the remaining 9.7% of the respondent is found in the above 50 age group.

#### **4.1.1.3 Education level**

Item 3 of the table deals with educational background of the producers. Accordingly, 48.5 % of the respondents joined primary education, 29.9 percent of them are secondary education completed and 7.5% and 14.1 % of them were with certificate and above and no education.

#### **4.1.1.4 Farming experience**

Item four is about farming experience .The survey result depicts that, majority of the producers were joining farming of Red onion recent years as 53.7 % of the respondent has Red onion farming experience of 1-5 years only 6.7 % of the respondents were having long experience (above 15 years) in the farming of red onion. The survey further shows that, 21.6 and 17.9 % of the producers have 6- 10 and 11-15 years of experience respectively.

#### **4.1.1.5 Land ownership**

The last item of the table depicts land ownership, the table result reveals that majority (87.3 %) of the respondent undertake the farming of Red onion by leasing land from land owners (farmers in the area). The remaining 13.7 % of the respondent undertakes the red onion farming on their own land.

Generally the socio –demographic characteristics of the producers shown that most of producers are male (82.1%) and majority of them are adult. Beside this most of they join primary education with less farming experience on rent land from others. This shown that the producers are capable to received necessary information as they are adult and educated.



On the other hand the respondents are depending on other on land this may make them delay and unproductive if they didn't get the land at the right time and price. But females has less opportunity on farming of red onion.

#### **4.1.2 Socio- Demographic characteristics of traders**

This section contains provides details of the respondents socio-demographic data of the Respondents that related to their Gender, Age group , Education level, Experience of Trading Red onion and ways of undertaking red onion trading

Table 4.2 socio demographic characteristics of traders

Table 4.2 socio demographic characteristic of traders

Item	Description								
		Wholesaler		broker		Retailer		Traders	
		Freq.	%	Frequency	%	frequency	N%		
Gender	Male	40	59.7	10	100.0%	55	45.5	105	53
	Female	27	40.3	0	.0%	66	54.5	93	47
Age	less than 30	23	34.3	3	30.0%	37	30.6	63	31.8
	30-40	26	38.8	4	40.0%	56	46.3	86	43.4
Education	41-50	16	23.9	3	30.0%	20	16.5	39	19.7
	>50	2	3%	0	.0%	8	6.6%	10	5.1
	Illiterate	6	8.9%	4	40.0%	37	30.6	47	23.7
How long	Primary education	32	47.8	3	30.0%	65	53.7	100	50.5
	Secondary education	19	28.4	3	30.0%	14	11.6	36	18.2
	Certificate and above	10	14.9	0	.0%	5	4.1%	15	7.6
	1-5 years	23	34.3	3	30.0%	42	34.7	68	34.4
Under	6-10 years	28	41.8	6	60.0%	55	45.5	89	44.9
	11-15 years	13	19.4	1	10.0%	16	13.2	30	15.2
	Greater than 15 year	3	4.5%	0	.0%	8	6.6%	11	5.6
	Alone	30	44.8	7	70.0%	52	43.0	90	45.5
take trade	in group	37	55.2	3	30.0%	69	57.0	108	54.5
	Total	67	100.0	10	100.0%	121	100.0	198	100

#### **4.1.2.1 Gender of the traders**

The survey result showed that 53 % of the traders are male and the rest 47 % are female. Specifically, almost all of the brokers are male, where as in the wholesalers market the males are more (59.7 %), and in retailers market females are more (54.5 %).

#### **4.1.2.2 Age group**

Based on the survey, the largest proportions of the traders (43.4%) lie within age group between 30-40. On contrary few traders (5.1%) were lies with age of >50 years .Which showed that most (63.1%) of the trader participate on red onion trading are within the age of 30-50 years.

#### **4.1.2.3 Education level of traders**

It is a crucial factor for skill development and enhancing marketing decisions (Tadesse, 2011). The assessment in this perspective signified that 7.6 % of the respondents hold certificate and above, 18.2% of them were secondary education completed, 50.5 % of them were with primary and 23.7 % with no education. Specifically more of the brokers (40% % were illiterate than wholesalers (8.9 percent) and retailers (30.6%).where as wholesalers (14.9%) had highest portion in holding certificate and above than retailers (4.1%).

#### **4.1.2.4 Trading Experience**

As indicated above majority of the traders were categorized in adult age group and with this mere reality; the majority (44.9 % ) of traders in the sampled markets had 6-10 years of experience on the other hand 5.6 % of the trades has greater than 15 years of experience.

#### **4.1.2.5 Ways of undertaking trading**

As the survey result showed 45.5 % undertake the treading activities individually while 54.5% work with others. Specifically, majority of the brokers (70%), 44.8% of wholesalers and 43% of retailers undertake the trading by themselves. Whereas, 30% of brokers, 55.2 % and 57 % of wholesalers and retailers work with others respectively.



Generally in contrary with producers, in traders females has highest opportunity, to trade red onion. As they occupy 47% total sample of the traders. Specifically on retail market they are high. On the other side as producers, most of the traders are adult (43.4 % lies in age group of 30-40 years), join primary education, with good trading experience. This shown that the traders capable to take advantage as they are adult and had good trading experience. .

## **4.2 Structure, Conduct and Performance of the Red onion Market**

In this section of the study, Red Onion market participants, their roles and linkages ,the marketing channel of Red Onion marketing , the market structure, conduct and as well as the performance of Red onion market are presented one after the other

### **4.2.1 Red onion market participants and their roles**

The Red onion produced in Dudga District passes through different channels before it reaches the end users. The major actors involved in Red onion marketing in the study area were Producers, Brokers, Wholesalers and Retailers. The characteristics and roles played by each market actors are described as follow.

**Producers:** -These are those who produce and sale Red onion. Based on the survey most of the producers don't have their own land rather leased from others to produce Red onion. As the interview with producers. After production they sell the Red onion either on farm field (80%) or directly going (20%) to other market (i.e. village markets.) .During the interview Producers explained their grievance of being cheated up to 5 percent per quintal apart from low price by Brokers.

Under modern storage facilities and best pre-harvest and post harvest practices red onion can stay for more than five months without spoilage (Watkins & Nock, 2012). Survey data indicated that producers can't store after harvest. Due to lack of space and advanced storage facility. Hence the producers are forced to dispose their produce within very limited period at low selling price.

Based on the interview the Respondents pointed out that, there were no any set arrangements to make the marketing of Red onion based on contract. The modalities are to sell to any buyer. Producers do not have any means of creating price advantage over time.

**Brokers:** These are marketing agents that exist between producers and wholesalers /retailers. The survey result shown that, Brokers did not handle any product but facilitated the buying and selling activities among producers, wholesalers and retailer. According to the survey all of the respondents were male and the majority age lies between 30-50 years. The main activity Brokers usually do is negotiating. Brokers also disseminate price and other information to the market participants and influence Red onion trade and price formation, besides, they also broke vehicles to wholesalers, weighing, register amount of each producers and safeguard wholesalers. The average amount of money brokers get is 250-1000 ETB per trip load.

**Wholesalers;** these are those participants of the marketing system who used to buy Red onion through Broker's service or direct contact with producers, with a larger volume than other actors did. They purchase Red onion in bulk and sell it to Retailers or consumers. They are relatively fully engaged in wholesale buying. They load 50-70 quintals of Red onion per day if the demand is high or after 3days. The wholesaler used to load Red onion in a truck (specifically. Isuzu and bus)

**Retailers;** These are the final link in the chain in the study area. They are very numerous as compared to Wholesalers and Brokers and their function is to sell to consumer in pieces after receiving larger volumes from wholesalers. Sometimes they may also purchase from producers with the help of Brokers. Their purchase and selling is based on the demand of the product from consumers. Retailers use rented and their own store because some Retailers store is not found in front of the main road to attract sellers.

