FACTORS INFLUENCING THE MARKETING OF HORTICULTURAL PRODUCE AMONG SMALL SCALE FARMERS AT ETUNDA IRRIGATION SCHEME IN THE OMUSATI REGION NAMIBIA

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ABSTRACT

This study investigated factors influencing the marketing of horticultural produce among small-scale farmers at Etunda irrigation scheme in the Omusati region of Namibia. The researcher sought to answer the following questions. A mixed method through the use of both quantitative and qualitative research designs was used to carry out this study at Etunda irrigation scheme. The study targeted small scale horticultural farmers at Etunda irrigation scheme and employees of AMTA at Ongwediva Fresh Produce Hub. Simple random sampling was used to select respondents from horticultural farmers at Etunda and employees of AMTA. Questionnaires and interview guides were used to collect primary data. The analysis was done using descriptive statistics and the results were presented in tables and pie charts. The study faced numerous limitations such as the absence of readily available research grants on critical research topics such as this one has also been a limitation as their availability could have led to countrywide studies being undertaken and made literature based on nationwide studies available. The researcher had to rely on data from other countries who are also embarking on horticultural production. The major limitation of the study was that not all the small scale farmers in the country or the region were selected to participate.Study findings showed that lack of on-farm infrastructure, lack of capital, poor mode of transportation, were some of the challenges faced by small scale horticultural farmers. It was also found that there are enormous difficulties and challenges facing Small-scale farmers in marketing their horticultural produce. These challenges range from inaccessibility to the Hub, fluctuating market prices, perishability of fresh produce, limited production, lack of on-farm infrastructure, poor quality of fresh produce, lack of capital/finance in engaging large quantity of fresh produce and disagreements in price between farmers and AMTA. Farmers inability to market produce means lack of income for production outputs, consumer goods and immediate cash

requirements and this inhibit income generation. The major challenges from the research show that distance to Hub and high transport costs, is a central concern for small-scale farmers in Namibia. Small-scale farmers need access to competitive markets not just for their produce but also for inputs, income generation, technology (storage) advancement, consumer goods, credit and labour. The study concluded that the Ongwediva Fresh produce need to reduce wastage, improve sustenance of the Hubs, diversify markets and reduce dependency on the importation of primary and secondary value added products. The study also emphasize that, there should be collective engagement of the farmers with policy makers to create a conducive environment for the success of agro-businesses. There is also a need to improve the collection of horticultural produces from farmer through a formal process because distance becomes barrier in conveying these produces to the market. Farmers are encouraged to join cooperatives to enhance their chances of accessing critical production inputs and the government should ensure that farmers 'perception of incentives associated will be associated with formal channel in transportation of their produce. Their physical costs of market access can be reduced by good road construction, road maintenance and improved transport, storage and information.

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DEDICATION

This thesis is dedicated to the late Natanael Shinana, my grandfather as well as my boys Cadas and Thaddeus.

DECLARATIONS

I, *Jacob Hamutenya* hereby declare that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.

SIGNATURE

02/04/19

DATE

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter presents the introduction and background of the study. It addresses the background to the study, statement of the problem, research questions, and significance of the study, assumptions of the study, limitations of the study, and delimitations of the study and ends with the structure of the study.

1.2 Background of the study

The marketing of horticultural produce from various irrigation schemes in Namibia remains one of the greatest challenges faced by farmers in Namibia (AMTA, 2012). Horticultural produce is perishable and more often needs to be delivered to the market places as soon as it is harvested.

Etunda Irrigation Scheme is one of the eleven (11) government irrigation projects under the irrigation project scheme of the Ministry of Agriculture, Water and Forestry. The project is being operated by the Agricultural Business Development Agency (AgriBusDev), which is a Government agency created specifically to manage the government production farms. Etunda Irrigation Scheme was established in 1993 under the Green Scheme policy. It is located at Ruacana, approximately 150 km west of Oshakati, in the Omusati region. The farm is about 1200 hectares in size, which is split in half for both commercial and small scale farming. Only 900ha of the project area is utilised for irrigation purposes (MAWF Namibia, 2012).

The project has a typical warm climate with annual mean temperatures ranging from 26 – 30 degrees Celsius and a rainfall of 270 mm annually. In addition to this, Etunda area is 95% sand and 5 % clay soil which makes it ideal for crop cultivation.

Maize is the main crop on the commercial plot (300ha). It also produces various vegetable varieties such as Maize, wheat, carrots, sweet potatoes, onions, cabbages, tomatoes, water melon, pumpkin and gem squash. These are mainly cultivated on a seasonal basis, and some throughout the year depending on the species. Etunda Irrigation Scheme is made up of 64 Small Scale Farmers who share the area with the service provider. It is estimated that the service provider's workforce is comprised of a total 126 workers, of which 45 are male and 81 are female.

The Etunda irrigation scheme was 950ha, however in 2015 it was extended with the addition of 360 Ha to make it 1560Ha in total. 600ha of the area is divided into small 3 hectare plots for small scale farmers. The remainder of the land (960ha) is run by the service provider AgriBusDev. The service provider coordinates and controls the overall operations of the small scale farmers. One of the core functions of the service provider is to provide technical support and skills transfer in the form of training to the small scale farmers. Water is supplied to the Etunda Irrigation Scheme as part of the Bulk Transfer supplies taken from the Calueque weir in Angola, upstream from the Ruacana Falls (Agro Marketing and Trade Agency (AMTA), 2012).

To ensure that produce from the Etunda Irrigation Scheme does not perish due to lack of market, the government of the Republic of Namibia constructed fresh-produce hubs, (storage facilities in Ongwediva and Rundu). This is also meant to help the farmers to have a secured market for their products, which gives Etunda Irrigation Scheme an opportunity to sell its produce throughout the year.

Agriculture plays a significant role to society in terms of poverty alleviation, food security and economic growth. It is the backbone of many African economies (Balarane & Oladele, 2012). Since the mid-90s, the Government of Namibia identified horticulture (the farming of vegetable crops) as a means of diversification and of making agriculture more profitable through efficient

land use, optimum utilization of natural resources and creating skilled employment for the rural masses (Kuvare, Maharero, & Kamupingene, 2009). The government was working on the assumption that, accessibility to the local market is a rather more significant obstacle for increased horticulture production than developing extra land. Over time, efficient marketing and distribution channels have been developed from the fresh produce markets in South Africa that could supply the whole of Namibia, competing strongly with the local producers (Balarane & Oladele, 2012; Blaikie, 2003).

The development of horticultural infrastructure together with marketing and distribution channels within Namibia thus, plays a significant role in opening local horticulture markets to local horticulture producers. This has necessitated the planning and development of Etunda Irrigation Scheme and the capacitation of local communities to be actively involved in the horticulture scheme (Makhura, 2011). The horticultural project is now supported by the Agro-Marketing Trade Agency (AMTA), a state-owned enterprise with operating hubs in Ongwediva, Rundu and Windhoek (Kanyangela & Kaufilua, 2010). Food security and self-sustenance is top on the agenda of the Namibian government, hence the unbridled importance of innovative food production. The community of farmers from Etunda Irrigation Project situated in the Omusati region was used as a case study in ascertaining factors affecting the marketing of horticultural produce among small scale farmers in the Etunda community.

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The project has a typical warm climate with annual mean temperatures ranging from 26 – 30 degrees Celsius and rainfall of 270 mm annually. In addition to this, the Etunda area is 95% sand and 5 % clay soil which makes it ideal for crop cultivation (MAWF Namibia, 2012). Maize is the main crop on the commercial plot (300ha), whereas various vegetable varieties such as, carrots, sweet potatoes, onions, cabbages, tomatoes, water melon, pumpkin, gem squash are also produced in this irrigation scheme. These are mainly cultivated on a seasonal basis, and some throughout the year depending on the species. The scheme also produces wheat. Etunda comprises of 64 Small Scale Farmers who share the area with the service provider. It is estimated that the service provider's workforce comprises a total of 126 workers of which 45 are male and 81 are female.

In the beginning the Etunda Irrigation Scheme was 950ha, however in 2015 it has been extended by 360 ha to 1560 Ha in total. 600ha of this is divided into several 3 hectare plots for small scale farmers. The remainder of the land 960ha is run by the service provider AgriBusDev (MAWF Namibia, 2016). The service provider coordinates and controls the overall operations of the small scale farmers. One of the core functions of the service provider is to provide technical support and skills transfer in the form of training to the small scale farmers. Water is supplied to the Etunda Irrigation Scheme as part of the Bulk Transfer supplies taken from the Calueque weir in Angola, upstream from the Kunene River.

To ensure that produce from the Etunda Irrigation Scheme does not perish due to lack of market, the government of the Republic of Namibia constructed fresh-produce hubs, storage facilities in Ongwediva and Rundu, to help the farmers have a secured market for their products. This would also give Etunda Irrigation Scheme an opportunity to sell its produce throughout the year. Irrespective of all these government initiatives, the researcher observed that the horticultural farmers face challenges in marketing their produce. The study focused on the factors influencing the marketing of horticultural produce among the Small scale farmers of Etunda irrigation scheme in the Omusati Region. Therefore, the current study investigated the factors influencing the marketing of horticultural produce among the Small scale farmers of the Etunda irrigation scheme in the Omusati Region with the objective of helping these farmers remain competitive in the marketing of the horticultural produce.

1.3 STATEMENT OF THE PROBLEM

Kuvare et al., (2009) indicated that marketing chains for agricultural commodities in Namibia are long, not transparent, and consist of many factors, making them inefficient and unresponsive to producer needs. Some marketing constraints or challenges arise due to many factors such as limited knowledge and use of market information, lack of access to high-value reliable markets, high transactional costs, and distance from the markets. It also includes poor quality of products, lack of storage facilities, low educational levels of small-scale farmers, poor agricultural extension services, lack of financial support, inadequate and inaccessible market infrastructure, and lack of adequate access to finance and socio-economic factors of the farmer for example: training, farming experience. In addition to that, the lack of access to decent roads, price risk and uncertainty, lack of electricity, poor communication (Fiebiger, 2010) were also identified as marketing challenges.

There is also little information regarding prices, inadequate local markets, lack of bargaining power and an excess of intermediaries (Food Agriculture Organisation (FAO), 2013).

To the researcher's knowledge, no studies have so far been undertaken to investigate the factors influencing the marketing of horticultural produce among the small scale farmers at the Etunda Irrigation Scheme in the Omusati region of Namibia. The current study, focussed on this matter so as to improve on the viability of the horticultural business and to advise the Ministry and other stakeholders.

1.4 **RESEARCH QUESTIONS**

The study aimed to answer the following research questions:

- What are the factors influencing the marketing of horticultural produce among small scale farmers in the Etunda community?
- What are the most popular market channels being used by small scale farmers at the Etunda Irrigation Scheme?
- What are the challenges faced by small scale farmers in the marketing of their produce at the Etunda Irrigation Scheme?

1.5 Significance of the study

This study will enable horticultural small scale farmers to have a level of participation in the marketing channels as well as exposing critical factors discouraging them from participating in the available market. Information from this study will be vital to the extension officers in advising farmers on the proper channel selection in horticulture marketing as it will encourage them to increase their production and profitably participate in the horticultural supply chain. Information gathered through this study would also be useful to policy makers of the Ministry of Agriculture

and the Ministry of Small and Medium enterprises in Namibia, to create or amend existing policies in a bid to develop more markets as well as motivate producers to access high value markets. Additionally, farmers can also use this information when deciding on which channel to sell their produce for profitable marketing.

1.6 SUMMARY

This chapter presented a brief overview and background of the study and the statement of the problem. It also elaborated the objectives of the study and general overview of the methodology which was used in the study. It presented the significance and limitations of the study. Finally, it presents an outline of the study with an elaboration of what aspect each chapter would cover in this study. The next chapter presents a comprehensive review of the literature for the study.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter reviews literature relating to the marketing of horticultural produce that helps in identifying and understanding the factors affecting channel choice decisions of vegetable farmers in general. It gives a background of the targeted area of research, identifying literature on the topic of study and the gaps that the research aims to fill. It further presents the conceptual framework on which this study was based, followed by a discussion on the marketing challenges encountered by small scale farmers. It also presents the issues associated with market access and how producers can overcome the challenges encountered when marketing fruits and vegetables. A detailed discussion is later given highlighting trends in agricultural marketing in Namibia, the importance of farmer participation in marketing and factors that lead them to participate in any marketing channel. The chapter ends with a description of the general trends of horticultural marketing in Namibia.

2.2 CHALLENGES FACED IN THE MARKETING OF HORTICULTURAL PRODUCTS IN FARMS.

Though, marketing plays a critical role in meeting the overall goals of the food supply chain and sustainable agriculture, particularly among small-scale farmers in developing countries, limited empirical studies exist regarding factors affecting the marketing channel choices that farmers make (Balarane & Oladele, 2012). Small-scale farmers still find it difficult to participate in markets, especially when faced with pressures from market liberalization (Bannan, Bekoe, & Nketiah, 2013).

Generally, very few small-scale farmers participate in formal markets. Makhura (2011) investigated the transaction cost barriers in the market participation of small-scale farmers in the Northern Province of South Africa. Makhura found that marketing by small-scale farmers was constrained by poor infrastructure, distance from the market, lack of assets (for example lack of own vehicles for transportation) and inadequate market information. On the other hand, Dolmans, De Grave, Wolfhagen, & Van der Vleuten (2005) cited lack of bargaining power along with various credit bound relationships with the buyers as having led to farmers being exploited during the transaction where most of the farmers become price takers.

The majority of the farmers are small-scale and hence, unable to obtain a fair price for their produce. This results to farmers not being able to sustain their livelihood. Kodithuwakku (2000) found out that the structure of the traditional vegetable supply chains is such that there are a large number of intermediaries (e.g. vegetable collectors, transporting agents, commissioning agents etc.) between the producer and the consumer. Kodithuwakku (2000) further indicated that the addition of the marketing margins for all these intermediaries coupled with almost 30 to 40 percent of the vegetables being wasted as post-harvest losses has resulted in producers receiving a very low price for their produce while on the other hand the consumers are compelled to pay a highly inflated price for their purchases. A survey by Thomas (2013) revealed that many factors and farm/ or farmer characteristics were found to be associated with the selection of a particular horticultural produce marketing channel among the Greece farmers. Factors such as price, loyalty, speed of payment, personal relationships and volume of production, degree of isolation, farm area, the size of horticultural produce, farmer's age and debt level were found to influence the horticultural farmers in Greece to select a particular marketing channel.

The capability of a buyer to purchase large quantities of livestock influenced the selection of different marketing channels. On the other hand, the isolation of the farm affected farmers only in terms of their selection of a milk marketing channel (Fiebiger, 2010). Thomas (2013) revealed that age and type of the farmer influenced decisions in those farmers who preferred the direct sales to retailers were small scale horticultural producers and medium scale horticultural producers. Their horticultural produce was medium in size, and their financial performance was below average. Farmers who preferred the direct sales to wholesalers were large scale farmers, their produce was big, and their financial performance was above average (Anyon, 2009). On the other hand, farmers who preferred private sale of their produce were small scale horticultural producers, their produce was small, and their financial performance was low (Mbene, 2005). Finally, those who preferred the sales to more than one marketing channel (multi–channel) were large scale horticultural producers, their financial performance was above average.

Bailey (2013) found that farmers who prefer to sell to local processing plants were medium scale horticultural producers. Middle aged farmers, had medium horticultural produce, and had incurred a debt between 10 and 29% of their income and earned average financial rewards. Bailey further unveiled that farmers who used the cooperative processing plants as an outlet were medium scale horticultural producers, young farmers, had a large produce and had incurred substantial debt whilst their financial performance was average. On the other hand, farmers that preferred to market their produce to big vegetable shops were large scale horticultural producers, middle aged farmers, had large horticultural products, and had a high debt and above-average financial performance. Finally, farmers who self-consumed their produce were small scale producers, were old in age and had little produce.

Corner (2010) identified factors related to price, production scale and size, farm household characteristics, behavioral aspects such as (trust, risk, and experience), market distance and purchase condition as factors that affect producer market channels. Mbene (2005) found out that factors such as price attributes, production system, farm household characteristics, market distance, and purchase condition could affect farmers' decisions market channels in the horticulture products supply chain in many developing countries like Namibia. Bailey (2013) found out that, age, education, farm profit and transaction costs were some factors that influence farmers' choices on which channel to use in the marketing of horticultural products. The same study also indicated that the mode of payment, long standing relationship with the buyer, and the price received were the most important reasons for selling to a particular buyer in the horticultural sector. A study conducted by Kuvare, Maharero, & Kamupingene (2009) found out that farm and farm characteristics, volume of milk production, farm income, debt, selling price, speed of payment and loyalty had a significant effect on the choice of market channel for small-scale horticultural farmers in Cyprus.

Misra (2003) on the other hand, found out that factors related to price and non-price factors affect the selection decision of horticulture farmers in India on which market channels to use. These invariably affect the economic value of the products. Royer (2005) unveiled that agricultural producers face some risks that are linked with decisions on the prices, quantity, quality, and the timing of delivery in United Sates of America. The current study explored the association between the factors that influence the farmers to adopt a particular marketing strategy and their selection of a particular distribution channel. Gong (2007) showed that there are significant relationships between economic and social variables and marketing channel selection for horticultural produce in China. He argued that transaction costs have a significant impact on marketing channel

selection.

2.3 CONCEPT REVIEWS

2.3.1 Operational needs

Although marketing of agricultural produce remains an important tool in increasing farmers income and alleviating poverty, Fiebiger (2010) explains that farmers experience barriers such as insufficient and inadequate physical infrastructure, lack of basic education and marketing knowledge, lack of organizational support and institutional barriers in marketing. This has further implications on the choice of marketing channels that farmers use in marketing their produce.

For Etunda Irrigation Scheme producers, most of the marketing of produce occurs locally either following informal (community-local trade- roadside and the local open markets) or formal (supermarkets, shops, institutions and petrol station outlets) marketing channels. The study by Thomas (2013) revealed that producers significantly benefit from high demand for vegetables during holidays (December or March/April) and traditional weddings (August and December). The range of buyers includes individual customers, traders or middlemen buying directly from producers' plots or from the produce transported to formal or informal markets.

