

**ONION PRICE CHANGE AND BROKERS ROLE: CHALLENGES AND
OPPORTUNITIES: CASE STUDY RUVU REMIT DIVISION IN SIMANJIRO
DISTRICT, TANZANIA**

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**DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for the acceptance by the Open University of Tanzania a dissertation titled: Onion Price Change And Brokers Role: Challenges And Opportunities, in fulfillment of the requirements for the degree of Masters of Project Management of the Open University of Tanzania.

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Date

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DECLARATION

I, **Mzee Ndukai** hereby do declare that this dissertation is my own original work and that it has not yet been presented and will not be presented to any other University for similar or any other degree award.

.....

Signature

.....

Date

DEDICATION

My special dedication should go direct to Almighty God, who has given me good health, my beloved wife, Thecla Mhilu, who encouraged me and my beloved mother, Naitopuaki Ndukai, who laid down the foundation for my Education.

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I am grateful to World Vision Tanzania for granting time to attend my MBA program. Special thanks should be given to my family for being with me by all means till my research project was completed.

God bless you all

ABSTRACT

Brokers are recognized as an important component of a distribution channel with the great role of making smallholder farmers access markets for selling the produce. The study observed both challenges and prospects on pricing of the onions. The focus was on market dynamics and the role of brokers in enhancing or destructing the required level of onion price, demand and supply for the onion produced at Ruvu Remit division. The current researcher set a topic on “Onions Price Change and Brokers Role: Challenges and Opportunities at Ruvu Remit Division in Simanjiro” to understand the concept of Brokerage across the market and its price mechanisms and market operations. The study applied mixed-method designs to collect the data from the field. The methods used include questionnaires, key informant interviews and observation. The study revealed that market information, loan provision, measurement and packing of onion and market price mechanism manipulated by the brokers to benefit from the produce, left the smallholder farmers not satisfied with the payment. The study recommended the following: The farmers from Tanzania should step into the EAC market and enjoy the benefit of low levies and good price offered by the market. The district government and NGOs in the area need to advertise the untapped financial investment opportunities to MFIs. The overfilling of the bags/lumbesa has been instituted by the brokers or buyers and makes themselves the primary beneficiaries of the crops instead of the farmers. The establishment of strong farmers association in connection with onion selling center contributes to the enforcement of using the weigh scales to have a weight that corresponds to the amount to be paid.

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LIST OF ABBREVIATIONS

| | |
|--------|--|
| EAC | East African Community |
| MBA | Master`s of Business Administration |
| MFI | Microfinance Institutions |
| NGO | Non -Governmental Organization |
| OUT | Open University of Tanzania |
| SPSS | Statistical Package for Social Sciences |
| SWOT | Strengths, Weaknesses, Opportunities and Threats |
| URT | United Republic of Tanzania |
| VC | Value chain |
| VFT | Vision Fund Tanzania |
| VICOBA | Village Community Bank |

CONCEPTS USED IN RESEARCH

Demand: Demand is the quantity of good a buyer wish to purchase at each conceivable price. The law of demand states that if the price of a certain commodity rises, its quantity demanded will go down, and vice-versa.

Supply: The amount of a produce or commodity a farmer or seller wishes to sell at a possible price.

Broker: An intermediary that connect the producers or sellers and buyers.

Price Mechanism: The price mechanism is a signaling and rationing device which prompts consumers and producers to adjust their demand and supply, respectively, in response to a shortage or surplus.

Value: Worthiness of a product.

Value Chain: Is a sequence of activities which are carried out to bring a product from conception by passing through the various phases of production and delivery to consumers.

Lumbesa: An overfilling of the bag with the capacity of carrying 100kgs by joining on top with another piece of bag to increase its carrying capacity from 100kg to 150kgs.

Smallholder farmer: A farmer who cultivates $\frac{1}{2}$ acre to 5 acres of onion.

CHAPTER ONE

1.0 BACKGROUND TO THE STUDY

1.1 An Introduction

This chapter presents the background of the study, statement of the problem, research objectives, research questions and the significance of the study. Onion is among important vegetables consumed by many people. Jules (2001) reported that worldwide, onion ranked among the most important vegetable crops, with the total production of 37 million tonnes in 1998. Onions marketing is facilitated by brokers' role. In practicing their role in marketing the onions, the brokers pose effects to smallholder farmers. These effects are different depending on the individual roles played by the brokers and level of development of the country of the smallholder farmers.

In developed countries, the existence of brokers in onion marketing appears to be insignificant. In reality, the smallholder farmers do not face a challenge in transporting the onion, storage, capital and market information regarding onion price. According to Nang'ole (2011), having the ability to sell large quantities at once without spending the time that direct marketing efforts require makes non-direct marketing as an option worth consideration for producers entering onion production.

The effect of brokers' role is experienced in developing countries with inadequate infrastructure and limitation on the flow of market information. In these countries, brokers' role are valued and engaged by onion smallholder farmers. The brokers are seen important in linking the farmers and wholesalers through provision of market information and organizing transport for the onion to the market places. This situation

gives brokers the opportunity to create their roles leading to small farmers' exploitation. Brokers travel to the production areas and buy the onions at farm gate at low price as the smallholder farmers have no room to bargain since they are not aware of the onion price in the market that the brokers are used to sell the produce. Mihiretu (2008) highlights that all market information, especially output price information, reach middle men first. Because of this, the poor farmers always remain in the hands of these middlemen in selling their products. Onions market in Tanzania is invaded by brokers who exist at the expense of the smallholder farmers through paying low prices to onion at farm gate. Brokers use unrealistic measurement standards when packing the onions while pay the same price. Nang'ole, *et al*, 2011, reports that since the bag size is not standardized the buyers tend to convince the farmers to use large bags but keep the whole price stable. Consequently, the use of oversized bags causes income losses for the farmers.

Onion smallholder farmers from Tanzania are facing market information problem despite of the existing EAC common market that gives people from member states opportunity to trade. The smallholder farmers are still relying on the brokers on market information about onion price. But the brokers are not transparent on onion price to smallholder farmers. The price is considered a secret of the brokers and not disseminated to farmers. The brokers are using the secret of onion price as an opportunity of paying low price to onion smallholder farmers compared to what is offered by the market for the same produce. The survey by Trade Mark East Africa (2013) revealed that despite of good onions harvests, farmers still remain poor as most of them are unaware of the potential market opportunities available in the East African common market. This has been attributed to lack of market information to the

extent that most of farmers continue to rely on middlemen when it comes to selling their onions. The brokers also take the advantage of market distance from the farming area. They buy onions from smallholder farmers on credit and transport them to market places for sale. The produce being in the hands of the brokers provide them chance to decide when to pay and what amount to be paid to the smallholder farmers in relation to what the market offers to the produce while taking into consideration the commission they receive to compensate the work done. Jeckonian (2013) highlighted that normally the broker tries to sell the products for a higher price than arranged with the farmer and also tries to keep the difference. The farmer only receives the money after he/she has sold everything. Sometimes the broker does not pay in time. This research tries to assess the effects of brokers' role on onion at Ruvu Remit division in Simanjiro district in reflection of the above highlights.

1.2 Statement of the Research Problem

Production of onion at Ruvu Remit division appears to increase and welcomes the brokers who play the role of connecting onion smallholder farmers and onion wholesalers. The brokers purchase onion from smallholder farmers at low price and sometimes they buy on credit and delay to pay the farmers. Jeckoniah (2013) reports that farmers complain that brokers reduce the benefits they receive from onion marketing. Brokers offer small contractual loans to farmers who eventually sell their onions to them at relatively lower prices and usually use non-standard units of measure such as bags which are overfilled. Putter (2007) says that a normal procedure is that brokers are buying the product at the farm. They negotiate with the farmer at the farm about the price while the farmer has no or only limited market price

information. The brokers collect the products from the farm at low price, focusing on the profit ahead. It appears that much needs to be studied on brokers and smallholder farmers' operation to understand the challenges and opportunities across the production, price mechanisms and market settings which is yet to be understood as not always brokers may take the advantage of market ignorance and so many factors need to be observed across Ruvu Remit division and onion price mechanisms. Assessing the effects of brokers' role on onions price will provide information that can be used to raise awareness of the onion small holder farmers on how to deal with brokers and also the policy makers and development actors can use the information to facilitate onion smallholder farmers with the techniques of interacting with the brokers. The current researcher, therefore, tried to go through many issues where even brokers should never always be taken negatively at the context of the market but both positive and negative roles for a broker position needed to be understood.