#### 4.2.2 Marketing channel

A marketing channel is a business structure of interdependent organizations that reach from the point of product origin to the consumer with the purpose of moving products to their final consumption destination (Kotler & Armstrong, 2003). According to the survey, five main alternative channels were identified for Red onion marketing. Marketing channels identified from the point of production until the product reaches the final consumer through different intermediaries were:

**Channel-1: producers' → wholesalers' → consumers** In this producers sell their product directly to wholesalers and then they sell to consumers.

**Channel-2: producers' → wholesalers → retailers → consumers** Producers sell to wholesalers and unlike the channel one wholesaler sell to retailers after that retailers sell to consumers.

**Channel-3: producers' → brokers → wholesalers' → consumers** Producers sell to brokers and then brokers sell to wholesaler then wholesalers sell to consumers. The brokers are not handling the red onion rather negotiate wholesalers and producers.

**Channel-4: Producers' → brokers' → wholesalers → retailers → consumers** This channel is the same as the channel three, but in this consumers purchase the red onion from retailers rather than from wholesalers. The role of brokers is same as in channel. This channel is the common channel in the red onion trading.

**Channel-5: Producers' → brokers' → retailers' → consumers (it is rear)** Producers sell their products to brokers and then brokers sell to consumers through retailers. This channel is the rare, mean not practice commonly.



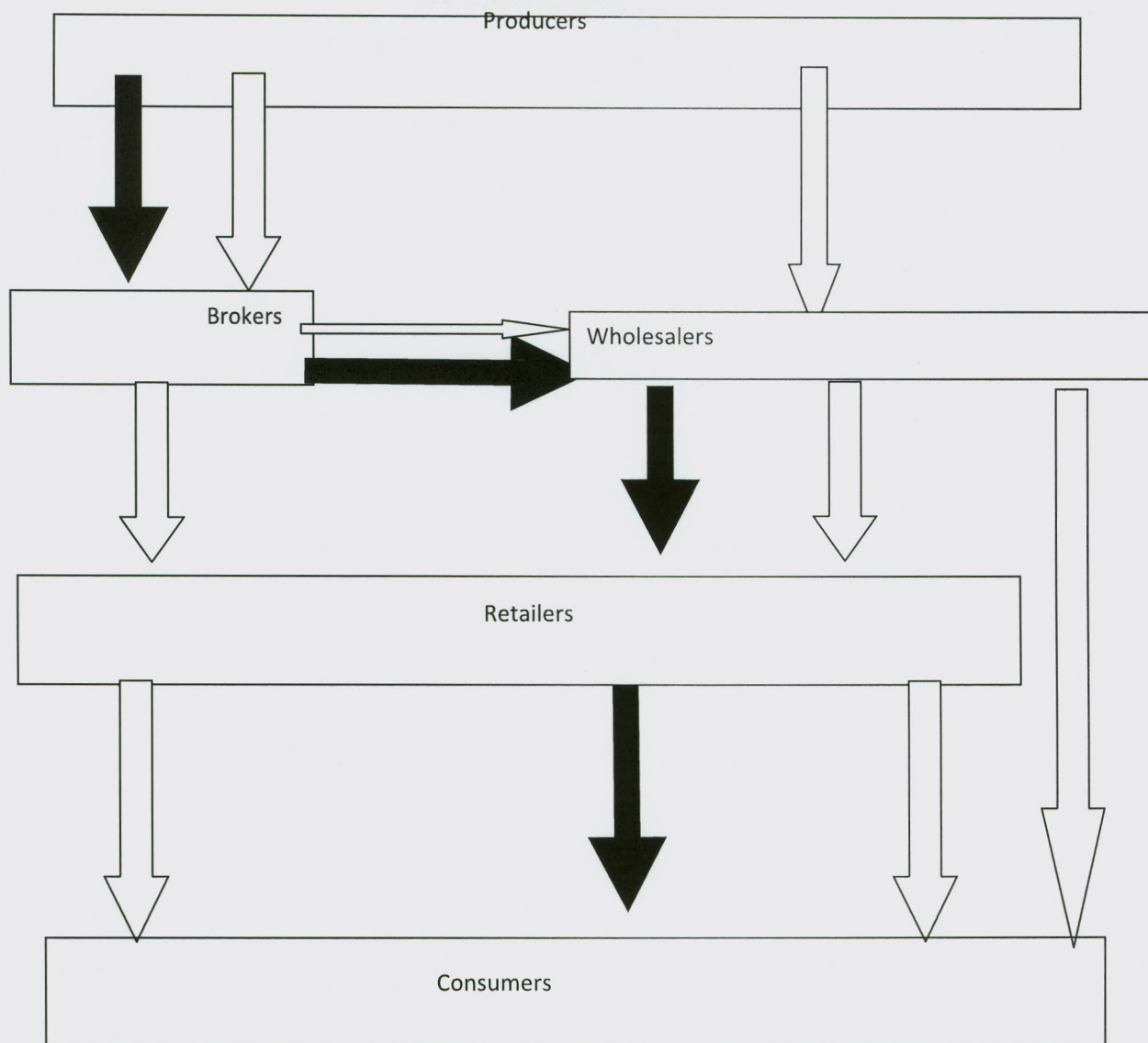


Figure 4.1 Red onion marketing channel Source: Survey result, 2014

**N.B:** The bold lines indicate the most practice channel of Red onion in the study area

### 4.2.3 Market structure

In order to know the structure of the Red onion market, the market evaluated in terms of market concentration, the degree of transparency (market information) and entry conditions (Managerial know-how, working capital, price fluctuation, and inability to compete with unlicensed traders, Gebre-Medin, Jabbar, Pender, & Ruben, (2004) also evaluated market structure of vegetables in different areas in terms of the degree of market concentration, barrier to entry (Managerial know-how, working capital, price fluctuation, and inability to compete with unlicensed traders, age, gender), and the degree of transparency.

#### 4.2.3.1 Measure of market concentration ratio

Market Concentration Ratio(CR), is the numerical index widely used by industrial organizations for measuring the size distribution of firms in a market as noted by Shughart, (1990). The calculation for concentration ratio was under taken for wholesalers by considering an average load a wholesaler took per day in the study period(March to April) basing the four firm criteria(CR<sub>4</sub>). This is used to analyze the type of markets prevailed in Addis Ababa market. Kohl & Uhl, (1985) States a rule of thumb, that encompass the top four enterprise with concentration ratios of 50 percent or more is strongly oligopolistic industry, of 33-50 percent as weak oligopoly, and less than that, as an un-concentrated industry. The result of the Addis Ababa market concentration ratio was found to be 13.08 percent. This indicates that the top four traders handled less than 50 percent (13.08%) of the Red onion market (refer to annex 3). According to Kohls and Uhl (1985) the Red onion market at Addis market has no oligopolistic market structure. This was acknowledge by Teka (2009) in Alamata with 24.56 for onion, woldeslasse (2009) on onion, shalla and tomato with 26.15 percent.

