



**Taping Export Opportunities for Horticulture Products in  
Tanzania: Do We Have Supporting Policies and Institutional  
Frameworks?**

**By**

**Oswald Mashindano<sup>1</sup>**

**Vivian Kazi, Specioza Mashauri and Solomon Baregu**

*Economic and Social Research Foundation  
Dar es Salaam, Tanzania*

**ICBE-RF Research Report N0. 65/13**

Investment Climate and Business Environment Research Fund

(ICBE-RF)

[www.trustafrica.org/icbe](http://www.trustafrica.org/icbe)

Dakar, October 2013

---

<sup>1</sup> Contact: [omashindano@esrf.or.tz](mailto:omashindano@esrf.or.tz)

## Table of Contents

Table of Contents.....	ii
List of Tables and Figures.....	iv
Executive Summary .....	v
(a) Background to the Assignment.....	v
(b) Study Rationale.....	v
(c) The Study Methodology .....	vi
(d) The Study Findings.....	vi
(e) Conclusion and Recommendations.....	vii
Acknowledgement .....	ix
1.0 Introduction.....	10
1.1 Background Information.....	10
1.2 Problem Statement.....	12
1.3 General Objectives and Research Questions .....	13
1.3.1 Specific Objectives.....	13
1.3.2 Research Questions .....	14
1.4 Rationale for Undertaking the Study .....	14
1.5 Significance of the Sector .....	14
1.6 Layout of the Report .....	15
2.0 Lessons from Related Literature .....	16
2.1 Introduction.....	16
2.2 An overview of the status and/or performance of the export of horticulture products .....	16
2.2.1 Ethiopia .....	16
2.2.2 Rwanda.....	17
2.2.3 Kenya .....	19
2.2.4 Tanzania .....	21
2.3 National Policy Frameworks and Strategies Supporting the Horticulture Sub Sector.....	24
2.3.1 Ethiopia .....	24
2.3.2 Rwanda.....	25
2.3.3 Kenya .....	25
2.3.4 Tanzania .....	26
2.4 Institutional Networks Supporting the Horticulture Sub Sector .....	29
2.4.1 Ethiopia .....	29
2.4.2 Rwanda.....	30
2.4.3 Kenya .....	32
2.4.4 Tanzania .....	32
2.5 Determinants of Export of Horticulture Products .....	33
2.6 Performance and prospects of the business enterprises (SMEs) in terms of its contribution to export growth of the horticulture.....	34
2.6.1 Ethiopia .....	34
2.6.2 Rwanda.....	34
2.6.3 Kenya .....	35
2.6.4 Tanzania.....	35

3.0	Methodology .....	37
3.1	The Study Area and Scope.....	37
3.2	Type of Data and Data Sources .....	37
3.3	Sample Size.....	38
3.4	Sampling Techniques.....	39
3.5	Data Collection Technique and Data Analysis .....	40
3.6	Involvement of Other Partners.....	41
4.0	Discussion of The Study Findings.....	41
4.1	Performance of Horticulture Exports in Tanzania .....	41
4.2	Assessment of Policy Frameworks and Strategies Supporting Horticulture Industry in Tanzania .....	46
4.2.1	Government Policies and Export Diversification.....	46
4.2.2	Evidence of Policy Implementation Failure affecting Horticulture Industry in Tanzania 48	
4.2.3	Perception from Major Respondents.....	53
4.3	Assessment of Institutional Networks Supporting Horticulture .....	55
4.4	Determinants of Horticulture Exports.....	57
4.5	Performance and Prospects of the Business Enterprises (SMEs) .....	60
4.5.1	Introduction.....	60
4.5.2	Current Methods of Production.....	60
4.5.3	Production Trend in Horticulture Crops.....	61
4.5.4	Prospects of the Business Enterprises (SMEs).....	61
5.0	Conclusion and Recommendations .....	64
5.1	Status and Performance of the Export of Horticulture Products.....	65
5.2	National Policies and Strategies Supporting the Horticulture Industry .....	65
5.3	Institutional Networks Supporting the Horticulture Sub Sector .....	66
5.4	Determinants of Export of Horticulture Products .....	67
5.5	Performance and Prospects of the Business Enterprises (SMEs) and its Contribution to Horticulture Export Growth.....	68
	References.....	70
	Appendix.....	72