1.3 Research Objectives

1.3.1 General Research Objective

The general objective of this study was to assess the effects of brokers' role on the price mechanism of onion produced by smallholder farmers in Tanzania.

1.3.2 Specific Research Objectives

- (i) To analyze the brokers' influence on onion market price at Ruvu Remit Division at Simanjiro.
- (ii) To evaluate challenges across onion market price mechanism faced by brokers and farmers at Ruvu Remit Division - Simanjiro.

- (iii) To assess the smallholder farmers' understanding of market prices and prospects in view of future production and marketing at Ruvu Remit Division in Simanjiro.

1.3.3 Research Questions

The following were research questions

1.3.4 General Research Question

What are the economic and social influence of brokers in the pricing and marketing of onion at Ruvu Remit Division in Simanjiro?

1.3.5. Specific Research Questions

- (i) What are the challenges and prospects in Ruvu Remit Division in Simanjiro on onion price mechanism through broker's activities?
- (ii) What are the future strategies to align challenges and prospects in the onion market price across Simanjiro farmers and brokers at Ruvu Remit Division?
- (ii) What are the influences of other stakeholders on the onion market price at Simanjiro-Ruvu Remit division?

1.3 The Relevance and Significance of the Current Research

The current research would have significance in the following areas:

Researching on the influence of brokers' role on onion market price provides baseline information to be used by decision and policy makers on appropriate ways to be followed to support smallholder farmers to interact with brokers about onion market price. Farmers' awareness on dealing with brokers will give them knowledge to control the price of the onion at farm place. The researcher is expecting to earn

advanced knowledge and awareness on challenges and prospects on market price mechanisms of onion strategies and the way forward across brokers and smallholder farmers' interactions. The proposed research offers an opportunity for all market participants in onion market at Simanjiro to have neutral negotiation about price and profit setting for better existence of the market. Such information is going to benefit all participants of onions and other vegetable value chain and markets not only in Ruvu Remit Division, but also across Tanzania on how logistics and market channels of distribution could be understood and done appropriately. The study becomes a relevant and significant reference to the existing body of knowledge. It benefits academicians, students and researchers intending to research on the same area of research.

1.4 Scope of the Study

The study cover the extent on how onions price change and brokers' role, viewing and reviewing challenges and opportunities across Ruvu Remit Division in Simanjiro. The study has taken more than 8 months in the field and data processing to understand the socio-economic issues at the area, market and behaviour of onion business through logistics and value chain with its channels of distribution. This went to the depth of understanding of the researcher as how brokers' role does influence onion price especially for the smaller holder farmers and how onion market behaves across Ruvu Remit Division in Simanjiro. Much went as far as how information facilitates smallholder farmers to interact with brokers for value creation.

1.5 Organization of the Study

The current study is organized into five chapters as follows: Chapter one gives the introduction part to the study, covering the background to the problem, statement of the problem, objectives of the study, research questions, significance of the study, scope and organization of the study. Chapter two is about literature review of various literatures towards the research gap from the concepts, theories, conceptual framework, and empirical studies and ends up with the research gap being established.

Chapter three discusses the methodology used to conduct the study, covering the area of study, research design, the study population, sampling, producers, data collection processes and data analysis and presentation. Chapter four provides data presentation, analysis and discussion from the field and documentary reviews. Chapter five is composed of conclusion and recommendations for action and further study related to the current study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The chapter introduces the reader to several issues reviewed from several authors and researchers from time to time in relation to the research proposed. The chapter reviews from concepts to practice on the subject issues.

2.2 Conceptual Definitions

To assess the effects of brokers' role on onion price produced by smallholder farmers it is important to understand several terms in the field such as brokers, price and smallholder farmers. A broker or middleman is an individual who brings sellers and producers together and makes sales. The broker may be formal by being registered legally to engage into distribution channel intermediaries or informal. The informal brokers are not registered legally to carry out broker's duties. The brokers have no constant relationship with seller or buyer. However, they may negotiate contract between the two parties. Food brokers differ from conventional brokers because they act on behalf of producers on a permanent basis and receive a commission from their services (Roger *et al*, 2009).

2.2.1 Price Structure and Revenue Concept

Price is the amount of money paid for goods or service. It is among the four components of a marketing mix. The other components include a product, promotion and place. It is only price among the marketing mix components that produces revenue. Revenue becomes the essence of profit from cost. Price reflects, therefore, cost and revenue in the market subject to profit or loss. This needs to be studied

across channels of distribution with much emphasis on brokers who engage to gain the benefits to meet their livelihood. The participation in the production of onion involve both male and female. In the study area, two studies were conducted which focussed on Women Empowerment in Agriculture Value Chain (onion value chain) and Mapping Gender Roles along Onion Value Chain in Northern Tanzania. The study on women empowerment was conducted by focussing on women who have been participating in onion value chain development activities regarding the roles they play in agriculture activities.

Jeckoniah *et al* (2012) state that Simanjiro District farmers, especially women, have been facilitated by the government and non-governmental organization to select agricultural commodity which has a potential to increase their income and reduce poverty. The study focused on the use of the income generated from onion value chain and the variables for the upcoming study were not discussed. Having the information about what the market offers provides opportunity to realistic and reputable price. Lack of market information to smallholder farmers create the opportunity for brokers or traders to offer low price to the produce as the farmers lack basis to argue about the price given by buyers at their farm gate.

2.2.2 Contractual Loans

Brokers usually offer small contractual loans to farmers who eventually sell their onions to them at relative low prices and usually use non-standard units of measurements such as bags which are overfilled (John, *et al*, 2013). On the other hand, farmers see brokers` loans the only opportunity of getting relief of financial scarcity in the fact that agricultural production is considered volatile and creates no

confidence to MFIs on lending the money to smallholder farmers whose production is not reliable as it depends on rains which show irregular patterns as the result of climate change.

2.3 Storage Capacity and Weighing

A culture of keeping both cash and food crops for noticeable period is not common to smallholder farmers. Crops are sold immediately after harvesting. It is not the wishes of the farmers not to store the crops for some time but it is caused by lack of others sources of income to meet basic life needs. These have contributed to sell the crops at low price with reality that demand is low while there is high supply of the same crop in the market. Koenig *et al*, (2008) emphasize that storage facilities offer farmers the potential to react more flexibly to market supply and thus to the prices. In Tanzania, the weighing or measurement of onions is done by using un-calibrated equipment. The packing and measurement process is done at the farm areas. Bags are used as packing and measurement equipment for onions. The bags measurement is influenced by the brokers. In the market place, the brokers put the onions into standardized bags and remain amount as result overfilled sold separate to get more benefit.

2.4 Empirical Analysis on Relevant Studies

Product pricing is accrual element on marketing and product performance. The preposition may particularly be valued when considering the price decision which is a fundamental element of the buying decision. Thus, any product or service has an established perceived price. The value of the product does not necessarily depend on the price only, but also the quality and customer awareness. Hence, the sales promotion can be used as a tool to change price by increasing or lowering the price in relation to the other components of market mix (Odunlami and Ogunsinji, 2011).

Several studies on the practice of brokerage across different markets have been done, but need to be reviewed in the context of market and economic changing behavior, where participants across supply chain need to be observed with the outcome such as price levels and so on.

2.4.1 General Perceptions on Brokerage

The effects of brokers have been experienced worldwide especially in developing and low developing countries. The effects observed to be predominant in those countries because of inadequate infrastructure to support crops transportation that cause smallholder farmers to incur high cost to carry the crops to markets with wholesalers who offer high price to farmers compared to what paid by middlemen/brokers. According Mitchell (2011), the exploitation of farmers by brokers is not new. It has been discussed in many years. The existing literature relating to brokers has tended to view brokers as either fulfilling an important role in the market or as being purely exploitative. Current study will observe both challenges and prospects on pricing of the onions focus on market dynamics and the role of brokers in enhancing or destructing the required level of onion price, demand and supply.

2.4.2 Review on African Market

Brokers have been among of the components of crops' value chain. The brokers or middlemen effects reported to be released to affect the onion prices and make the producers to gain a little benefit from their produce. Brokers' effects have been experienced in the selling of onions immediately after harvest season. They used to organize the collection of onions at the farm gate while paying low price to smallholder farmers. According to Mihiretu (2008), African awareness is changing

with the changing in information exposure and market expansion. The current study needs to observe the role of brokers in the onion market where after millennium; all participants are aware and informed about the market issues to large extent. Therefore, it is important to understand pricing mechanisms and brokerage aspect of onion price in the changing era. Brokers visit farms and try to buy recently harvested onions. Since the farmers have a limited time to store the onion bulbs they are subjected to sell their products with minimum price for brokers. This needed to be understood in terms of policy issues.