#### 4.2.3.2 Degree of market transparency

The degree of market transparency refers to the timeliness, reliability and adequacy of market information that the producers and traders have for their marketing decision. In a transparent market, participants have adequate information about their competitors regarding their demand and buying prices for better decisions( Tadesse, 2011).Market information is necessary on what to produce, when to produce and where to sale for cash crop, otherwise it is a risky business ( Tadesse, 2011)

Table 4.3 Source of market information, for producers

	Frequency	Percentage (%)
<b>Source of market information</b>		
Other Producers	14	10.4
Wholesalers	20	14.9
Brokers	92	68.7
Other sources	10	6

Source complied from the questioner

As table 4,3 showed producers have different sources to get market information. About 68.7% producers get information from brokers, 14.9 % from wholesalers, and 10.4% from other producers and the rest from other sources. This shown that most of the producer are depend on brokers for market information, this make the brokers have high power and miss guide the producers



Table 4.4 source of market information, for traders

	Frequency	Percentage
Source of market information		
Personal observation	30	15
Other traders	118	60
Act of other traders	30	15
Producer	20	10

Source compiled from the questioner

The result has also ascertained that traders have more privileged in information access than producers. The traders' survey result has also indicated that about 15 % of the sample traders got market information through personal observation and 60% from other traders. The rest (15 %) of the traders reported that they could guess market information from the acts of other traders (e.g. interest to buy large volume of red onion at higher prices) and 10% from producers

Table 4.5 Types of market information and ways of getting market information

	Producers		Traders	
<b>Ways of getting market information</b>				
Mobile phone	134	100	198	100
<b>Types of market information</b>				
Price	60	44.7	80	40.4
Demand and supply	50	37.3	60	30.3
Market place	10	7.4	30	15.2
Buyers and sellers	14	11.6	28	14.1

Source. Compiled from the questioner

Based on the data on table 4.5 All (100%) of the producers and traders get the information through mobile phone. Based on the survey respondents get market information on price, product demand, product supply, market place and buyers and sellers. Mostly they get market information on, price (44.7%) and demand and supply (37.3%). For producers and 40.4 % on price and 30.3 On demand and supply.

Table 4.6 transparency market information

	To producers ( in percent)						To traders					
	High		Medium		Low		High		Medium		Low	
	frq	(%)	frq	Pec(%)	Frq	Pec(	frq	Pec(%)	frq	Pec(	Frq	Pec (%)
Adequacy of market information	13	6.7	20	10.9	114	82.4	20	7.3	35	14.4	155	78.3
Reliability of market information	20	10.9	22	12.4	97	76.7	30	13.9	40	19	133	67.1

Note, feq=frequency and pec= percent

Source ;compiled from the questioner 2014

Regarding information about the marketing area , 82.4% and 78.3 % of producers and traders get less adequate and reliable market information , on contrary , only 10% and 15 % of producers and traders respectively have adequate and reliable information in the study area. The survey result has implied that, the market of the study area is characterized by lack of transparency in adequacy and reliability. This was also acknowledged by Tadesse (2011) on market chain analysis of fruits for Gomma Woreda that 26 and 47 percent of producers and traders respectively have reported as they have adequate and reliable information in the study area.



Both traders and producers get market information on daily basis from their sources, which mean it is consistent, but is not reliable and adequate as indicated above. According to the producers interview ,this is due to malpractices of traders specially brokers on weight and market information. This shows that the market transparency is lowest among traders and producers.

As the interview with producers and traders, There is no public information on demand and supply of Red onion. So all of the traders and producers state their willingness to pay for information cost, if there were well organized and transparent information. Teka, (2009) Analyzing fruit and vegetable (onion, tomato and papaya ) marketing chains in Alamata District, southern zone of Tigray Market information (on price, product demand, product supply, market place and buyers and sellers.) gain from observation, friends, traders and cooperatives.

#### **4.2.3.3 Barrier to entry**

Under this section we see whether or not the listed factors hinder for producers and traders to enter into the market based on the data we have on those who are already enter in to the market.. the major once are :Managerial know-how, working capital, price fluctuation, and inability to compete with unlicensed traders.

##### **A. Managerial know-how**

Managerial know how is assessed to measure the ability and knowledge of red onion traders and producers. This is therefore examined by level of traders' and producer's formal education and their trade experience.

##### **❖ Level of education**

The result of producers and traders' survey in Table 4.1 and 4.2 indicated that, generally 14.1 producers were illiterates, while 48.5 and 29.9 percent attend primary and secondary education and 7.5 hold certificate and above. On the other hand about 11.6 percent of traders were illiterate; while 53.7 and 30.6 percent of traders have attended primary and secondary education, respectively.

The remaining are hold certificate and above. As it is shown the illiterates are more than certificate and above holders. This confirmed that producers and traders' educational background seem to be not as such a barrier to entry into red onion trade. In contrary Tadesse, . (2011) state education is barrier to enter into the market as most of the respondents(56.27%) have completed secondary education.

### ❖ Experience

Business or trade experience refers to the number of years that people are engaged in Red onion trading activity where their experience plays crucial role in decision making activity (Bosena 2008). The traders' survey results in Table 4.2 shows that, most of the traders are not well experienced in red onion trading business. Out of the surveyed traders about 34.7%, 45.2%, 14.9%and 5.3% of the traders had an experience of 1-5; 6-10 11-15 and above 15 years of business experiences, respectively. The majority of traders in the sampled markets had 6-10 years of experience. This may explain that there are no as such barriers to entry in red onion trade with respect to years of experience when compare the rate with those who have 15 years experience. . This was acknowledge by Tadesse, (2011) as most of the respondents (67.4) had 1-5 years experience

### B. Capital

Based on the interview with traders (wholesalers and retailers) , they were constrained in receiving credit from micro finance for lack of guarantor and complicated process to get credit. They stated that their greatest constraint is access to finance, which they view as a constraining factor in enter in to the market, expanding their scale of operations, achieving greater efficiency, and engaging in the long- term storage needed. In these cases, capital requirement discourage entry into red onion trading. Beside this producers also state that there is problem on getting credit to undertake marketing activities like good storage facilities. in contrary Teka (2009) and Woldesslase (2009) show credit is not barrier to enter into the market because Retailers can get credit from Wholesalers and Rural assemble also get from producers. Whereas Tadesse (2011)

states that capital is barrier to enter in to market due to the collateral and other complicated processes.

### **C. Price fluctuation**

The price of the red onion is highly volatile to be engaged in the business confidently which is an entry barrier because only those who can take such risks will join the business. . The study made clear that about 50 percent of traders considered volatile price fluctuation as the entry barrier to red onion marketing.

### **D. Inability to compete with unlicensed traders:**

Even though all of sample traders (wholesalers and retailers) in the red onion market are licensed. There are also unlicensed traders in this market. Based on informal discussion with traders (wholesalers' and retailers), the regulatory action to control unlicensed traders (retailers and wholesalers') is minimal in the Addis market. Since these unlicensed traders do not pay tax they have the opportunity to charge competitive price and discourage the licensed traders. Traders (wholesalers' and retailers) do not blame about the payment for licensing and renewal. But, they claim that the tax rate is unfair and high and very subjective. The survey result indicated that 67% of traders pay tax based on the volume of the product handled but there was no continuous and proper counting.

Generally except managerial knowhow, the rest factors(capital, price fluctuation and competition from unlicensed traders) were entry barriers and there are no exit barrier rules and regulations in red onion trade in the study area

#### **4.2.4. aging, transportation and storage**

According to Jibat(2000) between production and consumption the vegetables loss can be estimated as 25-35%. He also added that facilities(packing, transport and storage) are used to reduce the post harvest loss gap between producer and consumer , and or reduce the time interval between harvesting and consumption.



**Table 4.7 Packaging and transportation used by traders**

Traders	Packaging	Capacity	Cost
Wholesalers	Wooden box	20kg	2 birrfor rent
Retailers	Wooden box madaberiya	20kg 50-100kg	30 birr 5-10 birr
	Transportation		
Wholesalers	Isuzu	50-70 quintal	2000-2400
Retailers			

**Source compiled from the questioner**

#### **4.2.4.1 Packaging**

Based on the survey except brokers other traders use packaging for red onion. While purchasing of red onion wholesalers use wooden box to measure the weight of red onion as most of the producers sell their product at farm get. This packaging material was made from wood, and has a capacity of holding 20kg of red onion at a time and lease from producers with 2 ETB. It used to measure the weight of red onion and fill the red onion to car or other means of transportation. Well retailers use “madaberia” with holding capacity of 50kg- 100kg or and wooden box. This is also purchased from 5-10 birr for madabria and 30 birr for wooden box. .