Marketing seems to be consistently given as the main constraint to high value crops production (Thomas, 2013). In addition, no viable or disciplined cooperatives have been established based on sound principles that can ensure their sustainability towards orderly marketing arrangements. This is in agreement with the findings of Balarane & Oladele (2012), that when agribusiness firms contracted a number of small-scale producers they incurred high transaction costs and so usually prefer to deal with large growers. This makes the relationship much more profitable but tends to crowd-out many small-scale producers from the market. Furthermore, farmers are said to receive information on market prices from other farmers returning from the market, by calling

supermarkets or catering agencies or by visiting supermarkets (Fiebiger, 2010) and as a result they experience high searching costs. Small-scale producers are, therefore, 'price takers' which means that the producer price depends on the market power and bargaining behaviour of the trader (Gillon, 2009).

Marketing plays a critical role in meeting the overall goals of food security, poverty alleviation and sustainable agriculture, particularly among smallholder farmers in developing countries like Namibia (Kharellah and Kirsten, 2011). This is done because of subsidy provided by the government in some of the agricultural materials that farmers use in their farms. Farmers are provided with loan and agricultural materials to enhance their productions. Although marketing is important, smallholder farmers still find it difficult to participate in markets, especially when faced with pressures from market liberalization. Makhura (2011) found that marketing by smallholder farmers was constrained by poor infrastructure, distance from the market, lack of assets (for example lack of own vehicles) and inadequate market information among small scale farmers in RSA. On the other hand, Antwi & Seahlodi (2011) revealed that lack of bargaining power along with various credit bound relationships with the buyers led to farmers being exploited during the transactions where most of the farmers become price takers. The majority of the farmers are smallholders and hence, unable to obtain a fair price for their produce. This results in farmers not being able to sustain their livelihood. The structure of the traditional vegetable supply chains is such that there are a large number of intermediaries (e.g. vegetable collectors, transporting agents, commission agents etc.) between the producer and the consumer (Agro Marketing and Trade Agency (AMTA), 2012). The addition of the marketing margins for all these intermediaries coupled with almost 30 to 40 percent of the vegetables being wasted as post-harvest losses has resulted in producers receiving a very low price for their produce while on the other end the

consumers are compelled to pay a highly inflated price for their purchases (Balarane & Oladele, 2012). Markets tend to be disorganized when the farmers and traders who do not fully rely on their vegetable business for a steady income sell their produce at any price offered. Retail agents often encourage this since it provides an opportunity for them to make more profit. In the long run, this is not good for the industry, since it promotes an erratic supply and unrealistic pricing structure (Bailey, 2013). Marketing information is important in assisting growers at the crop planning stage before planting and to sell surplus produce. In the absence of such marketing information, the retail end of the industry does not respond to supply and demand, prices are set artificially, and in most cases remain static (Corner, 2010).

2.3.2 Characteristics of Horticultural produce and its marketing

Horticultural production and marketing is influenced by a number of factors that can be attributed to production, product, and market characteristics. Antwi & Seahlodi (2011:123) identified the major attributes that inhibit marketing. The following factors were unveiled:

Perishability: As fruit and vegetables are highly perishable, they start to lose their quality right after harvest and this continues throughout their life until they are consumed. Due to the perishability of the products, elaborated and extensive marketing channels, facilities and equipment are vital (Antwi & Seahlodi, 2011).

This perishability of horticultural produce requires for the commodity not to be held for long periods. In the case of many small scale farmers, fresh produce from one area is often sent to distant markets without a firm buyer or price resulting in losses. Prices may be negotiated while the commodities are en route and they are frequently diverted from their original destination in search of a better price. Sellers might have little market power in determining a price. As a result,

a great deal of trust and informal agreements are involved in marketing fresh vegetables. For most farmers, there is not always time to write everything down and negotiate the finer details of a trade. The urgent, informal marketing processes often leads to disputes between buyers and sellers of fresh fruit and vegetables. Producers are normally price takers and are frequently exposed for cheating by the intermediaries.

Price/Quantity risks: Due to the perishable nature and biological nature of the growth process, there is a difficulty in scheduling the supply of vegetables to satisfy market demand. The crops are subjected to high price and quantity risks with changing consumer demands and production conditions. Unusual production or harvesting weather or a major crop disease can badly influence the production and marketing system (Antwi & Seahlodi, 2011).

Seasonality: Horticultural produce has seasonal production, directly influencing its marketing. Normally the produce has a limited period of harvest and more or less a year round demand. This seasonality is also worsened by the lack of facilities to store the produce once harvested (Antwi & Seahlodi, 2011).

Product bulkiness: Since water is the major component of the product, it makes them bulky and of low value per unit and that is expensive to transport in fresh form. This, therefore, exposes farmers to loss of a large amount of product in the form of unsold produce.

The above-listed characteristics of the product require a special complex system of supportive inputs. It demands a regular marketing preparation process like washing, cooling and proper management from the time of harvest until the produce is put on sale. It is frequently believed a vegetable should not only remain attractive to the consumer, it must also have a reasonable shelf life after having been purchased by the consumer (Nonnecke, 2009).

2.4. Vegetable Production and Marketing in Namibia

Namibia has a variety of horticultural produce grown in different agro ecological zones by small farmers mainly as a source of income as well as food. The production of horticulture varies from cultivating a few plants in the backyard for home consumption to large-scale production for the domestic and home markets.

Small-scale farms operate on low input – low output production systems. The use of improved seeds and planting material of high yielding varieties and other inputs such as fertilizer and plant protection materials is not common in the small scale sector. Technical training and extension services on improved crop husbandry techniques are not available. As a result average productivity levels are low in the small scale farming sector (Agro Marketing and Trade Agency (AMTA), 2012)

The Agro Marketing & Trade Agency - Namibia (AMTA) is a state trading organization. AMTA is a newly established agency under the Ministry of Agriculture, Water and Forestry (MAWF) responsible for the management of Fresh Produce Business Hubs (FPBH) and National Strategic Food Reserve (NSFR) facilities. This helps in ensuring high quality standards to achieve food security as a wholesale institution dealing with domestic and export trade of fresh fruits, vegetables, flowers, processed horticultural products and some slice crops. The marketing operation of the enterprise includes the collection of products from production sites, transportation, storage, grading and quality control, packing and distribution of these horticultural, floriculture and spice crops (Agro Marketing and Trade Agency (AMTA), 2012).

2.5. Marketing Constraints Facing Small-scale Farmers

The aim of this section is to identify key constraints facing small-scale farmers such as lack of physical infrastructure, lack of market, and high transaction costs (Balarane & Oladele, 2012; Kotler, 2010). Small-scale farmers find it difficult to compete in the new market environment.

They face enormous constraints when it comes to physically accessing markets. They also lack market information, business and negotiating experience, and a collective organisation to give them the power they need to interact on equal terms with other generally larger and stronger market intermediaries (Food and Agriculture Organization of the United Nations Annual Report, 2010). The result is a poor term of exchange and little influence over what they are offered (Heinemann, 2008). The next section is a discussion of some of the common marketing constraints facing small-scale farmers, as revealed through international experiences.

2.5.1. Constraints on production

Producing for the market calls for production resources that include, land, labour force and capital (Bailey, 2013). Poor access to these assets, affects the way in which small scale farmers can benefit from opportunities in agricultural markets, and especially in terms of the volume of products traded and the quality of those products (Corner, 2010). Small-scale farmers lack regularity in terms of producing for the markets due to insufficient access to production resources.

2.5.2. High transaction costs

High transaction costs are caused, inter alia, by poor infrastructure and communication services in remote rural areas (Thomas, 2013). Transaction costs are also a result of information inefficiencies and institutional problems such as the absence of formal markets (Makhura, 2011). Transaction costs include the costs of information, negotiation, monitoring, co-ordination, and enforcement of contracts. Small-scale farmers are located in remote areas and are geographically dispersed and far away from profitable markets. Distance to the market together with poor infrastructure and poor access to assets and information results high transaction costs (Wilson, 2000). Since small-scale farmers are poor, they find it difficult to compete in profitable markets due to the high transaction costs. Traders with higher social capital are better able to enter more capital-intensive marketing activities such as wholesaling and long-distance transport, whereas

traders with poor social networks face major barriers to entry into the more lucrative market segments (Hoy, 2003).

Minimizing transaction costs is the key to improving access to high-value markets in developing countries, because high transaction costs will make it difficult for poor small-scale enterprises to market their produce (Antwi & Seahlodi, 2011).

2.5.3. Lack of on-farm infrastructure

Small-scale farmers do not have access to on-farm infrastructure such as store-rooms and cold-rooms to keep their products in good condition after harvest. Lack of access to facilities such as post-harvest and processing facilities constitutes a barrier to entry into agricultural markets, since the emphasis of buyers is more on quality. Access to storage facilities increases farmers' flexibility in selling their products, as well as their bargaining power (Corner, 2010)

2.5.4. Asymmetry or lack of information on markets

Rural producers, and especially small scale farmers, have little information on the market demand and price. This information is costly to obtain. They may gather information through contact with other actors in the commodity chain, but the accuracy of this information is not certified, since those actors might to be exhibiting "opportunistic behavior" (Kotler, 2010:45). Small-scale farmers lack information about product price and times to sell their products, and about potential buyers. This in turn reduces their ability to trade their products efficiently and to derive the full benefit from the marketable part of their production (Agro Marketing and Trade Agency (AMTA), 2012).

2.5.5. Low quantity and poor quality

Due to their low endowment in production factors, such as land, water and capital assets, the majority of small-scale farmers produce low quantities of products that are of poor quality, which leads to their products being neglected by output markets (Kanyangela & Kaufilua, 2010).

Increasing concentration in the food value chain is a global trend caused by increasingly demanding consumers and concerns about food safety, which tends to make it very difficult for smallholder farmers to enter high-value markets in light of the low quantity and poor quality of their products (Agro Marketing and Trade Agency (AMTA), 2012).

2.5.6. Transportation problems

Most small-scale farmers have no means of transport to carry their produce to markets. Transportation problems result in loss of quality and late delivery, which in turn leads to lower prices, and this is regarded as the greatest problem faced by emerging farmers (Bailey, 2013)

2.5.7. Lack of market in rural areas

Most small-scale farmers are located in rural areas where there are no formal agricultural markets or agro-processing industries. They are compelled to market their produce to local communities in their areas, sometimes at lower prices, or to transport their products to towns at higher cost (Corner, 2010).

2.5.8. Lack of bargaining power

The bargaining power of the small producers is especially low since they have poor access to market information and limited access to financial markets, which prevents them from selling their products at the most profitable time (Hunt, 2011). Their lack of bargaining power may lead them to undervalue their production and obtain a smaller share of the added value created in the commodity chain. Small scale farmers have particularly low bargaining power when they operate in a long supply chain where the specificity of the product transformation assets leads to the creation of oligopoly (e.g. the oil-palm and cotton sectors in West Africa) (Fiebiger, 2010)

2.6 Effect of the challenges (variables) in terms of market choice

2.6.1 Place/distribution as a marketing activity

Kotler (2010:134) states that "Place" is the point where products are made available to customers. A business has to decide on the most cost-effective way to make their products easily available to customers. "Place" is a marketing mix experience that is directly linked to customer loyalty.

The strength of distribution channels secures a competitive position for the organisation. Logistics, timely production and dispatch of products in the market to make it accessible for the customer increases customers' confidence in the organization and such a swift mechanism of product delivery indicates the distribution capabilities of the organisation (Kruger & Lammerts-Imbuwa, 2015). Fiebiger (2010:67) described "Place" as one of the four Ps of the marketing mix and in particular the marketing variables under "Place" are channels, locations, coverage, assortments (varieties), inventory and transport.

2.6.2 Distribution channels

Bailey (2013) explains that distribution channels usually involve several parties that are intermediaries in a vertical sequence of the transaction, all of which are required to "add value" if they are to survive. It's the method marketers use to get their products or services through various distribution channels to the ultimate purchaser or end-user – in other words, how and where the consumer buys his/her product or service (Corner, 2010).

Kotler (2010) indicates that the distribution channel has a direct effect on product availability, customer satisfaction, loyalty and profitability. A distribution channel is the network of individuals and organizations involved in getting a product or service from the producer to the customer. Distribution channels include your own direct sales force, retailers, distributors and the Internet. Distribution channels are also known as marketing channels or marketing distribution channels (Antwi & Seahlodi, 2011).

According to Hunt (2011) there are four basic subcategories of market variables that are particularly important in influencing channel structure. Market variables are the most fundamental variables to consider when designing a marketing channel. They are (A) market geography, (B) market size, (C) market density, and (D) market behaviour.

Market geography refers to the geographical size of the markets and their physical location and distance from the producer and manufacturer. A popular heuristic (rule of thumb) for relating market geography to channel design is: "The greater the distance between the manufacturer and its market, the higher the probability that the use of intermediaries will be less expensive than direct distribution."

The number of customers making up a market (consumer or industrial) determines the market size. From a channel design standpoint, the larger the number of individual customers, the larger the market size. A heuristic about market size relative to channel structure is: "If the market is large, the use of intermediaries is more likely to be needed because of the high transaction costs of serving large numbers of individual customers. Conversely, if the market is small, a firm is more likely to be able to avoid the use of intermediaries."

The number of buying units per unit of land area determines the density of the market. In general, the less dense the market, the more difficult and expensive is the distribution. A heuristic for market density and channel structure is as follows: "The less dense the market, the more likely it is that intermediaries will be used. Stated conversely, the greater the density of the market, the higher the likelihood of eliminating intermediaries."

2.6.3 Distribution locations

The right distribution channel ensures that customers in different locations around the country can buy your products and get the right level of service from your company. Kotler (2010) mentioned

that to identify the right distribution channel for your business, you need to consider what a channel can offer, including location and reach, skills and resources, management costs and degree of control. Henceforth, businesses need to find a way to deliver quality products to their customers, wherever they are located. This is why selecting a distribution channel is an important aspect of building a competitive advantage for businesses of every size (Bailey, 2013).

2.6.4 Distribution coverage

Sandra (2013) stated that the density or number of stores in a particular geographical area and the type of intermediaries used constitutes the basics of distribution coverage. In the case of products that are purchased by a customer at a physical outlet, there are three main levels of distribution coverage: mass (or intensive) coverage, exclusive coverage and selective coverage. Mass coverage means that a firm tries to place its products or services in as many outlets as possible. Exclusive coverage is the exact opposite of mass coverage with only one retail outlet in a particular geographical area carrying the firm's product. In selective coverage, a firm selects a few retail outlets in a specific area to carry its products (Agro Marketing and Trade Agency (AMTA), 2012).

If your strategy is to grow your business regionally or nationally, highlight the geographical areas you want to reach through a distribution channel and identify a network of distributors or retailers that provide existing coverage of the territories. If you are planning to export products, focus on established distributors with detailed local market knowledge. Consider marketing your products on the Internet so that you can extend coverage to customers where there is no suitable physical distribution network (Antwi & Seahlodi, 2011).

2.6.5 Distribution assortments (varieties)

Kotler (2009), in marketing, goods can be distributed using two main types of channels: direct distribution channels and indirect distribution channels. The direct distribution system is when the product or service leaves the producer and goes directly to the customer with no middlemen

involved. This occurs, more often than not, with the sale of services. Indirect Distribution occurs when there are middlemen or intermediaries within the distribution channel (Fiebiger, 2010).

2.6.6 Distribution inventory

Kotler (2009) stated that inventory decision making involves knowing when to order and how much to order. The Food and Agricultural Organisation (FAO) (2013) wrote that inventory management has an important role in the effective management of the supply chain, e.g. improved customer service, customer satisfaction and reducing the cost of transport.

2.6.7 Transportation

Kanyangela & Kaufilua (2010) content that marketers need to be concerned with their transportation decision. Transportation choices will affect product pricing, on-time delivery performance, and the condition of the goods when they arrive, all of which affects customer satisfaction. In shipping goods to its warehouses, dealers and customers the company can choose among five transportation modes: rail, air, truck, waterway and pipeline. Shippers consider such criteria as speed, frequency, dependability, capability, availability, traceability and cost (Corner, 2010).

According to Fiebiger (2010) time and place utilities created by transportation are an important aspect of customer satisfaction and therefore, are important aspects of the overall marketing offering. Kuvare, Maharero, & Kamupingene (2009) state that transportation is the linkage process in logistics and often consumes much of the resources provided to the logistics function.

2.6.8 Supply chain

Kanyangela & Kaufilua (2010) refers to the way that materials flow through different organizations, starting with raw materials and ending with finished products delivered to the ultimate consumer. Hunt (2011) explains the supply chain as a long channel stretching from raw materials to components to final products that are carried to final buyers. The Food and

Agricultural Organization in its Annual Report (2010) described the Supply Chain as a sequence of (decision making and execution) processes and (material, information and money) flows that aim to meet final customer requirements, that take place within and between different stages along a continuum, from production to final consumption. The Supply Chain not only includes the producer and its suppliers, but also, depending on the logistic flows, transporters, warehouses, retailers, and consumers themselves. In a broader sense, supply chains also include new product development, marketing, operations, distribution, finance and customer service.

2.6.9 Supply chain management

Kotler (2010) defines the supply chain management as a set of procedures for all activities involved in procuring the right inputs (raw materials, components and capital equipment; converting them efficiently into finished products; and dispatching them to the final destination. Dolmans, De Grave, Wolfhagen, & Van der Vleuten (2005) refers to all the management functions related to the flow of materials from the company's direct suppliers to its direct customers, including purchasing, warehousing, inspection, production, material handling and shipping and distribution. Bailey (2013) defined supply chain management as the building of strategic relationships within the supply chain. In the context of this study, the researcher will analyze how strategic relationships within the rice supply chain are being built and recommend the best methods to strengthen the partnership.

2.7 An overview of the supply chain in the horticultural sector

Recent trends that include globalization, urbanization and agro-industrialization, are placing increasing demands on the organization of horticultural produce among small-scale farmers.

2.7.1 Horticultural produce distribution channels in the global market

Antwi & Seahlodi (2011) wrote that horticultural produce and agribusiness supply chains and networks – which tended to be primarily characterized by autonomy and independence of actors –

are now rapidly moving towards globally interconnected systems with a large variety of complex relationships. This is also affecting the ways in which horticultural produce is produced, processed and delivered to the market. Demand and supply are no longer restricted to nations or regions, but have become international processes.