A study on Mapping of Gender Roles and Relations along Onion Value Chain in Northern Tanzania involved the full onion value chain. The effects of brokers` role on the price of onions were not discussed although the activities that the brokers` have been carrying out to fulfill their role were narrated in the report. The study focused on onion value chain analysis and the components of value chain were analyzed and demonstrated well how women participated in individual component within onion value chain. Jeckoniah *et al*, (2013) argues that gender roles and relations determine distribution of benefits accrued from ones` participation in value chain activities. Most of the study appears to relate brokers or middlemen in commodity markets to be the most gainers who influence price fluctuations across the market. The current researcher will focus on onion pricing and role of brokers in influencing such price fluctuations. None of the two studies worked on the effects of brokers` role on the price of the onion from the area of study. The effects of brokers` role on onion price is important to be studied to ensure that while the brokers play their chief role (i.e. create linkage between smallholder farmers and traders) they do not benefit more than the producers who invested their energy and substantial capital in the production of

the onions. As no previous study on effects of brokers` role on the price of onion has been carried out in the study area, it was important to conduct this study in order to assess the effects of brokers `role on onion price and the results would give more insides on the price of onion smallholder farmers do receive against the effects of brokers` role. Currently many issues are changing in the commodity market and most of the terms used in their literature suggest critical research across local and international study.

The smallholder farmers used to get the good price when they traded with wholesalers instead of brokers. However, they were forced to trade with the brokers who are in contact with them and end up being paid low prices due to high transport cost faced when trying to carry the onions to the markets and meet with wholesalers who offer high prices. The price that farmers can get in the wholesale markets is much higher than they get from the collector. According to Jeckonian *et al*, (2012), farmers are price takers and have little bargaining power. This brings the question on what they can do to get a profitable price while the market is on competitive arena and every participant appears to have knowledge on price, demand and supply matters. Much is needed to be researched on critical issues of brokerage and pricing in the onion market and value chain to the channels of distribution. Brokers in Tanzania are active in trying to play their functions while maximizing earnings from agricultural produce on the expense of smallholder farmers. In Tanzania, the brokers have been exploiting smallholder farmers for failing to be in contact with wholesalers. Eskola (2005) highlights that the necessary institutional framework has been substituted by long supply chains of brokers and relying on personal relationships between producers, traders and brokers. Every market has its own characteristics, culture and

understanding of price and commodity demand and supply where critical study needs to be oriented on specific commodity, market and participants.

2.5 Research Gap Identified

The effects of brokers` role on onion price is a challenge to many countries including Tanzania. The role played by brokers in connecting farmers with wholesalers or other traders cannot be ignored as they are recognized and valued as other channel of distribution in the field of marketing. However, the effects of brokers` role on the price of onion need to be studied to ensure that the smallholder farmers benefit from their produce with the use of the brokers as beneficial intermediaries of their produce. Much has been perceived in the negative terms of brokerage role across agricultural commodities pricing. The current study was able to take up on both challenges and opportunities focusing on brokers` role in the onion market on selected case.

2.6 Theoretical Framework

The current study reconsiders the following theoretical backgrounds. Price is the component of the marketing mix that is associated with revenues; all others including product, promotion, and place are money users. Price is what is paid for exchange of ownership of a product. It is the sum of values received from the consumer of a product or service (Thomas, 2008). Price is set by the market forces of demand and supply. There is no common definition of what is a fair and reasonable price because what seems to be fair and reasonable in the eyes of buyer may not necessarily be the same in the eyes of the sellers, since each of them has his own motives or expectation towards the exchange process between them (Msaki 2009). The above needs to be observed in the context of brokers across onion market. In the government

contracting, a fair and reasonable price is always subject to both statutory and regulatory limitations. The ideal of the market fluctuation of the price reflects that price cannot be uniform and is bound to fluctuate with several factors as price tends to fluctuate from time to time. That is fall and rise there is instability of commodity prices (ibid). The research problem observed based on the role of brokerage on price fluctuation for the onion. There has been confusion between types of agents and brokers. Dibbs brokerage company (1994) came up with categorization in figure 1 where he questions and narrate types of agents and brokers, below.

Below model by Dibbs, S *et al* appears to categorize brokers and agents, but without being very specific to agricultural produce. Where the current research needs to understand brokers, middlemen and agents as per onion market with their roles in pricing and price fluctuation, whereby challenges and prospects will be exposed. Below figure 1 appears to be general. Much needs to be observed in the pricing mechanism and their role in market-setting pricing. The current study will focus on the topic Price Change in Onion and Brokers Roles: Challenges and opportunities at Ruvu Remit Division in Simanjiro.

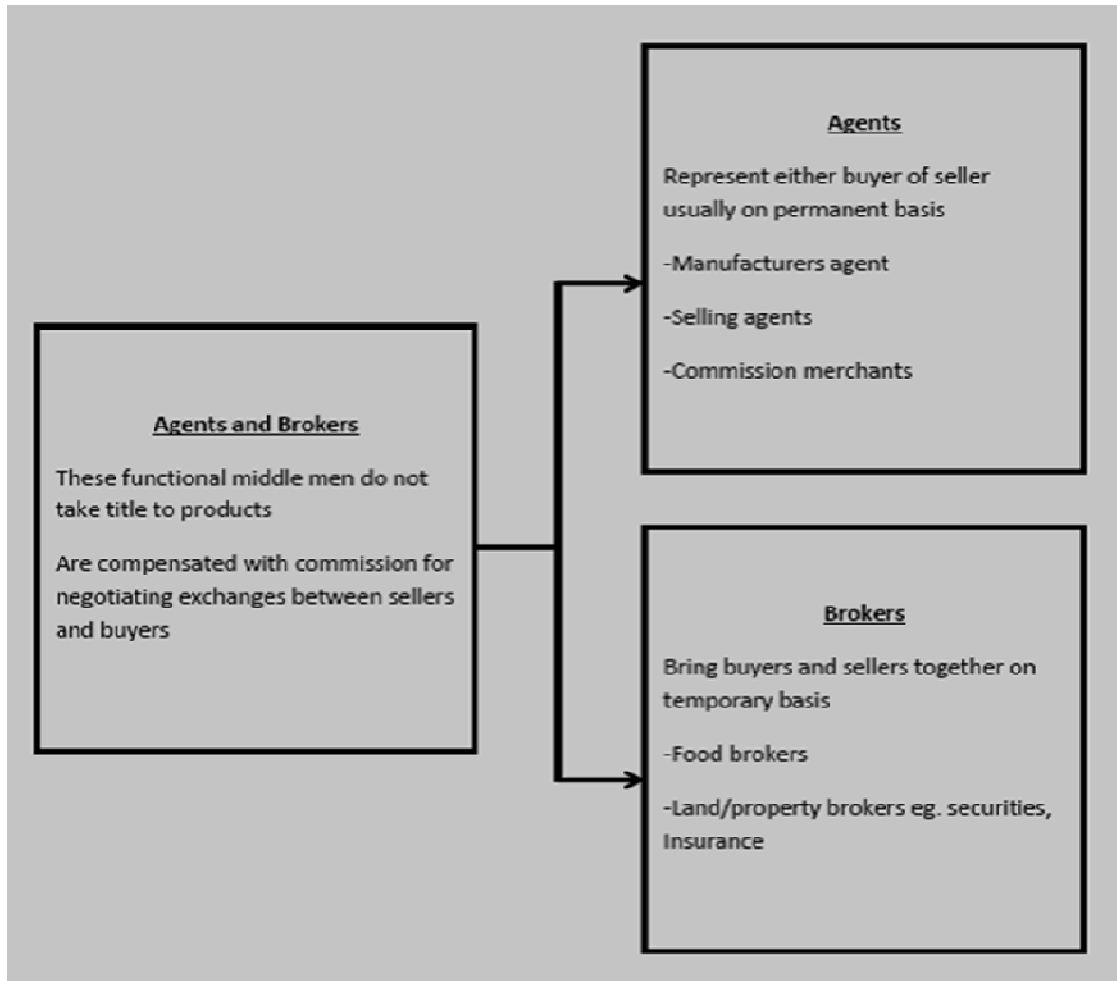


Figure 2.1 : Brokerage Roles and Agents Situation in the Market

Source: Theoretical Framework adapted from Dibbs et al (1994).