#### **4.2.4.2 Transportation**

As the survey result, most (80%) of the producers sold their product at farm get.. while the rest sold at village market . According to the survey result wholesalers use car/cargo to transport Red Onion from farm get to Addis Ababa market. It can hold 50-75quntal red onion at a time. Wholesalers may rent or use their own if have they wholesalers pay 2000-2400ETB for one trip. On the other hand, retailers use car/ isuzu for transportation of red onion from wholesalers store to their shop. Brokers do not use transportation facilities as their role is negotiating buyers and sellers.

#### **4.2.4.3 Storage**

During interview with producers, when the producers were asked about storage facilities, they replied "Why should we store?" This indicates that the Producers are rightly producing for immediate sale after harvest because they have not standardized as well as enough storage facility. While common storage practices made by traders (except brokers) were freely arranging red onion on the flour. Sometimes they may use wooden box if they have excess red onion than their store capacity. This makes the red onion spoil early and reduce its quality.

#### **4.2.5 Market conduct**

Market conduct refers to the patterns of behavior of firms. This implies analysis of human behavioral patterns that are not readily identifiable, obtainable, or quantifiable (Pomeroy and Trinidad, 1995). There are no agreed upon procedures for analyzing the elements of market conduct. Rather, some points are put to detect unfair price setting practices and the conditions under which such practices prevail. In this study conduct of the red onion market is analyzed in terms of the chain actor's price setting, purchasing and selling strategies

#### 4.2.5.1 Producer's market conduct

##### 4.2.5.1.1 Buying and selling strategy

As the research emphasis on post harvest marketing activities, it only considers selling procedures of producers. Based on the interview with producer and traders, Red onion supply starts in November and reaches its peak in January and sharply decline after March. The price also inversely related to the supply .i.e. it is highest on February and March and lowest on December and January. Respondents also reported that, there were no significant sales in the months of May to September. table 4.8 selling strategy for producers

<b>To whom you sell your product</b>	Frequen	Perce
Wholesalers through brokers	118	80
Wholesalers without brokers	10	13.8
Other traders	8	6.2
<b>In what time interval do you supply your product</b>		
Twice a year	114	85
Once a year	20	15
<b>Where you sell your product</b>		
At farm gate	108	80



Other market	26	20
<b>How do you sell you produc</b>		
On cash	114	85
On credit	20	15

Source compiled from the questioner 2014

The study indicated that about 85 percent of the producers supplied red onion to market twice in 2014 and the rest 15 percents once a year . There is no specific market day for red onion sales rather producers go to market (where an area that brokers and producers meet) on any day that is convenient to them and the brokers went with them to their farming area to see the quality of the product and negotiate on price to inform to wholesalers.

Simultaneously, 85 percents of red onion producers sold their product on cash basis. I.e. the payment under taken during transaction. And the rest was on credit .On average they sell 50-150 quintal (1-3 Isuzu) per day if they have highest production. As we seen on table 4.6 about 80% percent of the red onion producers reported that they sold their produce to wholesalers in Addis Ababa market through brokers. In On contrary 13.8 % of producers sell to wholesalers without the help of brokers, and the remaining to retailers..

Ahmad, et al,( 2008) also support this as Majority of the onion growers (93%) sold their produce at farm level and incurred no marketing cost. However, the remaining growers sold their produce to wholesale markets. According to Lashari et al. (2003) onion growers mostly supply produce to wholesale market (60 percent), followed by terminal markets (30 percent) and assembly markets (10 percent)

The red onion producers in Dugda District have weak or no organizations. Starting from production up to marketing, every producer produces and sells on individual basis. Due to this, they lack the power to negotiate. Because of this, they simply take price. Producers are not organized to increase their bargaining power. This was supported by Woldesselase (2009) in his study on market chain analysis of vegetables (onion, shallot and tomato in Fogera Woreda. In this woreda there was no any marketing institution to safeguard farmer's interest and rights over their marketable produces.

During the marketing of the product both traders (mostly brokers or wholesalers) and producers cheat each other. Traders minimize the volume of the product during weighing. On the other hand, producers cheat traders by watering red onion and adding not well matured and low quality red onion.

The lack of modern post harvest handling practice and lack of storage facilities have compelled producers sell the onion at prevailing prices (price set by traders themselves rather than the market price). Knowing this, wholesalers put pressure on producers to sell at low price.

#### 4.2.5.1.2 Producers pricing strategy

Table 4.9 Pricing strategy for producers

who set selling price	Frequency	Percent
themselves	20	15
Market	24	18
Negotiation	27	20
Traders	63	47

Source compiled from the questioner

The method of price formation is of critical importance. About 15% of the sampled producers set their own selling price, 18% of them reported that their price is set by market, 20 % of the producers set price by negotiation, and the rest (47%) reported that the price is set by wholesalers, and brokers.. This indicates that the red onion traders (wholesalers and brokers) had significant role in price setting. Most of the time producers negotiate with brokers than wholesales as they are their representatives.

There is no contractual based marketing System in the area to minimize marketing risks. Woldesslasse (2009) also show that intermediaries have highest power to decide on the price of onion/shallot products like this study area.

#### **4.2.5.2 Traders market conduct**

##### **4.2.5.2.1 Traders buying and selling strategy**

Brokers facilitate the market process without handling any product. The role of brokers in facilitating price information is limited due to predetermined brokerage charge per truck load . Regardless of producers selling price, brokers obtained 250-1000ETB per truck load. Brokers were very important for wholesalers and producers at the time of purchase



**Table 4.10 Buying and selling strategy of traders**

<b>How purchase your product</b>	Wholesalers		Retailers	
	Number	percent	Number	Percent
Through broker	54	80		
Without of brokers	13	20		
Wholesalers			97	80
Other retailer			18	15
producers			6	5
<b>For whom do you sell your product</b>				
Retailers	47	70		
Consumers	20	30	95	115
Other traders			5	6
<b>How the purchase and selling under take</b>				
On cash	67	100	100	122
On credit				

Source complied from the questioner 2014

As indicate on table 4.10 About 20% of the traders (wholesalers) purchase directly without brokers, 80% of them purchased through brokers. During buying all wholesalers makes a price difference for quality based on their experience. While retailers purchase red onion either from wholesalers or other retailers and producers. This shown that brokers whole s a l e r s depends on broker while purchasing the red onion. And make the brokers cheat on market information as they are main bridge to connect producers and wholesalers.

On the other hand about 80% of retailers purchase directly from wholesalers and 15% from other retailers and the rest from producers. Based on the survey on average wholesalers purchase 50-150 quintals per day based on the demand and production of red onion. Unlike wholesalers retailers are not depend on brokers, rather depend on wholesalers, this also give power for wholesalers to miss lead and get benefit on them on price.

The common weight measurement for red onion was “wooden box”(20kg), at one time three”wooden box” was weighted. On the other hand retailers purchase 80-100 kg per day based on their customers demand. The measurement was kilogram.

On selling strategy , wholesalers sell 70% of their product to retailers and the remaining is open to other buyers (consumers or hotel or other. According to (Lashari , 2003). Wholesalers supply 70 percent to other wholesalers, 20 percent to exporters and 5 percent to shopkeeper. On the other hand almost 100% of the retailers sell their product to consume. They are participating all days in the year on red onion trading.

Both the purchasing and selling was undertaken on cash basis (payment made during transaction).All of the traders participate on red onion trading all of the years, but for this district they participate year round means between November to April.

The informal survey indicated that many wholesalers/broker take excessive advantage by cheating the producers by means of manipulating the weighing scale, and producers also develop a habit of watering and mixing not well matured and low quality red onion.