2.7.2 Horticultural produce distribution channels in the domestic market (Namibia)

Fiebiger (2010) indicates that the retail sector is characterized by mostly the Republic of South Africa's (RSA) chains in the horticultural produce and vegetable, food and beverage subsectors, in particular. These retailers source their goods primarily from RSA, but also from other parts of the world, where historical ties (between RSA and Namibia) are still strong and accompanied by sophisticated distribution systems.

2.7.3 Distribution of horticultural produce

Namibia imports most of its high value, processed horticultural produce through the RSA food retailer shops, such as Fruit and vegetable, Shoprite, Spar, OK, Checkers, Pick n' Pay, etc. Supermarkets differ from traditional markets in many ways that also affect procurement channels and marketing options for small-scale farmers (Agro Marketing and Trade Agency (AMTA), 2012). The basic concept is that produce of certain quality can be sold to consumers continuously. For supermarkets in Namibia, this concept is often difficult to accomplish by sourcing from traditional wholesale markets at Etunda Irrigation Scheme, where supply is not always reliable in terms of quantity and quality. Hence, especially for horticultural produce, new procurement systems are established in many developing countries, involving specialized supermarket traders, centralized procurement through distribution centers, and the use of "preferred suppliers" who are able to meet the requirements on quality and consistent supply (Kuvare, Maharero, and Kamupingene 2008). Often, these preferred suppliers are farmers who are contracted by

supermarkets through written or verbal agreements, as is also the case in Namibia (Kuvare, Maharero, and Kamupingene 2008).

The scale of the spread of supermarkets in the developing world, together with the new set of requirements for suppliers has spurred a growing body of literature studying whether or not small-scale farmers can be successfully included in these new supply chains. Of particular interest for this article are the studies on factors influencing market channel choices of horticultural farmers in the Namibian horticultural sector by (Agro Marketing and Trade Agency (AMTA), 2012). Agro Marketing and Trade Agency (AMTA) (2012) concludes that many smallholders face a capital vector threshold that prevents them from participation in supermarket channels. This vector includes physical capital (irrigation, transport, cellphones etc.), financial capital, human capital, and organizational capital. In line with this finding, Kuvare *et al.,* (2014) show that supermarket participants are more likely to have larger farms, own means of transportation, better education, and off-farm income sources; many have also participated in an NGO program that specialized in linking small-scale farmers to high-value markets.

2.7.4 Distribution of local horticultural produce

The findings of the survey, conducted by Balarane & Oladele (2012), revealed the horticultural produce has been introduced amongst subsistence farmers in the northern regions especially farmers at Etunda Irrigation, raising the hopes of communities living in flood prone areas. The introduction of horticultural products, a semi-aquatic crop, was realized a few years ago in the north and north-eastern regions, after heavy floods in the area caused great devastation for farmers who depend on upland staple crops such as mahangu, maize and sorghum to feed their families and make a living. Preliminary results of a joint study between the University of Namibia (UNAM)

and the Ministry of Agriculture have shown that horticultural products can be grown successfully in northern Namibia to address food security during floods.

Bailey (2013) wrote that Namibian-grown, horticultural products, under the Etunda Irrigation farming, have entered commercial trading. The main crops grown at the project are maize, cabbages, tomatoes, groundnuts, butternuts, sweet potatoes, green peppers, watermelons and carrots. Currently the horticultural products are available at any of the National Fresh Produce Hubs.

2.7.5 Barriers inhibiting horticultural produce availability in the shops and markets

The general feeling of the Namibian Government is that locally produced horticultural products are not available on the shelves of the shops in the domestic market. Ndiitah (2015) wrote that this was highlighted by President Hage Geingob in his first State of the Nation Address, where he underscored the imperative to conclude the development of the Retail Charter, stating, "It is unacceptable that 25 years after Independence, Namibian manufacturers are still denied shelf space in retail outlets... the Retail Charter needs to be fast-tracked and concluded before [the end of] 2015." Sophisticated procurement and lack of consumer awareness are some of the barriers inhibiting locally produced horticultural products' availability in the shops and markets, which are discussed as follows:

2.7.6 Sophisticated procurement/distribution systems

According to the CEO of the Namibia Trade Forum, Ndiitah (2015), it is apparent and a concern that retail shops and markets around the country are full of imported products and local manufacturers are faced with barriers to entry into the retail trade due to the sector's procurement practices which date back to the colonial days. The small Namibian population, which is sparsely distributed over a vast terrain, adds further dimensions to considerations for potential retailers, due to the associated increased transportation costs. There are a small number of locally produced

horticultural products substitutes for the RSA imports, with the exception of some primary and processed agricultural products.

According to Lapitomhinda (2014), the Namibia Trade Forum (NTF) whose aim is to chart the way forward for the formation of Task Teams, their terms of references, as well as the guidelines for the development of the Namibian Retail Charter (NRC); which was implemented by the third quarter of 2015 and . This is as efforts are intensifying in what is widely regarded as an essential step to transform Namibia's retail sector. In addition Denver (2013) wrote that the Ministry of Industrialization, Trade and SME Development (MITSMED) moved forward with plans to establish a service charter for the retail sector that will force merchants to stock locally-produced products.

2.7.7 Lack of consumer awareness on locally produced products

The aspect of the role of the consumer seems to be contributing to entry barriers against local horticultural products in shops and markets. This has resulted in several interventions in an attempt to address the issue. Team Namibia's chief executive officer, Roberta (2015), stated that Team Namibia launched the campaign to raise awareness and educate customers on local horticultural products available in retail shops across the country. "Team Namibia wants consumers to start familiarizing themselves with local horticultural products occupying shelf space in retail stores, and to purchase the products and inevitably make them part of their daily lives".

The former CEO of Team Namibia, Daisry (2014), stated that Team Namibia has launched a national retail merchandising campaign, aimed at gaining a sustainable competitive advantage for Namibian products and services by addressing poor local product visibility in shops. According to Team Namibia CEO Daisry Mathias, other challenges that will be addressed include varying point-

of-purchase displays for local goods and supporting promotional, marketing and advertising initiatives for local products.

Michel (2015) stated that Team Namibia announced its own Smartphone mobile application, which was expected to greatly improve the awareness of locally manufactured products available at local retailers. The Smartphone application, which was developed by Green Enterprise Solutions, is a free download for Android and IOS devices.

2.8 Factors affecting locally produced horticultural products' participation in the supply chain

Studies were conducted on rice distribution in some parts of Africa, for example in the Republic of Benin and Senegal. The two studies reveal that product competitiveness, promotion and production capacity are some of the factors affecting locally produced horticultural products' participation in the supply chain.

2.8.1 Competitiveness

Competitiveness is the capacity to provide goods and services at the time and place and in the form desired by national and foreign buyers, and at prices equivalent to, or better than those of other providers, while recovering at least the opportunity costs of resources used. An industry is competitive when it has the capacity to make profit and keep a certain share in the domestic and/or international market. Therefore, small-scale farmers will need to raise their competitiveness to meet the demand of mass consumption of locally produced horticultural products.

The cost assessment survey in the Benin Republic, conducted by Blandine and Barthélemy (2015), revealed that local horticultural produce consumers usually prefer to buy horticultural products at a competitive price. Hence, marketers' task is that of providing horticultural produce at a competitive price. According to the quality assessment survey by Blandine and Barthélemy (2015),

horticultural produce consumers usually prefer clean produce with a low rate of spoilage or rottenness, and with high preservation capacity.

2.8.2 Promotion of horticultural produce

A study conducted in Senegal, by Colen, Demont and Swinnen (2013), concluded that once a sufficient supply of clean, quality fresh produce at a competitive price is ensured, investment in promoting Senegalese horticultural produce would be one possible strategy to stimulate the demand for local horticultural produce. However, local production must offer the characteristics demanded by consumers and the major transaction costs must be addressed.

2.8.3 Increased production capacity

Colen, Demont and Swinnen (2013), wrote that low horticultural production capacity undermines farmers' ability to participate in the horticultural produce supply chain to the market. Risk-averse farmers are reluctant to make investments such as purchasing inputs. Investment in inputs and techniques for increasing productivity requires a willingness to cope with risk.

2.9. Legislation Framework

2.9.1. Market Share promotion (MSP)

Efforts to increase the demand for Namibian horticultural products are increased through a policy known as the Market Share Promotion initiative (MSP), which is administered by the Namibia Agronomy Board (NAB) National Horticulture Task Team (NHTT) (Bailey, 2013). The NHTT implements the Market Share Promotion Scheme (MSPS) that aims to open up the market to local producers. Under the MSPS, importers of fruit and vegetables are required to buy 44% (currently) of their produce from Namibian producers before they can be issued with an import permit. The permit allows them to bring the rest of their stock in from other countries, especially South Africa. This has the effect of creating demand for local produce. However, the lack of a domestic fresh produce marketing framework allows for discrimination against Namibian small scale producers

who neither have the capacity to produce the required quantities nor have access to transportation facilities and hence they find themselves missing out on the opportunity to market their produce (Agro Marketing and Trade Agency (AMTA), 2012)

According to the NAB, All traders who do not reach the required MSP are only issued with a restricted import permit. Those who have purchased exactly or more than the required MSP are issued with an unrestricted import permit. The NHTT, at its quarterly meeting reviews the production conditions in the country and grants amnesty, if necessary, in order to assist deserving traders to reach or come close to the threshold required. Amnesty means that traders may be allowed to buy less than the required MSP rate and still qualify for an import permit.

Amnesty by Merit

The "amnesty by merit" requires traders to show that they have planting agreements with producers well in advance. It is only when the trader can show that a serious problem has happened to prevent the planting programme from being implemented as planned that the trader can be granted amnesty. This kind of amnesty was started to encourage traders to actively seek fruit and vegetable producers as partners from whom they can buy to meet the MSP rate. This may be an opportunity for small producers of fruit and vegetables to convince their local buyer to make a planting agreement with them to help ensure a market for their producer. Under this scheme, a comprehensive national database has been developed. All information regarding expected production, actual yields, hectares panted, imports and exports can be found on the database and periodically (every 3 Months) shared with traders and producers (Agro Marketing and Trade Agency (AMTA), 2012).

2.9.2. Agricultural Industry Act

Namibia has an Agronomic Industry Act, 20 of 1992 in place whose main aim is "To promote the agronomic industry; and to facilitate the production, processing, storage and marketing of controlled products in Namibia" according to the NAB. These functions are assigned to different agencies, whereby, Facilitation of Production is mandated to the Agriculture Business Development Agency (AgriBusDev), whereas the facilitation of Processing, Storage and Marketing of controlled products is mandated to the AMTA.

2.9.3. The Namibia Agronomic Board (NAB)

The Namibia Agronomic Board (NAB), came into existence as a statutory body on 1 April 1985 in terms of the Agronomic Industry Act. In terms of section 9 of the Agronomic Industry Act, the objectives of the Namibian Agronomic Board are to promote the agronomic industry and to facilitate the production, marketing and processing of controlled products in Namibia.

According to the Act, some of the administrative and daily operational mechanism of the NAB is performed by the NAB Secretariat whose main functions are: (1)Facilitating the marketing of controlled agronomic crops and regulating the marketing environment; (2) Promoting domestically produced agronomic crops, fostering and improving the market for all declared crops and products thereof via its agent AMTAN; (3) Maintaining a regulatory framework for controlled crops and the products produced from the crops, recommending crops for gazetting, maintaining quality standards and the monitoring of controlled agronomic crops and their products; (4) Managing the domestic trade environment and facilitating the development of grain and horticultural markets to ensure that its clients are not exposed to unfair trading practices; (5) Developing projects and sources of funding to enhance small-scale agronomic production and marketing and (6) Making

recommendations to and advising the Ministry of Agriculture, Water and Forestry (MAWF) on all issues relating to the agronomic industry.

2.10. National Fresh Produce Business Hubs

In line with the Government of the Republic of Namibia's, Vision 2030 and Green Scheme Policy, the Ministry of Agriculture, Water and Forestry (MAWF) has currently developed two Fresh Produce Business Hubs in Ongwediva and Rundu and is in the process of developing the central hub in Windhoek. These facilities provide a national marketing and centralized infrastructure for fresh produce in Namibia.

Fresh Produce Business Hubs are national import substitution mechanisms that required stimulating an increase in local production of fresh produce (fruit, vegetables, meat, dairy and fish) for the domestic and exporting markets. The Fresh Produce Business Hubs also promote the processing and value addition of fresh produce so as to create a diverse range of local products across the value chain. This will ultimately contribute to employment creation within the agricultural sector in the country. The Fresh Produce Business Hubs provide:

- Cold storage facilities,
- Grading, sorting and packaging infrastructure
- Marketing and trading (wholesale & retail)
- Transport and logistics

The Namibian fresh produce industry is dominated by South African producers through South African fresh produce markets supplying most of the country's local fresh produce demand with a fragmented and limited fresh produce supply coming from local producers. The objective of the Fresh Produce Business Hubs is to alter the substantial reliance on imports for Namibian fresh

produce consumption. This means that the Fresh Produce Business Hubs will actively seek to develop the internal capacity for production. Improved resource utilization within the country will translate to the creation of job opportunities, alleviation of poverty and improved national food security.

2.10.1 National Fresh Hub marketing conceptual framework

The conceptual framework of the fresh produce value chain as adopted from AMTA involves farmers who are classified into different categories namely: green scheme, smallholder, commercial, private farmers (Corner, 2010). These farmers practice market-led production, whereby farms are organised in numbered production blocks and planting programs synchronised to ensure increased harvested volumes. Before planting is carried out, there are commissioned or contract marketing agents who assure farmers of a guaranteed market prior to planting as well as defining quality and volumes for the fresh produce. To cater for logistics to market or fresh produce hubs, croping plans are organized such that transport volumes from one group are economical (fuel cost per kg is minimised). Minimum 7MT per collection from group. Collections are done at least once per week per farmer/group. Fresh Hubs are responsible for sorting, grading, primary processing and packaging.

For the hub business to break-even, set targets include 300MT fresh produce transacted per week per hub in accordance with Good Hygiene Practice standards for the market hall and HACCP processing standards. Once fresh produce has been collected from farmers, the fresh hubs then further classify it into produce for the local market and distribute it to Namibian retailers, greengrocers. They also facilitate for export to regional and international markets. All fresh produce merchants are licenced by the Ministry of Agriculture, Water and Forest through AMTA. Phyto-certificates and border controls by MAWF, quality and safety standards enforcement by

MAWF through AMTA. For the safety of fresh produce for the consumers, targeted safety and quality standards for vegetables and fruit in Namibia, whether grown locally, imported or exported, must meet international standards.

In certain regions of Namibia, the demand for fresh produce is greater than the supply today. This suggests a significant market potential for horticultural small-scale farmers. However, in some regions, producers lack interest in selling fresh produce to local markets to meet the existing demand (Kanyangela &, Kaufilua, 2010). Additional research is needed to identify the degree to which market barriers restrict the further development of fresh produce systems in a given region and the extent to which the benefits of direct market channels for local producers outweigh the perceived advantage of a larger volume of sales.

The price of fresh produce is another important factor in household consumers' buying decisions. Notably, the price of fresh produce seems to be a more important purchasing criterion for general household consumers than for direct market household consumers. According to Bailey (2013) general consumers indicate that high prices of fresh produce constitute a barrier to purchasing local produce. However, among Horticultural small-scale farmers' consumers, price is not generally ranked as an important factor, let alone a barrier (Bailey, 2010). This likely relates to the self-selection biases of market participants and the demographic composition, which tends to reflect higher income levels and educational status (Hunt, 2011).

2.11 SUMMARY

This chapter has presented and discussed the background and set up of the horticultural industry and the legislative environment of Namibia. The chapter also provided a review of relevant literature on the Small Scale Farmers, covering challenges encountered by Small Scale Farmers in general, the perceptions of existing markets and how farmers and stakeholders can overcome the

challenges encountered when marketing or choosing a market for certain produce. The next chapter will present the methodology of the study.

CHAPTER 3

RESEARCH METHODS

3.1 Introduction

This chapter presents the research methods employed for this study. It begins by explaining the difference between research designs and research methods and later on describes the research methods used in the current study and why. It also presents the types and sources of data and briefly discusses the study areas; thereafter it describes the data collection, sampling method and sample size, reliability of instruments used and ends by covering the research ethics observed in carrying out the research.

3.2 Research Design

Research designs are plans and procedures for the research, while research methods are tools and processes for obtaining and analysing data (Babbie & Mouton, 2012). Oyedele (2010) propounded that a research design is a plan and structure of investigation so conceived as to obtain answers to research questions and constitutes the blue print for collection, measurement and analysis of data. A research design is viewed as a mental plan for the research that highlights basic strategies applied to the research to obtain relevant data (Blaikie, 2010). From the definition above, a research design can be understood as, the complete plan on how the entire research will be undertaken, the total road map of how the whole research will be conducted to accomplish its objective.

This study employed a mixed method approach to collect primary data. Oyedele (2000) specifies that mixed approaches link field methods such as observation and interviews (qualitative data) with traditional surveys and questionnaires (quantitative data) in one study. Cohen, Manion, & Morrison (2008) contend that qualitative research can be described as being non numerical,

descriptive, using words and applying reasoning. Blaikie (2003) asserted that qualitative research is commonly used to develop theory or explore a topic. It describes the situation and gets the feeling and meaning of the situation. In contrast to qualitative research, quantitative research on the other hand, focuses on showing causal relationships, testing theory and establishing facts. It is based on the measurement of quantity or amount (De Vos, Strydom, Fouche, & Delport, 2011). The use of a mixed methods methodology helped to triangulate the study findings collected from two different instruments (closed ended questionnaire and an interview). This also helped to provide a synergy on the findings collected from the various participants and various research approaches since each approach has its own shortcomings.

Given the nature of the present study, both qualitative and quantitative approaches were found to be appropriate to capture the needed data. The qualitative dimension of the study adopted is the descriptive type. In this approach, an in-depth face to face interview was used to collect data from the AMTA employees on the factors influencing horticultural farmers in their marketing of produce. For example, qualitative research was most appropriate to obtain the respondents' personal perceptions, ideas, feelings and behaviors with regard to marketing options. On the quantitative dimension the study adopted the descriptive non-experimental design. Bryman & Bell (2015) stated that non-experimental designs are mainly used in descriptive studies in which the units that have been selected to take part in the research are measured on all the relevant variables at a specific time. Quantitative research was used in assessing the relationship between the various variables in the study which included age, type of crop and which marketing option. The quantitative dimension of the study utilized a closed ended questionnaire which was administered to the horticultural famers for Etunda irrigation scheme.

