

**ANALYSIS OF SOCIOECONOMIC FACTORS THAT AFFECT SMALL
SCALE FARMERS OF FRESH FRUITS AND VEGETABLES' ACCESS TO
EXTERNAL MARKETS: A CASE OF ARUSHA REGION**

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CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by the Open University of Tanzania, a dissertation entitled: **“Analysis of Socioeconomic Factors That Affect Small Scale Farmers of Fresh Fruits and Vegetables’ Access To External Markets: A Case of Arusha Region”** in fulfilment of the requirements for the award of the Master of Arts degree in Social Work of the Open University of Tanzania.

.....
Dr. John P. A. Msindai
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.....
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I, **John Vianney K. Mongella**, do hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University or Higher Learning Institution for a similar or any other degree award.

.....

Signature

.....

Date

DEDICATION

This work is dedicated to my Loving wife Bertiller Massawe, for her moral support in helping me concentrate on my studies during this period, and my six lovely children, Gertrude Mugwe, George Kitayomba, Janecharity Mhunge, Genevieve Mihayo, Joseph Leon Ibengwe and Maria Ntindi for making me secured and happy throughout my research period. I know you are all glad and happy to God, The Almighty to see me reach this far and all the achievements and blessings in our family.

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ABSTRACT

This study was undertaken to analyze socioeconomic factors that affect small scale farmers of fresh fruits and vegetables access to external markets. Specifically the study examined the effect of business skills; effect capital; effect of advocacy and intervention on performance of fresh fruits and vegetables access to external market. The study revealed that, FFV farming and exporting in Tanzania require skills on how to grow, harvest and sell their goods to the external markets. It was also revealed that, advocacy programmes from stakeholders of FFV such as government, external consumers and international food security and poverty eradication programmes need to intervene the industry. The study concludes that, factors such as business skills and capital are linked to advocacy and intervention as both needed by small scale farmers. Advocacy programme for intervening poverty eradication can be extended to FFV production and marketing, so as, the farmers can directly assess the external markets. Recommendations were done to the government to take a leading role in the design and formulation of policy and standards which shall be adopted and applied to empower the small scale farmers wishing to produce FFV. Small scale farmers were recommended to put more efforts and resources in dealing with these anomalies instead of complaining while living the opportunities to foreign exporters and those from neighbour countries. External buyers were recommended to participate in the sensitization campaign on market of FFV as well as training to farmers on farming skills to meet the international standards. Other players like commercial banks and other financial institutions were required to review and redesign loan procedures and credit facilities.

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LIST OF ABBREVIATIONS

| | |
|--------|---------------------------------------------------------------|
| DCs | District Councils |
| ESRF | Economic and Social Reform Foundation |
| FAO | Food and Agriculture Organization |
| FFV | Fresh Fruits and Vegetables |
| GNP | Gross National Product |
| LIDEP | Lushoto Integrated Development Project |
| RECODA | Research, Community and Organizational Development Associates |
| SPS | Sanitary and Phytosanitary Measures |
| SSA | Social Security Administration |
| TAHA | Tanzania Horticulture Association |
| TBT | Technical Barriers Trade |
| URT | United Republic of Tanzania |
| USD | United States Dollar |
| OECD | Organization for Economic Cooperation and Development |
| SSF | Small Scale Farmers |

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The growth in agriculture and its productivity are essential in achieving sustainable economic growth and significant reduction in poverty in developing countries. Both developmental and agricultural economists view productivity growth in the agricultural sector as critical if agricultural output is to increase at a sufficiently rapid rate to tackle poverty (Rao, et al, 2004 & OECD, 2006).

Agriculture has in many places connected broader economic growth and the indigenous people, increasing their productivity and incomes. The importance of agriculture for poverty reduction, however, goes well beyond its direct impact on indigenous incomes. Agricultural growth, particularly through increased agricultural sector productivity, also reduces poverty by lowering and stabilising food prices, improving employment for poor local people, increasing demand for consumer goods and services, and stimulating growth in the nonfarm economy.

However, small scale farmers in developing countries are challenged by lack of access to the market domestically and internationally. For the agriculture to yield good results, it must access foreign markets through exports as the main source of its foreign exchange earnings and economic performance. Hence the increase of the agricultural export is regarded as one of the gifted means of expanding incomes and increasing of foreign exchange earnings for the developing countries stepping up their development effort. Also for the developing countries that have channels their

economy from agriculture to manufacturing or other sectors, agricultural exports continue to play a vital role in creating incomes for rural citizens and providing raw materials to the related sectors.

It is a long period agricultural exports have been regarded as an economic development strategy for African countries especially Sub-Saharan Africa. Export of crops such as coffee, cotton, cocoa, palm and tobacco which were termed as traditional crops, have been encountered large price variability and declining prices at the world market. For example between 1978 to 1987, the average annual price changes for cotton, coffee, tobacco and tea were all negative, ranging from negative 2.4% from cotton, to negative 6.8 for coffee. Considering to shift into non-traditional crops export like vegetables, fruits, cut flowers, meat, fish, bee products, herbs, spices, nuts dyes, essential oils and organically grown traditional export crops were substituted the dropping prices of traditional crops export (World Bank, 2010). Although the performance of non-traditional exports has been higher than that of traditional agricultural exports in most of African countries, non-traditional exports have however not replaced traditional agricultural exports completely (World Bank, 2010).

The East African countries economies are basically agricultural based. For instance Uganda's exports are dominated by agricultural products which account for 90% of the export earnings. Coffee accounts for over 50% of agricultural exports. The total value of Ugandan agricultural exports amounted to US\$ 491.1million in 1996. Food crops (plantains, cassava, sweet potatoes, millet, sorghum, maize, beans, groundnuts

and sesame) represent 60% of agricultural GDP, livestock 19% and export crops (coffee, cotton, tea and tobacco) 12%. Some high value crops like flowers and certain vegetables and fruits are also being exported. The government of Uganda has developed a strategy to encourage export of both food crops and high value crops, in order to further diversify exports (Dijkstra, 2011).

In Kenya, coffee and tea are the major agricultural exports. Coffee was the country's leading foreign earner until 1987. However, in those years, world coffee prices declined and coffee export fell to US\$ 277.7 million, down from US\$ 445.6 million in 1986. About 83 percent of the country's commercial agricultural production was exported, including crops that are part of the customary diet of the local population and grown primarily for their high cash values and export potentials were categorized as non-traditional. Rising costs off greenhouse heating and labour coupled with pricing pressure in an increasingly global economy have made tropical countries a favoured alternative for producing green-house crops. Some tropical fruits and vegetables also show substantial export promise as consumers' desire for variety and awareness of the health benefits of these crops increases (Dijkstra, 2011).

Kenya is trying to reduce its heavy reliance of coffee and tea by developing other export crops. The most successful diversification to date has been in the sale of fresh fruits vegetable and flowers. Exports of these farm crops earned US\$ 100 million in 1987, up more than a third from US\$ 73 million in sales the previous year. Other alternative crops being prompted are pyrethrum and sisal fiber, but export sales of these products remain inadequate (Dijkstra, 2011).

In Tanzania, over 50 % of the exports are agro-based constituting exports of primary products such as coffee, cotton sisal, tea, tobacco and cashew nuts. The processed agro exports account for below 30 % of total exports. Non-traditional exports accounted for up to 44% of the total exports. During the era of socialism based on public sector led development, the state took the lead in agribusiness investment including plantations, processing and marketing of inputs and outputs.

Since the mid-1980s, policy reforms have been implemented involving liberalization of agribusiness and enhancing incentives for the private sector to engage in agricultural business. This has however not been accompanied by efficient and broad based supply response by private investors in various agricultural business (World Bank, 2010).

Although there is considerable entrepreneurial capacity demonstrated by African small business in supplying domestic markets, a recent study by Haidari, et al., (2013) on agricultural trade in Tanzania identified lack of exporter skills as one of the factors responsible as one of the factors responsible for poor performance in the sector. According to the study, only a few commercial farmers directly and of them are foreign farmers.

The small scale indigenous farmers are not professionals and lack information on foreign trade issues, including foreign exchange management and how to tackle uncertainty surrounding trade. The report of ESRF, (2004) cites numerous cases where Kenyans and South Africans purchase (e.g oranges, and other fruits) from

Tanzania and then re-export them. The report concludes that international market prices are only partially transmitted to domestic small scale farmers.

In Kenya, it is estimated that in 2013, foreign owned companies accounted for more than half of the value of Kenya's horticultural trade, while firms owned by Kenyan Asians and Europeans accounted for another 39%. Firms owned by Africans or having Africans in senior management positions accounted for only 6% of trade (Jaffee, 2014).

The export of Fresh Fruits and Vegetables (FFV) produce in Tanzania dates back to the post-independence days. As early as 1960s, a few private farmers from the northern highlands exported to Europe fresh produce by air. From 1972, the National Agricultural and Food Corporation took charge in a big export drive, gathering produce from small holders and larger farmers in Kilimanjaro and Arusha Regions and also from Lushoto Integrated Development Project (LIDEP) in Soni (Tanga) and the Tchenzema in Mgeta in Morogoro. A large share of the produce came from the West Kilimanjaro Farmers Association. This was exported through Dar es Salaam and Kilimanjaro airports. However, it was difficult to produce according to schedule and the scheme was abandoned in 1975 (Verheij, 2012). As in the other economic sectors, the performance of small scale indigenous farmers in the export of fruits and vegetables was severely affected by the Arusha Declaration of 1967. The exporters in the sector have been adversely affected by lack of transport infrastructure and cooling facilities. Considering the perishability of these commodities, i.e. fruits and vegetables, the two sets of facilities are a prerequisite as far as a robust export

business is concerned. For instance, when other countries shifted from air to sea for the transport of most products like pineapples to overseas markets, Tanzanians due to lack of efficient port facilities, still used the less competitive air transport. A survey done in 1999, noted that 75% of the firms engaged in FFV export business used air, 12.5% used ocean and 12.3% used ocean and air (Kitule, 2009).

1.2 Statement of the Problem

Despite the big role played by Fresh Fruits and Vegetables (FFV) exports in the East African economies, and Tanzania in particular, in bringing in foreign currency, small scale indigenous farmers have no direct link to the international export markets. According to Gibbon (2013), the FFV export business in East African countries is mainly controlled by agents of international companies. By not having direct contacts to international markets, the small scale indigenous farmers-get a very small percentage of the international market prices. In addition, since the middlemen in the export business are foreign companies, only a small percentage of the export revenue remains in the country. Therefore, there is a need for increasing participation of the small scale indigenous farmers in the export of Fresh Fruits and Vegetables. Gibbon (2013) study found that supermarkets which increased sourcing of fresh fruits and vegetables from developing countries has been generally accompanied by a decline of the proportion of this produce from small-scale farmers. He further concluded that, rather than small scale producers in developing countries reaping from the new opportunities, they instead experience marginalization and exclusion. The challenge of marginalizing indigenous producers is facing many countries in Africa including Tanzania. This study aims at addressing the factors that foster the exploitation of

indigenous small farm producers of fresh fruit and vegetable producers by middle men barring their direct contact with foreign markets.

In terms of market share the indigenous farmers' performance is dismal compared to the foreign exporters and their agents. In this regard the study aims at investigating the factors hindering their performance in terms of market share. In addition, the study was designed to advocate for the rights of the local small scale farmers in reaping the adequate profits from the external markets; and thereby eradicating the exploitative practices of middle men.

1.3 Research Objective

The overall objective of the study was to analyze socioeconomic factors that affect small scale farmers of fresh fruits and vegetables access to external markets.

1.3.1 Specific Objectives

Specifically the study intended to:

- i. To examine business skills of small scale farmers on performance of fresh fruits and vegetables export;
- ii. To determine capital requirements of small scale farmers of fresh fruits and vegetables export;
- iii. To review advocacy to small scale farmers on performance of fresh fruits and vegetables export;
- iv. To examine the interventions needed for enhancement of the performance of the export business of small scale farmers of fresh fruits and vegetables.

1.4 Research Questions

The following were the research questions based on the above objectives:

- i. What are the effect of business skills of small scale farmers on performance of fresh fruits and vegetables export;
- ii. What is the effect of capital requirements of small scale farmers of fresh fruits and vegetables export;
- iii. What is the effect of advocacy to small scale farmers on performance of fresh fruits and vegetables export?
- iv. What is the effect of intervention to small scale farmers on performance of fresh fruits and vegetables export?

1.5 Significance of the Study

Small scale farmers' involvement in the performance of FFV export in Tanzania is important in the national economy as it determine the level of foreign currency retained in the country from that line of business. Therefore, factors hindering performance in export of FFV by small scale farmers are very important to various stakeholders. The findings from this study will be used to give insights and contribution to the players in the FFV export industry as the results from exporters response will draw up the effect of one factor over the other (i.e. which one between lack of business and technical skills, inadequate information in terms of varieties, quality and timing, limited airfreight space and high airfreight cost and lack of adequate capital) so that players should put more weight and hence improve ways of influencing the support to the small scale farmers on finding external markets. In this setting, although the research is for academic purposes, it can also assist even

financial institutions and policymakers to set appropriate policies that can facilitate small scale farmers in FFV exports.

Furthermore, the study intends to assist not only FFV small scale farmers but also other non-traditional crops by small scale farmers in ascertaining their weaknesses in understanding their competitiveness strategies in terms of export business using the factors identified in this study. They will know how to address their problems in order to win and survive, and in-turn improves their productivity, profits, and finally enhance country's' foreign currency.

The findings of this study may additionally be used in other related studies as empirical findings, especially those evaluating factors that influencing export of FFV. Findings of the study can contribute to the stock of knowledge on factors influencing/hindering export of FFV. The study can form an empirical base on the effect of business and technical skills, information in terms of varieties, quality and timing, high transportation cost and adequate capital in export of FFV by small scale farmers in the academic arena, thus suggesting possible measures to the policy makers basing on those factors in this wake of globalization.