Based on the interview with producers, Even if a producer has knowledge of weighing scale, he/she is forbidden to see the scale. If the producer refuses to sell, wholesalers/brokers start to renegotiate on kg instead of price with producers and with the intermediation of brokers. Wholesalers/brokers manipulate the weighing scale and all traders seem to talking the same language, cheating on average a minimum of 8 kg per quintal. Moreover wholesalers consider about 4 to 6 kg s per quintal for wetness of red onion

#### 4.2.5.2.2 Pricing strategy of traders

Table 4.11 Pricing strategy for traders

Who set price while purchasing the red onion	wholesales	Retailers
negotiation	30%(20)	32.7 %( 40)
market	26%(17)	20.3%(25)
Producers/brokers	10%(7)	
Themselves	34 %(23).	47%(56)
Who set price while selling your product		
Market	54%(36)	52.8%(64)
Negotiation	30%(20)	12%(15)
Themselves	16%(11)	35.2(42)



The method of price setting is crucial importance in red onion trading activity .While buying 30% of the sampled wholesalers set price by negotiation, 26% of them by the central market price, 10% by producers/brokers and the remaining(34%) by themselves. Most of the time the negotiation on price was made with brokers as they highest purchase done with the help of them. The pricing strategy for selling is based on market price (54%) and 30% by negotiation and the remaining by themselves.

About 47 % of the retailers reported that their purchase price was set by market, about 20.3 %of set purchase price themselves and 32.7 % of the retailers respond that purchase price was set by negotiation with suppliers. About 64.8 %t of sample retailers set their selling price by themselves and the rest (35.2 %) of them respond that selling price was set by market.

On buying strategy wholesalers has highest power to set price. on contrary retailers has highest power in setting price while selling their product as 64.8% of retailers set the price . This indicates that as most of the producers (80%) sell their products to wholesalers , the producers are dis benefited in the market.

Generally on the market conduct analysis producers h less power on setting price, beside this there is also uncompetitive market due to cheating on weight and collusion of market information. This was support by Weldesslase(2008) and Teka, (2009) Analyzing fruit and vegetable. On pricing 75 percent of the tomato and 85% of the papaya producers believe price was decided through negotiation while 65% of the onion producers' believed that price setting was made by buyers.

#### 4.2.6 Performance of the market

Methods employed for the analysis of red onion market performance of Dugda district were marketing margins by taking into account associated marketing costs for key marketing participants. Hence, on the consideration of one month (March 1 and April 1) production, costs and purchase prices of the participant, margin at producers, wholesalers and retailers, level was conducted. Studies have found out that estimating marketing margin quite accurately through price surveys at all levels in the distribution channel during one week under normal conditions is normally recommended (Mendoza, 1995).

##### 4.2.6.1 Profitability analysis of red onion, producers

Table 4.12 Average estimated cost and profitability of red onion, producers (Birr/hectare Dugda, 2014)

List of cost type/hectare	Price in Birr	Percent (%)
Seed/seedlings	887.35	23.4
Fertilizer	91.75	2.2
Chemical	227.18	6.3
Labor(hired)	1980.60	51
Irrigation fee	415.05	11
Land rent	150	4
Other costs	84.73	2.1
Total cost per hectare	3751.93	
Total cost per quintal	36.96	
Average selling price/Qt	250	
Revenue/ha of production/ha	25375	
Gross profit(Loss)/ha	21623.07	
Gross profit(Loss)/Qt	213.04	

Based on the informal discussion with producers the average estimated production of red onion per hectare was 101.5qt. The cost of production per hectare on average was 3751.93ETB and the average return per hectare was 25375ETB, respectively. Table 4.3 indicates that on average a producer can get a gross profit of 21623.07 per hectare. It seems that the production of Red onion is profitable. Hired labor cost was the major cost of producers which constituted about 51% of the total production and marketing structure costs of red onion. On the other hand, other costs and fertilizer cost constituted less (2.2 and 2.1 %).

This cost also highest in Woldesslasse (2009) study in the onion and tomato was labor for about 43.3 like our study area and 88% from the total cost of tomato take the lion share. The lion share from this estimated cost of production was taken by seed (bulb) cost in shallot for about 45 percent of the total. Teka(2009) also get same result, Hired labor and family labor cost was the major cost of producers which constituted about 40% of the total production and marketing structure costs of onion.

#### **4.2.6.2 Profitability analysis of onion, for wholesalers**

Based on the survey The average marketing cost incurred for one quintal of red onion from production area to the market place of the wholesalers was 69.34 ETB. Out of which transport cost covered about 43.2% of the total marketing cost. When we compare to producers their gross profit was high (351ETB)



Table 4.13 Average estimated cost and profitability of red onion, wholesalers (Birr/quintal) (Dugda,

List of cost type/quintal	Price in Birr	Percent(%)
Average purchase price	250	
Packaging cost	10	14.4
Weighing cost.	3.32	5
Loading and unloading Cost	4.15	5.9
Transport cost	30	43.2
Store rent	16.87	24.3
Storage loss	5	7.2
Commission paid	11.40	16.4
Other expenses(telephone, guard )	3.15	4.5
Subtotal cost	69.34	
Total cost	349.34	
Average selling price	700.25	
Gross profit per quintal	351	

2014)

#### 4.2.6.3 Profitability analysis of Red onion, for retailers

The survey result indicates that the gross profit obtained from red onion, at retailer level was 305.61ETB,per quintal .According to the survey result transportation cost(33.9%) is highest as wholesalers. again the gross profit also higher.

Table 4.14 Average estimated cost and profitability of red onion, wholesalers (Birr/quintal) (Dugda, 2014)

List of cost type/quintal	Price in Birr	Percent(%)
Average purchase price	700.05	
Packaging cost	8	18
cost of labor	3.32	7.1
Storage loss	5.15	11.8
Storage rent	6	13.8
Transport cost	15	33.9
Other	6.87	15.4
Sub total cost	44.34	
Total cost	744.39	
Average selling price	1050	
Gross profit per quintal	305.61	

#### 4.2.6.4

#### Marketing Margins

By taking the average sales prices of different participants in the Red onion market chain (producers wholesalers and retailers ), the marketing margins of Red onion was calculated as follows.

Table 4.4 .Average estimated price of Red onion at different market levels, % share from consumer price, and gross profit.

Market channel particip	Selling price (Birr/Qt	% share from retail pric (Gross marketing margin	Profit in birr /quntal
Producers	250	26	128.67
Wholesalers	700	43	91.05
Retailers	1050	33	100.56

Source own consumption

TGMM (complete distribution channel) = 76 %

GMM<sub>w</sub> (wholesalers) = 43%

GMM<sub>R</sub> (retailers) = 33%

GMM<sub>P</sub> (Producers )= 100%-60 %=26%

Table 4.13 reveals that 76 % total gross marketing margin was added to Red onion price when it reached the final consumers at domestic markets. From the total gross marketing margin 43 % was gross marketing margin of wholesalers (received by wholesalers) while 33% was that of retailers. As the result show producers get less share from the price paid by consumers. This means the onion market does not perform well.

This was support by Gupta (1979) in his study on analyzed the performance of vegetable marketing in Delhi. The results revealed that producers received 38 percent of the consumer price, and those middlemen margins were excessive give the level to risk and marketing activities. In contrary Lashari et al. (2003) show that producers received the highest margins for all the three vegetables due to the investment made in production. They also bear the highest production and marketing risks among all actors involved. Specifically on onion



producers received 55%, commercial agent 12%, wholesalers 14%, retailers 19%. Mari, (2009) also get same result in his study on structure and efficiency analysis of vegetable( onion , tomato and Chile) production and marketing in sindh. The producer share in consumer's rupee was 57% in Sindh, when producer marketed their own produce. The other intermediaries obtained 5%, 21% and 17% as commission agents; wholesalers and retailers respectively

#### **4.2.7 Market problems**

The marketing problems can be seen specifically for producers and traders.