Christensen, Johnson, & Turner (2010) further mentioned the types of mixed methods as convergent parallel design whereby the researcher relates both quantitative and qualitative data and analyses the results simultaneously, the explanatory sequential design, whereby the researcher first collects and analyses quantitative data, then the qualitative analysis will be based on the quantitative outcomes. This study adopted the convergent parallel design to interpret the quantitative and qualitative data together. This design was suitable for the current study as it necessitated the reseacher to elicit the opinions of the farmers and all the stakeholders for the Etunda irrigation scheme on the various factors that influence the marketing of their produce.

3.3 POPULATION AND SAMPLE

3.3.1 Population

A population is referred to as "the group of a well-defined set of people or objects, from which a sample is selected" (Kruger, 2013:56). It is therefore correct to say that a research population is a large collection of individuals or objects that is the main focus of an inquiry (De Vos, Strydom, Fouche and Delport, 2011:34). In addition, a research population is also known as a well-defined collection of individuals or objects known to have similar characteristics (Babbie and Mouton, 2012:56). All individuals or objects within a certain population usually have a common, binding characteristic or trait. In this research the population included all 64 small scale horticultural farmers at the Etunda Irrigation Scheme and 18 employees of AMTA at AMTA Ongwediva Fresh Produce Hub (AMTA, 2012). Therefore, the total population was 66 participants

3.3.2 Sampling and sampling procedures

Sampling refers to choosing individual units to measure from a larger population (Babbie & Mouton, 2012). This is to say that sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly

generalize our results back to the population from which they were chosen (Christensen, Johnson, & Turner, 2010). Belland, French, & Ertner (2009:23) define a sample as "the section of population chosen for a study".

A sample random sampling method was used; the first stage identified all small-scale farmers engaged in horticultural production in the Etunda Irrigation Scheme. The second stage involved random sampling to draw a sample of 60 small-scale farmers and 6 participants selected from the employees of AMTA to undergo an in depth face to face interview. The total sample was therefore 66 participants.

3.4 Data collection instruments

For this study, the researcher used a self-administered open and closed ended questionnaire to collect data from the farmers, drawing questionnaires that were to bring out credible views from the participants. The questionnaire was found to be the most appropriate technique to use for the purpose because it was easy to administer and it collected a lot of data in a little time.

The self-administered questionnaire, is a questionnaire that is administered to the respondents and the respondents can respond to it at their own time wherever they maybe. The questionnaires were structured in a way that allowed for quick responses because they were simple with clearly laid down questions. Besides that the researcher used simple and straight forward wording and ordering of questions to ensure that they were unbiased. The researcher distributed the questionnaires to respondents using the non-probability sampling technique to collect the needed information. Self-administered questionnaires enabled the respondents to evaluate their responses and fill the questionnaire at their own pace.

Anyon (2009) highlighted that the questions in the questionnaire should be focused on investigating factors of the research. In the case of this research the questions focused on the factors influencing marketing of horticultural produce among small-scale farmers at the Etunda Irrigation Scheme. In line with Anyon (2009), in addition, the questionnaire also solicited answers that would help and support small-scale farmers in making marketing choices. In this regard closed-ended questions designed to solicit specific information should were included in the questionnaire. In addition to this, the questionnaire also made use of the open-ended questions which allowed the respondents to express their views freely, without restriction.

The researcher also used the self-administered (delivery and collection) questionnaires to collect data from small-scale farmers and the management of AMTA. The questionnaires consisted of both the closed and open-ended questions because they were easier to administer and user friendly. In this way the respondents had an opportunity to express themselves especially when they responded to the closed ended questions. The questionnaire was divided into two parts namely: Part 1 which consisted of personal information and Part 2 which consisted of marketing choice information.

Most of the questions on the questionnaire were geared towards getting as much data as possible. This was necessary in order to get relevant information to address the objectives of this research. The questionnaire was written in English because it was under the assumption that most of the respondents speak, read and write English. However, in cases where some respondents struggled with English, the researcher helped to translate to the respondents in the Oshiwambo languages and other native languages. Using English, Oshiwambo and other native languages helped the researcher especially in situations where the respondent may not have been well versed in English

or vice versa. This allowed the researcher to assess the reliability and to compare the findings in this study with the findings of other scholars.

Each question in the questionnaire was developed to tackle a specific objective, research question or hypotheses of the study (Collis & Hussey, 2003). The questionnaires were divided into four parts, namely: Parts 1, 2, 3 and 4. Part 1 described the personal or demographic information. Part 2, factors affecting marketing of horticultural produce among small scale farmers in the Etunda community. Part 3, popular market channels being used by small scale farmers at the Etunda Irrigation Scheme, and Part 4 to investigate the small scale farmers' behaviors in market engagement at Etunda. This was done using both the close and open ended questions. Both open ended and close ended questions were prepared and used by the researcher. Face to face interview was conducted in getting information from the participants by using a structured questionnaire to collate information from them.

3.5 Analysis of data

Once the data is collected it is important that this data should be interpreted in order to enhance its usefulness. Data analysis involved examining, categorizing and tabulating data using descriptive statistics, where frequencies and percentages were used to summarize information. The researcher also used coding and memo to the grouped data into themes which were aligned to answer the research questions for the study. All this was concerned with the organization and the interpretation of information (other than numerical information, which is generally the preserve of quantitative research) in order to discover any important underlying patterns and trends. Following the same method with Cohen, Manion, & Morrison (2008), the researcher used descriptive statistics such as bar charts and pie chart, tables, frequencies and percentages to analyze the data.

3.6 Data collection procedures

The researcher obtained the consent of respondents to conduct the study. Interview schedules were drafted to allow the scheduling of appointments from each of the participating members. Each of the participating members completed an informed consent form. The researcher obtained an ethical clearance letter from the University before undertaking the study. After confirmation with respondents, the researcher visited the specific participant at agreed times. In addition, questionnaires were also dispensed to other participants and were collected after three hours by the researcher from the premises of AMTA. Those for the farmers were collected after one week from the small scale farmers at Etunda.

3.7 Reliability and Validity of instruments

Validity and reliability are concepts that are often used in a research study to make sure that the findings of the study are reliable and valid. This section presents these two issues with great depth

3.9.1 Validity

Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Zohrabi, 2013). Validity can be sub-categorised as external and internal validity. Babbie (2015) describes external validity as the extent to which the results can be generalised beyond the sample used in the study. Internal validity is the extent to which factors influencing patient satisfaction are a true reflection of reality rather than the result of the effects of extraneous or chance variables, not necessarily related to the issue under investigation. Zohrabi (2013:259) revealed that validity of a questionnaire can be established using a panel of specialists which explore theoretical

construct. According to Bolarinwa (2015) this form of validity exploits how well the idea of a theoretical construct is represented in an operational measure, that is, the questionnaire. This is called a translational or representational validity. Two subtypes of validity belong to this form namely face validity and content validity. On the other hand, questionnaire validity can be established with the use of another survey in the form of a field test and this examines how well a given measure relates to one or more external criterion, based on empirical constructs. These forms could be criterion-related validity and construct validity (Deniz & Alsaffar, 2013). Construct validity is defined as a thing that is presented to explain some characteristic of people or activities, such as mechanical ability, intelligence, or introversion. Saunders et al., (2009) defines construct validity as the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure. This term is normally used when referring to constructs variables such as attitude scales, aptitude and personality tests (Blaikie, 2003). The criterion-related is explained by distinguishing the presence or absence of one or more principles considered to represent traits of interest (Nyaboga et al., 2011). Bryman & Bell (2015) suggested that predictive validity is concerned with the ability of the measures (questions) to make accurate predictions. Content validity for this study was measured by submitting the questionnaire to the supervisor who checked to see if the contained questions were sufficient enough to answer the research questions of the study.

Content validity was accomplished by asking research experts at University of Namibia and the supervisor of the study to assess the questionnaire to establish if the items were representative of the outcome.

3.9.2 Reliability

Reliability refers to the degree to which the results obtained by a measurement and procedure can be replicated (Zohrabi, 2013:12). Lack of reliability may arise from divergence between observers or instruments of measurement such as a questionnaire or instability of the attribute being measured. There are three aspects of reliability, namely equivalence, stability and internal consistency or homogeneity (Bolarinwa, 2015:196). Stability is measured to ensure that the same results are obtained when the research instrument is used consecutively for two or more times. A test retset method is used to measure stability (Zohrabi, 2013). Internal consistency is measured to ensure that all subparts of an instrument measure the same characteristic. Split-half method is used to measure this aspect of reliability (Bolarinwa, 2015). Correspondence is used when two observers study a single phenomenon simultaneously. Inter-rater reliability is used to measure this aspect (Deniz & Alsaffar, 2013). Test retest reliability was done to establish the reliability of the questionnaire. This was done by administering the questionnaire twice to the same participant at different times.

Reliability refers to the degree to which data collection techniques and procedures yield constant findings (Kumar, 2013). Kumar (2013) further explained that reliability is about the robustness of the questionnaire and whether or not it will produce constant outcomes at different times and under different conditions. The researcher was present when the questionnaires were completed in order to attend to all queries relating to the questionnaires. This ensured the reliability of the research.

3.9 Ethical considerations

Ethical considerations are based on ensuring that in the process of the research the researcher must ensure that they follow the correct channels and do the right thing to avoid actions that may be tantamount to the contravention of the rights of the people involved in the research (Babbie &

Mouton, 2012). In the research study the participants voluntarily participated in the study as informed consent was sought from all. All participants used pseudonyms during the completion of the questionnaire. This was done to maintain anonymity and confidentiality on the side of the participants. The researcher tried as much as possible not to harm participants physically or emotionally. The researcher also informed the participants about their rights either to participate or not to participate in this survey with full knowledge of relevant risks and benefits.

3.10 SUMMARY

This chapter dealt with the methodology employed by the study. The adoption of the mixed method approach was covered and justified in this chapter. The population and the sampling were also defined. The methods of collecting data by means of interviews and questionnaires, procedures and instruments used to analyze the data were also explained. Finally, the ethical considerations used throughout the study were clarified. The next chapter presents and discusses the results of the study.

CHAPTER 4
RESULTS AND DISCUSSION

4.1 **Introduction**

This chapter presents the findings of the study. The first part will present the biographical information of the participants followed by a presentation of the findings on the factors affecting the marketing of horticultural produce among small scale farmers in the Etunda community. This chapter will then present the most popular marketing channels being used by small scale farmers at the Etunda Irrigation Scheme. The last part of the chapter will present the challenges affecting small scale farmers' marketing channels at Etunda. Finally, this chapter will present the small scale farmers' behaviours in market engagement at Etunda. Each of the outcomes on the objectives will be reconciled with the reviewed literature.

4.2 **Presentation of the Quantitative data from the farmers**

The quantitative data was collected through a questionnaire which had closed ended questions and this was given to the Etunda Horticultural farmers. The findings were analyzed using the SPSS and the Microsoft Excel software. Tables and graphs were generated and these findings were aligned to answer the research questions of the study. Below are the detailed results.

4.2.1 **Gender of the participants**

The study established the gender distribution of the participants. Figure 4.1 below shows the results of the gender distribution of the participants:

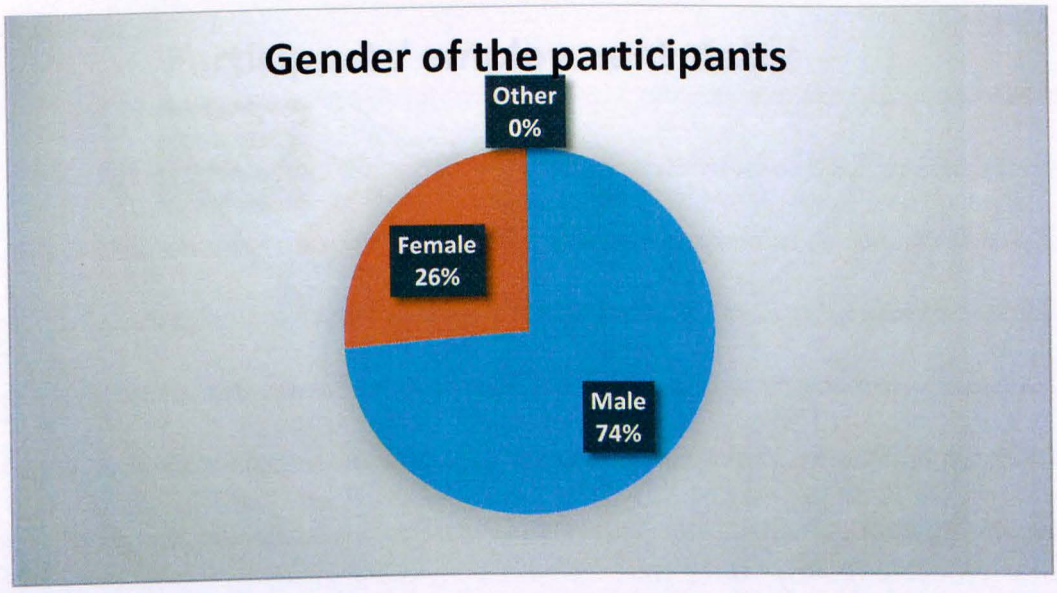

Figure 4.1: Gender of the participants

The figure above shows that 26% of the participants were female while 74% were male. These findings reveal that there are more males involved in the farming of horticultural products at the Etunda Irrigation Scheme than females. These findings show that male participants are more engaged in farming process than women. This is basically depends on the tedious nature of the occupation.

4.2.2 Participants' employment status

The study comprised of farmers from Etunda who were involved in the production of various horticultural products. The figure below shows the numbers of the participants in the study by status:

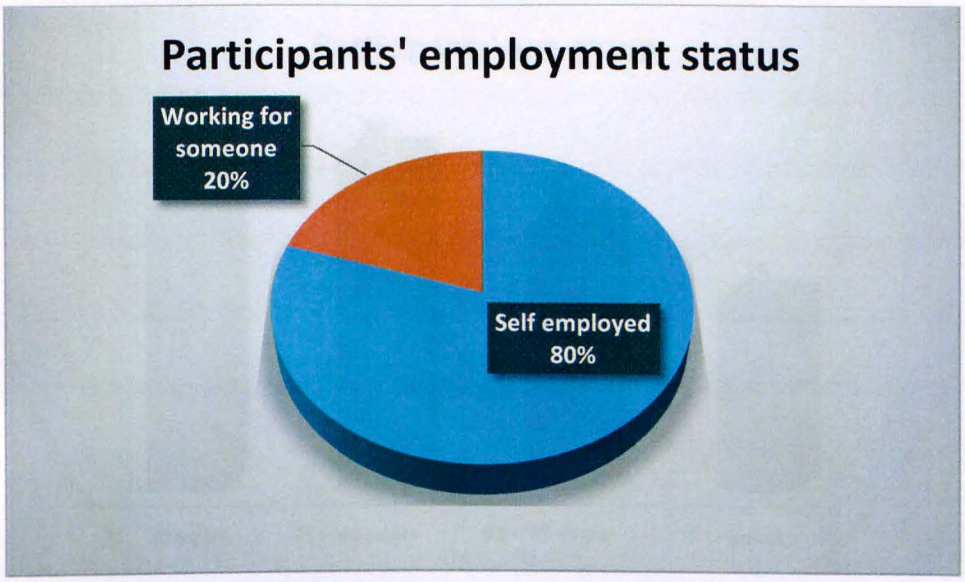

Figure 4.2: Participants' employment status

The figure above reveals that 48 of the participants (80% of the respondents) were farm owners who are also owners of the land while 12 participants (20% of the participants) were working for someone in Etunda. These results reveal a fair representation of the knowledgeable persons who were aware of the challenge being faced in the marketing of the produce at Etunda. On this note, Kotler (2009) reveals that marketing challenges are well understood by individuals who are directly involved in the problem.

4.2.3 Participants' age group

The study unveiled the age groups of the participating members and the figure below shows the results on this aspect.

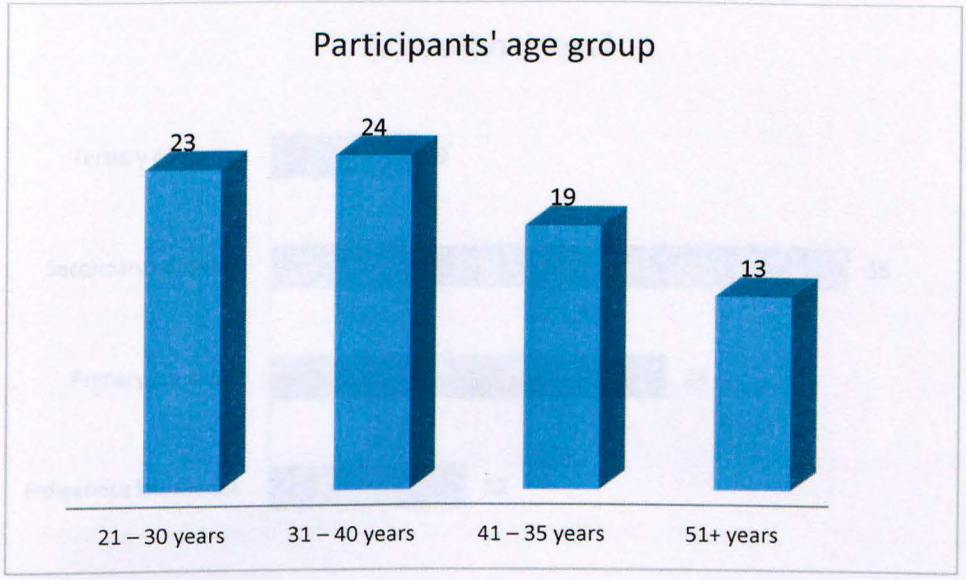

Figure 4.3: Participants' age groups

The figure shows that the majority of the participants in the study were aged between 31-40 years followed by those who were between 21-30 years. These findings further reveal that those participants who were above 51 years were 13. These findings show that most of the participants were of the working class age and the elderly people were mostly not involved in the production of horticultural products.