2.6.1 Conceptual Framework Proposed

The current research considers figure 2 on how research variables were linked as independent, dependent and background variables (A, B and C). The study was based on onion value chain (VC) theory. The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving combination of physical transformation and the input of various producers` services), delivery to final consumers, and final disposal after use. The product “Onion” is one of essential products in terms of

vegetables which move faster than other vegetables in Africa (Jeckoniah 2012). The current study focused on onion price change and brokers' role, evaluating challenges and opportunities at Ruvu Remit Division at Simanjiro. The development actors have been sensitizing the smallholder farmers to choose a crop(s) in order to focus on single value chain. The value chain increases the efficiency in a crop's production and end up fetching a good price from the available local and international markets.

Through the value chain the smallholder farmers get connected to markets and give them ability to gain benefits from their produce, through their price to profit increasing. The current research examined the one role of brokers in the pricing mechanism of onion market whereby all variables in figure 2 were considered and others discovered across the field survey. Main variables for analysis were related to brokers influence on onion price fluctuations. Challenges were observed with prospects in setting reasonable or fair price in the market not to hinder the market demand and supply, for the onion market, across Simanjoro at Ruvu Remit Division. The current researcher, therefore, focused on conceptual framework in figure 2.

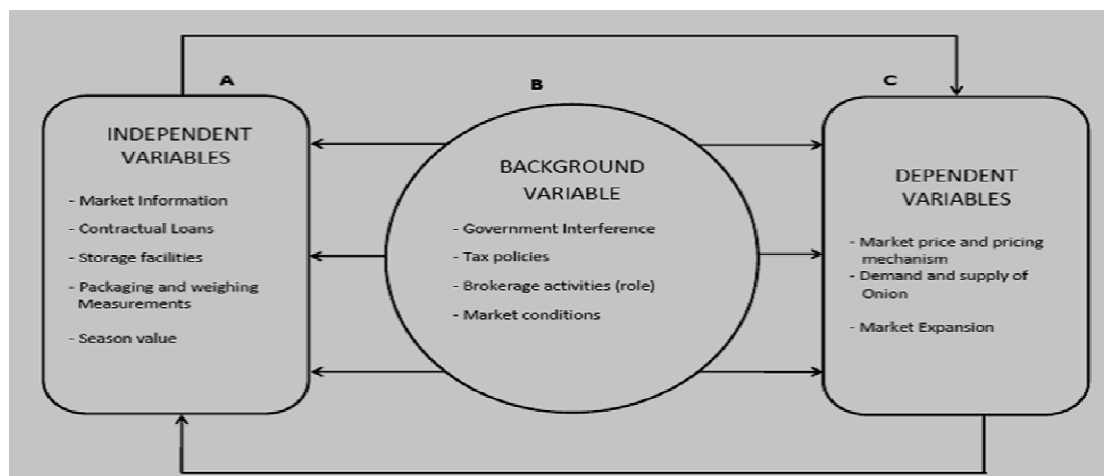


Figure 2.2: Research Conceptual Framework - Linking Variables

Sources: Researcher's Consideration from Onion Market (2014)

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the methodologies that were used in data collection. It shows how actual field work was done. This includes research strategies, sampling design and procedures, variables and measurement procedures, methods of data collection and data processing. Research methodology refers to scientific and systematic way of assigning to required knowledge that can enable solving community problem in a locality (Kothari, 2011).

3.2 Research Strategies and Design

Explanatory research was employed for this study. This type of research was selected in order to study the existing relationship between the effects of brokers` role and the price of onion produced by smallholder farmers from the study area. *Sunders et al*, (2009) state that explanatory research is a study that establishes causal relationships between variables. Case study employed to cover large part of research exercise, because it allows multiple methods for data collection. The methods used to collect the data were observation check list, key informant interviews, and closed and open questionnaires. Those methods were used to collect the data from the respondents in order to be in position to answer ‘what’, ‘why’ and ‘how’ questions that directed to the respondents for the sake of collecting reliable and realistic data to enrich the study. Kohls and Uhl (1985) defined markets as and for organizing and facilitating business activities and answering the basic economic questions: What to produce, how much to produce, how to produce and how to distribute production. The role of

brokers in onion market price fluctuation was explored by taking the case of Ruvu Remit division–Simanjiro onion business. Much were needed to be understood across the onion market, as it was appearing to be complex in terms of distribution, marketing and logistics.

3.3 Area of Study

The research was conducted at Ruvu Remit Division, at Simanjiro district in Manyara region. Three villages, out of several villages which were active in growing and marketing of onions, were selected within the division for data collection, observation and analysed. The villages are Gunge, Ngage and Loiborisoit. Production of onions at Ruvu Remit Division appears to increase and welcome the brokers who play the role of connecting onion smallholder farmers and onion wholesalers. The brokers, across the area studied, purchase onions from smallholder farmers at low price and sometimes delay to pay the credit. This area was selected because of its accessibility to the researcher, mixed operations needed to be understood and potential response expected from the respondents was high.

3.4 Survey Population

A population is defined as all existing members of a group from which the sample is drawn for which conclusion is made (Coolican, 1998). According to URT Census Report (2012), Ruvu Remit division has a total of 12,284 people among which 1000 are farmers and the rest are pastoralists. The population in this study is defined as 1000 smallholder farmers. A sample size of 79 people was drawn from 1000 farmers. The key informant checklist and questionnaire administered to respondents that comprised of onion smallholder farmers, onion brokers and agriculture extension officers.

Table 3.1: Survey Population and Percentage Samples.

| S/no | Unit | Male | Percentage | Female | Percentage | Total | Areas |
|------|--------------------------------|------|------------|--------|------------|-------|-----------------------------|
| 1 | Smallholder farmers | 26 | 56.5 | 20 | 43.5 | 46 | Gunge, Loiborsoit and Ngage |
| 2 | Onion Brokers | 13 | 56.5 | 10 | 43.5 | 23 | Gunge Loiborsoit and Ngage |
| 3 | Agriculture extension officers | 8 | 80 | 2 | 20 | 10 | Ngage and Gunge |
| | Total | 47 | 59.5 | 32 | 40.5 | 79 | 3 villages |

Source: Researcher (2014)

The respondents were farmers who either won land or rent the land for onion cultivation. Marital status was not a criterion of selecting respondents because the area occupied by different tribes with different education level. The culture and education level may either make a person to either get married early or gate married late. Professional people within the community involved in the sample as they are key informant regarding their knowledge on making agriculture profitable to the producers.

3.5 Sample and Sampling Procedures and Techniques

The study applied stratified sampling. That type of sampling was applied to ensure that the views regarding the study collected from respondents with different level of understanding to enrich the findings and draw relevant recommendations. The study put much emphasis on smallholder farmers, government officials at division level and brokers from the area. The respondents were 79 mixing both male and female as the above table depicts. The researcher focused on the above sample and the major three categories of that is smallholder farmers, onion brokers, agriculture extension officers.

The area survey was concentrated in small places, well linked, which offered an advantage for the researcher to access information and reduce the cost of data collection and transportation. But it was a convenient sample to present large part of population as much information obtained was relatively comprehensive from the selected 3 groups shown in table 1.

3.6 Data Collection Techniques

3.6.1 Interview

The data were collected through field survey by interviewing the smallholder farmers, brokers and key informants from government institutions in the area. Other data were collected through observation were by the observation checklist used by the researcher to collect the information which enriched the findings and lead to come up with the recommendations that can be used to address the noted problem in onion price and make the smallholder farmers the primary beneficiaries of the benefits earned though selling the produce. The variables used to collect the information include market information, brokers' role, loans, measurement/packing of onion and price. The variables were measured by administering the questions to the respondents. Both structured and non-structured questionnaires, observation checklist and key informant checklists were used to collect primary data.

3.6.2 Questionnaires

The questionnaires were administered to respondents due to the presence of diversity level of literacy among the respondents, geographical location of the study area and the software used to analyse the data. Both primary and secondary data were collected to enrich this study.

3.7 Data Collection Methods

The data collection was focused on both secondary and primary data. The combination of data was used to compliment limitations that occurred by using few techniques and sometimes the researcher wanted to confirm the information from multiple sources from the field. Secondary data had played a complementary part in this research. The following were the data collection methods initiated by the researcher: The primary data were collected by using three methods. These were structured and non-structured questionnaire, direct observation and key informant check list. The structured and non-structured questionnaire was used to collect the data from the respondents. The checklist was used to collect necessary information from key informants. Agriculture extension officers and leaders from the villages within the study area were considered as the key informants for the study. Secondary data obtained through scan of literatures and searching from internet used as other source of information to supplement the collected primary data.