## List of Tables and Figures

TABLE 1. 1: TOP 20 PRODUCERS OF VEGETABLES .....	11
TABLE 1. 2: TOP 20 EXPORTERS OF VEGETABLES .....	12
TABLE 3.1: THE SAMPLE SIZE (IN TERMS NO OF PEOPLE AND INSTITUTIONS).....	39
TABLE 3.2: SAMPLING METHOD .....	40
TABLE 4.1: COMPARISON BETWEEN CHANGE IN QUANTITY EXPORTED TO VALUE EARNED FROM EXPORTS .....	43
TABLE 4.2: VIEWS AND PERCEPTIONS BY KEY HORTICULTURE STAKEHOLDERS ON POLICIES AND LEGISLATIONS .....	54
TABLE 4.3: COMPARISON OF CHARGES AT KILIMANJARO INTERNATIONAL AIRPORT AND JOMO KENYATTA INTERNATIONAL AIRPORTS .....	59
TABLE 4.4: VIEWS AND PERCEPTIONS BY KEY HORTICULTURE STAKEHOLDERS ON BUSINESS PERFORMANCE AND PROSPECTS IN HORTICULTURE SUBSECTOR.....	63
FIGURE 4.1: AVERAGE OF NET WEIGHT ON HORTICULTURE EXPORTS (IN TONNES) .....	42
FIGURE 4.2: VALUE OF HORTICULTURE EXPORTS (IN USD).....	42
FIGURE 4.3: COMPARISON OF EXPORTS TO PRODUCTION .....	43
FIGURE 4.4: COMPARISON OF SMALLHOLDER FARMERS COMPANIES/ASSOCIATIONS TO LARGE SCALE FARMERS	44
FIGURE 4.5: SHARE OF HORTICULTURE TO TOTAL AGRICULTURE PRODUCTION .....	44
FIGURE 4.6: RESEARCHERS WITH MTAZAMO SMALL GROWERS IN ARUMERU, ARUSHA .....	45
FIGURE 4.7: RESEARCHERS WITH FLOWERS AND VEGETABLES WOMEN GROUP IN ARUMERU, ARUSHA .....	45
FIGURE 4.8: TRENDS OF TRADE TRADITIONAL AND NON-TRADITIONAL EXPORTS (2007 – 2010).....	47
FIGURE 4.9: CONTRIBUTION TO TOTAL NON-TRADITIONAL EXPORTS FOR THE YEAR ENDING MARCH 2010 .....	48
FIGURE 4.10: MARKETING (BUSINESS) MODEL .....	50
FIGURE 4.11: MAIZE FARM UNDER CONTRACT FARMING, KIRANSI VILLAGE, SIHA DISTRICT.....	51
FIGURE 4.12: A STORAGE FACILITY UNDER CONSTRUCTION, KIBOSHO AREA.....	51
FIGURE 4.12: TAHA OFFICIALS (FIRST FROM LEFT AND THIRD FROM RIGHT) WITH RESEARCHERS AT TAHA HEADQUARTERS IN ARUSHA .....	55
FIGURE 4.13: IRRIGATION INFRASTRUCTURE IN PLACE IN A LARGE SCALE FARM IN KARANSI-KILIMANJARO REGION, TANZANIA.....	61
FIGURE 4. 14: AVERAGE ANNUAL PRODUCTION OF FRESH VEGETABLES IN MT: 1990-2008.....	61
FIGURE 4.15 RESEARCHERS POSE AT HORTICULTURAL PROCESSING PLANT OF SERENGETI FRESH COMPANY IN ARUSHA, TANZANIA .....	62
FIGURE 4.16: WORKERS AT SERENGETI FRESH COMPANY, A PROCESSING PLANT IN ARUSHA, TANZANIA.....	62