4.2.4 Participants' level of education

The study elicited the level of education of all the participating members. The figure below shows the results on this aspect:

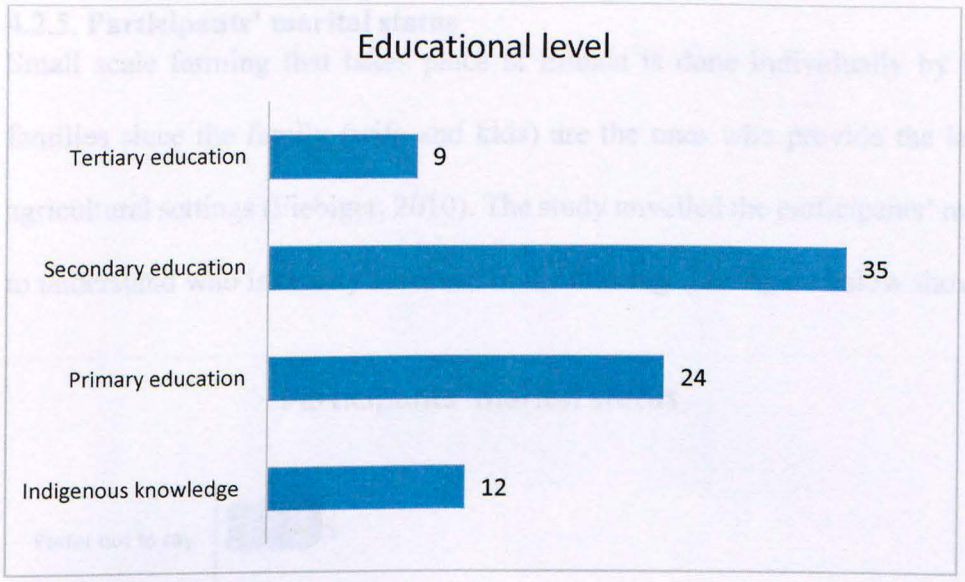

Figure 4.4: Participants' level of education

The figure above shows that the majority of the participants (25) had done secondary education while only nine had tertiary education, 23 had only done primary education and 12 had not gone through formal education. These finding suggests that the majority of the participants had done at least primary education and should at least have an idea on how the growing and marketing of horticultural products should be done. These findings concure with the findings of Antwi & Seahlodi (2011) who indicated that some minimum level of formal education is beneficial for one to be able to make a meaningful decision to market their produce. On the same note Balarane & Oladele (2012) stated that the level of education is an important component in the marketing of products. Those individuals whose level of education is low may not be able to know what marketing channels to take because they are limited and their level of understanding of marketing variables is low.

4.2.5. **Participants' marital status**

Small scale farming that takes place at Etunda is done individually by individuals who have families since the family (wife and kids) are the ones who provide the labour in most African agricultural settings (Fiebiger, 2010). The study unveiled the participants' marital statuses in order to understand who is mostly involved in the farming. The figure below shows the results.

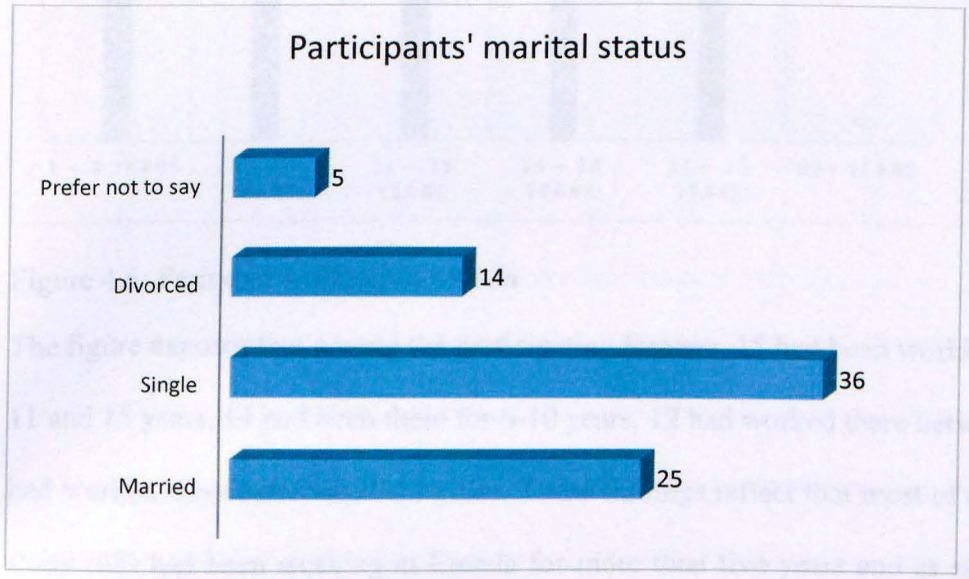

Figure 4.5: Participants' marital status

The figure above shows that 35 participants who formed the majority are single while 26 participants involved in the Etunda horticultural farming are married. The issue of marital status seemed to be sensitive for some as they were not willing to disclose their status. Four participants preferred not to reveal their marital status and 13 participants were divorcees. These finding suggest that the ones who are married might be involved in farming with their families especially the women and children.

4.2.6 Period of working in Etunda

The study also divulged the participants' period of working at Etunda in order to have a better understanding of their experiences with the marketing channels, challenges and procedures. The figure below shows the results from the participants.

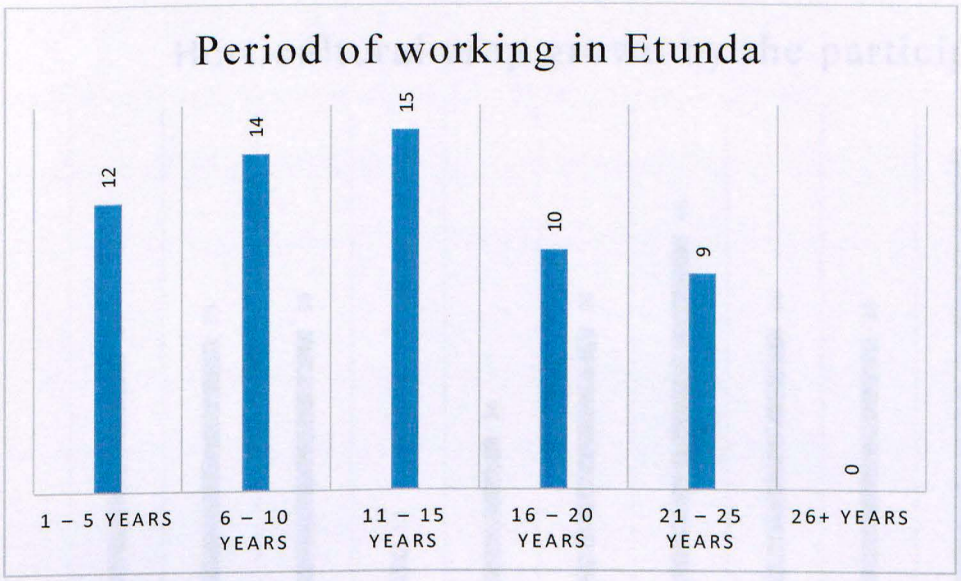

Figure 4.6: Period of working in Etunda

The figure exposes that among the participating farmers, 15 had been working at Etunda between 11 and 15 years, 14 had been there for 6-10 years, 12 had worked there between 1 and 5 years, 10 had worked there between 21-25 years. These findings reflect that most of the participants in the study (48) had been working at Etunda for more than five years and as such they should have developed a better understanding of the challenges faced in the process of marketing horticultural produce. Wilson (2000) argues that an individual needs time to understand how marketing processes work. For this to happen one needs to work with the same system for quite a long period of time.

4.2.7 Main crop being grown

The challenges faced in the marketing of horticultural produce vary from crop to crop. As a result of this, there is no uniform challenge in the marketing processes of horticultural goods (Corner, 2010). For this reason the study elicited the type of crop which each of the farmers grows the most in order to match the marketing challenge with a specific crop. The figure below shows the results on this attribute.

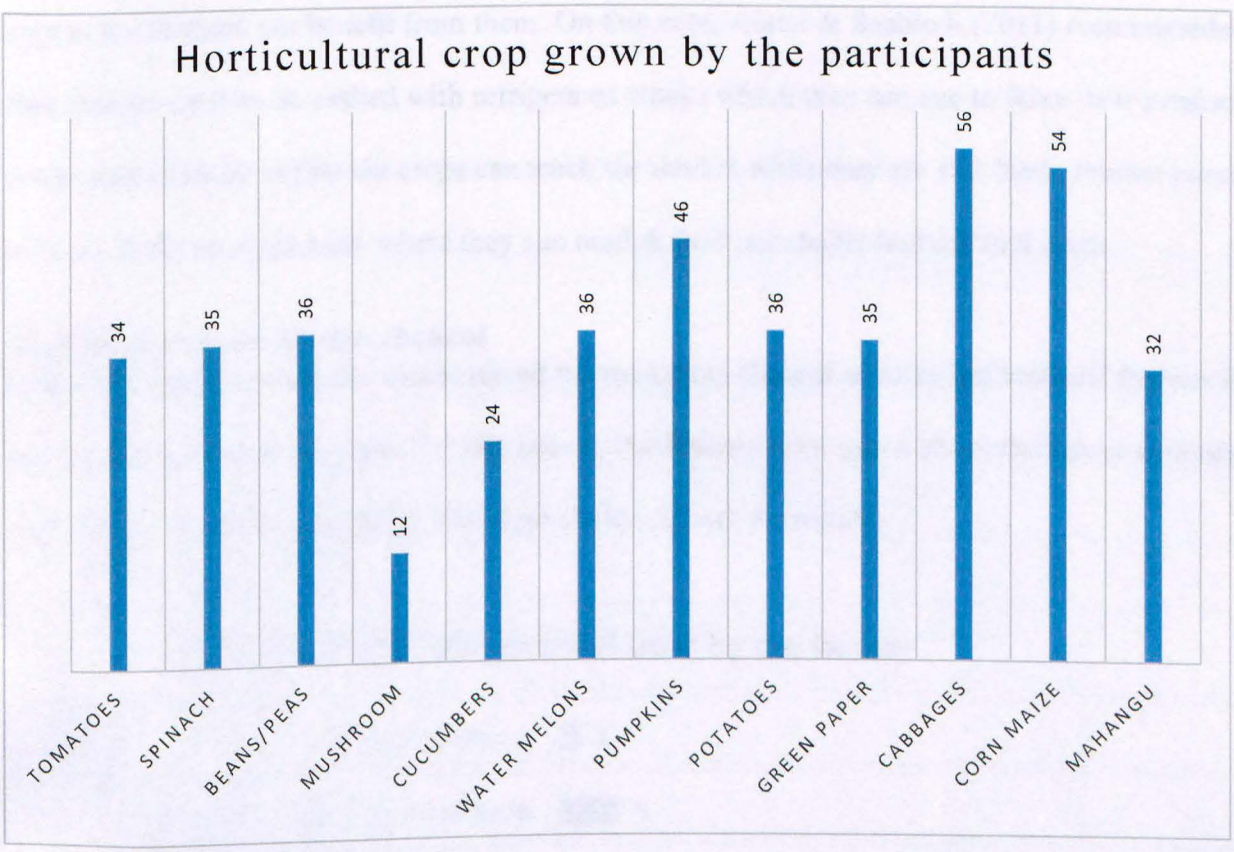

Figure 4.7: Main crops being grown

The figure above shows that the most common horticultural crops grown by most of the farmers were: cabbages which were grown by 56 farmers followed by corn maize grown by 54 farmers, then pumpkins grown by 46 farmers. Tomatoes, spinach, beans, water melons, potatoes, green paper and butternuts were grown by more than 30 farmers but less than 40. Carrots were grown by only 12 farmers. These findings reveal that mushroom is the least common plant grown at Etunda. This is probably because of the expenses and special skills needed to nurture mushrooms and the sensitivity of the crop to environmental contamination. These results also reveal that there were some crops which seem to be easy to market and which probably take less time to go bad, such as cabbages and corn and most farmers seem to be rushing to grow them compared to some crops like carrots and spinach. Agro Marketing and Trade Agency (AMTA) (2012) recommended that most perishable horticultural crops need to be rushed to the market as soon as they are harvested

so that the farmers can benefit from them. On this note, Antwi & Seahlodi (2011) recommended that farmers need to be assited with refrigerated trucks which they can use to ferry their produce to the market place so that the crops can reach the market while they are still fresh. Farmers need to have close range markets where they can market their perishable horticultural crops.

4.2.8 Most popular Market channel

One of the aims of this study was to unveil the marketing channel used by horticultural farmers in the marketing of their produce. For this reason, the farmers were asked about their most common marketing channel in this regard. The figure below shows the results:

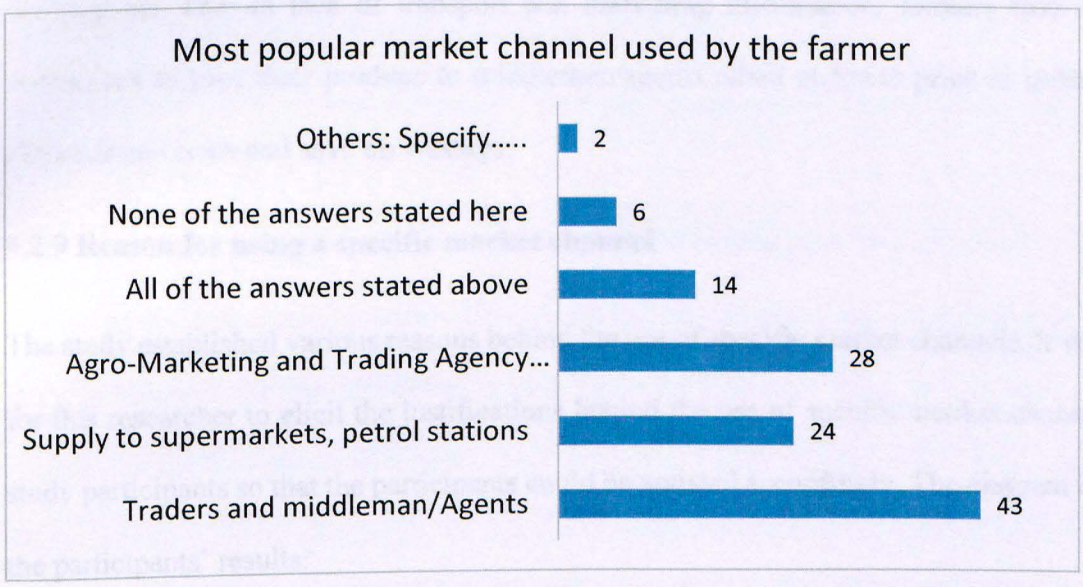

Figure 4.8: Most popular market channels

The figure above shows that the most common market channel was the traders and middleman/agents with about 43 farmers who utilised this channel, this was followed by the Agro-marketing trading channel which was utilised by about 28 farmers, 23 farmers indicated that they were supplying their produce to local supermarkets, six farmers had other channels that they used to market their produce. These findings concur with the earlier findings of Corner (2010) who

indicated that there is a need to assist farmers in marketing their horticultural products. Farmers who lack appropriate information on how and where to market their produce may end up quitting the farming business yet it is one of the greatest businesses that assists Namibia to become self-sufficient in food production rather than relying on South African food supplies. Due to inconsistencies in production and quality, farmers need to be organised and embrace market led production in order to gain more access to the lucrative formal markets. This could be done with support of established agencies such AMTA and AgriBusDev through creating capacity building programs, creating comprehensive cropping programs and establishing production quality control mechanisms. Due to lack of transport and marketing information, farmers find it easier and convenient to give their produce to middlemen/agents albeit at lower price in order to cut own transactional costs and save on wastage.

4.2.9 **Reason for using a specific market channel**

The study established various reasons behind the use of specific market channels. It was important for this researcher to elicit the justifications behind the use of specific market channels from the study participants so that the participants could be assisted accordingly. The diagram below shows the participants' results:

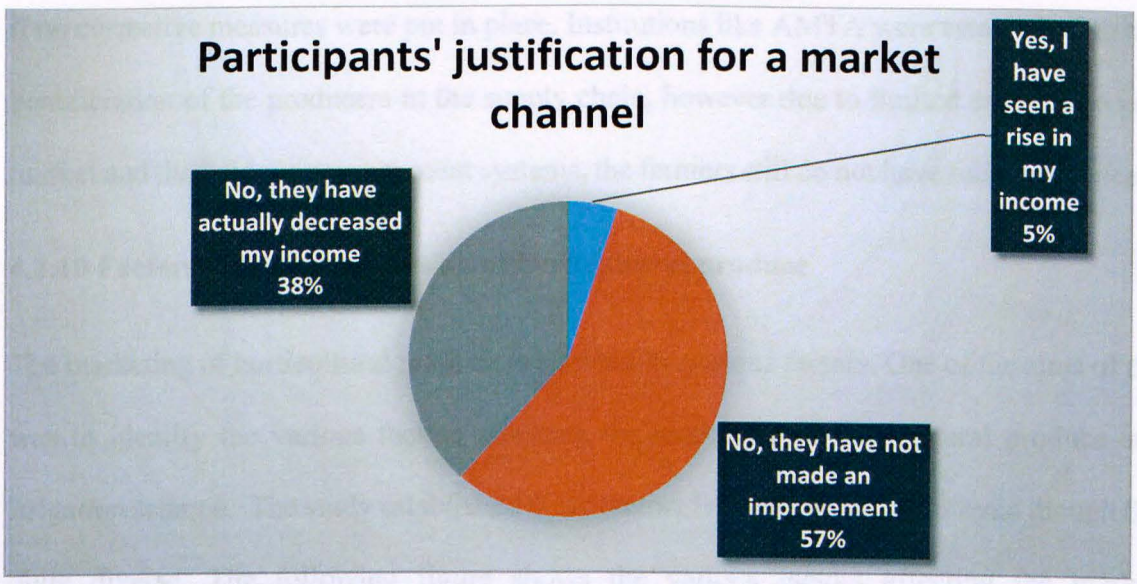

Figure 4.9: Participants' justification for a market channel

The figure above shows that 57% of the participants indicated that their current market channel which is supply to Agro-marketing and trading had not been able to make a significant improvement in their businesses, 38% showed that their market channels which is supply to the traders and middle men and agents have actually lead to a decrease in their income. Only 5% of the participants confirmed that their market channels which is supply to the markets and petrol station has resulted in a meaningful increase in their income. These findings concur with the findings of Antwi & Seahlodi (2011) who wrote that horticultural produce and agribusiness supply chains vary considerably from individuals involved in the production of various produce. On this note, the United Nations Annual Report (2010) described the supply chain as a sequence of (decision making and execution) processes and (material, information and money) flows that aim to meet final customer requirements, that take place within and between different stages along a continuum, from production to final consumption. This supply chain needs to reward the farmer if s/he has to remain competitive in the business. In the current study, the supply chain processes didn't seem to be benefiting the farmer that much and as a result the farmer could be out of business

if no corrective measures were put in place. Institutions like AMTA were established to maximize beneficiation of the producers in the supply chain, however due to limited capacity to access the market and the bureaucratic payment systems, the farmers still do not have full confidence in them.