1.6 Organization of the Research

The study is divided into five chapters. Chapter one is an introduction which presented background information, an overview of agricultural exports in East Africa and also in Tanzania, research problem, research objectives, research questions, conceptual framework and significance of the study. Chapter two discusses both

theoretical and empirical literature on non-traditional crops and FFV in particular. Chapter three covers extensively on the methodology of the study. Chapter four presents empirical findings and lastly chapter five presents the conclusions, limitations, recommendations and area for further studies.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter revisits literature to compare various definitions of terms and concepts and operationalising them on the fresh fruits and vegetables in agriculture in various places in the world. It goes further to delve into theoretical literature review and empirical literature in Tanzania and elsewhere, simply in order to find out what has been done in this area and identify gaps which will be filled by this study. A review of policies and protocols will also be implemented.

2.2 Theoretical Literature Review

Theoretically this study was guided by the systems, conflict theory and rational choice theory as the three are dealing with concepts that influence human performance socially and economically.

The systems theory basically considers human behavior as the outcome of reciprocal interactions of person operating within linked systems. Basically, systems theory is an interdisciplinary all about the nature of complex systems in nature, society, and science, and is a framework by which one can investigate and/or describe any group of objects that work together to produce some result (Helou, and Caddy, 2006). In the social work perspective, systems theory was adopted in the 1960s, as there was a move of shift from a psychiatric model to system model inclusive of environment. Social work has drawn most heavily from the work of sociologists Talcott Parsons

and Robert Merton, Kurt Lewin and Urie Bronfenbrenner, and Ludwig von Bertalanffy (Helou, and Caddy, 2006).

The systems theory is considered to social work method in a generic situation is applied. Forder (2015) accounts that; general system theory is given indicating how human systems differ from other systems, taking their place in a larger continuum. Folder (2015) addresses four levels of systems theory in the social work. First there is the philosophical level, the view it presents of man and society, as compared with other psychological and sociological theories. Secondly its contribution to the perspective of social workers, making them aware of the range of systems they should be considering. Thirdly, it is the contribution to practice in providing a model of the structure of systems as a guide to appraisal and intervention. Fourthly it is the contribution to the understanding of social work process.

Small scale farming supply chain can be linked by systems theory whereby theory perspective could make significant contributions towards defining the scope of supply chains and developing a greater understanding of their design, implementation and management (Helou, and Caddy, 2006).

The Conflict theory draws attention to conflict, inequality, dominance, and oppression in social life. The theory states that, society is in a state of perpetual conflict due to competition for limited resources. Conflict theory holds that social order is maintained by domination and power, rather than consensus and agreement. According to conflict theory, those with wealth and power try to hold on to it by any

means possible, chiefly by suppressing the poor and powerless. Conflict theory also ascribes most of the fundamental developments in human history, such as democracy and civil rights, to capitalistic attempts to control the masses rather than to a desire for social order (Andrew, 2012).

Conflict theory has been used to explain a wide range of social phenomena, including wars and revolutions, wealth and poverty, discrimination and domestic violence.

Conflict theory proponents view the poverty in the society as the inevitable outcome of the inequalities and instabilities that the present structure of the global economic system enables to intervene (Andrew, 2012). In this perspective, small scale farmers empowered by government in such a way that, policies which favour their production, marketing and taxes are intervened.

The Rational Choice theory sees human behavior as based on self-interest and rational. It is an economic principle that assumes that individuals always make careful and logical decisions that provide them with the greatest benefit or satisfaction and that are in their highest self-interest. Most mainstream economic assumptions and theories are based on rational choice theory (Andrew, 2012).

According to Milgrom (2004) individual decision-making figures the basis for nearly all of microeconomic analysis. These notes outline the standard economic model of rational choice in decision making. "In the standard view, rational choice is defined

to mean the process of determining what options are available and then choosing the most preferred one according to some consistent criterion". In the social work perspective, rational choice theories assert that human beings behave rationally, either in the narrow sense of rational self-interest, or in the broader sense that decisions are rationally based on preferences (Hooker, 2011).

With agricultural products it is particularly clear that quality is important in determining price and even market structure, and for this reason agricultural economics was the first to develop the economics of quality, starting with the hedonic approaches following from Waugh (1928) in Bowbrick (1996). Most of these theories are based on the realities of agricultural products in agricultural markets.

2.3 Empirical Literature Review

In many developing countries small scale farming is a core function of many people especially in the rural areas. Small scale farming is a major source of food security for the rural people. According to Bijman and Meijerink. (2007) the majority of the rural population in sub-Saharan Africa can be considered as small scale farmers. Small scale farmers are marginalized and are vulnerable to climatic uncertainty and global economic shocks due to the fact that, they are practicing traditional farming which depends on rainfall and traditional watering. Meanwhile economic shocks do affect small scale farmers. In this regard, small scale farmers have to diversify the associated risks in engaging in more than crop farming. However, Bijman and Meijerink. (2007) observe that, small scale farmers also form a diverse group in

terms of their allocation of resources to food, cash crops, livestock and off-farm activities, their use of external inputs and hired labour, the proportion of food crops which are sold, and their household expenditure pattern. In addition, different types of small scale farmers are differently integrated with outside markets, whether national or international, and this influences the way they are impacted by policy changes.

Muwanga (2008) indicates that, fresh fruits and vegetables production was primarily regarded to be undertaken using non-intensive production systems with inadequate commercial orientation. However, recently horticultural production has become more intensive, with farmers aiming both the local and export markets. Despite the local market for FFV has no record, the external market of FFV was recorded increasing since the last decade (Muwanga 2008).

The marketing of FFV products is influenced and affected by many different factors including laws and regulations. For example, Bijman and Meijerink. (2007) indicate that, some of these laws and regulations work directly on agricultural marketing opportunities, such as the legal requirement to have a license for selling products or the legal obligation to sell to a state marketing board, or the requirements for government procurement, other laws and regulations have an indirect effect such as public quality standards or policies on investing in physical infrastructure.

Agriculture is the backbone of the economy of many developing countries, especially those non-oil exporting ones. For example in Tanzania, agriculture is providing 50%

of the Gross National Product (GNP) and 54% of foreign exchange earnings (URT, 2006). Most of the people in Tanzania depend on agriculture for their livelihood.

Agriculture provides mass employment and supplies food for the majority of the people in Tanzania. This situation is relatively the same for most of the developing countries globally especially Sub-Saharan Africa. For example, in Ethiopia, Kenya, Malawi, Mozambique and Uganda the contribution of agriculture to the GDP were 52%, 20%, 42% 24% and 42% respectively (World Bank 2005). The overall average of Sub-Saharan Africa is 18% of its GDP are contributed by agriculture (World Bank 2005). Therefore, it is obvious that improvement in farm incomes of the majority of the rural population is a requirement for reduction of poverty in Sub-Saharan region whose economic performance depends on agriculture.

According to Mkindi (2009) on his paper titled governance over fruit and fresh vegetables, export of agricultural products particularly both the traditional and non-traditional cash crops have been contributing significantly on foreign earnings. However, recently the falling prices of traditional cash crops such as coffee, cotton, sisal, tea and cashew nuts and emerging of world markets for non-traditional cash crops have forced farmers to look for alternatives, hence the introduction of export of fresh fruits and vegetables. The production of fresh fruits and vegetables has been increasing steadily since the last decade.

This increase has been engendered by the increases of demand and high prices of fresh foods in the global market which lead to the creation of attractive export

opportunities. Dolan and Humphrey (2001) researched on changes in the governance of global value chains of fresh fruits and vegetables: opportunities and challenges for producers in sub-saharan Africa. They argue that, because of increasing trend for the demand of fresh fruits and vegetables, a lot of effort has been devoted in promoting the production and export of fresh horticultural products by developing countries.

This has influenced the organization of marketing system of horticultural produce which was mainly dominated by the collection of fresh fruits and vegetables from small and scattered producers in the developing countries into a more integrated marketing system (ibid). However, the production is not yet stable particularly in the accumulation of amounts to satisfy the world market demand and quality

Fresh fruits and vegetables as one of agricultural subsectors ~~is~~ that are currently a fast growing are non-traditional crop production and marketing in Tanzania, despite the declining trends of agricultural outputs as a whole (SLE, 2008). The country has a large potential for the production of tropical, subtropical and temperate fruits, flowers, exotic vegetables (tomatoes, onions, cabbages, lettuce and carrots); tropical vegetables (cherry tomatoes, eggplants, African eggplants, okra, green leafy vegetables); spices and herbs crops (cinnamon, cardamom, vanilla, ginger, garlic, scrubs; but the potential has not been fully utilized. According to Development Alternatives Inc. (2003), over 95% of Fresh Fruits and Vegetables production comes from small scale farmers who cultivate small plots of less than one acre. These small-scale farmers supply over 80% of fruits and 90% of vegetables consumed in the domestic market (Development Alternatives Inc, 2003). Production occurs under

both rain fed and furrow-irrigated systems and utilization of improved inputs is low and average realized yields for most crops are 50% of achievable potential (ibid). While the industry has seen an increased number of smallholders farmers participating in the supply chain e.g. contract farming, the industry has remained unevenly organized in terms of its service delivery and performance in terms of exports.

Although the foreign income earned by the industry has increased from US\$ 1.4million per annum in 2002, 140 million in 2008 and US\$ 340 million in 2009, the full potential has not been realized (Mkindi, 2009). Employment rate has significantly increased by 67% in the past four years which has resulted to the increase of the per capita income of different societies (ibid). Production trends in the fresh fruits and vegetables industry have been increasing over years (TAHA, 2008). However, the sector's potential is—has not been adequately exploited; and FFV business operations are not adequately monitored, especially the exporting segment, so as to maximize the contribution to the national economy.

Development in the sector has been aggressively spearheaded by TAHA, an umbrella organization for producers, exporters, processors and service providers in the horticultural industry. TAHA was established in the country in 2004 and became operational (under the Dutch government support) in year 2005. TAHA is currently the most effective business association in Tanzania and is an advocate for reformation and transformation for the industry's economic performance and competitiveness (TAHA, 2008).

The production of FFV for trade has increasingly become an attractive and rewarding activity in many of developing countries. For instance between 2001 and 2006 the monetary value gain from export of edible fruits, nuts, peel of citrus fruits or melons to European Union by Sub-Saharan African increased by 28% which is equivalent to 319,957 million Euros. 28% increase was recorded in the same period for edible vegetables and certain roots and tubers which is equivalent to 67,652 million Euros. Ascribing to the dynamic nature of a sector, in terms of rising demand and high prices compared to traditional primary commodities, the production of tropical fruits and vegetables for trade has been consciously encouraged in many developing countries for alleviating heavy dependence on few, and often non-remunerative, primary commodities (Diop and Jaffee, 2005). It is for this reason that the volume of trade in FFV increased at annual rate of 7% and 14% during the periods 1995-2000 and 2000-2003 respectively (Pay, 2005).

A study of Kitule (2009) on the export and development of Fresh Fruits and Vegetables (FFV) products in Tanzania noted that exports in the country were low because of the following reasons:

- i. Many small scale farmers and exporters have no idea of how to export their products;
- ii. Advertisements of Tanzania FFV products are nonexistent;
- iii. Unavailability of good seed for high yielding production;
- iv. Refrigerated ships in Tanzania are not available;
- v. Bureaucracy in export procedure and documentation;

- vi. Exports were mainly by air which was very expensive and made it difficult to compete with other exporting countries which exported by ship; and
- vii. The Tanzania mission abroad was not aggressive enough to collect enough information on Tanzania imports to their station countries.

However, a study by Verheij (2012), noted that, to make the FFV export enterprise a success, the following requirements should be fulfilled:

- i. A high level of managerial skills;
- ii. A good infrastructure in the producing country ensuring a smooth flow on inputs; and proper maintenance of equipment on the farm and in the packing station (cold store), on the road and at the airport;
- iii. A tight organization to streamline the flow of produce on its 700km journey to European markets;
- iv. Instant communications (such as telephone and fax) to facilitate immediate action in case of mishaps (changes in available cargo space, in flight schedule etc); and
- v. Long enough supply seasons to establish a strong routine in the production and transport marketing chain.

Another study done for FAO as reported by Nyange, et al., (2003) specifically on fruits made the following recommendations to solve the constraints facing the fruit exporting firms:

- i. Centralizing some of the activities of the exporting firms;
- ii. Establishing of a database for Tanzanian exporters;

- iii. Adoption of generic promotion;
- iv. Product specialization and brand development;
- v. Quality control at farm level;
- vi. Introduction of semi-processed and frozen produce;
- vii. Coordination of facilitating agencies; and
- viii. Tax exemption.

2.3.1 Challenges Facing Small Scale Farmers on FFV marketing

Generally, there are several institutional concerns which limit the opportunities for growth in horticulture exports. According UNEP (2011) these challenges include costly certifications, limited market access, lack of exporter and producer associations, supply side constraints, lack of a well-developed local market and information gaps.

Many FFV small scale farmers are not certified in order to comply with market standards of European Union because they cannot afford the certification fees (UNEP, 2011). Other challenges facing exporters of FFV to the European Union are lack of formal contracts between traders and buyers. According UNEP (2011), several traders operate without formal contracts with buyers. Most farmers of FFV produce on small scale and have difficulties on increasing volume to meet market demands. The domestic market for FFV and cut flowers is poorly developed and offers a limited fallback position for exporters. When producers and exporters invest in produce handling systems, such as cold-chain storage, they must ensure that their operating costs can be covered by market price for exports (UNEP, 2011).