##### **Producers marketing problems**

- ❖ Price setting is the major problem of marketing. Producers could not have highest portion to set price for their product. The reasons stated by producers are: usually price set by traders, more unstable, and lack of real price information from terminal market and no direct relation with traders. About 47% of the producers' red onion price was set by traders.
- ❖ Weighing or scale is another marketing problem for 51% of the producers. Even if producers have knowledge about weighing, they are not allowed to check the scales.
- ❖ Unfair price quotation- in the study area repeated low pricing was reported at peak supply periods that were not based on the actual supply and demand interaction but information collusion created by buying actors.
- ❖ The intermediaries used to decide on the price of products. The benefit of Wholesalers overweighs than others and they control the market chain.
- ❖ Absence of law enforcement on standards- The prevalence of strong and wide market cheating by wholesalers and brokers like mis-weighing, collusion (price information). There were no identified and applied quality standards that resulted in absence of discriminatory pricing accounting for quality and grades

- ❖ Lacks of coordination among producers - producers were not coordinated to increase their bargaining power. This may help traders information producers to sell with less price .
- ❖ There is no marketing institution to safeguard producers' interest and rights over their marketable produces.
- ❖ Market research and information- Inadequate availability of market research and marketing information that resulted in uninformed planting and marketing decisions based on neighbors' advice/information . Many decisions were made following the leading producers . Leading producers can speed up technology replication but could also result in planting duplication and ultimately lower prices for crops of very perishable type
- ❖ Lack of standardize storage facility made producers to sell their product early and low price.

#### **Traders marketing problems**

- ❖ Based on the survey the absence of transparent role from the brokers on market Information ( the price and supply of red onion) , and fluctuations in the red onion prices at the terminal markets have affected their(wholesalers and retailers) business. This means those who have close relation with the brokers only get on the right time with it right information.
- ❖ Access to credit was reported by the sample traders as limiting factor in operation and business expansion. The problems in acquiring loan occur from lack of collateral for micro finance and banks. Even if there is an access to credit, the complexity of process to get credit from micro finance, and high interest rate discourage loan.
- ❖ Lack of advanced storage technology was also affecting their business. As red onion is Perishable product it need standardize storage facility. But due to lack of storage the red onion spoil and incur loss to the traders . beside this the quality also affected

## Chapter Five; Conclusion and Recommendations

This chapter presents conclusions drawn from the result of the previous chapter and indicates its implications. The chapter is organized in two main sections with section (5.1) discussing conclusion and section (5.2) presenting recommendations for manufacturers, marketers, retailers and other players in the area.

### 5.1 Conclusions

This research has tried to analyze the marketing chain of red onion in Dugda district by applying market structure, conduct and performance model. The specific objectives included identifying the market structure of Red onion, investigating market conduct of Red onion in dugda district, describing performance of the market of Red onion in duga district and identifying major marketing problems in trading of Red onion in Dugda district.

Analysis of the collected data showed that there are five major channels that help to transfer red onion from producers to consumers. From the this market channels the channel that stretched as: producers --brokers\_\_\_\_\_wholesellers Retailers\_\_\_\_\_consumer was the major ones.

On market structure analysis the calculation of concentration ratios from the 64 wholesalers based on their load indicated no oligopolistic (13.08%) market behavior. The four firm concentration ratios were lower than the standard, 33 percent. This shows that the market is not controlled by few traders. However, activities like cheats in weight and information collusion showed uncompetitive market. Even though all market participants get market information from different sources, it lack of transparency in adequacy and reliability, mean the information they get was not true and correct but is good in timeliness.



Barrier to entry in terms of managerial knowhow(education and trading experience) not hinder entry into red onion market, but capital, price fluctuation and competition from unlicensed traders were barriers. Regarding the conduct of red onion market, pricing strategy of the producers indicated that 47% of producers sell at price set by traders.

On the contrary 28.2 % of trader's purchase price is set by negotiation, 26% of them by the central market price, 6% by producers/brokers and the remaining(39%) by themselves. This shows traders have highest role in price setting of producers.

Purchasing strategy of traders indicates that about 20% of the traders (wholesalers) purchase directly without brokers, 80% of them purchased through brokers. While About 80% of retailers purchase directly from wholesalers and 15% from other retailers and the rest from producers .About80% percent of the red onion producers reported that they sold their produce to wholesalers in Addis Ababa market through brokers. This shows that wholesalers have strong relations with producers than retailers have. Beside this brokers has highest role in connecting producers with traders. .

The main market places for producers are the farm gate. The largest receivers in the case of onion are wholesalers. Cheating was very common in red onion marketing by manipulating weighing scale.

The results of the marketing cost, margin and profit analysis indicates that retailers incur highest cost (744.39 ETB per quintal) followed by wholesalers (349.34 ETB per quintal) and producers (36.96 ETB per quintal. On their profit analysis, generally producers get lowest profit and profit margin when compared traders. Specifically producers get less portion (26%) than traders (76%) from the price paid by consumer.

Among various problems in the marketing of red onion ,Price setting ( If price set by traders, more unstable red onion price, and lack of real price information from terminal market and no direct relation with trader), Weighing or scale , Unfair price quotation, Absence of law enforcement on standards, Lack of coordination among producers , Inadequate availability of market research and marketing information ,

absence marketing institution to safeguard producers interest and rights over their marketable produces stated by producers as major problems . For the traders, absence of transparent role from the brokers on market Information ( the price and supply of red onion) ,the complexity of process to get credit from micro finance, lack of advanced storage technology are the major problems.

## 5.2 Recommendations

Based on the above conclusion of this study, the following recommendations are given which may be considered in the future intervention strategies. The recommendations include;

- ✦ Is better that the government develop institutions that provide market information at the right time with right place in order to overcome market information problems of producers. Hence an integrated agricultural marketing information system can be put in place that will link to Woreda information center, and to link them to governments program. .
- ✦ It is better if government enhanced the onion producers' bargaining power through cooperatives. This means developing cooperative that make producers cooperate each other to set price for their product, this is the best measure that should target at reducing the control of traders in the study market. Such measure also facilitates the regular supply of red onion at reasonable price to consumers. Hence the government may encourage the producers to form cooperatives for their own benefits.

- The concerned authorities (like trade and industry, *Woreda* and *Kebele* administration, and the farmers themselves) need to monitor the activities of the brokers to ensure that they act ethically. This can be achieved if the trade and industry ministry as well as *Woreda* and *Kebele* administration provide update and correct market information like, demand and price of red onion in village and Addis Ababa market beside rather than individually setting the price for their product, producers should organize themselves and set price in group.
- The Government may build cold storage facilities for the benefit of the producers and rent the facilities to them on no –profit- no -loss basis. This will minimize the exploitation of the producers by the others (brokers, wholesalers, etc).
- It is better that the government develops standard weighting scale and put individuals that provide weighting scale service rather than brokers



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# APPENDICES

**APPENDIX –A**

**JIMMA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**MASTERS OF BUSINESS ADMINISTRATION**

**Questioner schedule designed for producers**

***Instruction:*** please *circle* the best answer you believe it from the given alternatives. Note: if the answer is more than one you can choose more than one answer

**Demographics characteristics**

1. Sex
  - a. Male
  - b. Female
2. Age of the respondent
  - a. <30
  - b. 30-40
  - c. 41-50
  - d. >50
3. Education level
  - a. Illiterate
  - b. Primary education (1-8 grade)
  - c. secondary education (9-12 grade)
  - d. certificate and above
4. Is the farm yours or is it rented?
  - a) Mine
  - b. Rented
5. Experience on red onion production.
  - a. 1-5 years
  - b. 6-10 years
  - c. 11-15 years
  - d. >15 years





13. How do you qualify the reliability of the information you received?

- a) Highly reliable
- b) Moderated
- c. low.