4.2.10 Factors affecting marketing of horticultural produce

The marketing of horticultural produce is affected by various factors. One of the aims of this study was to identify the various factors affecting the marketing of horticultural produce at Etunda irrigation scheme. The study established these factors from the participants even though they were quite diverse. The following figure shows the various factors affecting the marketing of horticultural produce in their different diversities.

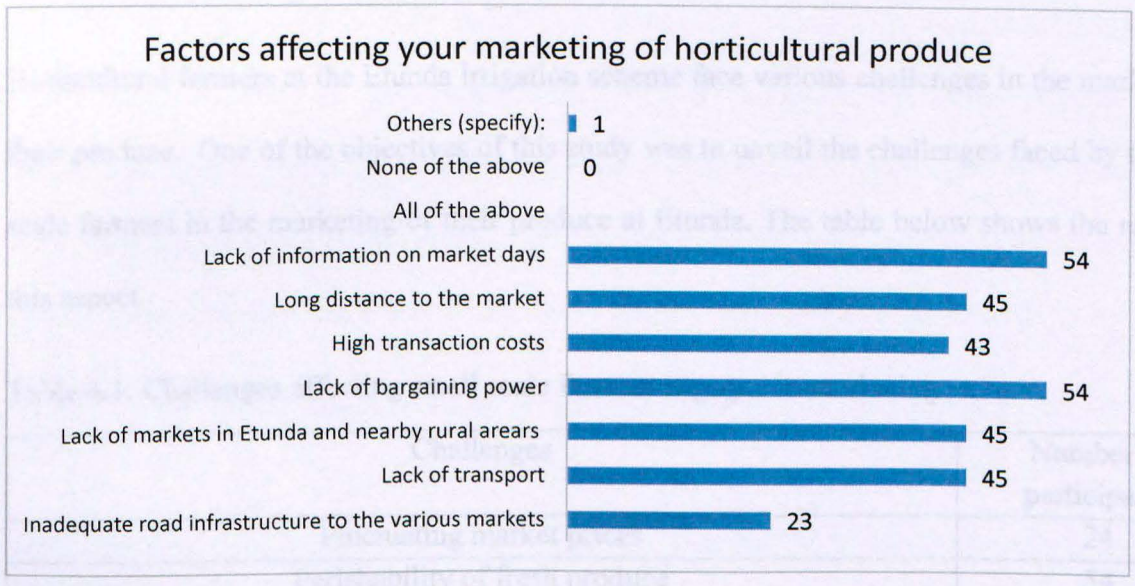

Figure 4.10: Factors affecting marketing of horticultural produce

The figure above reflects that 55 farmers indicated that their horticultural marketing processes were affected by lack of information on market days and lack of appropriate bargaining power, long distance to the market-place, lack of transport and lack of markets in Etunda and nearby rural

areas. These factors were cited by 45 participants. Inadequate infrastructure was stated by only 22 participants, while high transaction costs was cited by 42 participants. While remaining which are ascribed as others indicated that other logistic issues that are beyond their controls affect the the marketing of their horticultural produces. These findings substantiate with earlier findings by Bailey (2013) who indicated that transportation problems result in loss of quality and late delivery, which in turn leads to lower prices, and this is regarded as the greatest problem faced by emerging farmers. On the issue of lack of marketing information, AMTA (2012) indicated that small-scale farmers lack information on product price and times to sell their products, and on potential buyers. This in turn reduced their ability to trade their products efficiently and to derive the full benefit from the marketable part of their production.

4.2.11 Challenges inhibiting small scale farmers from actively engaging in marketing

Horticultural farmers at the Etunda irrigation scheme face various challenges in the marketing of their produce. One of the objectives of this study was to unveil the challenges faced by the small scale farmers in the marketing of their produce at Etunda. The table below shows the results on this aspect.

Table 4.1: Challenges affecting small scale farmers engaged in marketing

Challenges	Number of participants
Fluctuating market prices	24
Perishability of fresh produce	54
Limited production	13
Lack of on-farm infrastructure	32
Poor quality of fresh produce	44
Lack of capital/finance in engaging large quantity of fresh produce	48
Disagreements in price	56
All of the above	52
None of the above	0

Others (specify):	0

The table above shows that the greatest challenge farmers were facing at the Etunda Irrigation Scheme was disagreements in prices, with 56 participants, Lack of capital/finance in engaging in the marketing of a large quantity of fresh produce 48, Perishability of fresh produce, with 54 and all of the above was selected by 52 participants. The table also shows that the least challenge according to the farmers is Limited production with 13 participants and fluctuating prices with 32. These findings are similar to earlier findings by Fiebiger (2010) who indicated that time and place utilities created by transportation are an important aspect of customer satisfaction and therefore, are important aspects of the overall marketing offering. This challenge is echoed by Kuvare, Maharero, & Kamupingene (2009) who stated that transportation is the linkage process in logistics and often consumes much of the resources provided to the logistics function. On this note Corner (2010) also noted that most small-scale farmers who are located in rural areas where there are no formal agricultural markets or agro-processing industries face challenges of marketing their perishable horticultural produce and this forces them to market their produce to local communities in their areas, sometimes at lower prices, or to transport their products to towns at a higher cost.

4.2.12 Transport challenges faced by farmers in transporting their goods to the market place

The marketing of horticultural produce is mostly affected by transport challenges since most horticultural products are perishables (Balarane & Oladele, 2012). The study unveiled the transport challenges faced by the farmers in the study. The figure below shows the results from the participants.

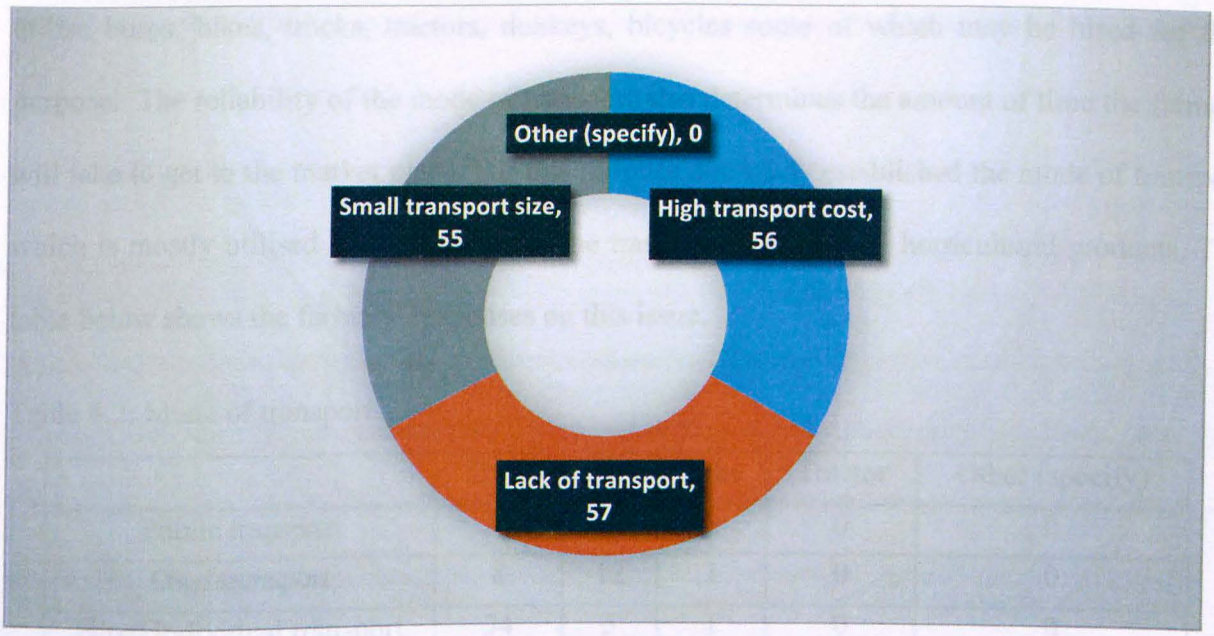

Figure 4.11: Transport challenges faced by farmers in transporting their goods to the market place

The figure shows that 34% of the farmers were affected by lack of transport to ferry their products to the market, 33% indicated that transport costs were very high for them, while another 33% indicated that transport size was affecting the marketing of their produce. None of the farmers indicated other transport related challenges. These findings corroborate with the earlier findings of Fiebiger (2010) who indicated that time and place utilities created by transportation are an important aspect of customer satisfaction in the marketing of horticultural products. On this note Kuvare, Maharero, & Kamupingene (2009) recommended that farmers need a reliable transportation linkage processes for them to take their produce to the market.

4.2.13 Mode of transport

There are many modes of transport that can be used by farmers to transport their products to the market place. The mode of transport used by farmers to transport their produce will determine the time the farmers will take to get to the market place (Antwi & Seahlodi, 2011). Some farmers

utilise buses, bikes, trucks, tractors, donkeys, bicycles some of which may be hired for that purpose. The reliability of the mode of transport also determines the amount of time the farmers will take to get to the market place. For this purpose, the study established the mode of transport which is mostly utilised by the farmers in the transportation of their horticultural products. The table below shows the farmers' responses on this issue.

Table 4.2: Mode of transport

	Truck	Bus	Bike	Tractor	Other (specify)
Public transport	12	23	8	0	0
Own transport	8	12	1	0	0
Hired individual transport	34	5	1	0	0
Hired group transport	48	1	2	0	0
Buyer transport	18	12	9	0	0
Other (specify)	0	0	0	0	0

The table above shows that the mode of transport mostly used was the group hired trucks, with 48 participants indicating this, followed by hired individual trucks, 34 participants. Twenty-three farmers mostly utilised the public buses. None of the farmers used tractors as a mode of transport for their horticultural products. Very few farmers utilised the bikes as a mode of transport for their horticultural products. These findings concur with the earlier findings of Kotler (2010) who indicated that supply chain management processes which are not efficient may affect the delivery of goods to their intended market places as a set of procedures for all activities involved in procuring the right inputs (raw materials, components and capital equipment) and converting them efficiently into finished products; and dispatching them to the final destination. If the mode of

transport is reliable, farmers will be able deliver their goods with the most needed efficiency and reliability.

4.2.14 Knowledge about AMTA

The horticulture project is now supported by the Agro-Marketing Trade Agency (AMTA), a state-owned enterprise with operating hubs in Ongwediva, Rundu and Windhoek (Kanyangela & Kaufilua, 2010). The study aimed to establish whether the participants were aware of this government initiative on where they can market their produce. The table below shows the feedback from the participants.

Table 4.3: Knowledge about AMTA

Statement on knowledge about AMTA	Frequency
No, I do not think AMTA has benefited farmers in any way	14
Yes, I believe AMTA has come at the right time and is helping farmers market their produce	24
I am not sure about the role of AMTA and therefore I cannot say much	26
To some extent yes but they can do more	55

The table above shows that 55 farmers feel that AMTA is helping them but they feel it can still do more to help them in meeting their marketing goals and objectives. Fourteen farmers feel that they had not benefited much from AMTA, 24 felt that they had greatly benefited immensely from this noble government initiative, 26 were not sure about the role AMTA was playing in the marketing supply chain for the Etunda horticultural farmers. These findings are similar to the findings of Kanyangela &, Kaufilua (2010) who indicated that in some regions, producers lack interest in selling fresh produce to local markets to meet existing demand. These findings are further highlighted in the sentiments of Bailey (2013) who said that farmers need to be informed through

advocacy if there are any boards that are meant to help them in their marketing processes. They also need to give their input as to where they think such a fresh produce hub should be located.

4.2 15 What participants want AMTA to do:

In order to improve the efficiency and effectiveness of AMTA as a role player in the marketing of horticultural produce, the study elicited what the participants wanted AMTA to do or to improve on. The table below shows the responses of the participants in the study.

Table 4.4: What participants want AMTA to do

What participants want AMTA to do	Frequency
In order to promote quick sales, AMTA must not overcharge the fresh produce they get from farmers	45
AMTA must organise monetary and award incentives to farmers for increased fresh produce production	34
As the marketing agency for farmers, AMTA should partner with other stakeholders to aggressively and consistently promote the consumption of local fresh produce	51
AMTA must to stop issuing import permits for locally produced farm produce.	8
AMTA to obtain market orders, issue production Contracts and monitor production	26
All of the strategies suggested here	33

Table 4 shows that 51 participants indicated that as the marketing agency for farmers, AMTA should partner with other stakeholders to aggressively and consistently promote the consumption of local fresh produce, while 45 indicated that in order to promote quick sales, AMTA must not overcharge the fresh produce they get from farmers, 34 indicated that AMTA must organise monetary and award incentives to farmers for increased fresh produce production, 26 recommended that AMTA needs to obtain market orders for farmers, issue production contracts and monitor production, only 8 indicated that AMTA must stop issuing import permits for locally produced farm produce and 33 participants felt that all of the strategies suggested here were OK.

These findings are in agreement with the findings of (Bailey, 2013; Balarane & Oladele, 2012) who indicated that AMTA should partner with other stakeholders to aggressively and consistently promote the consumption of local fresh produce in their mediation for the marketing of the horticultural produce. AMTA, as part of its mandate, and as enshrined in the AMTA strategic plan, is expected to support Government efforts to assist farmers to establish and promote value addition on horticultural produce for the attainment of food security in Namibia. This would assist the producers to minimize wastage and also increase the value of produce leading to better returns from the sale of the produce.

In summary:

Once the above interventions are effectively implemented it is expected that the outlined problems will be solved and the following benefits would be realized:

- Small and medium scale horticulture farmers will have access to stable markets at stable prices, which in turn would enhance household income and household food security. Stable and increased income for small and medium scale farmers would contribute to the reduction of income inequality amongst Namibian farmers.
- The collective marketing of farmers' produce by AMTA to the Government institutions would enhance farmers bargaining power, as opposed to individual farmers going for it alone.
- This market access would create sufficient throughput volumes for fruit and vegetables at the FPBHs, which would lower operational costs per unit, hence contribute to overall sustainability of the fresh produce business hubs infrastructure and trading system.

- Government institutions as consumers would be assured of high quality and fresh (grown at home) produce, which is inspected against food safety standards on pesticides contamination and hygiene measures.
- There may be no need for the Government to subsidize production at the farmer level, since the market access assurance through Government institutions contracts is a basis upon which AMTA would procure inputs such as seeds, fertilizer and pesticides for distribution to contracted farmers, and eventually recover costs borne on behalf of the farmers before payment.

4.3 Analysis of the interview results from the AMTA Ongwediva Fresh Produce Hub Employees

4.3.1 Participants' biographical information

The study elicited the biographical information of the participating employees for AMTA. Table 4.5 below tabulates the results:

Table 4.5: Participants' biographical information

Participant	Gender	Age	Position
1	Female	33	Finance and Administration
2	Female	29	Quality Control and Standards
3	Male	32	Sales and Marketing
4	Male	36	Finance and Administration
5	Male	38	Sales and Marketing department
6	Male	39	Logistics

The table shows that six participants from the four key departments at AMTA Fresh Produce Hub were selected for an in-depth face to face interview on the factors influencing the marketing of horticultural produce by Etunda small scale farmers. The departments were Finance, Marketing, Quality Control and Logistics. Out of these, four were male and two were female. The male were aged 32, 36 and 38 and 39 years, while the female were aged 29, and 33 years.

4.3.2. Presentation of the interview results

Data presentation includes the description of the collected data into some form of explanation, understanding or interpretation of the organisation and situations under investigation. This involved tuning, and modeling of the data from the interview into findings which provided useful information, suggesting conclusions, and supporting decision-making (Bryman & Bell, 2015). Since in depth interview results followed a qualitative approach, data was analyzed thematically and presented in the form of themes and sub-themes. The data was collected during the individual in depth face to face interviews and was transcribed and then analyzed according to the framework of data analysis for qualitative research by (Oyedele, 2000). The researchers' interpretations and analysis were integrated with the literature, which served as evidence of the themes and sub-themes (Hallebone & Priest, 2012).

The themes were identified through sequential phases which were data familiarization, data coding, searching for themes and theme development, reviewing themes, defining and naming themes and finally writing up the theme (Kruger, 2013). The data was then presented in themes with transcribed quotations of the respondents being included to support the findings. The themes and sub-themes that emerged from the analyzed transcribed collected data are presented in the table below:

Table 4.6: Themes and categories

THEMES	SUB-THEMES
Theme 1: Factors influencing the marketing of horticultural produce	Sub-theme 1.1: Distance to the market place
	Sub-theme 1.2: Perishability of the crop being grown
	Sub-theme 1.3: Transport availability
	Sub-theme 1.4: Marketing prices
Theme 2: Inadequate resources to use	Sub-theme 2.1: Insufficient transport
	Sub-theme 2.2: Lack of appropriate marketing knowledge in marketing
	Sub-theme 2.3: Insufficient capital
Theme 3: Availing resources to use	Sub-theme 3.1: Availing resources to use e.g. transport
	Sub-theme 3.2: Involving farmers in market research issues
	Sub-theme 3.3: Assisting farmers with proper marketing skills

4.4 **Theme 4.1: Factors influencing the marketing of horticultural produce**

There are many factors which influence the marketing of horticultural produce. It was important for every farmer who was involved in the production of horticultural products to consider these factors so that they could benefit from their labour, otherwise they would labour in vain. Bailey (2013) indicated that horticultural farmers need to consider the farmer's distance from the market

place before they can set up a horticultural project. The participants in the study cited several factors as being contributory to their participation in the marketing of their produce. The following citations supports this claim:

> *" Well the location of Etunda is quite strategic but the location of AMTA Hubs seems to be too far from the place where the farmers are produicng their crops" (Participants 1).*

> *"I think these farmers are informed about the role that AMTA plays in the marketing of their produce, they think AMTA is dictating things for them". (Participants 2)*

The findings above concur with the earlier findings of Kotler (2009) who indicated that marketing of goods is an important aspect to consider before a business is established.