3.8 Data Processing and Analysis

Both qualitative and quantitative techniques were used to process data required by the researcher. The collected data were edited, coded, entered into SPSS software. The software was commanded to process the data and descriptive statistics selected where the frequency tables generated for the study variables. Qualitative techniques used were case study, observation, descriptive analysis, SWOT analysis and comparative statement analysis. Quantitative techniques used were cross-table calculations, percentage analysis, trend analysis and ratio analysis.

3.9 Validity and Reliability of Instruments

To ensure reliability of data, the researcher took the following measures and consideration, involving the participant error by proper timing of the interview and avoiding the bias. Several groups were consulted with multiple techniques. The research, moreover, used secondary information to complement the field information but also several tools for analysis were utilized, with multiple research instruments. The researcher consulted several experts.

3.10 Ethical Issues

The researcher introduced himself to ward and village government leaders. The research topic was shared to the leaders. After sharing the topic to the government leaders the researcher was allowed to walk among the small holder farmers to collect the data. The ethical issues were take care during data collection. The concert was prepared and presented to individual respondent to asking to volunteer to give the data before start data collection. To enhance confidentiality the data collection tools were prepared without having any section to fill the name of the respondent. On the other hand the collect data were stored in place with limited access by other people aside of the researcher.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION

This chapter presents key analysis and findings with discussion on challenges, prospects relating to the price change in onion and brokers roles at Ruvu Remit Division in Simanjiro with more discoveries relating to the intended objectives of this research.

The following were specific research questions of the current study:

- (a) What are the challenges and prospects in Ruvu Remit Division in Simanjiro on onion price mechanism through brokers` activities?
- (b) What are the future strategies to align challenges ad prospects across onion market price at Ruvu Remit Division though farmers` and brokers` linkages?
- (c) What influences are exerted by other stakeholders on onion market price across Simanajro-Ruvu Remit division?

4.1 Composition and Categories of Respondents

The researcher found out through URT Census Report (2012) that Ruvu Remit division has a total of 12,284 inhabitants among which 1000 are farmers and the rest are pastoralists. The area is so much linked with the road and transportation system and ways of communication. The researcher used 79 respondents of which 56.5 percent were males as smallholder farmers and females were 43.5 percent. Onion broker comprised of 56.6% and 43.5 % as male and female respectively. He found 8 male agriculture extension officers and 2 female of which were 80 and 20 percent respectively. The researcher found that the onion business was male dominant as the

percentage above shows and also depicting males` control over pricing and profit at all categories of the respondents.

4.2 Market Information as Brokers Weapon

Smallholder farmers were asked whether they receive market information from the brokers and 34 % said the brokers gave them information about the market. The information reached them when the brokers went to buy onion at the farm gate. The farmers claimed that it was difficult to treat the message from the brokers as the real market information as was not given before and it just released the time of buying the produce. 66 percent of the remaining respondents were depending on themselves to fetch information from the market for better pricing and better market pricing which is not available.

The researcher found that onion market price being dominated by brokers who hide the price changes and, therefore, manipulate price and profit levels based on ignorance of smallholder farmers. Lack of market information among smallholder farmers led farmers to produce in the traditional way of massive production first and the markets came later. The consequences of producing without considering markets lead farmers to keep waiting for the brokers or buyers to appear at the farm area and gave what they thought to be the good price on their site in considering good benefits the produce gave in the market. The inaccessibility of market information was a normal challenge in agricultural products. The smallholder farmers could get the information by visiting the markets especially the internal markets such as Arusha and Dar es Salaam. However, the brokers had networks with other brokers at the market place and even the wholesalers. The brokers at the market had established the system

of which farmers cannot trade with the wholesalers. In that regard, it was only brokers who communicated with the wholesalers and agreed on the availability and the existing price. When a normal farmer visited the market and tried to meet with wholesaler, he was directed to look for the brokers who used to supply the produce to wholesalers in the markets.

Table 4.1: Market Information and Smallholder Farmers' Access to Information Responses.

| Market information | | | | | |
|--------------------|-------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Yes | 26 | 34.2 | 34.2 | 34.2 |
| | No | 50 | 65.8 | 65.8 | 100.0 |
| | Total | 76 | 100.0 | 100.0 | - |

Source: Field Response (2014)

Table 2 above shows accessibility of information through 76 respondents where 3 respondents could not respond to complete 79 total number of respondents. The table shows that 50 respondents (65.8) responded that it was difficult to get the right information for pricing across the onion market and therefore much were influenced by brokers who denied them access, but also hid the market facts on pricing. The flow of information from buyers/ wholesalers to brokers and smallholder farmers showed that there was a gap in communication along a distribution channel. 67.3% of the brokers said that they visited the onion market and received the market information. It was revealed that communication gap exists between the smallholder farmers and

brokers. Brokers did not share information with smallholder farmers until when they appeared at the farms where they told the price to farmers ready for onion transaction. It was recognized that the level of education among the brokers contributed on how to seek the market information and use of the information to benefit them through creating a connection between farmers and buyers. The 70% of brokers reported to visit the onion markets to search for the information have secondary education level compared to those with no informal and primary education who relied on mobile communication with the buyers/wholesalers.

Table 4.2: Market Visit and Calls by Brokers to Influence Price

| Onion market information | | | | | |
|---------------------------------|--|-----------|---------|------------------|-----------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Visit onion markets | 33 | 67.3 | 67.3 | 67.3 |
| | Call the buyers and ask about the price | 16 | 32.7 | 32.7 | 100.0 |
| | Total | 49 | 100.0 | 100.0 | |

Source: Field Work (2014)

The 67.3 percent of the brokers agreed to visit the market (onion-market) on the continuous basis, and that what makes them to influence the market by sharing with farmers on the available quality, price and quantity demand requirements. But 32.7 percent agreed that they call the buyers to enquire the price by bargaining to earn the profit as shown in the Table 4.2 above. The researcher found that smallholder farmers are continuously manipulated by brokers as they are always busy with their family or works and not often visit the onion market and this has help the brokers to

strategically visit the market and have price information for their competitive advantage, across Ruvu Remit Division in Simanjiro. The 19.74% of the respondents reported that different methods used by brokers to get onion market information from the wholesalers led to inconsistency of the information given to farmers. The farmers received different information about what brokers pay at the farm while there was a struggle to sell the produce due to high supply. The high supply of the onion during harvest season made farmers not to mind the price variability and what mattered to them was to get the onions handled to brokers to avoid any loss that might be caused by adverse weather condition.

4.3 Period, Price on the Price Level by Brokers

The smallholder farmers know the periods of high price. 50% of the respondents reported to know about the periods for high price. The period for high price reported to be at the beginning of harvest season which is the month of September and December that mark the end of harvest season. In those periods, a bag of onions sold at Tsh 90,000 to 120,000 while the normal price ranged from Tsh 70,000 to Tsh 80,000. In those periods, smallholder farmers put more efforts in harvesting and selling onions although the reasons for those two periods to be regarded as the ones with high price were not known among the smallholder farmers. According to www.fintrac.com/.../13_25_1676_USAID%20TAPP, generally most parts of Tanzania, as other countries in the region, experience long dry spells in the months of August, September and October. In the event only few farmers have ready access of reliable source of water other than rainfall grow crops those months of the year.