14. How do you qualify the timeliness of the information you got?

- a. Continuous
- b. Varied

15. How do you qualify the adequacy of the information you got?

- a) Highly adequate
- b) Moderated
- c. low

16. How much you are willing to pay for information you received?

- a) Willing
- b. Not willing

17. On what interval you received the information?

- a) Daily
- b) Weekly
- c. monthly

**Price**

18. Who set the selling price?

- a) Broker
- b) Wholesalers
- c. retailers
- d. myself

19. On what way the price set?

- a) Through negotiation
- b. Through market

20. Problems faced by producers

- a. On Transportation facility\_\_\_\_\_
- b. On market information\_\_\_\_\_
- c. On packing facility\_\_\_\_\_
- d. On storage facility(Lack of cold shelf facility)\_\_\_\_\_
- e. Other specify\_\_\_\_\_

## TRADERS QUESTIONER

**Instruction:** please *circle* the best answer you believe it from the given alternatives. Note: if the

answer is more than one you can choose more than one answer

### Socio -Demography characteristics

1. Are you  
a) Wholesalers                      b. brokers                      c. retailers
2. Sex  
a) Male                                  b. female
3. Age of the respondent  
a) <30                                  c. 41-50  
b) 30-40                                d.>50
4. Education level  
a) Illiterate                            c. secondary school (9-12)  
b) primary school (1-8)              d. Certificate and above
5. How long have you been in onion trading?  
a) 1-5 years    b.6-10 years    c. 11-15 years    d. >15 years
6. How do you undertake onion trade activity?  
a) Alone        b.In group
7. How do you see the licensing procedures for red onion? \_\_\_\_\_
8. What is your role in the marketing on red \_\_\_\_\_
9. When you participate in red onion trading?  
a) Year round                      c. During high supply  
b) When purchase price becomes low    d. Other (specify)

## Selling and buying practices

### 10. Selling practices

Time	Quantity	Price/kg	
		To other wholesalers	To retailers
Per day			
Per week			
Per month			
Total			

### 11. To whom do you sell your product?

- a) To other wholesalers   b. To retailers   c. To consumers

### 12. . Buying practice

Interval	Quantity	Price/kg		
		From producers	From brokers	From other wholesalers
Per day				
Per week				
Per month				
Total				

### 13. From whom do you purchase Red onion?

- a) directly from producers   b. from brokers   c. from other wholesalers   d. other specify



### Market information

14. Who is your source of information?

- a) personal observation
- b. other traders
- c. act of other traders
- d. producers
- e. Other(specify)

15. On what mechanism you received the information?

- a) Through mobile phone
- b. fixed phone
- c .Other (specify)

16. What type of information you received

- a) Price of red onion
- b. Demand of red onion
- c. Other (specify)

17. Did you know the market prices in different market (farm get, Addis Ababa market) before you sold your red onion?

- a) Yes
- b. No

18. How do you qualify the reliability of the information you received?

- a) Highly reliable
- b. Moderated
- c. Low

19. How do you qualify the timeliness of the information you got?

- a) Continuous
- c. varied

20. How do you qualify the adequacy of the information you got?

- a) Highly adequate
- b .Moderated
- c. Low

21. How much you are willing to pay for information you received?

- a) Willing
- b. not willing

22. On what interval you received

- a. daily,
- b. weekly
- c. Monthly



### Storage

27. Mode of storage

Storage materials	Holding capacity	storage cost

28. Where do you store red onion after you purchase?

- a. in sacks                      b. spread on the floor inside house                      c. others specify\_\_

29. How long do you store red onion (between purchasing and selling) Days

### Price

30. Who sets the price for the products when you sell?

- a) Myself      b. Buyers                      c. Other \_\_\_\_

31. Who sets the price for the products when you purchase?

- a) Myself                      b. sellers                      c. Other \_\_\_\_\_

32. How the price is set when you sell /purchase the product?

- a) Through negotiation                      b. Through market(demand of the product)  
c. other specify

33. . What are 'the problems on Red onion marketing related to ?

- a. Marketing information\_\_\_\_\_
- b. Packaging\_\_\_\_\_
- c. Transportation\_\_\_\_\_
- d. Storage\_\_\_\_\_
- e. Other\_\_\_\_\_



## **Interview questioner**

1. What are your costs
2. How do you see the licensing procedure
3. How do you see the credit facilities in your are
4. What are the problems in marketing of red onion
5. Is there any institution that provide market information fo you

**Appendix 3 Red Onion wholesale Concentration ratio**

List of wholesaler	Average quantity load per week	Average quantity( $v_i$ ) loaded per	Market share $s_i = v_i / (\sum v_i)$	% share of cumulative purchase $c = \sum_{i=1}^r s_i$	Main destination
W1	9	1.29	1.96	1.96	Addis Ababa
W2	6	0.86	1.30	3.26	Addis Ababa
W3	15	2.14	3.23*	6.49	Addis Ababa
W4	7	1	1.51	7	Addis Ababa
W5	7	1	1.51	8.51	Addis Ababa
W6	14	2	3.02*	8.53	Addis Ababa
W7	21	3	4.23*	12.67	Addis Ababa
W8	4	0.57	1.13	13.80	Addis Ababa
W9	12	1.71	2.60*	16.40	Addis Ababa
W10	4	0.57	1.13	17.53	Addis Ababa
W11	10	1.43	2.30	19.83	Addis Ababa
W12	6	0.86	1.30	20.13	Addis Ababa
W13	9	1.29	1.96	22.09	Addis Ababa
W14	5	0.71	1.07	23.16	Adiss Ababa
W15	10	1.43	2.45	25.61	Addis Ababa
W16	6	0.86	1.30	26.91	Addis Ababa
W17	6	0.86	1.30	28.21	Addis Ababa
W18	7	1	1.51	29.72	Addis Ababa
W19	5	0.71	1.07	30.79	Addis Ababa
W20	5	0.71	1.07	31.16	Addis Ababa
W21	7	1	1.51	32.67	Addis Ababa
W22	11	1.57	2.45	35.02	Addis Ababa
W23	9	1.29	1.95	36.97	Addis Ababa

ጅማ ዩኒቨርሲቲ  
የማኔጅመንት ትምህርት ክፍል  
ኤምቢኤ ኘሮግራም

ለአምራቾች የተዘጀ መጠይቅ

መመሪያ ከተሰጡት አማራጮች ትክክለኛው መልስ ያክቡ

ማሳሰቢያ መልሱ ከአንድ ለላይ ከሆነ ለአንድ በላይ መምረጥ ይችላሉ

1. ያ

ሀ. ወንድ                      ለ. ሴት

2. ዕድሜ

ሀ. ከ30 አመት በ ች                      ሐ. 40 - 50 አመት

ለ. ከ30 ሀ40 አመት                      መ. ከ 50 አመት በላይ

3/ የትምህርት ደረጃ?

ሀ. ያልተማረ /ማንበብና መጻፍ የማይችል/                      ሐ. ሁለተኛ ደረጃ /9- 12 ክፍል/

ለ. አንደኛ ደረጃ /1-8ኛ ክፍል/                      መ. ሠርተፊኬት ና ከሁሉም በላይ

4. ርሽው የማነው?

ሀ. የራስ                      ለ. ተከራይቼ

የመሸጥ ልምድ

6. ምርቶን ንዴት ነው የሚሸጡት

ሀ. በቀጥ ለጅመላ አፋፋዮች                      ሐ. በቀጥ ለቸርቻራ-ች

ለ/ በደላሎች በኩል                      መ. ሌላ ካለ ይግለፁ



7. የመሸጥ ልምድ

ጊዜ	ብዛት	ለሌላ አምራቶች	ደላሎች	ለጅምላ አከፋይነት	ለቸርቻራ-ች
በቀን					
በሳምንት					
ለወር					

9. ማመረጃ ምጫች ነማ ናቸው?