2.3.2 Business skills by Small Scale Farmers

Limited business skills by small scale farmers impede businesses to prosper and sustain in the market. Very few African farmers have knowledge about or control over the marketing of their exports. According to Kaplinsky (2004) most African farmers cannot be truly said to “manage” market channels in Europe. The EU market for off-season fruit and vegetables, ethnic crops, “exotic” fruit, and flowers has a wide range of suppliers to choose from Africa, Asia, or Latin America. Despite limited opportunity for channel management, farmers from Sub-Saharan Africa have a potential to enter into institutional arrangements with foreign buyers which reduce the risks and enhance the returns relative to relying entirely on open market sales, spot market sales, and sales on consignment. However, the business skills to the many of farmers are prerequisite (Kaplinsky, 2004).

2.3.3 Information in Terms of Varieties, Quality and Timing for Export

Small scale farmers requires right and adequate information regarding variety of produce to export, quality required and right time for exporting. Temu and Marwa (2007) observe that an access to market and technical of information on a regular and sustained basis requires investments that may be beyond the means of small enterprises. According to them, social media offer many advantages to the small scale farmers but require investments in computers, phone and fax equipment, and training of personnel in identifying, accessing, and interpreting the available data in order to fully benefit from market information systems. If a FFV producer is unwilling or unable to subscribe to a service that provides detailed import volume and price data for major terminal markets, she/he may rely upon a representative or a

trading partner in one or more terminal markets. This can also be costly, and the reliability of the data may be suspect. The most effective market intelligence is obtained by actually visiting wholesale markets, supermarkets, shops selling fruits and vegetables, and importers in foreign markets. This form of market research is very costly (Temu and Marwa, 2007).

2.3.4 High cost of Transportation

Generally the transportation cost from Africa to Europe is always high contrary from Europe to Africa. This might be caused by lack well layoff transportation infrastructures which include few airports, harbours with enabling facilities. The transportation of fresh fruits and vegetables needs cooling facilities and special packaging which automatically pushes the transportation cost to be high. Rodrigue and Comtois (2001) argue that whenever transportation costs rise by 10% trade volume is reduced by 20%.

2.3.5 Inadequate Capital

It is a fact that the commercial banking sector in developing countries, particularly in Africa, is generally not well developed; and the limited commercial credit that may be available is given to large enterprises that meet the collateral requirements of banks. Also Government credit schemes benefiting small farmers and businesses, have proven costly to run and difficult to sustain, requiring ongoing subsidies.

Recently, however, in many developing countries, like Tanzania, most of the financial institutions and the banking sector in particular, have been privatized. The

experience shows that the privatization of the banking sector has made the accessibility of credit facilities to small enterprises much difficult than when they were state owned (Temu and Marwa, 2007).

Since the private sector is entirely after profit maximizations, this makes them very sensitive to who is legible and who is not legible for the credit. Since small enterprises have poor record in management and formal entrepreneurial skills, it is very difficult for them to qualify for the credit. Even when they qualify, the amount they qualified for is meager due to the fact that, credit facilities offered by commercial banks always tied it with the value of collaterals. This makes the credit management by small scale farmers and enterprises extremely expensive.

2.4 Research Gaps

The study by Foss (2004), identifies many challenges to the development of trade and exports in Africa such as difficulties in complying with TBT and SPS, measures, unfavourable or discriminating trading terms which hinders the market access, gaps and delays in the logistic chain, lack of precise market information and communication, lack of clear national objectives and supportive government policies, bureaucracy in import licensing and border-crossing procedures and poor export strategies.

However, the previous studies in Tanzania seem to put less emphasis on whether limited business skills, inadequate information on varieties, and quality and time for export, high transportation cost and lack of adequate capital to indigenous exporters

on export of Fresh Fruits and Vegetables (FFV) in Tanzania, have challenged the performance of small scale farmers to access external market of FFV produces.

Given the importance of participation of small scale farmers in performance of non-traditional crops export in Tanzania especially Fresh Fruit and Vegetables (FFV) which have a lot of contribution to foreign currency earnings, this study intended to find out whether the limited business skills, inadequate information on varieties, and quality and time for export, high transportation cost and lack of adequate capital challenge the export of Fresh Fruits and Vegetables (FFV) by small scale farmers to access external market. Others are lack of advocacy, interventions and training.

2.5 The Conceptual Framework

The variables that were studied included business skills, information in terms of varieties, quality and timing, packaging, transportation costs, training and capital as independent variable and the indigenous exporters. If the small scale farmers are adequately trained in business and technical skills, get adequate information in terms of varieties, quality and timing, reasonable transportation cost and receive adequate capital the expected results are positive performance in FFV export.

However, it is assumed that the factors above are missing i.e. there is a lack of business and technical skills, inadequate information in terms of varieties, quality and timing, high cost of transportation and lack of adequate capital which have hindered the performance of FFV on accessing external market by small scale farmers. The relationship is represented as follows:

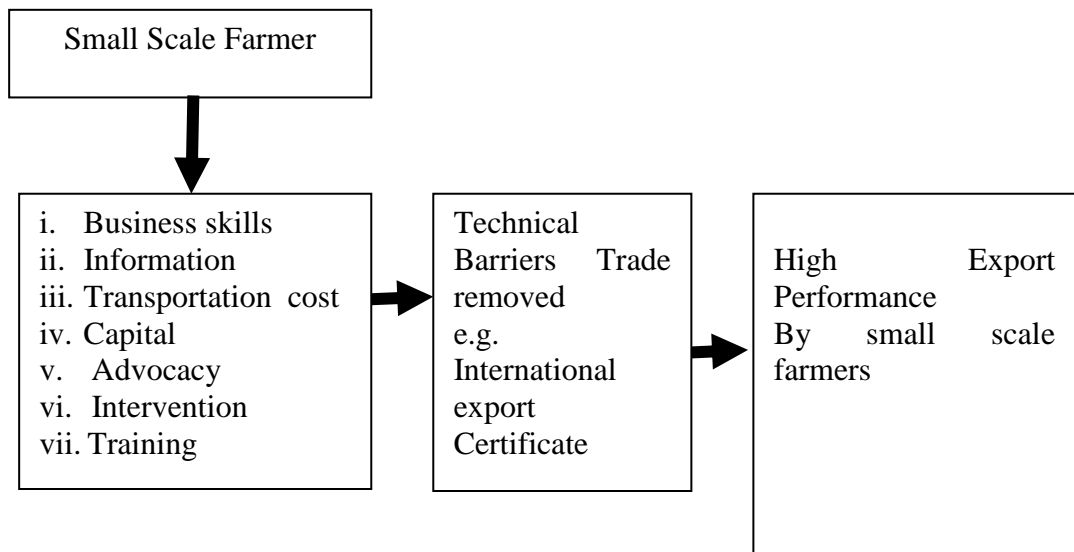


Figure 2.1 Conceptual Framework

Source: Research (2015)

The lack of business and technical skills, inadequate information in terms of varieties, quality and timing, high cost of transportation and lack of adequate capital were expected to impact adversely to the performance of FFV export small scale farmers. The variables were measured to determine effects of lack of business and technical skills, inadequate information in terms of varieties, quality and timing, high cost of transportation and lack of adequate capital, as independent variable, to the export of FFV by small scale farmers. The above variables as conceived by the researcher may be discussed as follows:

- i. **Business and technical skills:** In business people have certain attributes in common. Several personal qualities are important, like a thirst for continuous education, personal drive and motivation, strong goals and ambition, clear vision and always a great deal of passion. Special business and technical

attributes like writing skills, social networking, speaking, sales and negotiation. Limited business skills by small scale farmers may cause businesses to fail in their early years or may operate unsuccessful.

- ii. **Information in terms of varieties, quality and timing:** Any business requires right mixture of the varieties of produces, right quality and right time of delivery. Lack of information regarding these combinations may always mismatch of balance between supplier and buyer. Inadequate information in terms of varieties of supplies, quality requires and timing of requirement hinders the successful performance of the fresh fruits and vegetables export business due to the fact that the produces have very short lifespan.
- iii. **Cost of transportation:** Apart from poor infrastructures, such as lack of power and roads passable throughout the year, the transportation of produces from Africa to Europe is always high. Being the transportation of fresh fruits and vegetables needs cooling facilities and special packaging, we can imagine the cost. Therefore this factor is affecting the performance of fresh fruits and vegetables export business if not be taken into consideration.
- iv. **Capital:** Capital is conditional for smooth operation of any business. Lack of adequate capital shall definitely affect the performance of fresh fruits and vegetables by small scale farmers on accessing external markets.
- v. **Advocacy: Advocacy** is a process aimed at influencing decisions by public policy, social systems and institutions. Lack of advocacy on small scale farmers of FFV will remain unsupported by government and institutions that promote poverty eradication. Advocacy on small scale farmers on FFV expected to enhance availability of support such as subsidies from government

programmes, supporting FFV market programme such as African Growth Opportunity Act (AGOA) whereby eligible countries enter U.S market duty free.

- vi. **Intervention:** In social work, intervention refers to actions taken by social workers to directly provide service or support to at-need individuals.
- vii. **Training:** Training is a continuing process of developing skills of an individual to cope with the demand of performance in respect of rapidly changing of technology and the environment. As well training enhances an individual to achieve desired goal through strategies which often required being learnt new techniques and ways of doing things better. Lack of training programmes to small scale farmers make them producing and marketing FFV produces in a traditional ways which does not meet requirement of market.’

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This research carried out a detailed and critical review of the existing literature. It gathered all relevant evidence on the factors that need to be taken into account when evaluating social economic factors hindering performance in accessing external market for FFV by small scale farmer in Tanzania.

3.2 Research Design

Research methodology is a way to systematically solve the research problem (Kothari, 2004). Research methodology included both research methods as well as consideration of the logic behind the methods we used in the context of our research study (Kothari, 2004). To successfully carry out this study, qualitative and quantitative approaches were adopted. The respondents were selected from small scale farmers who were members of TAHA. The surveys and analysis as such, were set to address questions raised in the research objective context, through provision of ground for answers to the research questions by the participants. The research investigated socio economic factors hindering performance in accessing external market for FFV by small scale farmer in Tanzania.

The study employed both explanatory and descriptive research design. Apart from using survey design; data that were used in this study were collected using cross-sectional approach. That is, it was undertaken at a particular point in time.

3.3 Population

The population of study comprised of all currently small scale farmers listed by TAHA, Government and TAHA officials worked at least 5 years past all.

Table 3.1 The Population

| Respondents | Population |
|----------------------------|-------------------|
| Small scale farmers | 137 |
| Government official | 30 |
| TAHA official | 30 |
| Total number of population | 197 |

3.4 Sampling Procedures and Sample Size

The sample size selected for the study was based on Krejcie and Morgan (1970) table in Amin (2005). According to this table, there are given sample sizes(s) for the given population sizes (N) (Refer to Appendix 3). In this regard, 100 small scale farmers and 50 Government and TAHA staff were sampled.

3.5 Data Collection Methods and Procedures

The researcher used primary and secondary data:

3.5.1 Primary Data

3.5.1.1 Questionnaire

Primary were collected from the study population using researchers developed semi-structured questionnaire with open and close ended questions. It is self-administered in the sense that the targeted respondents that had ability to read and understand it on their own. This set of questionnaire validated for its

reliability by undertaking a pilot study which will involve eight (9) respondents whereby 3 respondents were obtained from each category namely small scale farmers, TAHA official and government officials . After being piloted they were corrected ready for being distributed to the sample size of the study. The questionnaires consisted five sections (Appendix 1 & 2).

3.5.2 Secondary Data

Secondary data were collected by reviewing documents related to FFV production and marketing available at TAHA. The study employed sources such as:

- a) FFV marketing research and reports
- b) Published and non-published records and statistics

3.6 Validity and Reliability of Data

According to Joppe (2000), reliability is the extent to which results are consistent over time and an accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology, then the research instrument would be considered to be reliable. Embodied in this citation is the idea of repeatability of results or observations.

Validity on the other hand determines whether the research truly measures that which it was intended to measure or how truthful the research results are. So far, the definitions of reliability and validity in quantitative research reveal two strands: Firstly, with regards to reliability, whether the result is replicable. Secondly, with

regards to validity, whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure.

3.6.1 Cleaning of Data

Data was cleaned before being used in order to ensure their reliability and validity. Data was cleaned to identify missing information, removing duplications, detecting entry errors, and checking for inconsistencies such as outliers. Triangulation of methods was deployed in data cleaning where apart from reports; people dealing with the reports (Government and TAHA officials) were also interviewed. Moreover, the respondents from the small scale farmers' category were asked similar questions in order to work out on the variations and correct them during the design of the questionnaire and pre-testing pilot exercise.

3.6.2 Triangulation

One measure of reliability and validity in qualitative research is triangulation. Patton (2002) advocates the use of triangulation by stating that “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches” To ensure reliability and validity of the study, different sources of data were used.

3.7 Methods of Analysis

Questionnaires were analyzed using Statistical Package for Social Scientists (SPSS). A descriptive part involved the use of frequency tables and pie charts as well as cross tabulations of variables of interest was presented in the discussion of the results.

The model to be used:

$$IE = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Where:

Improved exports by small scale farmers, which is the dependent variable. It is assumed to be a function of Limited business skills(X_1), adequate information in terms of varieties, quality and timing (X_2), transportation cost (X_3) and adequate capital (X_4). b_0 and b_1 and b_2 , b_3 , b_4 are coefficients of the model, and e is error term.

Some data were analyzed by using the descriptive statistics (frequency and percentage) whereas Pearson Correlation and the one way ANOVA F-Test to identify the significant differences of the application levels of relationship between advocacy factor and access of accessing external market by small scale were employed.

The Simple Linear Regression and the Pearson Correlation to check the relationship between application levels of training factors and access of accessing external market by small scale were employed.

3.8 Testing Hypotheses

T-statistics and probability values were used to test the level of significance on each variable (Lack of business and technical skills, inadequate information in terms of varieties, quality and timing, high transportation cost and lack of adequate capital) on export of fresh fruits and vegetables by small scale farmers using the results from questionnaires. The cut-off point which was considered to be significant was 10%.