Graph1: Onion price trend in 2011, 2012 and 2013: Source markets; Kariakoo, Arusha, Zanzibar, Mwanza, Dodoma, Iringa, Mbeya, Morogoro, Lushoto, Nairobi and Mombasa

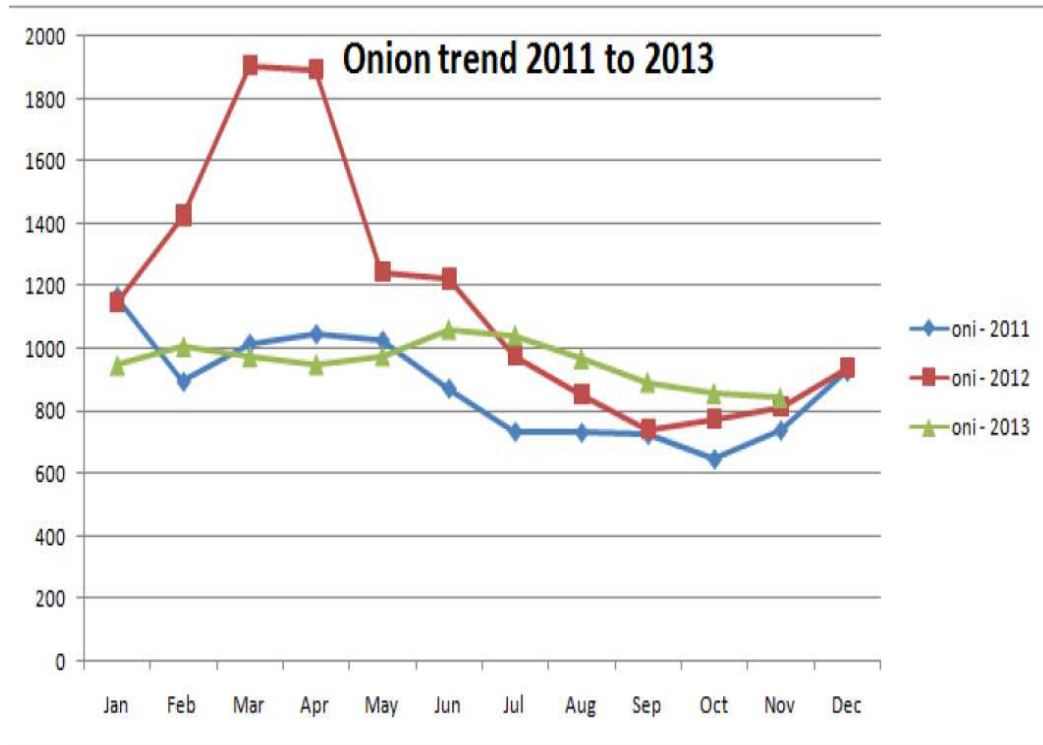


Figure 4.1: Onion Price Trend 2011-2013 on Several Markets in Tanzania

Source: www.fintrac.com/.../13_25_1676_USAID%20TAPP

The researcher was observing the onion price trend from the period 2011-2013 across 9 markets which shows that during September it is the time for harvesting till December and the prices are a bit lower as brokers are not very active due to availability of onions across many markets. Though the pattern as per graph 1 can change as in Ruvu, irrigation can influence the time to harvest and sell. The presence of irrigation scheme in the area gave smallholder farmers from Ruvu Remit division the privilege of enjoying the market available opportunity in the country and outside as the rest onion producing areas faced water shortage in those months. Although the

farmers mentioned the price to be high in those periods, still there is a need of do much investigation to know the real price in the market in the same period to prove if the farmers are receiving relevant benefits in response to what is offered by the markets. The smallholder farmers reported to know the markets of the produce. 90 % of the farmers reported that the markets of onion from Ruvu Remit Division were Arusha, Dar es Salaam and Nairobi in Kenya. However, they did not carry the onions to those markets due to lack of the information concerning the price. It was not strange to farmers from Ruvu Remit to know the markets but not take their produce as the same reported to happen at Mang`ola - the famous area in onion production. “Market for our onions remains a serious challenge in this area. We still depend on businessmen from Arusha and Nairobi, Kenya,” said Hanzrun Pantaleo, an onion farmer. He cited limited information on the market as a stumbling block (<http://www.ippmedia.com>).

4.4 East African Venture on Onion Market and Brokers

Onion smallholder farmers as other horticulturists in East Africa were not enjoying the opportunity of East Africa to venture into the trade chances within the region. That resulted in market information not being released to farmers and continued to be kept by the brokers. The www.competeafrica.org reports seasonal price differential between the countries and between markets in East Africa and argued that to achieve this, horticulture stakeholders across the region will need to improve the availability, reliability and credibility of market (price) information. This appears to bring more exploitation of farmers as the brokers dominate market information while farmers are ignorant of East African and other places markets opportunities for price of onions.

The government is yet to engage in the market information. Two wards offices were visited and no information concerning the onion market was available. 86 % of key informants reported that nothing was done by the government on the provision of market information to farmers although it engaged in collection of revenue from the produce. The government is reported to have only put emphasis on the brokers to get registered legally and be known to the village government. This is one of the core challenges for the smallholder farmers of onion and the government to regulate onion price at Ruvu Remit and other markets, where brokers keep on exploiting farmers in terms of bargaining power and pricing.

4.5 Loan Facility and Provision

Loans provisions to farmers were found to be of paramount importance in maximizing crops production. Accessibility of loans to smallholder farmers was obviously observed to be a challenge as agriculture depends on reliable rainfall which was affected by climate variability. The situation was different to Ruvu Remit smallholder farmers. They irrigated the farms and no vulnerability of depending on reliable rainfall for onion growing. That could be an advantage to smallholder farmers on accessibility of loans. However, only VICOBA and VFT reported to lend the money to the smallholder farmers in the area. 36% of the farmers received the loans from Vision Fund Tanzania (VFT) and Village Community Bank (VICOBA). The researcher observed that financial sources could be used to link and associate farmers against brokers association to exploit small farmers.

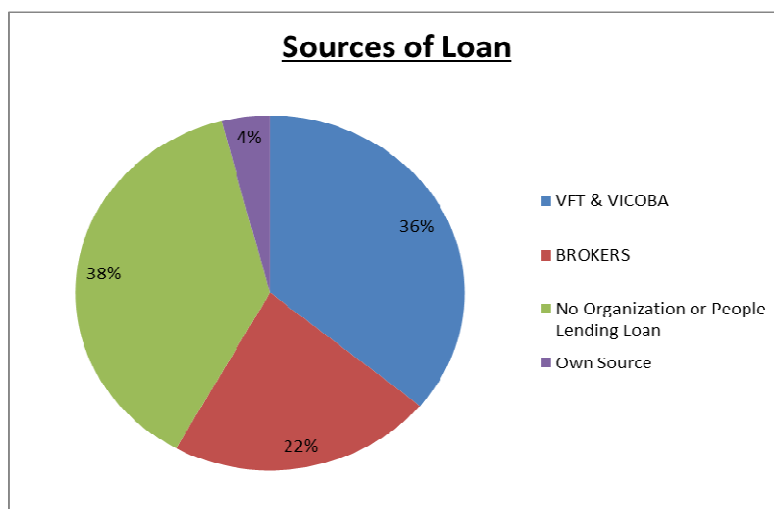


Figure 4.2: Potential Loans to Smallholder Farmers to Associate against Brokers

Source: Field Work (2014)

It was not amazing that not enough microfinance institutions were providing loans to smallholder farmers apart from VFT and VICOBA. It was reported by farmers as a common problem of MFI investment into rural communities that depend on agriculture. According to www.emeraldinsight.com/0002-1466.htm, farmers qualify less often for a loan as they do not fit into the standard microcredit product. The limitation of financial services in the area observed as untapped financial trade opportunities in the reality that risk associated in investing in irrigation agriculture was not high compared to rain-fed agriculture. Inadequate financial services in the area gave brokers a chance to enter into contractual loans with farmers which ended up posing limitation of farmers to making decision about selling the produce. The smallholder farmers did not disclose to receive the loans from the brokers. However, 81.6% of the interviewed farmers reported procedures they used to repay a loan. 78.9% of farmers reported to repay a loan after onion harvesting season a procedure that was used by brokers to recover loans. That revealed that a big number of

smallholder farmers took loans from the brokers. On that perspective, it was the brokers loan which favoured smallholder farmers due to a grace period of repayment after onion harvest season despite of the consequences associated with the loan repayment. 40% brokers agreed to provide loans to smallholder farmers in terms of agriculture implements and advance payment. Advance payment was noted as a special need to farmers as onion growing and harvesting is labour intensive and it required lump sum of funds.

4.6 Onions Measurement and Packing Onion

The farmers reported not to use the weighing scale. The sisal bags and net made of nylon used to measure and packing the onions. The bags are over filled and added the other portion (Kilemba). 64% (51 respondents) reported to use the bags and net for measuring and packing the onions. The nets were introduced by the brokers. The nets were reported to create a big loss to the side of farmers as they were elastic and differed in size of which it was difficult to farmers to recognize the size of the net. That gave a good benefit to the brokers as the price was constant and no price consideration of over-filled bags.