4.4.1 Distance to the market place

The distance to the market is an important factor to consider before one establishes his or her business. Whoever embarks into any form of business needs to consider the distance to the market he would have to walk to sell the goods (Balarane & Oladele, 2012). The employees of AMTA indicated that the location of AMTA is good for the people who would buy but it seems too far for the farmers who are producing the produce at Etunda, which is more than 90km away. For this reason most farmers choose to use other marketing channels than utilizing AMTA. The following sentiments support this claim:

> *"Our farmers are too far from AMTA where they have to sell their products" (Participant 5)*

"Most of our farmers do not have transport to ferry their perishable produce to the marketing harbor at AMTA."(Participant 2).

The findings above supports the earlier findings of The Organization for Economic Cooperation and Development (OECD) (2004) which indicated that the businessman needs to do accurate calculations on whether or not he will make a significant profit considering the distance and other production costs involved. On this note Antwi & Seahlodi (2011) indicated that perishables need to be grown in the peri-urban settlement where they can be delivered to the market or to those who will consume them.

4.4.2 Sub-theme 1.2: Perishability of the crop being grown

The perishability of horticultural products is one of the factors which needs to be considered in their marketing process. If farmers do not consider that horticultural products are perishable they will run a loss since their products cannot stay longer before getting bad (Agro Marketing and Trade Agency (AMTA), 2012). Employees for AMTA indicated that most of the products that are supplied to their hub are perishable but sometimes farmers take days before they deliver these good to the market and when they finally get to the hub the products would not last long. The following quotation supports this claim:

"Our farmers are keeping their products before they deliver them to the marketing hub and when the products finally get to our hub they will not stay long."(Participant 6).

"Farmers are producing perishable goods that are taking long before they are delivered to the market place."(Participant 3).

The findings above corroborate with the earlier findings of Corner (2010) who stated that perishable horticultural produce needs to be produced closer to the market-place for it to reach the consumers while it is still in a good state.

4.4.3 Sub-theme 1.3: Transport availability

The availability of transport is an important component in the marketing of horticultural produce (Foster & Kaplan, 2011). Transport is needed so that it can be used to transport the produce as early as possible before the products go bad. If producers do not have reliable modes of transport, they would not be able to actively perform in the marketing of their products. The participants in the study indicated that the farmers at Etunda face the challenge of reliable modes of transport and as such they are not able to deliver their produce to AMTA on time. The following citations substantiate this claim:

> *"Our farmers do not have reliable transport mode to transport their products to the markets."(Participant 6)*
>
> *"Farmers have the challenge of transporting their goods to AMTA and as a result a lot of their products get rotten since they are delivered late to the fresh produce hub".(Participant 3).*

The findings above cements the earlier findings of Foster & Kaplan (2011) who content that transport reliability makes the marketing of horticultural products feasible. Horticultural farmers need to be sure of how they will carry their products to the market before they harvest their products.

4.5 Theme 2: Inadequate resources to use

Adequate time and material resources should be available to employees to enable them perform their work easily (Foster & Kaplan, 2011). This would help them perform to the best of their ability and be proud of their achievements and performance. To make workers more productive and efficient, it is important to equip them with the right tools (Antwi & Seahlodi, 2011). Ignoring the potential benefits of resource availability in the workplace may reduce the productivity and performance of an individual. Etunda farmers do not have enough resources to use for them to increase their productivity. The following statements substantiate this theme:

> *"Our Farmers are using outdated marketing strategies and old methods to produce their produce and sometimes they produce substandard produce."(Participant 4)*
>
> *"Our farmers need their marketing and production skills to be revamped they seem to be in the old day world."(Participant 5)*

The findings above concur with the findings of Corner (2010) who stated that workers need to have adquate resources such as financial, material and knowledge for them to do their work efficiently inorder to meet the modern day world demands for goods and services.

4.5.1 Sub-theme 2.1: Insufficient transport

Transport is needed to move produce to the market-places. If farmers do not have reliable modes of transport to transport their horticultural produce, such produce will get to the market late and may not meet the standard of freshness that is needed (Agro Marketing and Trade Agency (AMTA), 2012). The Participants in the study indicated that the farmers at Etunda do not have adequate transport to carry their horticultural produce while it is still fresh. The following citation supports this claim:

"Our farmers do not have reliable means of transport to transport their goods to the markets" (Participant 3)

"Our farmers straggle a lot to transport their goods to the market place as a result their produce reach the market when they are already stale."(Participant 4)

The findings above harmonize with the earlier findings of (Balarane & Oladele, 2012; Fiebiger, 2010) who indicated that lack of transport is one of the challenges that inhibit successiful marketing of hortcultural products.

4.5.2 Sub-theme 2.2: Lack of appropriate marketing knowledge in marketing

Marketing knowledge is needed by all farmers who embark in the horticultural products. Agriculture is defined as the growing of crops and the rearing of animals for a special purpose (Bailey, 2013). Agriculture has five main branches which are agronomy, horticulture, animal husbandry, agricultural economics, and agricultural engineering. Each of these branches of agriculture plays a role in making agriculture profitable to a farmer. Farmers need to have sufficient knowledge of agricultural economics in which marketing is embedded (Antwi & Seahlodi, 2011). This branch is primarily responsible for addressing the business side of farming for each farmer who wants to undertake productive agriculture. Lack of marketing strategies inhibit farmers from making as much profit as they should make. Horticultural farmers need to know where to market their produce on time. If this skill is not in them, they will end up losing out. The participants in the study indicated that farmers at Etunda lack this most needed skill for them to make their farming more profitable. The following citations support this claim:

"Our farmers rely on roadside marketing of their horticultural produce they do not understand the benefits associated with bringing their produce to the marketing hub at AMTA." (Participant 3).

"Farmers are using old marketing channels irrespective of the fact that the government has opened up AMTA for them to market their produce". (Participant 1).

These findings corroborate with the earlier findings of Fiebiger (2010) who indicated that farmers without proper marketing skills and knowledge may not be able to perform well in the production of horticultural produce. On this note, Agro Marketing and Trade Agency (AMTA) (2012) recommends that horticultural farmers need to be educated on the benefits of utilising the AMTA hub so that they move away from road side marketing of their hortcultural produce.

4.5.3 Sub-theme 2.3: Insufficient capital

Availability of capital makes horticultural farmers be able to bring their produce to the market-place. Some farmers do not own cars and rely on hired transport for them to transport their produce (Kruger & Lammerts-Imbuwa, 2015). Capital is needed to pay the labourers and to pay the truck owners who carry their products to the market-place. Successful horticultural production cannot be achieved if there is no available capital for the farmers to use (Foster & Kaplan, 2011). The participants in the study indicated a lack of capital investment as one of the greatest challenges the farmers have which inhibits their productive capacity and marketing. The following sentiments authenticate this claim:

"Farmers lack sufficient capital to pay the truck owners especially when they want to bring their produce to the market place". (Participant 1).

"Farmers lack sufficient capital to make their horticultural business become as productive as it should."(Participant 5).

The findings above concur with the earlier sentiments by Kruger & Lammerts-Imbuwa (2015) who signposted that lack of available capital is one of the challenges faced by horticultural farmers in making their business more profitable. Fiebiger (2010) indicated that, generally comercial production capital finance products do exist in the market, however, most small scale farmers are not credit worthy. In some cases, Goverment financing institutions such as Agribank in Namibia provide govermement backed-loans to small scale farmers in the form of vouchers which are redeemed for production inputs.

4.6 Theme 3: Availing resources to use

Every organisation needs three main resources to survive. These resources include -Financial resources, Physical resources which include material and Human capacity (Antwi & Seahlodi, 2011). Any organisation needs money to pay its staff and buy essential materials or equipment for operation (Kanyangela & Kaufilua, 2010). There is no organisation with no financial resources that can remain productive in its business. Even though an organisation has got all the money and machinery or material needed, it must still find capable people to put them into effective use. It is therefore logical to claim that human and financial resources are the most important of the three essential resources of an organisation (Agro Marketing and Trade Agency (AMTA), 2012). In this study the participants highlighted that if resource availability is enhanced; this would increase their productive capacity and get the farmers to be more productive. The following sentiments substantiate this theme:

"Our farmers need financial resources, so that they can smoothly operate. At the moment the most farmers are operating at a loss because they do not have all the necessary resources they need in their production."(Participant 6).

"The farmers do not have sufficient financial resources, and other material resources needed to keep remain as productive as they should in the horticultural business this is the reason why our hub is always empty". (Participant 3).

These findings are in agreement with the findings of Fiebiger (2010) who stated that farmers should maintain a strong human resource base for optimal performance. In order for a farming business to survive, it must train and develop its human resource base, for it is the human resources that hold the key to its survival, prosperity, future economic and social development. The success of any farming is also by ensuring that the available human resources are motivated adequately. Therefore it is the prime responsibility of the ministry to ensure that the available scarce resources are provided to the farmers to support their business endeavors (Antwi & Seahlodi, 2011).

4.6.1 Sub-theme 3.1: Availing resources to use e.g. transport

Farmers need resources to use for them to be able to market their produce. The viability of any business is possible if there are enough resources to use. The marketing of horticultural products is only possible if the farmers are well supported financially (Agro Marketing and Trade Agency (AMTA), 2012). Therefore it is important for The Ministry of SMEs and the Ministry of Agriculture to constantly support the farmers with all the resources they need for them to market their produce at all times. Participants in the study indicated that there is a need for these Ministries to support farmers from time to time and also to monitor and evaluate the effectiveness of whatever

resources and support they are rendering to the farmer to see if these farmers are utilizing all the structures they are being provided with. The following quotes support these claims:

> *"Our farmers need to constantly be supported with financial resources and skills to market their produce and also need to be assisted in opening up export markets for their produce."(Participant 3)*

> *"The farmers need a lot of support from the ministry especially transport and financial resources to continue being productive in the horticultural business*

The findings above concur with the findings of Kotler (2010) who indicated that producers in any production area need to be well supported for them to remain competetive in the bussiness. Kotler (2010) further indicated that lack of such support can render producers useless in any form of business.

4.6.2 Sub-theme 3.2: Involving farmers in market research issues

Marketing research is an important component for effectiveness in production. If there is no empirical research done to find out the predicaments which the farmers are facing in the day to day running of their businesses this can render them ineffective and can ultimately chuck them out of business (Bailey, 2013). Farmers need to be involved in marketing research so that they can make informed decisions on where they can improve to make the marketability of their produce viable. The participants in the study indicated that the farmers need to be active in marketing research for them to see what can work and what cannot work for them. The following citations validate this claim:

> *"We need our farmers to be active in market research so that they can see what can work for them and what cannot work for them."*

"Market research is important for our farmers as it opens up opportunities for growth on the side of the farmers who are the main role players in the horticultural production business.

These findings correspond with the earlier findings of Corner (2010) who indicated that farmers' involvement in marketing research can broaden the farmer's understanding of the reality of what is happening in their various businesses.

4.6.3 Sub-theme 3.3: Assisting farmers with proper training in marketing

Training and development is important towards farming success (Agro Marketing and Trade Agency (AMTA), 2012). There is need for the Ministries of Agriculture and SMEs to have a standalone department that caters for marketing development (Kruger & Lammerts-Imbuwa, 2015). Technology keeps changing daily and new technologies are being introduced and as such farmers' staff needs to be trained to use or interact with the new technologies. This would help them to remain productive in their work and the marketing of their businesses (Food and Agriculture Organization of the United Nations Annual Report, 2010). Farmers need to be trained to adapt to the new ways of doing business (Flora, 2009). Business is dynamic and people need to be adapted for change (Mbene, 2005). The following emerged from the participants:

"Our farmers need to be trained on how to use modern ways of marketing their produce"(Participant 2).

"I am farmers are trained on how the world is changing rapidly and how they can also change their old ways of doing business sure they will remain competitive in their production business."(Participant 6).

The findings above match with the earlier findings of *Shikongo et al.,* (2011) who stated farmers' training in marketing skills development as one of the important components for horticultural business success. Farmers also need capacity development in areas of consistent production, quality control, Food safety and information management.

4.7. SUMMARY

This chapter presented the findings of the study from both the questionnaire and interviews. Each of the presented findings of the study was aligned to the reviewed literature of the study. This chapter finally presented the recommendations which emanated from the study. The next chapter presents a summary of the findings, conclusion and the areas for further study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter will present a summary of the study, the conclusions from the findings and recommendations for future research. The aim of this study was to investigate the factors influencing the marketing of horticultural produce among the small scale farmers at Etunda horticultural irrigation in the Omusati region. The study adopted a mixed method research design (Christensen & Johnson, 2012). The research questions for the study were (1) what are the factors affecting the marketing of horticultural produce among small scale farmers in the Etunda Irrigation Scheme community? (2)What is the most popular market channel being used by small scale farmers at the Etunda Irrigation Scheme? (3) What are the challenges affecting small scale farmers' marketing channels at Etunda? The questions were all answered in Chapter 4 where research findings were presented and discussed in detail.

The study had three main objectives namely to:

- Establish the factors affecting the marketing of horticultural produce among small scale farmers in the Etunda Irrigation Scheme community.
- Identify the most popular marketing channels being used by small scale farmers at the Etunda Irrigation Scheme.
- Identify the challenges faced by the small scale farmers in terms of marketing channels at the Etunda Irrigation Scheme.

The collected data was analysed, from which three main themes emerged that were elaborated on in Chapter Four. Literature was used to substantiate, explain, compare and contrast the findings of this study and align them to answer the research questions of the study. A brief summary on each

of the previous chapters, as well as conclusions and recommendations from the findings will be presented in the following sections.

5.2 Summary of the chapters.

The summary of the study provides a brief account of the chapters, without going into detail, as they have been thoroughly discussed already.

5.2.1. Chapter 1: Introduction of the study.

This chapter provided the reader with a general contextual overview of the research study, the research problem, research goal, research question, delimitations used to execute the study.

5.2.2. Chapter 2: Literature review.

In Chapter 3, the researcher presented a comprehensive review of literature. The literature which was explored mainly focused on the factors that influence the marketing of horticultural products, the challenges faced in the marketing of horticultural products and the various strategies that can be used to improve the participation of farmers in the marketing of horticultural products.

5.2.3. Chapter 3: Research methodology.

This research chose and used a qualitative descriptive and quantitative non experimental research approach as the best suited in seeking to achieve the study's aims. Chapter 3 elaborated more on the research methodology and the steps used to complete the research study successfully. This chapter presented the research design (qualitative descriptive and quantitative) approach, description of the studied population (horticultural farmers for Etunda small scale horticultural farmers and AMTA employees) and sampling strategies (random and multistage purposeful) which were adopted in the study. In this study, the sample was taken from horticultural farmers and AMTA Ongwediva Fresh Produce Hub employees. The data was collected by means of semi-structured face-to-face in-depth interviews and a close and open ended questionnaire. In addition

to that, this chapter also presented issues of data collection and analysis, and ethical issues which were considered in the study.

5.2.5. Chapter 4: Presentation and discussion of the findings.

Chapter 4 presented a discussion of the main findings which were presented in the form of tables, graphs, theme and sub-themes that were generated from the in-depth interviews and the close ended questionnaire. This chapter also presented the demographic information of the 80 participants in the study which included 60 farmers from Etunda and 6 employees for AMTA. With the three themes which emerged in the study, literature and theory was used to substantiate, explain, compare and contrast the findings of this study. Specifically, the following themes emerged from the study:

5.2.5.1. Theme 1: Factors influencing the marketing of horticultural produce

The purpose of the study was to investigate on the factors influencing the marketing of horticultural produce among the small scale farmers at the Etunda Irrigation Scheme in the Omusati region of Namibia. The study unveiled that transport, perishability of the horticultural products, lack of sufficient marketing information, and farmers' inability to negotiate for good prices with the buyers are the most influential factors affecting the marketing of horticultural produce at the Etunda small scale horticultural irrigation scheme.

6.2.5.2. Theme 2: Inadequate resources to use

One of the research objectives was to establish the most popular market channel which is being utilized by the farmers in their marketing of horticultural produce. On this aspect, the study revealed that the farmers are utilizing the road side marketing of their produce since they do not have transport to ferry their goods to the market place which is AMTA Fresh Produce Hub in Ongwediva. These farmers also presented the challenge of a lack of price negotiation skills with

AMTA in the marketing of their produce. In addition to that the farmers cited long distance from Etunda to AMTA as one of the challenges inhibiting them from utilising AMTA.

5.2.5.3. Theme 3: Availing resources for farmers to use

The study also found out that farmers at Etunda need to be assisted with transport to transport their produce to the market place at AMTA. In addition to that, the farmers also need to be involved in the pegging of prices for their produce so that prices are not dictated to them.

5.2.6. Chapter 5: Conclusion and recommendations.

Lastly, Chapter 5 presents the conclusions and recommendations of the study. It presents an overall summary of the chapters covered in the study, as well as the limitations that need to be observed simultaneously with the findings of the study. The chapter also provides recommendations for future research.

5.3 Limitations of the study

For fear of the unknown by respondents, the researcher experienced non-cooperative respondents who were not willing to disclose necessary data during the data collection phase. With this in mind, the researcher had to convince the participating farmers that whatever information they were providing was going to be used only for academic purposes. The absence of readily available research grants on critical research topics such as this one has also been a limitation as their availability could have led to countrywide studies being undertaken and made literature based on nationwide studies available. The researcher had to rely on data from other countries who are also embarking on horticultural production. The major limitation of the study was that not all the small scale farmers in the country or the region were selected to participate. As a result, generalizing the findings to the entire sector in the country would not be possible since the research was only carried

out in the Etunda Project and the views of the participants might not have been reliable because some could have provided biased information to create favourable impressions.

5.4 Recommendations

5.4.1 Recommendations to the Ministry of Industrialization, Trade and SME Development (MITSMED) and the Ministry of Agriculture and Forestry (MAWF).The Ministry of Industrialization, Trade and SME Development and the Ministry of Agricultureare the active Ministries helping the Etunda Project. The AMTA Fresh Produce Business Hub was built to help the SME farmers in the Northern part of the country. With this background, the study recommends that:

- Farmers need to be assisted with transport to carry their horticultural produce from the farms to AMTA Fresh Produce Hubs.
- Farmers need to be capacitated with appropriate equipment to engage in basic Value addition such as cleaning, packaging and primary processing.
- Farmers need to be sufficiently educated on appropriate marketing skills for their horticultural produce.
- Farmers need to be provided with financial support to produce more crops that can make them to break even and make meaningful profit in their business.
- Farmers should be allowed to make decisions on how to market their produce and the advantage of utilising such a marketing channel (AMTA).