This determined the importance of each variable over the other basing on the model developed.

The following statements were tested

- H₁** Limited business skills by small scale farmers do hinder performance of FFV access to external market.
- H₂** Inadequate information in terms of varieties, quality and timing for export by small scale farmers has adverse effect on the performance of Fresh FFV access to external market.
- H₃** High transportation cost has negative effect on the performance of exports of FFV by small scale farmers.
- H₄** Lacks of adequate capital by small scale farmers have negative impact on performance of FFV access to external market.
- H₅** Poor advocacy to small scale farmers have negative performance of fresh fruits and vegetables export.
- H₆** Lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export.
- H₇** Lack of trainings to small scale farmers have negative performance of fresh fruits and vegetables export.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS, AND DISCUSSION

4.1 Introduction

This chapter discusses the major results and conclusions of both statistical and descriptive information derived from both primary and secondary information. While secondary data were collected using the information of different publications from the Ministry of Agriculture (Annual and monthly reports), BoT Economic bulletins – Quarterly reports, annual reports as well as the TAHA operation reports, primary data captured through questionnaires of small scale farmers, government officials and TAHA officials were presented and discussed through frequencies and charts.

4.2 Discussion of the Results From Secondary Data

4.2.1 Trend of export of FFV in Tanzania

The FFV export trend in Tanzania show fluctuating trend in four years since 2010 as extracted from TRA data of 2014 in this study. In terms of value the study shows the growth trend from 2010 to 2012 and suddenly decline in 2013. The reason for this trend might be the situation of currencies and economic situation in the global. Meanwhile the price for high valued FFV is fluctuating. The growing trend seems on 2010 to 2012 and dropped on 2014 (Table 4.1 and Figure 4.1).

Table 4.1 Tanzania Export of High Value FFV

| Year | 2010 | 2011 | 2012 | 2013 |
|-----------------|-------|-------|-------|-------|
| Value (000) | 5.380 | 5.656 | 8.108 | 4.585 |
| Volume(000) | 4.633 | 2.711 | 3.016 | 2.654 |
| Price(US\$ 000) | 1.66 | 2.09 | 2.69 | 1.76 |

Note: Calculated from Tanzania revenue Authority, Value are FOB in US\$ '000',
Volume in tons, Prices are in US\$ per Kg

Source: TRA Data (2014)

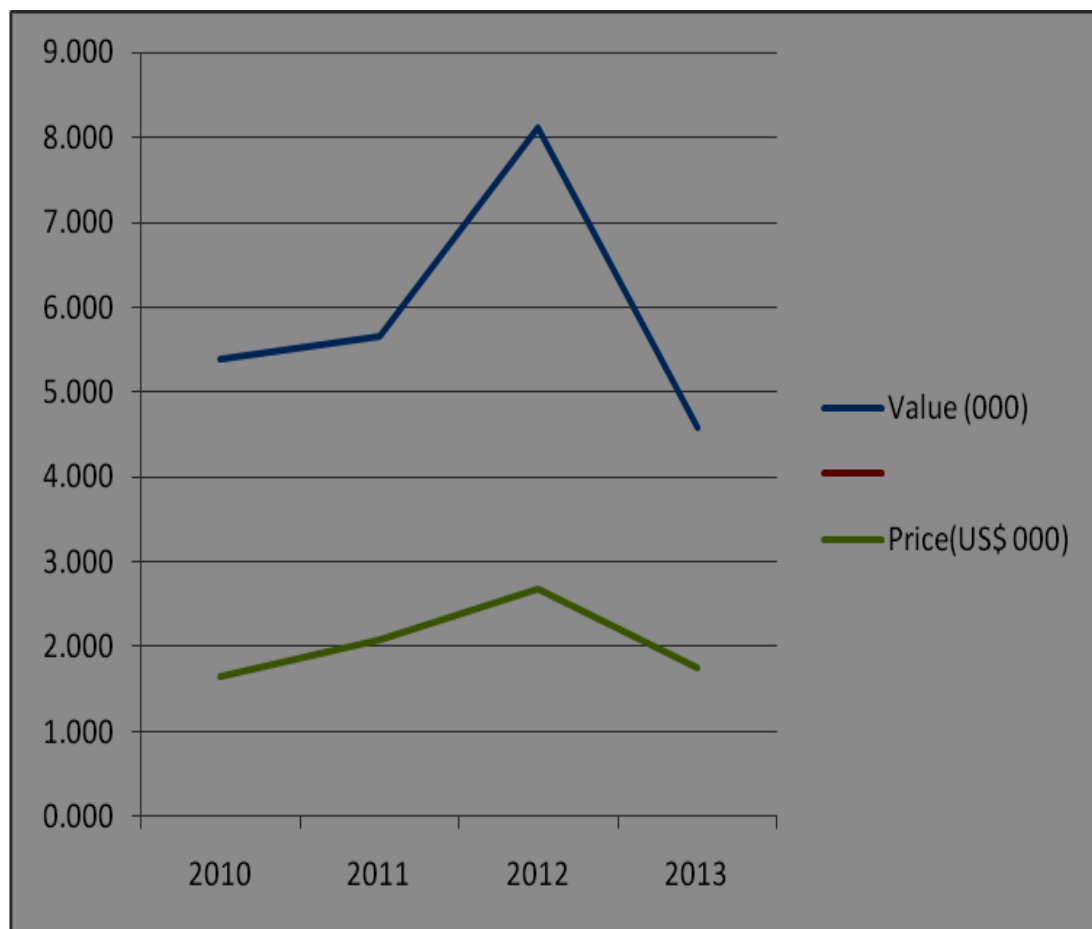


Figure 4.1: Trends in Value of Fresh Fruits and Vegetables Export in Tanzania

Source: TRA Data (2014)

In terms of volume the trend shows the decline behavior except 2012 where there was slight growth. The reason for this trend might be due to marketing situation which have been affected by Global Financial Crisis. Other reason might be drought weather which has been persistently hit the country since 2006 (Table 4.1 and Figure 4.2).

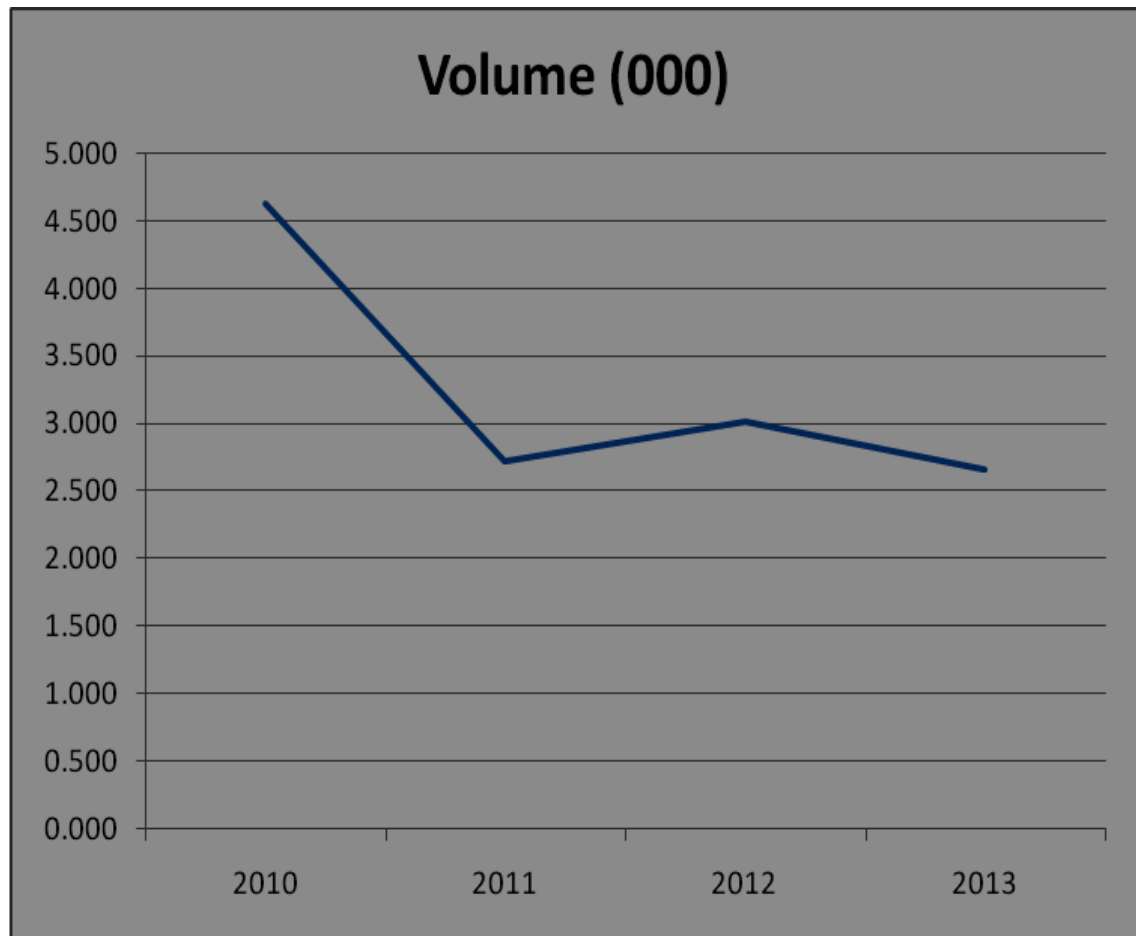


Figure 4.2 Trends in Volume of Fresh Fruits and Vegetables Export in Tanzania

Source: TRA Data (2010/4)

Despite, the FFV export business in Tanzania is not much encouraging compared to the potentiality of this industry to grow steady due to soil, climatic and weather favorability, the small scale farmers are holding very little market share in this industry. According to market survey conducted by the Ministry of Agriculture in 2012, the top nine local export associations which assisted small scale farmers to sell their FFV produces are holding the average of 25% of the total market share of FFV export from Tanzania (Table 4.2).

Table 4.2 Top Small Scale Farmers Associations Export Market Share

| Farmers Association | 2010 | 2011 | 2012 | 2013 |
|------------------------------|-------------|-------------|-------------|-------------|
| Meru Vegetables Association | 2.1 | 2.2 | 2.5 | 2.3 |
| Kishimiri - Juhudi | 2.7 | 2.8 | 2.6 | 2.7 |
| Kikwe Kilimo Association | 3 | 2.8 | 2.5 | 3 |
| Wameru Horticulture | 2.4 | 2.7 | 2.5 | 3 |
| Maendeleo Association | 1.5 | 1.6 | 1.2 | 2.3 |
| Daima Kilimo | 4 | 3.8 | 3.9 | 3.7 |
| Tengeru Association | 2.4 | 2.5 | 2.8 | 2.6 |
| Eselina Horticulture Produce | 2.8 | 2.6 | 2.2 | 2.9 |
| Ujamaa Group | 4 | 4.6 | 4.1 | 3.6 |
| Total | 24.9 | 25.6 | 24.3 | 26.1 |

Source: RECODA (2014)

4.3 Discussion of the Results From Respondents' Questionnaires

4.3.1 General Observations

There were two categories of respondents in this study namely small scale farmers and TAHA officials who responded on the two set of questionnaires. The following tables represent their profiles.

Table 4.3: Respondents Statistics

| Category | Sample | Respondents | Percent |
|-----------------------------------------|---------------|--------------------|----------------|
| Small Scale Farmers | 100 | 95 | 95 |
| TAHA Officials and Government Officials | 50 | 50 | 100 |
| Total | 150 | 145 | 96.7 |

Source: Research Data (2015)

Table 4.3 above shows the respondents statistics. The study sampled 100 small scale farmers and 50 TAHA officials. The valid respondents were 95 (95%) of the small scale farmers and 50(100%) of TAHA officials. Generally the total respondents from these categories represent 96.7% of the entire sample.

Table 4.4: Small Scale Farmers Gender Distribution

| Sex | Frequency | Percent | Cumulative Percent |
|------------|------------------|----------------|---------------------------|
| Male | 55 | 57.9 | 57.9 |
| Female | 40 | 42.1 | 100 |
| Total | 95 | 100 | |

Source: Research Data (2015)

Table 4.4 represents small scale farmers' gender distribution. 57.9% were male and 42.1% were female. These results shows FFV exporting business pattern is dominated by male.