The consequences to farmers of not using the preferred equipment by brokers was noticed in the study area. 85% famers claimed that brokers refused to buy onion if the bags were not overfilled or other packing materials were used instead of sisal bags and nets. The farmers met with the disturbance of refilling the bags under the supervision of the brokers of which it caused double work to farmers and caused extra cost of hiring the causal labour to carry out the work. Strategy enforced on use of standard equipment to measure the weight of the onions did not exist in the area. The

government did not put any effort to enforce the use of the weighing scale to measure the weight of onion to benefit the farmers rather than the brokers/buyers. 100% of key informants reported that the government had not instituted the use of calibrated equipment.

4.7 Age Influence through Brokers of Onions

Table 4.2: Age of Respondents (Farmers) and Brokers` influence

| Sn | Age of Respondents | Respondents | Percentage | Ranking |
|-----------|---------------------------|--------------------|-------------------|-----------------|
| 1 | 10-20 | 10 | 12.7 | 4 th |
| 2 | 21-30 | 26 | 36.7 | 1 st |
| 3 | 31-40 | 21 | 26.6 | 2 nd |
| 4 | 41-50 | 16 | 20.3 | 3 rd |
| 5 | Above 50 | 6 | 7.6 | 5 th |

Source: Researchers` Field Work (2014)

Table 4.2 shows that the majority of onion farmers fall under the age between 21-30 years of age as per sample. This is a very active youth age (1st rank), followed by the age of 31-40 years (second rank).

Such groups appear to be hard working but full of so many responsibilities so have less finances and therefore it is quite easy to be manipulated by rich and experienced brokers in terms of their Onion price across the market.

4.8 Onion Pricing Experience and Knowledge

Smallholder farmers experienced onion price to be a challenge in the area. They did not understand what exactly was offered by the available onion markets. They just

met with the brokers at the farm and gave the price of the onion. To farmers it was difficult to recognise whether the price was too high or low as they have no information on what the marketing was offering in that respective season although there were periods that the smallholder farmers realized changes in onion price. Onion price in the area was reported to be high in both begging of harvesting season which was September and October and December and January. 35.5 % of the farmers and 34.2% reported price to be high in the respective periods. The price reported to be high in those months. However the amount paid was different across all the smallholder farmers. The price to be high was contributed with demand and supply of onions in the market. Normally farmers in Mang`ola harvest the onion in June and October of each year while Ruvu Remit smallholder farmers harvested onion from October to December. The difference in harvest seasons gave farmers from each area to enjoy benefits offered by Nairobi market. There is a critical price reflection across several markets which may be caused by brokers' influences.

4.9 SWOT Analysis for Smallholder farmers relative to Brokers influence in Onion Market

Table 4.4: SWOT Analysis for Smallholder farmers to wards Brokers Influences

| Strength of Farmers | Weakness of Farmers |
|--|--|
| <p>Better changing environment as markets can increase for onions</p> <p>Good harvest all the time</p> <p>Availability of irrigation and rainwater</p> <p>Increase in financial institution and banks at the area.</p> <p>More information coming through TV, internet and mobile phones (more education)</p> | <p>Less technological improvement</p> <p>Unregulated market price</p> <p>Less support from the government</p> <p>Less training for farmers</p> <p>Increase farmers population</p> <p>Lack storage facilities</p> |
| Opportunities of farmers | Threats of farmers |
| <p>Potential loan services</p> <p>Good relationship among farmers to associate themselves</p> <p>Opening of EAC borders</p> <p>Raising household income</p> <p>More informed farmers than before</p> <p>Better storage facilities.</p> | <p>Changing government rules and policies on agriculture and land.</p> <p>More competitive brokers coming on area</p> <p>Falling price</p> <p>High prices of farm facilities</p> <p>Lack of loan facilities</p> <p>Raising cost of transport</p> <p>Lack of ready markets for onions</p> |

Source: Field Work (2014)

According to www.hortnews.co.ke, the high pick harvest season in Taveta and Loitoktok reported to be February of each year and it is the time onion price in Ruvu remit division fetch little price at the farm gate as the Nairobi market got flooded by the onion from those regions within Kenya. Smallholder farmers were not happy with the brokers despite that they sold onions to them. 40% of interviewed farmers reported not to prefer the brokers because they offered little price compared to what was present in the market. In this view, the farmers saw that it could be better to get connected with the wholesalers rather than continue be linked with brokers. Smallholder farmers cultivated onion without prior information about the market.

That was caused by limited knowledge on marketing. The area has several NGOs supporting the smallholder farmers. 71% of the respondents reported presence of NGOs in the area. Those include World Vision Tanzania, World Food Programme, and Mama Masai. However, none of the NGOs supported farmers with knowledge on marketing instead more focus was put in crops production maximization in the area through livelihood interventions, example rehabilitation and construction of irrigation canal and provision of improved onion seeds. The storage facilities in the area were not enough in respect to the massive production of onion in the area.

The inadequate storage facilities created a pressure to smallholder farmers of selling the produce immediately after harvest at farms place to avoid rotting of the onion due to adverse weather condition. In that regard, the smallholder farmers have had no option of applied markets of demand and supply of the produce and sold it at high price to earn more benefits to improve livelihoods in the area.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, core findings and recommendations.

5.2 Summary of the Study

The several brokers played a role in the distribution channel of onions in the area. Those are Tanzanian brokers for Dar es Salaam market and buyers/brokers from Kenya. 70% of farmers reported that the influx of buyers from Kenya visited the farms during harvest season and bought the onions. The brokers from Kenya visited direct to farms and bought the onions without being transparent when it came to pricing the onion. That inhibits the price mechanism of onion markets as it was difficult to smallholder farmers to differentiate whether the onion demand was high against supply or the opposite.

The influx of the brokers to onion production area was a strategy to exploit the available business opportunity in East African Community member states that was created after reducing horticultural products' tariffs and increasing the profits that were enjoyed by Kenyans with the secret of what the market offered to the produce.

Limited provision of market information to farmers was an obstacle for farmers to establish a base to bargaining with the brokers/buyers the price of the produce and earn more benefits. The smallholder farmers did not receive the information regarding the markets that could pay a good price despite that they knew the markets of the produce. The market information was important to farmers and not only

because of knowing the price for selling the produce but also for the size of the land to cultivate and a relevant amount to produce in each season. This would enhance onion market price mechanisms as an instrument to favour smallholder farmers to fetch a good price in the available onion markets. It was observed that smallholder farmers praise more Nairobi onion market compared to internal markets. That was not impressive due to limited information about the competitors from the host country of which Tanzania farmers may find it a great loss as the result of Nairobi market getting flooded by onion from Kenya.

5.3 Conclusion and Recommendations

The smallholder farmers received the loans from brokers in the form of agriculture implements and advance payment to support intensive required labour for onion harvest as the microfinance institutions reported to operate in the division had inadequate financial capacity to provide loans to all farmers at the same period. The financial capacity limitation to MFI led to smallholder farmers to engage into contractual loans that limited the chance of selling onions to other brokers apart from the lender to avoid price sabotage as consequence of the received loans. Brokers/buyers forced the smallholder farmers to measure and pack the onion with the use of un-calibrated equipment that did not give a fare volume subject to payment. The exceeded volume was a benefit to buyers/brokers and a loss to smallholder farmers. The government should continuously help smallholder farmers by regulating price based on demand and supply of onions across the Ruvu Remit Division and other parts of Tanzania to avoid brokers to influence and manipulate smallholder farmers. Farmers should link (associate) themselves in groups for regulating information on price, markets and product movements to avoid costs of using brokers.

This could be done through SACCOS, VICOBA and other community groups for smallholder farmers. Further, smallholder farmers need to be provided with more information on entrepreneurship, finance and marketing to help them to have knowledge on how to improve their positions. There is a critical challenge for external buyers and smallholder farmers on the pricing to profit setting whereby brokers influence the Onion-market through regulating the information while setting to manipulate the ignorance of the market. Many farmers of onion at Ruvu Remit Division appear to borrow money from brokers and this has made them to depend on and be controlled by brokers when it comes to price, profits and market. It is, therefore, recommended that financial institutions should observe on how smallholder farmers need to be facilitated by small loans to depend on themselves.