- ሀ. ሌላ አምራቶች                      ሐ. ደላሎች
- ለ. ጅምላ አከፋይነት                መ. ሌላ ካለ ይገለፁ

10. የገቢያውን መረጃውን የሚያገኙት በምንድን ነው

- ሀ. በተንቀሳቃሽ ስልክ                ሐ. ሌላ ካለ ይገለፁ
- ለ. በመገናኛ ብዙሃን

11. የሚያገኛቸው መረጃ-ች ምን በተመለከተ ነው

- ሀ. የቀይ ሽንኩርት ዋጋ                ሐ. ሌላ ካለ ይገለፁ
- ለ. የቀይ ሽንኩርት ፍለጉት

12. ለምርቶች ከመሸጥ በፊት በሌላ ገበያ ላይ ያለውን ዋጋ ያወቃሉ

- ሀ. አ-                                      ለ. አላውቅም

13 የሚያገኙትን መረጃ ማኝነት ንዴት ይገልፁ ል

- ሀ. ከፍተኛ                                ለ. መካከለኛ                            ሐ. ዝቅተኛ

14. የሚያገኙትን መረጃ ትክክለኛነት ንዴት ይገልፁ ል

- ሀ. ከፍተኛ                                ለ. መካከለኛ                            ሐ. ዝቅተኛ

15. የሚያረኙትን መረጃ ቋሚነት ንዴት ይመዝና ሀ

ሀ. ቋሚ ለ. ተለዋዋጭ

15. ለሚገኙት መረጃ ለመክፈል ፍቃደኛ ኖት?

ሀ. ፍቃደኛ ነኝ ለ. ፍቃደኛ አይደለሁም

16. መረጃውን የሚያገኙት በምን ያህል ጊዜ ክፋተት ነው?

ሀ. ለየቀኑ ለ. በየሳምንቱ ሐ. በየወሩ

ዋጋ

17. ምርቶችን ሲሸጡ ዋጋ ማነው የሚያወጣው?

ሀ. ደላሎች ሐ. ቸቻራ-ች

ለ. ጀምላ አካፋዮች መ. ራሴ

18 ዋጋው ለምን መንገድ ነው የሚወሰነው

ሀ. በስምምነት ለ. በገበያ ሐ. ሌላ ካለ ይግለፁ

19. ቀይ ሹንኩርት ለማምረት ምን ያህል ወጪ ያወጣሉ?

20. ያጋጠመኝ ችግር ካለ ይረለፁ

ሀ. በመጓጓዣ

ለ. በገበያ ወረጃ

ሐ. በማሸጊያ

መ. በማጠራቀሚያ

ሠ. ሌላ ካለ ይግለፁ

ለነጋዴ-ች

1. ምንድናት

ሀ. ጅምላ አከፋፋይ      ለ. ደላላ    ሐ. ቸርቻሪ

2. ያ

ሀ. ወንድ      ለ. ሴት

3. ዕድሜ

ሀ. ከ30 አመት በ ች      ሐ. 40 - 50 አመት

ለ. ከ30 ሀ40 አመት      መ. ከ 50 አመት በላይ

4/ የትምህርት ደረጃ?

ሀ. ያልተማረ /ማንበብና መጻፍ የማይችል/      ሐ. ሁለተኛ ደረጃ /9- 12 ክፍል/

ለ. አንደኛ ደረጃ /1-8ኛ ክፍል/      መ. ሠርተፊኬት ና ከሁሉም በላይ

5. በቀይ ሽንኩርት ንግድ ላይ ለምን ያህል ጊዜ ቆዩ

ሀ. 1 - 5 ዓመት      ለ. 6-10 አመት

ሐ. 11-15 አመት      መ. በ 15 በላይ

6. የቀይ ሽንኩርት ንግዱን ንዴት ነው የሚያከናውኑት

ሀ. ብቻዩን      ለ. ከሌሎች ጋር

7. ንግድ ፈቃድ ለማውተት ያለውን መንገድ ንዴት ያዩተል

8. በገበያው ትስስር ላይ የርስ ሚና ምንድነው

9. በቀን ሽንኩርት ገበያ ላይ የሚሳተፉት መቼ ነው

ሀ. በአመት አንዴ      ለ. የመግኝቻ ዋጋ ሲቀነስ

ሐ. አቅርቦት ሲጨምር      መ. ሌላ ካላ ይረለፅ

የመግዛትና የመሸጥ ልመድ

10 የመሸጥ ልምድ

ጊዜ	ብዛት	ዋጋ		ኪሎ	
		ለሌላ አምራች	ለደላሉት	ለጅምላ አከፈፈዶች	ለቸርቻራ-ች
በቀን					
በሳምንት					
ለወር					

11. ምርቱን ለማን ነው የሚሸጡት?

ሀ. ለሌላ ጅምላ አከፋፋዮች

ሐ. ለቸርቻራ-ች

ለ. ለተጠቃሚ-ች

12 የመግዛት ልምድ

ጊዜ	ብዛት	ዋጋ		ኪሎ	
		ለሌላ አምራች	ለደላሉት	ለጅምላ አከፈፈዶች	ለቸርቻራ-ች
በቀን					
በሳምንት					
ለወር					

13. ከማን ነው ቀይ ሸንኩርት የሚገዙት?

ሀ. በቀጥ ከአምራች

ለ. ከደላሉት

ሐ. ጅምላ አከፋፋዮች

መ. ከቸርቻራ-ች



የገበያ መ ጃ

14. የመረጃ ምንጮች ነግን ናቸው

ሀ. ራሴ በአካል በማየት      ሐ. ከሌላ ነጋዴ-ች ተግባር

ለ. ሌሎች ነጋዴ-ች      መ. አምራቾች      ሠ. ሌላ ካለ ይግለፁ

13 የሚያገኙትን መረጃ ማኝነት ንዴት ይገልፁ ል

ሀ. ከፍተኛ      ለ. መካከለኛ      ሐ. ዝቅተኛ

14. የሚያገኙትን መረጃ ትክክለኛነት ንዴት ይገልፁ ል

ሀ. ከፍተኛ      ለ. መካከለኛ      ሐ. ዝቅተኛ

15. የሚያረኙትን መረጃ ቋሚነት ንዴት ይመዝና ሀ

ሀ. ቋሚ      ለ. ተለዋዋጭ

15. ለሚገኙት መረጃ ለመክፈል ፍቃደኛ ናት?

ሀ. ፋቃደኛ ነኝ      ለ. ፋቃደኛ አይደለሁም

16. መረጃውን የሚያገኙት በምን ያህል ጊዜ ክፋተት ነው?

ሀ. ለየቀኑ      ለ. በየሣምንቱ      ሐ. በየወሩ

ማሸጊያ

17.

የማሸጊያው አይነት	የመያዝ አቅማቸው	ዋጋው

18.. ማሸጊያውን ገዝተውት ነው ወይስ አዘጋጅተው?

ሀ. ገንቼ      ለ. አዘጋጅቼ

19.. ከገዙት ዋጋ ምን ያህል ነው

ማጓጓዥ.

የመጓጓዥ አይነት	የመያዝ አቅም	የራሱ ተከራይተው	ሲያስጭኑ የሚከፈሉት	ሲያወርዱ የሚያወጡት ወጪ	የመጓጓዥ ዋጋ		
					ከአምቶች	ከደላሎች	ከሌላ ነጋዴ-ች

ማጠቃለያ

20.

የማጠቃለያ አይነት	የመያዝ አቅም	ዋጋው

21. ከገዙ በ ላ የምንያህል ጊዜ ያስቀምጡ ል

ዋጋ

22. ምርቱን ሲሸጡ ዋጋ ማንነው የሚወስነው?

ሀ. ራሱ      ለ. ገዥ-ች      ሐ. ሌላ ካለ ይግለፁ

23. ሲገዙ ዋጋ ማን ነው የሚወስነው?

ሀ. ራሴ      ለ. ሽጮች      ሐ. ሌላ ካለ ይግለፁ

24 ሲሸጡም/ሲገዙ ዋጋ ንዴት ይወሰናል?

ሀ. በስምምነት      ለ. በገቢያ      ሐ. ሌላ ካለ ይግለፁ

25. አንድ ኩን ል ቀይ ሽንኩርት ሲገዙ ምን ያህል ያወጣል?

26 በገቢያው ላይ ያጋጠሙት ችግር ካለ ይግለፁ?

ሀ. ገቢያ መረጃ

ለ. ማሸጊያ

ሐ. ማጠራቀሚያ

መ. ትራንስፖርት

ሠ. ዋጋ ይግለፁ



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