Table 4.5: Small Scale Farmers Education Profile

| Education level | Frequency | Percent | Cumulative Percent |
|------------------------|------------------|----------------|---------------------------|
| Primary | 25 | 26.4 | 26.4 |
| Secondary | 55 | 57.9 | 84.3 |
| Diploma | 15 | 15.7 | 100 |
| Degree and above | 0 | 0 | 100 |
| Any other | 0 | 0 | 100 |
| Total | 95 | 100 | |

Source: Research Data (2015)

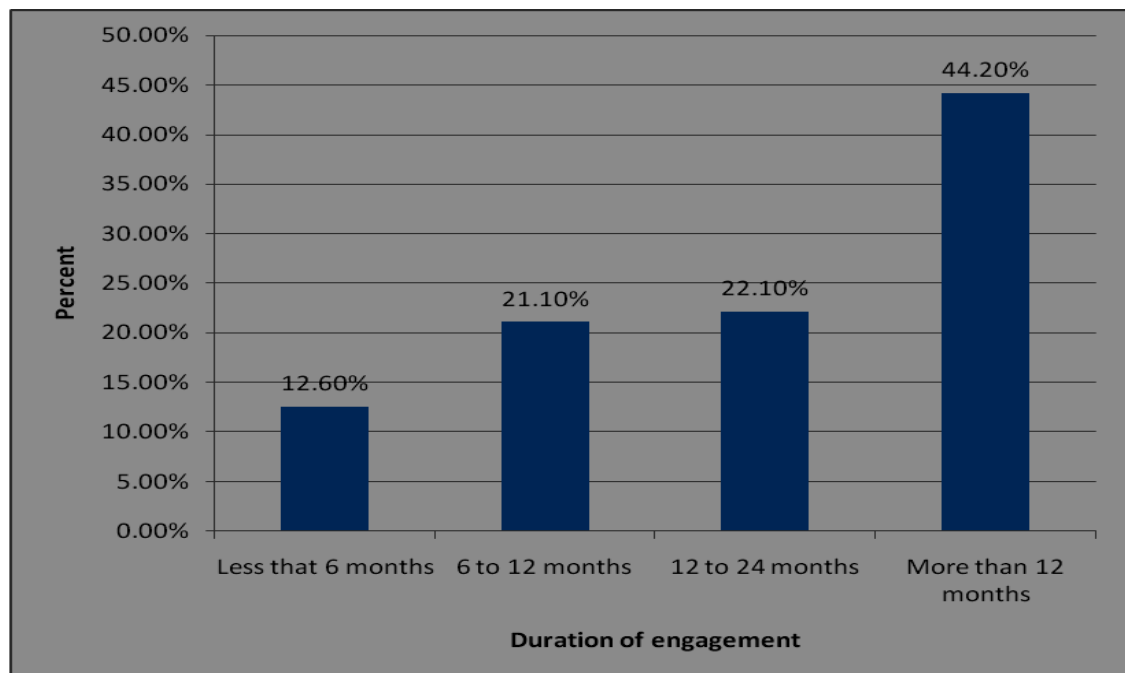
The education profile of the small scale farmers was summarized on the table 4.5 above. The group was dominated by 57.9% of farmers with secondary education level followed by 26.46% of farmers with primary education level and finally 15.7% of farmers with diploma education level. There were no respondent with degree education level. This shows that the FFV production is produced by ordinary educated individuals. However, the trend from these results can represent education pattern for small scale farmers.

Table 4.6: Small Farmers Engagement into FFV production

| Education level | Frequency | Percent | Cumulative Percent |
|------------------------|-----------|---------|--------------------|
| Less than 6 months | 12 | 12.6 | 12.6 |
| 6 months to 12 months | 20 | 21.1 | 33.7 |
| 12 months to 24 months | 21 | 22.1 | 55.8 |
| More than 24 months | 42 | 44.2 | 100 |
| Total | 95 | 100 | |

Source: Research Data (2015)

The researcher found out whether the little market share possessed by small scale farmers into FFV export market is associated with insufficient time of engagement into the sector by small scale farmers. In this regards, small farmers' engagement into FFV production period were assessed. The group was dominated by 44.2% of the respondents with more than 24 months, followed by 22.1% of those with experience of 12 months to 24 months, then 21.1% of those with 6 months to 12 months experience and lastly, 12.6% of those with less than 6 months experience.

**Figure 4.3 Small farmers engagement into FFV production**

Source: Research Data (2015)

From these results the study a prematurely concluded, that little market share possessed by small scale farmers into FFV export market cannot be related to by little duration of engagement into FFV production (Table 4.6 and Figure 4.3).

Table 4.7: Factors Influenced Small Scale Farmers to Engage into the Production of FFV

| | | Frequency | Percent | Cumulative Percent |
|---------------------------------------------|-----------------|-----------|---------|--------------------|
| Potential for high income | Strong Disagree | 0 | 0 | 0 |
| | Disagree | 31 | 32.6 | 32.6 |
| | Indifferent | 0 | 0 | 32.6 |
| | Agree | 45 | 47.4 | 80.0 |
| | Strong Agree | 19 | 20 | 100.0 |
| | Total | 95 | 100 | |
| Existence of large potential market | Strong Disagree | 0 | 0 | 0 |
| | Disagree | 0 | 0 | 0 |
| | Indifferent | 0 | 0 | 0 |
| | Agree | 65 | 68.4 | 68.4 |
| | Strong Agree | 30 | 31.6 | 100 |
| | Total | 95 | 100 | |
| Sensitization and support by the government | Strong Disagree | 51 | 53.7 | 53.7 |
| | Disagree | 39 | 41.1 | 94.7 |
| | Indifferent | 5 | 5.3 | 100 |
| | Agree | 0 | 0 | 100 |
| | Strong Agree | 0 | 0 | 100 |
| | Total | 95 | 100 | |
| Diversification with other export business | Strong Disagree | 15 | 15.8 | 15.8 |
| | Disagree | 33 | 34.7 | 50.5 |
| | Indifferent | 0 | 0 | 50.5 |
| | Agree | 31 | 32.6 | 83.2 |
| | Strong Agree | 16 | 16.8 | 100 |
| | Total | 95 | 100 | |

Source: Research Data (2015)

The researcher also explored the factors would influence small farmers engagement into FFV production and exporting business. Table 4.7 below represents the results

as were rated by the respondents from strongly disagree to strongly agree by assigning number 1 to 5 respectively.

(i) Potential for high income. The respondents were asked to rank if were attracted to the FFV production because there is potential for high income in this sector. The results show that 47.4% agreed and 20% were strongly agreed. 32.6% disagreed with the proposition. It seems potentiality of the income FFV production was the reasons for attracting small scale farmers to engage into the sector.

(ii) Existence of large potential market. The respondents were also asked whether they entered into FFV production due to the existence of large potential market. All 100% of the respondents accepted the proposition. That is 68.4% were plainly agreed and 31.6% were strongly agreed. This correspond with the results above that there is potential high income since there are large potential market. The results confirm the Tjalling Dijkstra, (2001) study that, the farming of fruits and vegetable in tropical climate is easier because does not require greenhouses heating facilities. Since the production in tropical zones is a bit low compared to non-tropical zones, the FFV products are also easier available for export.

(iii) Sensitization and support by the government. The respondents were asked whether were attracted into the business because of the sensitization and support by the government. 94.7% were not accepted the proposition. That is 53.7% were strongly disagree with the proposition and 41.1% were plainly agreed with

the proposition. Another 5.2% were indifferent with the proposition. From this results the researcher understand that there are little support or sensitization from the government toward assisting indigenou exporters in busting this kind of business. This is in line with Kitule, (1999) that even the Tanzania mission abroad was not supporting the industry by collect enough information on Tanzania imports to their station countries.

(iv) Diversification with other export businesses. The respondents were also asked to respond whether they were in FFV production as one of the portfolio in their commercial activities. 50.5% accepted that they were producing FFV as diversification with other commercial activities. Another 49.5% did not accept that, FFV production was diversification with other commercial activities. Thus, FFV production was their main commercial activity and had no other commercial activities. The reason for asking this question was to find out whether by production of FFV in combination to another commercial activities, may cause the small scale farmer to put less attention while concentration with other commercial activities.

4.3.2 Hypotheses Testing

The hypotheses were tested based on the equation developed in the research methodology and three groups of respondents were considered namely indigenou exporter respondents, government officials and TAHA officials. Where frequencies, from all group of respondents, show different trends, data were treated separately to run the regression in order to see the results of each group. However, where

frequencies looks the same, say both with strong agreement on a certain variable, regression was run on combined data.

H₁: Limited business skills by small scale farmers do hinder performance of FFV access external market

The large proportion of the respondents strongly agrees on the limited business skills by small scale farmers hinder performance of FFV access external market. However, some of the respondents were indifferent that limited business skills by small scale farmers hinder performance of FFV access external market. The result from the analysis indicates that, limited business and technical skills by small scale farmers have affected access to external market. According to the findings, 90% of the respondents from small scale farmers and 85% from government officials were identified limited business skills by small scale farmers as an important factor that hinder the performance of FFV access external market.

This was also observed to TAHA officials where 80% of the TAHA respondents ranked the same on the influence of business and technical skills by small scale farmers on the improvement of performance of FFV access external marker (Figure 4.4).

A t-statistics test from the regression equation presented in the research methodology was conducted to show if limited business skills by small scale farmer's does not hindering performance of FFV access external market. Results of the test revealed that the business and technical skills by small scale farmers has a positive and significant impact on performance of FFV access external market.

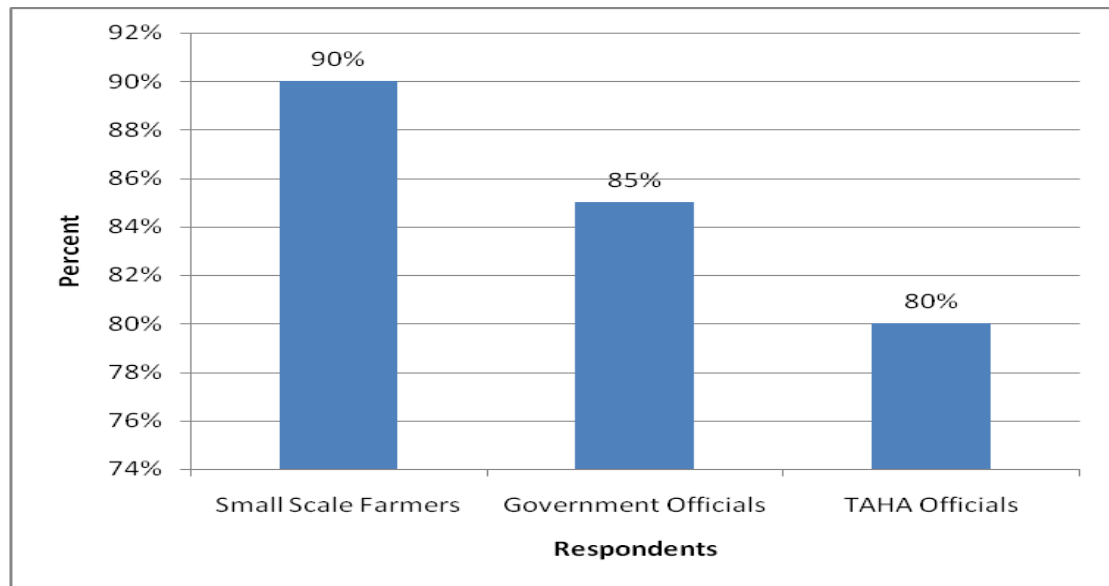


Figure 4.4 Limited business skills by small scale farmers do hinder performance FFV access to external market

Source: Research Data (20115)

The relationship was statistically significant as it was supported by the high coefficient of t-statistics of 5.16 (with probability = 0.02231) (Table 4.8). Not only that, but also the coefficient of standard deviation of 0.21 was very low, indicating that the influence of the business and technical skills by small scale farmers is not far away from the performance of FFV in accessing external market by small scale farmers.

Table 4.8 T-statistic test on the limited business skills by small scale farmers do hinder performance of FFV access external market

| Mean | Std. deviation | Standard Error Mean | t-statistics | Probability |
|------|----------------|---------------------|--------------|-------------|
| 0.87 | 0.21 | 3.17 | 5.16 | 0.02231 |

Source: Research Data (2015)

Therefore, the hypothesis that limited business skills by small scale farmers do hinder performance of FFV access external market was accepted. Despite potential to enter into institutional arrangements with foreign buyers by small scale farmers of FFV in Tanzania as explained by Kaplinsky, (2004), the limited business skills by small scale farmers is a potential obstacle to access external market of FFV produces.

H2. Inadequate information in terms of varieties, quality and timing for export by small scale farmers has adverse effect on the performance of FFV access external market

Small scale farmers are mismatching the information in terms of varieties, quality and timing. The cost for this mismatching are said to be high, and has effect on the performance of FFV access external market.

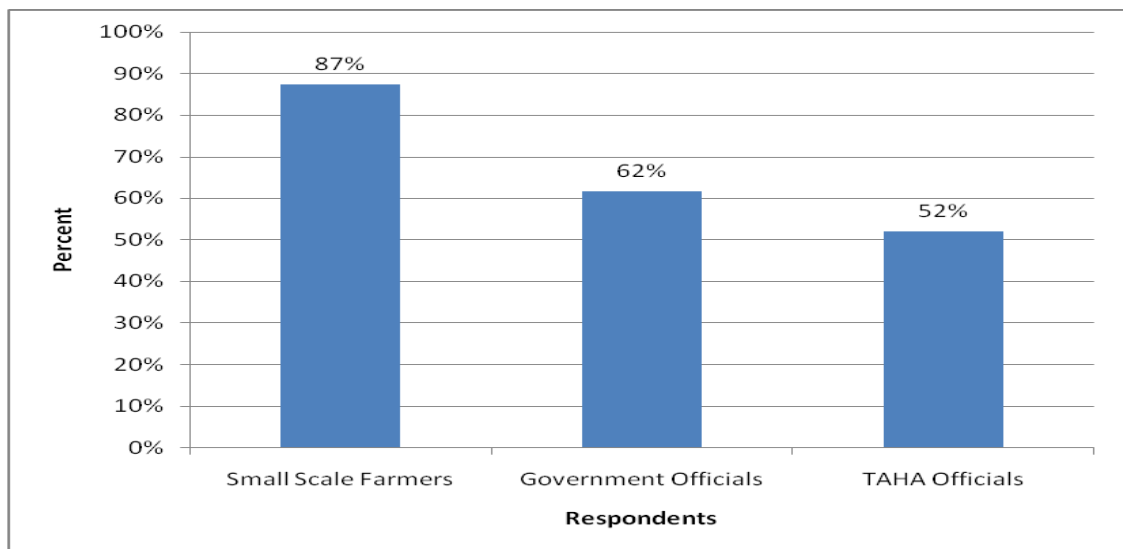


Figure 4.5: Inadequate Information in Terms of Varieties, Quality and Timing for Export by Small Scale Farmers Has Adverse Effect on the Performance of FFV Access External Market

Source: Research Data (2011)

The results from small scale farmer respondents reveal the inadequate information in terms of varieties, quality and timing for export by small scale farmers was a strongly factor which has adverse effect on the performance of FFV access external market. 87% of the small scale farmer respondents accepted this factor while the results from government and TAHA officials show that 62% and 52% respectively accepted that inadequate information in terms of varieties, quality and timing for export by small scale farmers has adverse effect on the performance of FFV access external market (Figure 4.5).