Farmers need to find the standards of weighing and packing to avoid being exploited by “Lumebesa” packing (overfilled bags) used by brokers. Ruvu Remit smallholder farmers need to be informed on utilization of technology power from mobile phone to internet service, to understand price changes, markets, buyers and regulation so as to be knowledgeable not to get exploited by the brokers. The government should initiate project and other Non-governmental institutions to help the farmers of Onion at Ruvu Remit Division to establish storage facilities so that they will be able to sell their products when it is needed and when the price is reasonably high, not the brokers to manipulate. Kenya domestic onion producers enjoyed the levies imposed by Kenya government that reduce the profits of onion imported to the market from Tanzania in the truth that the Tanzanians` onion were high grade and had created loyalty to its consumers. The farm gate onion transaction did not favour the smallholder farmers as

they saw Nairobi as sole and potential market for the produce and made not consider any signal of onion market demand and supply that make an opportunity of farmers to benefit more through creating the scarcity of the produce and force buyers to pay good price. The smallholder farmers did not know the price of onion. They relied on the word of mouth from brokers that provided the time brokers go to farm to buy onions. That became a hindrance of smallholder farmers to know onion market performance trend for decision making of whether to continue to cultivate onion or switch to other high value horticultural crops. The government and the stakeholders invested in massive production of the onion without paying attention of the reliable market for the onion. This has led to farmers to fail to apply price mechanism to maximize the wealth from the produce.

Measurement equipment applied to packing the produce not standardized or uniform. That has given the brokers/buyers to take advantage of forcing the farmers to overfill the packing gears for personal benefits and not for the primary beneficiaries of the produce. This has to be controlled by the government policies and regulations to help small producers. Onion markets assurance continues to be important to smallholder farmers and call for more efforts to make farmers to enjoy the produce. The onion stakeholders have to establish the availability and reliability of the produce price information. This will create fair markets which favour the smallholder farmers. The government, through its extension officers, has to investigate what are the months of high production of onions in other areas in the country and outside the country and communicate to farmers for creating a gap to avoid months of high production and take advantage of the presence of irrigation scheme to apply market price mechanism

to fetch high price in the market. The district government and NGOs in the area need to advertise the untapped financial investment opportunities to MFIs in regarding that onion production use reliable source of water of which it reduces risk of farmers getting total loss and cause the bad defaulters that call for write off of their bad debts that lead to the MFIs to lose the capital. The presence of MFIs give smallholder farmers option of going to MFIs instead of borrowing from the brokers and end up with contractual loans that limit them to sell the produce to other buyers even if they give good price. Mechanisms to control the invasion of buyers from Kenya to farm areas have to be established to enable farmers to get a chance to clear doubt about the market price and make decision of where to sell the product and at what price.

The brokerage system in the area calls for special attention and needs to be controlled for the betterment of the farmers. The brokers need to be registered and recognized by relevant authorities and, on the other hand, get trusted while connecting the farmers with the buyers. The farmers require facilitation on how to venture into the EAC common market. The farmers from Tanzania have not yet stepped into the market to enjoy the benefit of low levies and good price offered by the market. Accessibility to the EAC market creates chance to shorten the distribution channel chain by farmers to meet directly with onion wholesalers rather than depend on brokers from Tanzania who connect the farmers with either other brokers from Kenya or retail traders. The use of standardized weigh measurement is common cry in all parts of the country. The overfilling of the bags/lumbesa has been instituted by the brokers or buyers and makes themselves the primary beneficiaries of the crops instead of the farmers who invested the limited capita and time into the production process.

The establishment of strong farmers association in connection with onion selling center contributes to the enforcement of use the weigh scales to have a weight that correspond to the amount to be paid.

5.4 Area for Further Research

The researcher recommended further research to be done to all other areas of production involving different produce and several regions where a common-man need to be extended with knowledge and right wealth creation against poverty.

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APPENDICES

Appendix One: Respondents Consent

Dear respected respondent,

My Name is Mzee Ndukai, from Arusha, undertaking research on Price Changes in Onion and BROKERS` ROLE: Challenges and Opportunities at Ruvu Remit Division in Simanjiro. This is purely academic research and exercise as a candidate from Open University of Tanzania.

I kindly request your kind consideration in answering the below questions by filling gaps and tick the required places.

The researcher promises that this will be kept confidential and purposely for academic focus. Please ask if you need any clarification.

Thank you.

Yours.....

The researcher and candidate signature.....

Appendix II:

Research Questionnaire-Brokers Functions and Role on Pricing

Questionnaire One – Smallholder Farmers

Geographical information

Name of the village.....Ward name.....Division

Name.....District

Name

Date

Personal Information

i. Age (.....)

ii. Sex: A. Male B. Female (.....)

iii. Education level A. Standard Seven B. Secondary level C. High education (diploma, degree) (.....)

iv. Marital status A. Married B. Single C. Divorce (.....)

1. Do brokers help you to know the onion price offered by the markets?

A. No B. Yes (.....)

2. Where do you get the information of the amount of the onion to sell to the brokers?.....

3. In which months do you expect the price of onion to be high?

4. In those months, do the brokers give you more prices to the onion?

A. Yes B. No (.....)

If the answer is 'No', give the reasons.....

5. Do brokers own onion storage facilities? A. Yes B. No (.....) If the answer is 'Yes' do they buy onion and store them for some times? A. Yes B. No (.....).

6. What is your comment on the brokers to continue connecting you with the market?.....

7. Who are the loans providers in your area?
.....

8. Is there any connection between the loan you receive and selling of onion?

A. Yes B. No (.....) If the answer is Yes how
.....

What system do you use to reimburse the loan principle?

A. Paying instalment B. Pay after harvest the onion. C. Give the lender the onion and bring the money after sale the onion and deduct the loan. (.....)

9. Is the lender of the loan the one who buys your onion at the time of harvest?

A. Yes B. No (.....) If the answer is Yes go to question **11**

10. How long does it take you to receive payment of onion after the lender had taken the produce to the market? A. One month B. Two to four months C. Three to Six months D. Sometimes no payment at all. (.....)

11. What tools/equipment is commonly used to measure the weight of onion in your village after packing? A. Bags B. Weighing scale C. No tool available (.....)

What is the effect if you do not abide by the introduced tool during packing your onions?.....
.....

14. Is there any development actor in your village? A. Yes B. No () if the answer is YES go to question 15.

15. Mentioned the names of development actors in your area.

.....

16. What are the activities of development actors in your village?

1.....

2.....

3.....

Appendix III:

Research Questionnaire: Price of onion

Geographical information

Name of the village.....Ward name.....Division

Name.....District

Name

Date

Personal Information.

i. Age (.....)

ii. Sex A. Male B. Female (.....)

iii. Education level A. Standard Seven B. Secondary level C. High education (diploma, degree) (.....)

1. Do you give loans to onion smallholder farmers?

A. Yes B. No (.....) If the answer is ‘Yes’ go to question 2.

2. How did a loan contribute to increase the benefits of onion to smallholder farmers?

.....

3. How do you get market onion information?

A. By visit the market B. By call onion wholesalers (.....)

5. How do you control the price of onion during high demand and low demand?

6. Do you have onion storage facility? A. Yes B. No (.....). If the answer is Yes,

how do you use the facility to control onion price?

.....

.....

7. List the names of markets for onion produced from Ruvu remit division.

.....

8. How is the market dictating the packing and measurement of onion?

.....

9. Do onion wholesalers go direct to farmers?

A. Yes B. No (.....)

10. What are your comments on the benefits you get from dealing with onions produced from Ruvu remit division?

Thank you for participating.

Appendix IV

Informant Check List

Respondent: Agriculture Extension Officers, Ward Leaders and Village Leaders

Village name Ward.....District

Date

1. Age of respondent: (tick one)

15- 25 (.....)

20-25 (.....)

25-30 (.....)

35-40 (.....)

45-50 (.....)

50 and above (.....)

Gender of respondent (tick one)

Male (.....)

Female (.....)

1. Is there a system at district level that supports the provision of onion market information to farmers during harvest season?

A. Yes B. No (.....). If the answer is 'Yes', mention the systems.

.....

.....

.....

2. How is the district government controlling the activities of the brokers during facilitating onion market?

.....
.....

3. Is the district government educating the onion farmers on how to interact with the brokers?

.....
.....

4. What measures are laid down by the district government to enforce the use of greed measurement equipment for packing the onion?

.....
.....

5. What are the short-run and long-term strategies to align the challenges and prospects on onion prices markets across the smallholder farmers and brokers?.....

.....

6. How is the district government supporting onion smallholder farmers on dealing with demand and supply to gain more benefits from the produces?

.....
.....

7. Any opinion regarding the role of brokers on connecting the onion smallholder farmers with markets?

.....
.....
.....

7b. What could be the innovations contributed by brokers in the onion market?.....

.....
.....

7c. What key lessons can one learn from the onion market and brokers and smallholder

farmers?.....

.....
.....