Restrictions on the importation of fresh produce in the country - the absence of a law to restrict and/or control the imports of fresh produce in the country is a serious challenge. Under the current arrangement, the importer is only required to buy 46% of the local produce for the Market Share Promotion (MSP). This is done, regardless of the quantity available in the country. The current restrictions (close border periods) for potatoes and onions need to be

extended to other product lines which are commonly produced by local farmers, this would help to secure the market for locally produced fresh produce.

5.4.2 **Recommendations to the Ministry**

5.4.2.1 Coordinated Public institutional marketing approach

According to industry data, Government is the largest single market for crop and animal products in Namibia. The combined demand for crop and animal products in schools and other training institutions, hospitals and other health facilities, prisons, defense institutions, drought relief, food banks, Government hotels and other catering facilities, is larger than any other buyer of these agricultural commodities in the country. With the exception of beef from the area south of the VCF, these Government institutions are traditionally supplied with mainly imported food, rather than food produced by local farmers. This procurement practice creates jobs in farms, processing facilities and logistics of other countries, a situation which is unacceptable for the growth of the local horticultural industry.

MAWF and AMTA should therefore propose a procurement scheme to support the supply of locally produced high quality crop and livestock products mainly from small and medium scale farmers to Government institutions. The scheme should identify products in which Namibian farmers have a competitive advantage compared to import sources, and propose that these products be exclusively sourced from Namibian farmers, through the already established processing, handling and consolidation infrastructure established by the Government such as Fresh Hubs. This dedicated procurement will provide market access to local farmers such as the Etunda Irrigation Scheme's produce, particularly in communal areas. This would in turn encourage more local production, improved rural incomes, and hence contribute greatly to reduction in income inequality in the country and poverty eradication amongst farming communities.

5.4.2.2 Transportation and logistics

In order to assist producers in bringing their produce to the markets, AMTA should own trucks which would be used nationwide to transport produce and also to neighboring countries. Their logistics officers have identified central strategic reachable collection points and will need to schedule it accordingly to ensure producers transport their product effectively and efficiently. Producers per clusters would be identified and their production capacity be known at the AMTA logistics department, this would enable the transporter to plan frequent visits to certain clusters for collecting products. Communication with producers will be essential in this regard.

A proper method of handling, storing and transporting can help keep quality of vegetables. Hence, it is recommended to assign an efficient extension system by AMTA, updating the producer's knowledge and skill with improved production, handling, storing and a marketing system that enables the increase of benefits for producers.

5.2.2.3 Cropping programme to address quantity and consistency issues

In order to address quantities and supply inconsistencies, synchronised cropping programmes for Etunda farmers should be developed by AMTA, AGRIBUSDEV, and DAPEES together with farmers in order to ensure consistent supply of produce to the OFPBH and help drive market-led local production of fresh produce as well as the demand for local fresh produce.

5.2.2.4 Stakeholder Engagement

Consultation of all relevant and critical stakeholders is of utmost importance to the success of OFPBH and AMTA as a whole. AMTA should conduct a regular Stakeholders' engagement at various production hotspots. Ideally this should comprise of field meetings and information sessions with all key stakeholders at different platforms such as farmers' days, information days

and workshops. Engaging stakeholders is critical to gain insight into pertaining issues in the fresh produce industry, help secure resources to assist with various projects, and build trust, ultimately leading to stakeholders' consensus with AMTA goals and increased transparency. In addition, it also provides opportunities for AMTA hubs to align their practises with the fresh produce industry needs and expectations helping to drive long-term sustainability. Such engagements would help to raise awareness of AMTAs activities as well as keep itself relevant and visible. Such platforms also help in finding a way forward on issues facing the trade.

5.2.2.5 Short Payment Farmers Period

The AMTA Fresh Hubs should embark on measures and come up with mechanisms to pay farmers within a short period of time after delivery or better yet on the spot. This can be in form of cash cheques, Cash money or EFTs. This should be done to earn the trust of farmers and ease farmers' business cash flows and also to reduce their association with middlemen and roadside selling because availability of cash should be one leading cause why some farmers choose informal sales.

5.2.2.6 AMTA should establish commission based selling and distribution Centres

In order to decentralize the availability of local produce and also to stabilize both supply and prices in different strategic areas such as towns, villages and settlements, AMTA must engage various credible small business entities in the regions to distribute produce by means of commission. Under a contract, AMTA would basically be dropping produce at these selected shops/Minimarkets and where they sell it at prescribed prices on commission. This would relieve pressure on the Fresh Hubs and prevent wastage of produce, while some areas are starved or produce is overpriced. It would also make produce widely available through improved market access.

5.2.2.7 Joint Input procurement

One challenge observed is that small and medium scale horticultural farmers operate mainly as individuals, making their production and marketing costs high. It would be a great idea if small and medium scale horticultural farmers organized themselves into groups that work together in areas such as joint procurement of production inputs, joint marketing, joint savings, etc. they will potentially improve their competitiveness, reduce transactional costs and wealth creation potential.

5.2.2.8 Establishing Strategic partnerships with bodies and institutions to provide technical support and capacity development

The involved institutions, AMTA, MWAF, NAB, and AgriBusDev should engage strategic institutions and affiliated bodies to organise capacity development and empowerment programs. If well engaged, Institutions such Universities, NGOs, Donor agencies, and research institutions can facilitate training and workshops on topical issues in order to address eminent challenges and shortcomings of the small scale farmers.

5.2.2.9 Provision of Farming capital loan financing

Banks and financiers such as Agribank should provide Small scale farmers with Agricultural Production Loan Schemes and Input supply contracts using forward produce supply agreements with FPBHs to supply the potential domestic market institutions. Government-backed loans and production subsidies would also assist the farmers to have access to production capital.

5.2.2.10 Encouraging Farmers' Unions or Cooperatives

AMTA should encourage farmers to form production clusters to improve their market intelligence and also improve the pricing system of their horticultural produce. This could be achieved through the formation of producer groups or cooperatives. In each group there should be an advisory

committee trained in various aspects of marketing which would be able to have access to up-dated pricing information and make it available to farmers on time. Policies should be developed to enhance productivity of vegetable farmers through the provision of seminars and workshops where farmers would acquire more training on vegetable production. This would enable farmers to improve their productivity and hence profitability. Agriculture extension systems should be market driven, decentralised and farmer-led in order to improve vegetable productivity and profitability. Further research on the development of innovative extension systems on horticultural produce within a changing global economy is therefore necessary.

5.4.3 Recommendations to AMTA.

AMTA is the main body that is helping farmers to market their produce. Therefore it is recommended that:

- AMTA need to provide the farmers with marketing education.
- Assist farmers with the marketing knowledge and skills of their produce.
- Play a pivotal role in improving the conditions of the farmers in the marketing of their produce rather than dictating prices for them.
- Assist farmers with other marketing channels even beyond Namibia so that farmers can export their produce.
- Need to explore other markets such as exports into neighbouring countries such as Angola, Zambia and the DRC.
- AMTA needs to engage in rigorous Agro-processing to minimise postharvest losses. This would assist the hubs to maximise income, reduce wastage and also increase produce value leading to better returns from vegetables.

- Agro-processing and Value addition: As part of AMTA mandate which is in its strategic plan, it is expected to support Government efforts to assist farmers in the marketing of agricultural products and to promote value addition on horticultural produce for the attainment of food security in Namibia. Historical data has shown that most horticultural products go to waste due to the fact that most farmers especially small scale farmers are unable to add value to their products for them to yield an appeal to consumers and in the process fail to give value to the farmer in terms of generating income. In Namibia, most of the horticultural products are sold and consumed with little processing. Therefore, the primary objective of this project is to reduce wastage, improve sustenance of the Hubs, diversify markets and reduce dependency on the importation of primary and secondary value added products. As such, AMTA needs to advocate for and implement rigorous agro-processing strategies at the Fresh Produce Hubs and identified central collection centers in the field.

- In order for it to be successful, AMTA, MAWF and MTSMED, should collectively, engage with policy makers to create a conducive environment for the success of agro-businesses. Analysis of investment opportunities and constraints in the local agro-processing industries, and exploration of the strategic involvement of women and young people in agriculture and agro-processing activities, coupled with government funding are some of the initiatives that need to be pursued.

5.5 Suggestions for further research

This study was done with small scale farmers in the Omusati Region, at the Etunda irrigation scheme. Future studies need to be done in the other 10 (Ten) Irrigation Projects and towns to:

- Compare the findings so as to have a better understanding of the factors affecting the marketing of horticultural produce in some regions also involved in the production of horticultural produce and compare these across Namibia
- Find ways to assist farmers in playing a proactive role in the marketing of their produce.
- Establish costs of production of various product lines
- Establish Transactional costs associated with the producers from farm to fork
- Establish mechanisms to harmonise marketing of produce from these projects in a market-led fashion

5.6 Conclusion

The purpose and goal of the study was to investigate the most commonly used market channel used by horticultural farmers at Etunda irrigation in Omusati Region. This chapter presented a summary of the chapters in the study, followed by a summary of the main findings emanating from the study. It also presented recommendations and areas for further research. A mixed method approach involving both (qualitative and quantitative) research approaches was used to answer the research questions, thereby attaining the research goal and objectives of the study. The results of this study provided insight into the factors influencing the marketing of horticultural produce among the small scale farmers at the Etunda horticultural irrigation scheme in the Omusati region. This last chapter of the study provided the reader with a summary and the conclusions of the study, from the introduction, literature review, applied methodology and the presentation of the research findings.

A number of recommendations were made to the Ministry of Industrialization, Trade and SME Development (MITSMED) and the Ministry of Agriculture and Forestry (MAWF) and to AMTA on various aspects which were raised in the study. In addition, the researcher made suggestions for future research. Finally this study is expected to add new knowledge to a limited body of literature on the factors influencing the marketing of horticultural products in the Namibian context.

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APPENDIX A: QUESTIONNAIRE FOR THE FARMERS

Questions

Instructions to questions: Please tick the most appropriate which can be more than one per each question.

SECTION A QUESTIONS:

Biographical Information

1.1 Gender composition

Male	
Female	
Other	

1.2 Age groups

21 – 30 years	
31 – 40 years	
41 – 35 years	
51+ years	

1.3 Level of education

Indigenous knowledge	
Primary education	
Secondary education	
Tertiary education	

1.4 Marital status

Married	
Single	
Divorced	
Prefer not to say	

1.5 How long have you been living and farming at Etunda?

1 – 5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
21 – 25 years	
26+ years	

1.6 What would you say are the main fresh produce crops you are farming?

Tomatoes	
Spinach	
Beans/Peas	
Carrots	
Cucumbers	
Water melons	
Pumpkins	
Sweet Potatoes	
Green paper	
Cabbages	
Corn maize	
Butternuts	

SECTION B:

1. a) What are the most popular market channels you are using to sell your products, as a small scale farmer at Etunda?

Road side or Street Vendors/ open market selling	
Traders and middleman/Agents	
Supply to supermarkets, petrol stations	
Agro-Marketing and Trading Agency Fresh Hubs (AMTA)	
All of the answers stated above	
None of the answers stated here	
Others: Specify…..	

1. b) What are the main reasons for the choice above?

Convenience		Better Price		Others:

2. a) Have the market channels you are using improved your income in the last three years?

Yes, I have seen a rise in my income	
No, they have not made an improvement	
No, they have actually decreased my income	

3. b) What are the factors affecting your marketing of horticultural produce among in Etunda community?

Inadequate road infrastructure to the various markets	
Lack of transport	
Lack of markets in Etunda and nearby rural arears	
Lack of bargaining power	
High transaction costs	
Long distance to the market	
Lack of information on market days	
All of the above	
None of the above	
Others (specify):	

c) What are the challenges affecting small scale farmers' to actively engage in marketing at Etunda?

Fluctuating market prices	
Perishability of fresh produce	
Limited production	
Lack of on-farm infrastructure	
Poor quality of fresh produce	
Lack of capital/finance in engaging large quantity of fresh produce	
Disagreements in price	
All of the above	
None of the above	

Others (specify):	

4. What problem(s) do you experience mostly when moving your produce from the farm to the market? (Tick appropriate)

High transport cost	56
Lack of transport	57
Small transport size	55
Other (specify)	0

5. How is your produce moved from the farm to the marketing points? (Tick appropriate)

	Truck	Bus	Bike	Tractor	Other (specify)
Public transport					
Own transport					
Hired individual transport					
Hired group transport					
Buyer transport					
Other (specify)					

a) If you answered "Yes" above, would you say AMTA has improved small scale farmers' fortune at Etunda?

No, I do not think AMTA has benefited farmers in any way	
Yes, I believe AMTA has come at the right time and is helping farmers market their produce	
I am not sure about the role of AMTA and therefore I cannot say much	
To some extent yes but they can do more	

6. a) What else would you expect AMTA to do for farmers?

In order to promote quick sales, AMTA must not overcharge the fresh produce they get from farmers	
AMTA must organise monetary and award incentives to farmers for increased fresh produce production	

As the marketing agency for farmers, AMTA should partner with other stakeholders to aggressively and consistently promote the consumption of local fresh produce	
AMTA must to stop issuing import permits for locally produced farm produce.	
AMTA to obtain market orders, issue production Contracts and monitor production	
All of the strategies suggested here	

7. a) What are your suggestions on how to solve the challenges?

That is it, thank you for your valuable contribution.

RESEARCHER'S NOTES

APPENDIX B: INTERVIEW PROTOCOL FOR THE AMTA EMPLOYEES

INVESTIGATING FACTORS INFLUENCING MARKETING OF HORTICULTURAL PRODUCE AMONG SMALL-SCALE FARMERS AT ETUNDA IRRIGATION (OMUSATI REGION, NAMIBIA).

1. What is your responsibility at AMTA
2. What are the most popular market channels your farmers are using to sell their products?
3. What are the factors affecting the farmers marketing of horticultural produce among the farmers in Etunda community?
4. Based on your experience, what are the challenges affecting small scale farmers' to actively engage in marketing at Etunda?
5. Do you think AMTA is doing enough to help small scale horticultural farmers at Etunda to market their produce?
6. What else would you expect AMTA to do for farmers at Etunda?
7. What are your suggestions on how to solve the challenges?

That is it, thank you for your valuable contribution.

APPENDIX C: INFORMED CONSENT

APPENDIX D: PERMISSION REQUEST LETTER ETUNDA IRRIGATION

APPENDIX E: PERMISSION LETTER AMTA FRESH PRODUCE HUBS

Informed Consent for Participation in research Interviews

I volunteer to participate in a research project conducted by Mr. Hamutenya Jacob T from University of Namibia, Business School. The project topic is '*Factors influencing the marketing of horticultural produce among small scale farmers at Etunda irrigation scheme in the Omusati region Namibia.* I understand that the project is designed to gather information about academic work for the Masters in Business Administration (MBA) in Natural Resources Management. I will be one of approximately 60 people being interviewed for this research.

- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one on my date will be used.
- I understand that most interviewees in will find the discussion interesting and thought-provoking. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.
- Participation involves being interviewed by researchers and data collectors. The interview will last approximately 30-45 minutes. Notes will be written during the interview. An audio tape of the interview and subsequent dialogue will be make. If I don't want to be taped, I will not be able to participate in the study.
- I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure and treated as per the provisions of the ethical clearance of the university.
- Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions represented.
- I understand that this research study has been reviewed and approved by the appropriate Institutions, such as AgriBusDev and University of Namibia
- I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

I have been given a copy of this consent form.

_____ _____

Participant **Date**

_____ _____

Mr. Hamutenya Jacob **Date**

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22 April 2017

TO WHOM IT MAY CONCERN

This is to certify that Mr. Jacob T. Hamutenya a Post Graduate student of the Namibia Business School pursuing a Master of Business Administration in Natural Resources Management with the University of Namibia Business School, has been granted approval to carry out a research study entitled: "***Investigating factors influencing marketing of horticultural produce among small-scale farmers at Etunda irrigation project***". The study is being conducted in partial fulfillment of the requirements for the awarding of the degree program.

AgriBusDev sees the value in the study in that it the study will enable horticulture small scale farmers to have a level of participation in the marketing channels as well as exposing critical factors discouraging them to participate in the marketing channels available. Information gathered through this study would also be useful to policy makers to create or amend existing policies in an effort to develop more markets as well as motivate producers to access high value markets. It will also contribute to limited literature in the area of Namibia Horticulture especially for small scale farmers in the area under study.

Therefore, we recommends to stakeholders to provide the necessary support to Mr Hamutenya to fulfil his study objectives.

Sincerely,

Julia N. Nambili
CHIEF AGRONOMIST

AGRI BUSINESS DEVELOPMENT
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All official correspondence must addressed to the Managing Director

A Section 21 company

ENQUIRIES: Alfeus Siyamba
Tell: 061 202 3300

AMTA
FROM LAND TO NATION

To whom it may concern,

12 January 2015

Permission to carry out research

Dear Sir/Madam

This is certify that the Agro-Marketing and Trade Agency (AMTA), through the National Fresh Produce Business Hubs supports and granted permission to Mr. Hamutenya T. Jacob to carry out a study titled***: Investigating the Factors influencing the marketing of horticultural produce among small scale farmers at Etunda irrigation Scheme in the Omusati Region.*** This is part of his Master's Degree in Business Administration in Natural Resources Management studies with the University of Namibia.

Understanding the factors influencing the marketing of horticultural produce among small scale farmers, identifying the most popular market channels being used as well as establishing what are the challenges faced by small scale farmers in the marketing of their produce is critical. As such, AMTA sees the value in the study since it will enhance AMTA's understanding toward the marketing of Fresh Produce through its fresh produce Hubs.

This study will enable horticultural small scale farmers to have a level of participation in the marketing channels as well as exposing critical factors discouraging them from participating in the available market. Information gathered through this study would also be useful to policy makers of the Ministry of Agriculture and the Ministry of Small and Medium enterprises in Namibia, to create or amend existing policies in a bid to develop more markets as well as motivate producers to access high value markets.

Therefore AMTA recommends stakeholders to provide necessary information to the researcher in order to fulfill this assignment.

Sincerely yours,

Agro Marketing and Trade Agency
Ongwediva Fresh Produce
Business Hub

ALFEUS M. SIYAMBA
12 JAN 2015
SENIOR MANAGER: NFPBH
Oshakati
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