The t-statistics show that, there is positive and significance relationship between information in terms of varieties, quality and timing for export by small scale farmers and the performance of FFV access external market as it was proved by high coefficient of t-statistics of 3.32 (with probability = 0.04012) (Table 4.9). Also the low coefficient of standard deviation of 0.77 indicates that the information in terms of varieties, quality and timing for export by small scale farmers is not far away from the performance of FFV access external market.

Table 4.9: T-statistic Test on the Inadequate Information in Terms of Varieties, Quality and Timing for Export by Small Scale Farmers Has Adverse Effect on the Performance of FFV Access External Market

| Mean | Std. deviation | Standard Error Mean | t-statistics | Probability |
|------|----------------|---------------------|--------------|-------------|
| 1.92 | 0.77 | 6.03 | 3.32 | 0.04012 |

Source: Research Data (2015)

Therefore, the hypothesis that the inadequate information in terms of varieties, quality and timing for export by small scale farmers has adverse effect on the

performance of FFV was not rejected. The adequate information in terms of varieties, quality and timing for export by small scale farmers is a prime and prerequisite for FFV export business by small scale farmers of Tanzania. According to Temu and Marwa (2007) access to market and technical of information requires investments that may be beyond the means of small enterprises. However, due to accessibility of the social media networks that are affordable by ordinary small scale farmer, the challenge can be managed.

H3 High transportation cost has negative effect on the performance of FFV access external market by small scale farmers

The observation from respondents, 83% of small scale farmers showed that high transportation cost has negative effect on the performance FFV by small scale farmers, hence was identified to be an important factor which hindering the performance of FFV access external market by small scale farmers. The entire respondents from government and TAHA pointed out that high transportation to have negative effect on the performance of FFV access external market by small scale farmers (Figure 4.6).

The empirical findings from the combined data for all respondents indicated that the relationship between high transportation cost and performance of FFV access external market by small scale farmers is negative and insignificant at 1% level of significance as it is shown by the high t-statistics coefficient of 13.18 (with probability value = 0.00612). In addition, the low coefficient of the standard deviation of 0.26 also indicated that that the high transportation cost and performance

of FFV by small scale farmers does not deviate far away from each other (Table 4.10).

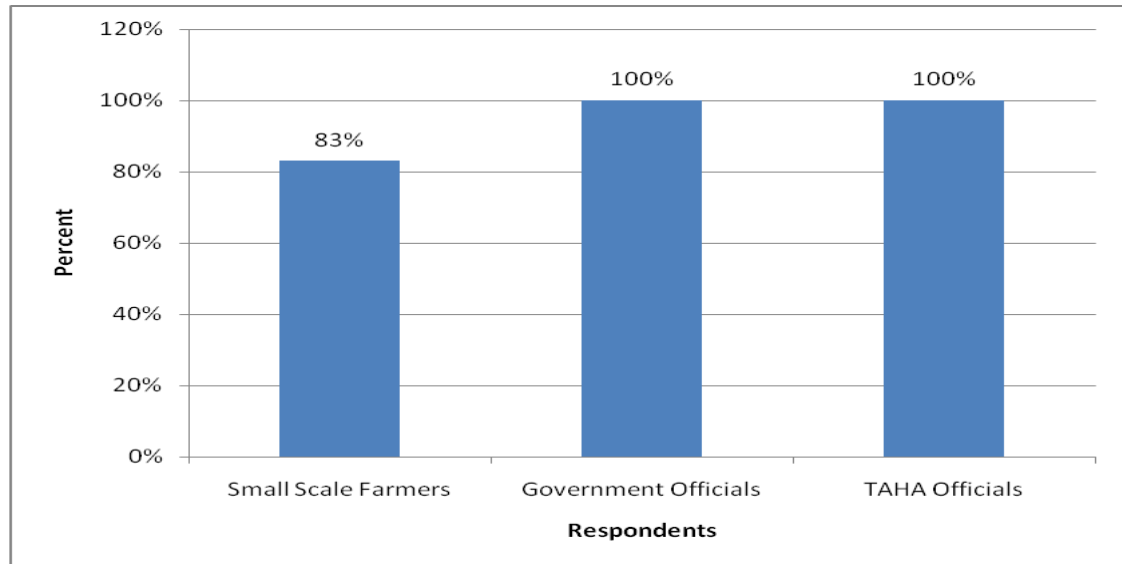


Figure 4.6: High Transportation Cost Has Negative Effect on the Performance of FFV Access External Market by Small Scale Farmers

Source: Research Data (2015)

Table 4.10: T-statistic Test on the High Transportation Cost Has Negative Effect on the Performance of FFV Access External Market by Small Scale Farmers

| Mean | Std. deviation | Standard Error Mean | t-statistics | Probability |
|------|----------------|---------------------|--------------|-------------|
| 3.13 | 0.26 | 1.65 | 13.18 | 0.00612 |

Source: Research Data (2015)

Therefore, the hypothesis that the high transportation cost has negative effect on the performance of exports of fresh fruits and vegetables (FFV) by small scale farmers

was rejected in this study as it was hypothesized. This implies that, transportation cost affect small scale farmers to access external market. The results confirm Rodrigue and Comtois (2001) argument that impact the export business from Africa. According to Rodrigue and Comtois (2001) transportation cost in Africa is high due to some factors such as poor infrastructures which include few airports, harbours with enabling facilities. Being the transportation of fresh fruits and vegetables needs cooling facilities and special packaging automatically pushes the transportation cost to be high.

H4 Inadequate capital by small scale farmers has negative impact on performance of FFV to access external market

Generally, lacks of adequate capital, affects the performance and success of any business operations. 56.8% of small scale farmer respondents accepted the proposition.

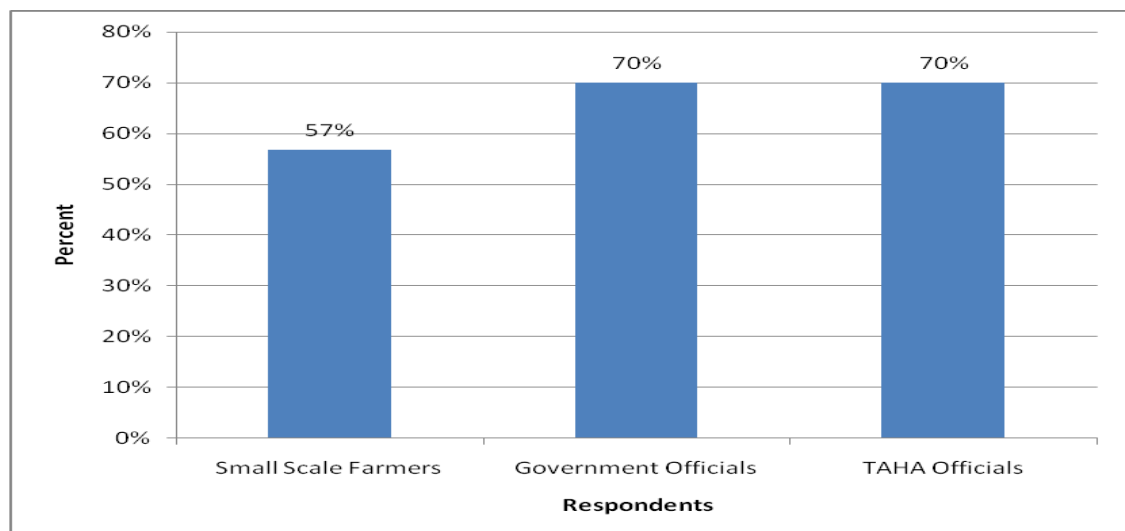


Figure 4.7: Inadequate Capital by Small Scale Farmers Have Negative Impact on Performance of FFV to Access External Market

Source: Research Data (2015)

However, 33.7% did not buy the idea that lacks of adequate capital by small scale farmers have negative impact on performance of FFV access external market. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition (Figure 4.7).

In carrying out the statistical analysis, the results from both all respondents indicated the positive and significant relationship between these two variables. The coefficients of the t-statistics of 2.21 corresponding probabilities of 0.06910 suggest the positive and significant relationship between lacks of adequate capital by small scale farmers and negative impact on performance of FFV access external market (Table 4.11).

Table 4.11: T-statistic Test on Inadequate Capital by Small Scale Farmers Have Negative Impact on Performance of FFV to Access External Market

| Mean | Std. deviation | Standard Error Mean | t-statistics | Probability |
|------|----------------|---------------------|--------------|-------------|
| 2.13 | 0.92 | 3.15 | 2.21 | 0.06910 |

Source: Research Data (2015)

Therefore, the adequate capital by indigenous exporters was identified as very important factors which can enhance performance of FFV access external market by small scale farmers.

Despite that access lack of lack of adequate capital by small scale farmers have negative impact on performance of FFV to access external market; there is a difficult of small scale famers in accessing financial support. Temu and Marwa (2007), indicate that, there is a limited commercial credit available to enterprises due to lack

of collateral requirements by banks. Also Government credit schemes benefiting small farmers and businesses, have proven costly to run and difficult to sustain, requiring ongoing subsidies.

H4 Inadequate capital by small scale farmers has negative impact on performance of FFV to access external market

Generally, lacks of adequate capital, affects the performance and success of any business operations. 56.8% of small scale farmer respondents accepted the proposition. However, 33.7% did not buy the idea that lacks of adequate capital by small scale farmers have negative impact on performance of FFV access external market. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition (Figure 4.8).

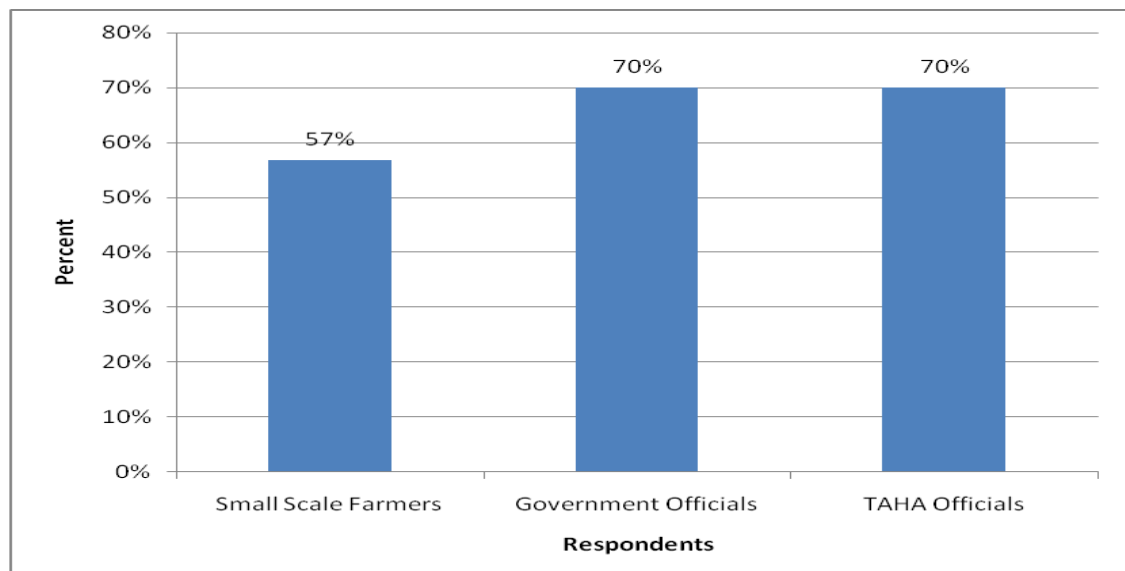


Figure 4.8: Inadequate Capital by Small Scale Farmers Have Negative Impact on Performance of FFV to Access External Market

Source: Research Data (2015)

In carrying out the statistical analysis, the results from both all respondents indicated the positive and significant relationship between these two variables. The coefficients of the t-statistics of 2.21 corresponding probabilities of 0.06910 suggest the positive and significant relationship between lacks of adequate capital by small scale farmers and negative impact on performance of FFV access external market (Table 4.12).

Table 4.12: T-statistic Test On Inadequate Capital By Small Scale Farmers Have Negative Impact On Performance of FFV To Access External Market

| Mean | Std. deviation | Standard Error Mean | t-statistics | Probability |
|------|----------------|---------------------|--------------|-------------|
| 2.13 | 0.92 | 3.15 | 2.21 | 0.06910 |

Source: Research Data (2015)

Therefore, the adequate capital by indigenous exporters was identified as very important factors which can enhance performance of FFV access external market by small scale farmers.

Despite that access lack of lack of adequate capital by small scale farmers have negative impact on performance of FFV to access external market; there is a difficult of small scale famers in accessing financial support. Temu and Marwa (2007), indicate that, there is a limited commercial credit available to enterprises due to lack of collateral requirements by banks. Also Government credit schemes benefiting small farmers and businesses, have proven costly to run and difficult to sustain, requiring ongoing subsidies.

H5 Poor advocacy to small scale farmers have negative performance of fresh fruits and vegetables export

Generally, poor advocacy, affects the performance of FFV production and marketing. 92% of small scale farmer respondents accepted the proposition. However, 9% did not buy the idea that poor advocacy to small scale farmers have negative performance of fresh fruits and vegetables export. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition (Figure 4.9).

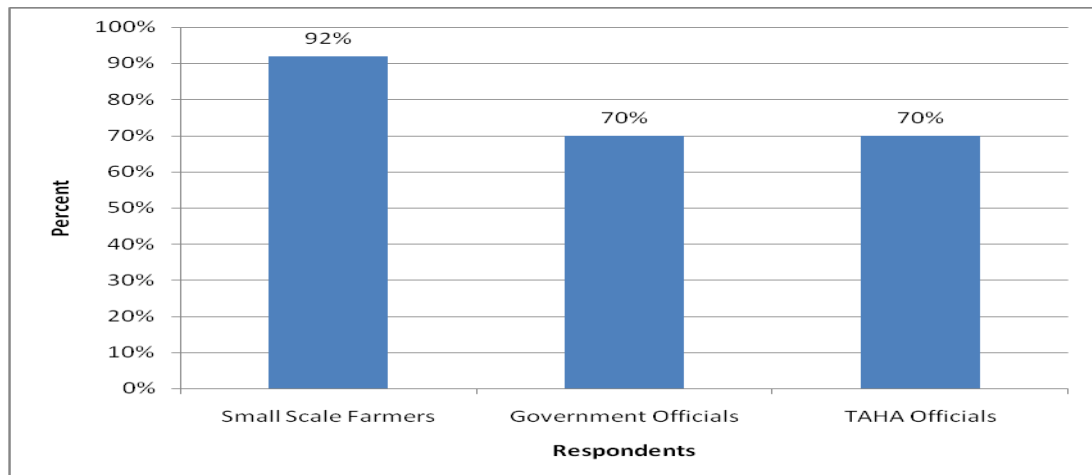


Figure 4.9: Poor Advocacy to Small Scale Farmers Have Negative Performance of Fresh Fruits and Vegetables Export

Source: Research Data (2015)

Meanwhile the study of determined the application level of advocacy factors that are applied by government and TAHA. The researcher used questionnaires to collect data from all categories of respondents while treated as homogeneous group. The study employed the descriptive statistics technique to analyze the data. Table 4.13 shows the extent to which respondents agreed or disagreed with certain aspects of advocacy factors in terms of mean scores and standard deviation.

Table 4.13: Empirical Results For Application Level of Advocacy Factors

| Advocacy Factor | N | Mean | Std. Deviation |
|-----------------------------------------------|----------|-------------|-----------------------|
| Poverty eradication | 145 | 3.1162 | .67851 |
| Sensitization | 145 | 3.0673 | .41544 |
| Government support - subsidies | 145 | 3.4869 | .49734 |
| Media campaign –for external market awareness | 145 | 3.5556 | 1.10270 |
| Other factors | 145 | 3.3300 | .42850 |

Source: Research Data (2015)

The factor media campaign –for external market awareness obtained the highest mean score of 3.5556, and the factor policies change the lowest mean value of 3.0673. The items used to measure the media campaign –for external market awareness were: TAHA campaign for market awareness (3.18); the government has programmes for market awareness (3.63); and small scale farmers are encouraged to attend the trade fair and exhibition (3.45). In this regard, this suggests that the media campaign –for external market awareness was highly considered by the participants of the survey as a most advocacy factor.

The lowest mean factor was policy change which was measured by the use of: The agriculture policy is effective to encourage small scale farmers to engage in FFV production; and the small and media enterprises policy is effective to encourage engagement FFV export business by small scale entrepreneurs. This signify that the participant did not agree with the considered items in measuring the policy change as an advocacy factor and hence instituting measures to address the policy change is very important.

According to literature (De Vos et al., 2005: 235), if the standard deviation is high,

the values are more dispersed. Table 4.12 also highlights the standard deviation scores. In this instance, the high standard deviation scores indicated that the respondents varied extensively with regard to their perceptions of the presence of the predetermined advocacy factors. The highest standard deviation score was 1.10270 for media campaign –for external market awareness and the lowest score was 0.41544 for policy change.

Although government support in terms of subsidies received fair mean and standard deviation, the researcher was interested to know whether there is any support from the government. He was wondering whether, there any programme covered under AGOA in terms of export guarantee scheme. However, it was revealed that, such programme does not exist to small scale farmers.

Respondents revealed that, the external markets have not sensitized support eradication of extreme poverty among small scale FFV farmers. Currently there is no devised programme whereby external markets are purchasing FFV products directly from small scale farmers and participating and engaging small scale FFV farmers in training and improving their business and farming skills to meet the international standards.

H6 Lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export

Generally, Lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export. 57% of small scale farmer respondents accepted

the proposition. However, 43% did not buy the idea that lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition (Figure 4.10).

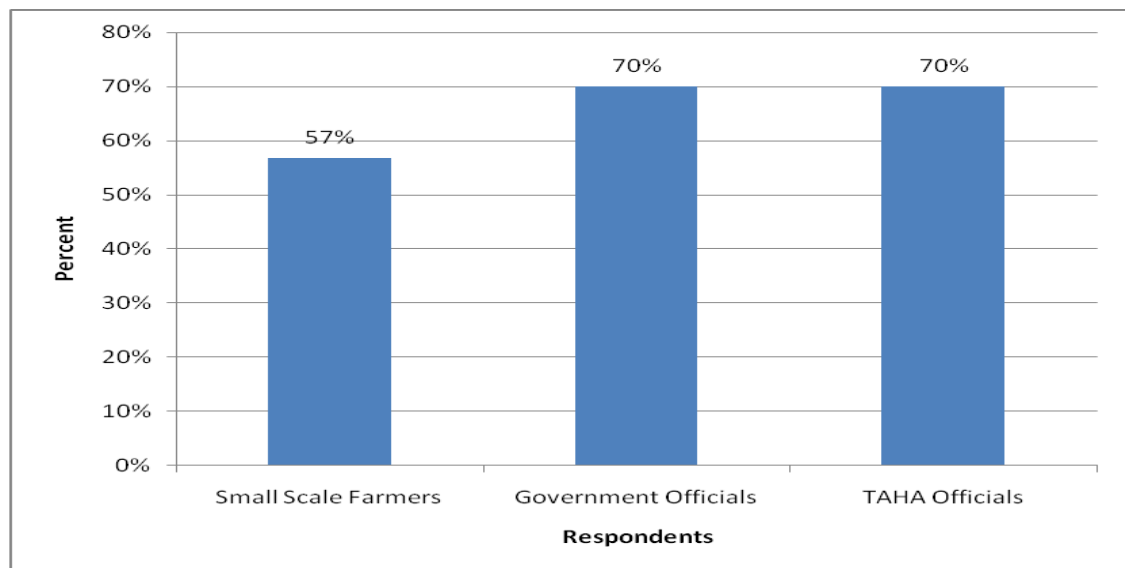


Figure 4.10 Lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export

Source: Research Data (2015)

The study identified the intervention factors that influence the small scale farmers' general performance in FFV in accessing external market. The researcher collected data through questionnaires and analyzed them using the Pearson Product-Moment Correlation Coefficient technique. Table 4.14 below reveals the results.

This table depicts that capacity building had the strongest correlation with the small scale farmers of FFV in accessing external market. Empowerment was also found with strong correlation with the variables in study. This means respondents perceive

that, small scale farmers receive enough support in capacity building and empowerment. It was revealed during this study that occasionally small scale farmers are provided with a seminar on entrepreneurship and marketing skills in all communities involved in production of FFV. Therefore, all members of small scale farmers in association were attended training.

Table 4.14: Ranking of Intervention Factors According to Correlation Strength

| Rank | Factor | R-Squared |
|-------------|--------------------------------|------------------|
| 1 | Capacity building | .19 |
| 2 | Empowerment | .168 |
| 3 | Tax and levies consideration | .076 |
| 4 | Fair treatment | .025 |
| 5 | Involvement in decision making | .012 |
| 6 | Monitoring and evaluation | .004 |
| 7 | Resource mobilization | .004 |

Source: Research Data (2015)

However, respondents indicated that, capacity building and empowerment such as training, seminar and workshops are received from NGOs and institutions like RECODA and World Vision. None of the both capacity building and empowerment were ever received from government directly.

When interviewed on the empowerment to communities, that is, the ability of communities to make own decisions in; setting prices, determining labour wages and power to decide whatever is appropriate it was revealed communities were empowered. However, most of them were not conversant with the prices of FFV in an international market. Therefore, TAHA and middlemen were left with such responsibility to look for FFV price in the external market. Also it was learned that communities preferred to pay high wages to labourers.

H7 Lack of trainings to small scale farmers has negative performance of fresh fruits and vegetables export

Generally, Lack of trainings to small scale farmers have negative performance of fresh fruits and vegetables export. 56.8% of small scale farmer respondents accepted the proposition. However, 43% did not buy the idea that lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition (Figure 4.11).

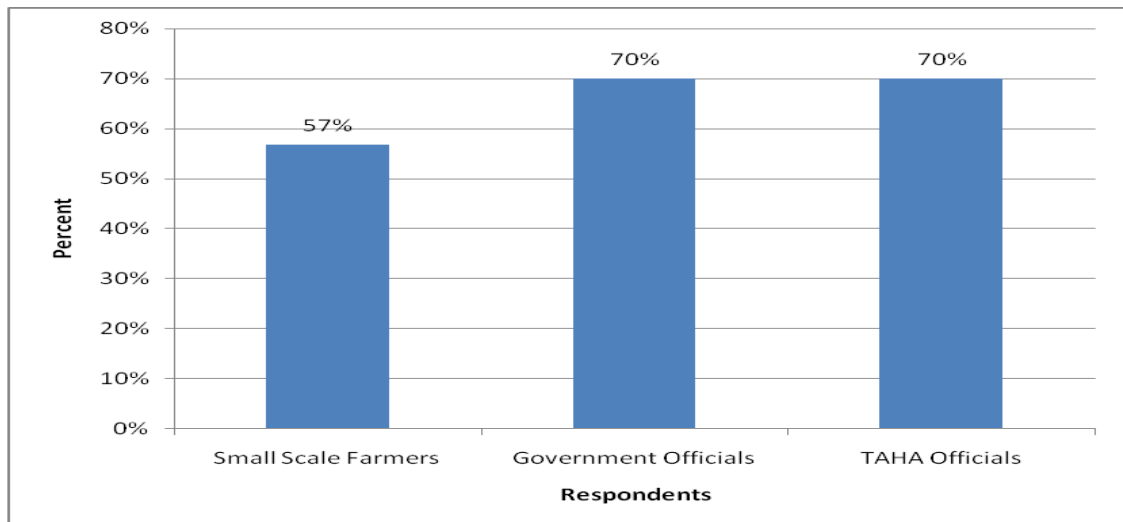


Figure 4.11 Lack of Trainings to Small Scale Farmers Have Negative Performance of Fresh Fruits and Vegetables Export

Source: Research Data (2015)

The study was to find out the influence of training to the small scale farmers performance in FFV in accessing external market. The researcher gathered data through questionnaires and did the analysis using the Regression Analysis and Pearson Product-Moment Correlation Coefficient techniques. Table 4.15 below presents the results of the analysis.

Table 4.15 Measure of Relationship using Pearson Correlation Coefficients

| Influential factor | Pearson Correlation (r) | R-Squared (R ²) |
|------------------------------------|-------------------------|-----------------------------|
| Orientation | .127 | .19 |
| Coaching | .074 | .004 |
| Sponsored training | .063 | .004 |
| Formal school training | .158 | .025 |
| Study tour | .111 | .012 |
| Exchange programme | .264 | .076 |
| Other training influential factors | .434 | .168 |

Source: Research Data (2015)

The table indicates the Pearson correlation coefficients and linear regression results obtained in regression the dependent variable (effective accessing external market) and the seven independent influential factors. The Pearson correlation coefficients and the linear regression illustrate the significantly positive relationships between all the predetermined influential factors and effective accessing external market at the 95% confidence level.

The strongest relationship was between accessing external market and other training influential factors ($r=.434$). The other motivating factors considered were trade exhibition; individual learning through radio, TV and other media sources. The weakest relationship was established between sponsored training and access of external marketing ($r = 0.063$).

The positive relationship between training to small scale farmer and their ability of accessing external market signify the importance of reliable and comprehensive systems that should be in place in FFV business, in order to empower small scale

farmers. Examples of systems should be adhered to principle of learning while supported by public policy especially poverty eradication policies and procedures. Specifically, respondents insisted on the small scale farmer skills' development and poverty eradication policies and agenda. They went further into mentioning of the existence of the policies but in papers.

The linear regression analysis showed highly significant relationships between each of the seven predetermined training influential factors and effective access of external market.

CHAPTER FIVE

5.0 CONCLUSION, RECOMMENDATIONS, LIMITATION AND SUGGESTIONS FOR FURTHER STUDIES

5.1 Introduction

This chapter highlights the summary of the study conclusion, recommendations and limitation of the study.

5.2 Summary

This study was undertaken to analyze socioeconomic factors that affect small scale farmers of fresh fruits and vegetables to access to external markets. Specifically the study examined the effect of business skills; effect capital; effect of advocacy and intervention on performance of fresh fruits and vegetables access to external market.

The key findings are summarized as follows:

5.2.1 Key Findings

5.2.1.1 The Effect of Business Skills by Small Scale Farmers on Performance of FFV Access External Market

It was found out that the limited business skills by small scale farmers have significantly affected the performance of fresh fruits and vegetables access to external market by small scale farmers. Several items were tested to find out the effect of lack of business and technical skills. The results from the analysis indicated that all the respondents accepted the proposition that the limited business skills by

small scale farmers hinder the performance of FFV access external market. 90% of the small scale farmers, 85% of government officials and 80% of TAHA official respondents accepted the proposition.

5.2.1.2 The effect of Capital by Small Scale Farmers on Performance of FFV Access To External Market

The study revealed that lack of adequate capital by small scale farmers has negative effect performance of FFV access to external market. This implies that the adequate capital by small scale farmers was identified as very important factors which can enhance performance of FFV access to external market. 57% of small scale farmers 70% of government officials and 70% TAHA officials' respondents accepted that lack of adequate capital by small scale farmers affected negatively small scale farmers to access external market.

Regarding the effect of high cost of transportation as of operation capital on performance of FFV access to external market by small scale farmers, it was concluded that the high transportation cost has negative effect on the performance of exports of fresh fruits and vegetables by small scale farmers.

5.2.1.3 The Effect of Advocacy to Small Scale Farmers on Performance of Fresh Fruits and Vegetables Export

Regarding advocacy, the study revealed that, poor advocacy affects the performance of FFV production and marketing. 92% of small scale farmer respondents accepted the proposition. 70% of the respondents from both government and TAHA accepted the proposition. It was also revealed that, there is a little identified advocacy in media

campaign –for external market awareness. However, no advocacy programme for poverty eradication, sensitization of external market to support small scale farmers in neither purchasing directly from them nor development programmes. Also there is no government support in terms of subsidies.

5.2.1.4 The Effect of Intervention of Small Scale Farmers on Performance of Fresh Fruits and Vegetables Export

The study revealed that, lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export. 57% of small scale farmer respondents accepted the proposition. 70% of the respondents from government officials and 70% of the respondents from TAHA officials accepted the proposition. Despite it was revealed that, there small scale farmers received capacity building and empowerment, neither was provided by government rather NGOs. The government does not intervene in the FFV production and exporting done by small scale farmers in terms of tax and levies relief, export guarantee scheme and even subsidies of any kind.

The study also revealed that, lack of trainings to small scale farmers has negative performance of fresh fruits and vegetables export. 56.8% of small scale farmer respondents accepted the proposition that lack of intervention of small scale farmers has negative performance of fresh fruits and vegetables export. On the other hand, 70% of the respondents from government officials and 70% of the respondents from TAHA officials together accepted the proposition. It was identified that the training factors such as trade exhibition; individual learning through radio, TV and other

media sources were only practiced by small scale farmers. However, apart from training provided by NGOs such as RECODA and World Vision, no training programmes were provided by government, external buyers and middlemen to small scale FFV farmers.

On the contribution of inadequate information in terms of varieties, quality and timing for export by small scale farmers on hindering the performance of the fresh fruits and vegetables export was also accepted. The results show that 87% of the small scale farmer respondents accepted the proposition. Also government and TAHA official respondents show that 62% and 52 % respectively accepted that inadequate information in terms of varieties, quality and timing for export by small scale farmers has adverse effect on the performance of FFV access to external markets.

5.3 Conclusions

The study took into consideration several social economic factors which deemed to have an influence on the small scale farmers to access external markets and subsequently benefits to the community at large. Small scale farmers need business skills for what to do and not to do. A FFV farming and exporting require skills on how to grow, harvest and sell their goods to the external markets. Despite not necessarily for long term training for small scale farmers, advocacy programmes from stakeholders of FFV such as government, external consumers and international food security and poverty eradication programmes need to intervene. The factors such as business skills and capital are linked to advocacy and intervention as both needed by

small scale farmers. However, without advocacy and intervention both cannot be achieved.

Advocacy programme for intervening poverty eradication can be extended to FFV production and marketing, so as, the farmers can directly assess the external markets. Government sponsorship of social programmes can be advocated despite of the free market principle imposed by international economic institutions such as World Bank, WTO and IMF which presses poorer nations to minimize subsidies for farming inputs and equipments that, many farmers cannot afford at market prices. Without advocacy and intervention, small scale producers of FFV in Sub Saharan Africa can still lag behind to access external markets directly compared to their counter parties of Latin America and Asian Tigers.

5.4 Recommendations

The study aimed at identifying areas, which could benefit policy makers, FFV small scale farmers/producers and other players towards enhancing good performance of fresh fruits and vegetables export business by small scale farmers of Tanzania. In light of the findings of the study, there are recommendations that can be drawn from this work:-

5.4.1 Recommendations to the Government - Policy makers

Based on the findings of this study, the government is hereby recommended to take a leading role in the design and formulation of policy and standards which shall be adopted and applied to empower the small scale farmers wishing to produce FFV. Also there is inadequate advocacy, intervention and training for the sake of

enhancing poverty eradication to the communities. The government shall take into consideration the potential of soil, climate and weather in the country which are favourable for producing quality FFV and exploiting the potential market globally. Agriculture and business related policies should be established to empower small scale farmers in terms of capital, subsidies, business skills and marketing search. There should be a purposely initiatives by the government to look for market through Tanzanian embassies abroad and connect the small farmers associations. Government should also consider taxes relief to the FFV exporters, and enhance infrastructures like roads, power and irrigation channels so as to maintain smooth follow of produce from farms/producers to the cooling facilities, packaging and transportation to the market.

Furthermore, this study acknowledged the recommendations by other studies especially the study by Verheij (2012), as noted that, the FFV business can succeed if the following requirements are implemented by various players in the industry:

- i. A high level of managerial skills;
- ii. A good infrastructure in the producing country ensuring a smooth flow of inputs and proper maintenance of equipment on the farm and in the packing station (cold store), on the road and at the airport;
- iii. A tight organization to streamline the flow of produce on its 700 km journey to European markets;
- iv. Instant communications (such as telephone and fax) to facilitate immediate action in case of mishaps (changes in available cargo space, in flight schedule etc); and

- v. Long enough supply seasons to establish a strong routine in the production transport marketing chain.

Also this study acknowledged another study done for FAO as reported by Nyange et al., (2003) specifically on fruits to do the following recommendations to solve the constraints facing the fruit exporting firms:

- i. Centralizing some of the activities of the exporting firms
- ii. Establishing of a database for Tanzanian exporters
- iii. Adoption of generic promotion
- iv. Product specialization and brand development
- v. Quality control at farm level
- vi. Introduction of semi-processed and frozen produce
- vii. Coordination of facilitating agencies
- viii. Tax exemption

5.4.2 Recommendations to the FFV Small Scale Farmers

The study revealed that there are weaknesses among indigenous exporters in various areas including business and technical skills, lack of adequate capital, high transportation cost and lack of information in terms of varieties, quality and timing of exporting. Hence this study recommend to them to put more efforts and resources in dealing with these anomalies instead of complaining while living the opportunities to foreign exporters and those from neighbour countries who uses the weaknesses of the indigenous exporters to maximize their dealings by purchasing the fruits and vegetables from local producers at the farm at very local cheap price, transport the

produces to their countries packing them and export it as if were produced at their countries. Some of the well packing produces may also be exported to Tanzanian supermarkets.

5.4.3 Recommendation to the External Buyers

It was identified that, there is no any devised programme whereby external buyers are supporting small scale farmers for the sake of poverty eradication. In this regard, the external markets should be sensitized to the fact that they have a role to play in the eradication of extreme poverty among small scale FFV farmers. However, they have to be sensitized to buy FFV products directly from small scale farmers and participating and engaging small scale FFV farmers in training and improving their business and farming skills to meet the international standards.

5.4.4 Recommendations to Other Players

For other players like commercial banks and other financial institutions should review and redesign loan procedures and credit facilities in order to facilitate the availability of financial support to this sector putting into consideration that the FFV produces are perishable and seasonal business.

5.5 Limitations of the Study

The scope of the study had been purposefully restricted in a number of ways. First, the study was mainly restricted to Fresh Fruits and Vegetables only and few individuals in the sector. Secondly, the study mainly captured 145 individual in the FFV industry, hence may not represent fairly the opinions of other players in

Tanzania. Therefore, findings of the study should not be generalized to assume that other crops exporters in Tanzania is experiencing similar trend all over the country.

On the sampling process, the sample might be more appropriately termed as an “incidental sample” (Joppe, 2000), i.e. in respondent participate on the basis of availability and willingness to cooperate. This factor may restrict the generalization of the findings.

Notwithstanding the above outlined limitations, the study may still be useful on shedding light on the performance of non-traditional crops exports by small scale farmers in Tanzania.

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APPENDICES

APPENDIX 1: Questionnaire for Small Scale Farmers

INTRODUCTION:

Dear Sir/Madam;

I am a MA student at Open University of Tanzania. I am collecting data for my dissertation regarding “**analysis of socioeconomic factors that affect small scale farmers of fresh fruits and vegetables to access external markets; a case study of Arusha region**” The study is being conducted in partial fulfillment of my master’s degree.

I am kindly requesting you to answer all questions in the questionnaire. The questionnaire will take about 20 minutes. Please respond based on your practical experience and we (I and the University) are assuring you that all answers will remain and treated in a confidential manner and will be used for the purpose of this study only.

Yours Sincerely

JOHN VIANNEY K. MONGELLA

INSTRUCTIONS:

Please attempt all questions, fill in blanks, which are left open, put a tick for the situation, which appeals to you in a space provided. *Your cooperation is highly appreciated.*

1. What is your sex

(a) Male []

(b) Female []

2. What is your level of education?

(a) Primary Education []

(b) Secondary Education []

(c) Diploma []

(d) Degree and higher education []

(e) Any other []

3. What is your career background?

(e) Business []

(f) Agriculture []

(g) Employee []

(e) Any other []

4. How long have you been producing Fresh Fruits and Vegetables (FFV)? (*Circle whichever appropriate*)

A: Less than 6 months **B:** 6 months to 12 months **C:** 12 months to 24 months **D:**

More than 24 months

5. What are the factors behind your choice of producing Fresh Fruits and Vegetables (FFV)?

1- Strongly Disagree, 2- Disagree, 3- Indifferent, 4 - Agree, 5- Strongly Agree.

- | | | | | | |
|-------------------------------------------------|---|---|---|---|---|
| (a) Potential for high income | 1 | 2 | 3 | 4 | 5 |
| (b) Existence of large potential market | 1 | 2 | 3 | 4 | 5 |
| (c) Sensitization and support by the government | 1 | 2 | 3 | 4 | 5 |
| (d) Diversification with other export business | 1 | 2 | 3 | 4 | 5 |
| (e) Other factors: _____ | | | | | |

6. Please circle the number, which best describes how much you agree with the following statements

1- Strongly Disagree, 2- Disagree, 3- Indifferent, 4 - Agree, 5- Strongly Agree.

- | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| i. Limited business skills hinder you on accessing external market of your fresh fruits and vegetables. | 1 | 2 | 3 | 4 | 5 |
| ii. Inadequate information on required varieties, quality and timing for export hinders you on accessing external market of fresh fruits and vegetables | 1 | 2 | 3 | 4 | 5 |
| iii. High transportation cost hinders you on accessing external market of fresh fruits and vegetables. | 1 | 2 | 3 | 4 | 5 |
| iv. Lack of adequate capital hinders you on accessing external market of fresh fruits and vegetables. | 1 | 2 | 3 | 4 | 5 |

- v. Poor advocacy by government hinders you on accessing external market of fresh fruits and vegetables.
- 1 2 3 4 5
- vi. Lack of interventions government hinders you on accessing external market of fresh fruits and vegetables.
- 1 2 3 4 5
- vii. Lack of training hinders you on accessing external market of fresh fruits and vegetables.
- 1 2 3 4 5

Thank you for your cooperation.

APPENDIX 2: Questionnaire for Governmental and TAHA Officials

INTRODUCTION:

Dear Sir/Madam;

I am a MA student at Open University of Tanzania. I am collecting data for my dissertation regarding “**analysis of socioeconomic factors that affect small scale farmers of fresh fruits and vegetables to access external markets; a case study of Arusha region**” The study is being conducted in partial fulfillment of my master’s degree.

I am kindly requesting you to answer all questions in the questionnaire. The questionnaire will take about 20 minutes. Please respond based on your practical experience and we (I and the University) are assuring you that all answers will remain and treated in a confidential manner and will be used for the purpose of this study only.

Yours Sincerely,

JOHN VIANNEY K. MONGELLA

INSTRUCTIONS:

Please attempt all questions, fill in blanks, which are left open, put a tick for correct answer in a space provided. Your cooperation is highly appreciated.

1. What is your organization?_____

(a) Government []

(b) TAHA []

Please circle the number, which best describes how much you agree with the following statements

1- Strongly Disagree, 2- Disagree, 3- Indifferent, 4 - Agree, 5- Strongly Agree.

- i. Limited business skills by small scale farmers hinders the performance of Fresh Fruits and Vegetables in accessing external market

1 2 3 4 5

- ii. Inadequate information in terms of varieties, quality and timing in shipping hinders small scale farmers in export of Fresh Fruits and Vegetables

1 2 3 4 5

- iii. High transportation cost hinders small scale farmers in export of Fresh Fruits and Vegetables

1 2 3 4 5

- iv. Lack of adequate capital hinders small scale farmers in export of Fresh Fruits and Vegetables

1 2 3 4 5

- v. Level of education of small scale exporters do have influence in export of fresh fruits and vegetables

1 2 3 4 5

- vi. Poor advocacy by government hinders small scale exporters accessing external market of fresh fruits and vegetables.

1 2 3 4 5

vii. Lack of interventions government hinders small scale exporters accessing external market of fresh fruits and vegetables.

1 2 3 4 5

vii. Lack of training hinders small scale exporters accessing external market of fresh fruits and vegetables.

1 2 3 4 5

6. Which factor do you think contributes a lot in hindering the performance of Fresh Fruits and Vegetables export by small scale farmers? (For multiple responses, please rank them 1,2,3,4 in the box)

1- Strongly Disagree, 2- Disagree, 3- Indifferent, 4 - Agree, 5- Strongly Agree.

- | | | | | | |
|-------------------------------------------------------------|---|---|---|---|---|
| a) Lack of business and technical skills | 1 | 2 | 3 | 4 | 5 |
| b) (Inadequate information on varieties, quality and timing | 1 | 2 | 3 | 4 | 5 |
| c) High cost of transportation | 1 | 2 | 3 | 4 | 5 |
| d) Lack of adequate capital | 1 | 2 | 3 | 4 | 5 |
| e) Poor Advocacy | 1 | 2 | 3 | 4 | 5 |
| f) Lack of interventions | 1 | 2 | 3 | 4 | 5 |
| g) Inadequate training | 1 | 2 | 3 | 4 | 5 |

Thank you for your cooperation

APPENDIX 3: Determination of Sample Size**TABLE 1****Table for Determining Sample Size from a Given Population**

| <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> |
|----------|----------|----------|----------|----------|----------|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |

| | | | | | |
|-----|-----|------|-----|---------|-----|
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 1000000 | 384 |

Note.— N is population size.

S is sample size.