## **Executive Summary**

### **(a) Background to the Assignment**

The major economic activity in Tanzania specifically in rural areas is agriculture. Tanzania is blessed 94.5 million hectares of land out of which 44 million hectares are classified as suitable for agriculture (ASDS, 2001). The land use pattern has not changed much over time with expansion of farming taking place around already populated areas to the extent of fuelling conflicts between land cultivators and nomadic pastoralists. Part of the arable land is marginally suitable for agricultural production for a variety of reasons, including soil leaching, recurring drought, and tsetse infestation, such that only 10.1 million hectares or 23 percent of the arable land is cultivated. This includes around 2.2 to 3.0 million hectares of annual crops, fallow of up to 5 years, permanent crops and pasture. The sector accounts for approximately 26.7% of Tanzania's GDP and provides employment for the majority of the population. Tanzania agriculture is smallholder-based, with almost 60 percent of households having farms of less than 2 hectares, and another 20 percent falling in the 2-3 ha category. A number of government initiatives, programmes, policies and strategies have been made to facilitate the growth of the agriculture sector. These include, the National Development Vision 2025, National Strategy for Growth and Reduction of Poverty (NSGRP), National agriculture and livestock Policy, Agricultural Marketing Policy of 1997, Kilimo Kwanza document, National five year strategic plan, 2011-2015, Agriculture Sector Development Strategy (ASDS), Agriculture Sector Development Programme (ASDP), Trade policy, SME development policy etc.

Among the crops grown in the country, include the high value non-traditional horticulture crops such as baby corn, French beans, flowers, baby carrots, fruits etc. In Tanzania, these crops are grown in highland regions such as Mbeya, Njombe and Iringa. Other areas with high production of horticultural crops are Arusha, Kilimanjaro, Morogoro and Tanga. Despite a number of challenges, Tanzania is known as one of the 20 biggest producers of horticulture crops in the world.

This study therefore focuses on assessing the export potential for four major categories of horticultural crops namely fresh vegetables, flowers, fruits and spices. The main objective is to present a synopsis of the status of the export sub-sector of horticulture products (performance), and investigate on the determinants of horticulture exports in Tanzania in the perspective of policy and institutional frameworks.

### **(b) Study Rationale**

Facts from the literature show that Tanzania has not exploited much of its enormous export potential of horticultural produce and yet it is among the 20 biggest producers of horticultural crops in the world but does not feature among the 20 biggest exporters. Many studies have been conducted in this sub-sector which document various problems that limit or inhibit export of horticulture products both on the demand and supply side. Several recommendations have been made for improvement. For example storage facilities in our airports, packaging materials, use of quality seeds etc are among the areas which have been recommended in the past. However,

not much has been researched on the extent at which the current policy and institutional frameworks, and strategies are supportive to the horticulture industry such as tapping export opportunity on horticulture products such as fresh vegetables and fruits.

This study therefore focuses on export potential for horticulture products by looking at current policy and institutional frameworks that are expected to support and set good business environment to stimulate trade and export of horticulture products.

### **(c) The Study Methodology**

This study applied both primary and secondary data approaches of data capturing. Primary data was collected through interviews administered to different actors in the horticulture sub sector, while secondary data were extracted from publications through literature review as well as review of official reports and publications. A field survey was conducted in Arusha, Kilimanjaro and Dar es Salaam whereby different sampling techniques were applied in order to select a sample of respondents in the subsector. In selecting respondents, simple random sampling, as well as purposive sampling techniques was utilized. The field instruments used include, structured questionnaire and interview guide which facilitated focus group discussion and interviews of key informants. A total of 14 FGDs, 79 farmers, 4 transporters, 6 processors, 6 exporters, 5 input suppliers, 4 LGA, 5 private organizations and associations, 3 ministries and 5 government departments and agencies were consulted. Data obtained through the structured questionnaire and secondary sources was analyzed using SPSS and STATA computer software.

### **(d) The Study Findings**

There has been a notable achievement in Arusha and Kilimanjaro regions horticulture industry in terms of enabling small scale producers to access markets for horticulture products; agricultural inputs; storage facilities and extension services. A few private organizations such as York Limited and especially Home Veg based in Arusha have introduced a Marketing or Business Model which performs relatively well in the two regions. This is known as contract farming arrangement. The key determinants of horticulture exports are requirement to meet the Global Gap Certificate, TBS certification and Barcode, Adequate cold rooms, Quality packaging materials and Exports Transport and Logistics.

The findings show that there is a slight improvement of horticulture exports from 500 in 2010 to 900 tonnes in 2011 which provides a glimpse of hope that the sector's performance is showing signs of improvement. Horticulture products have the potential for a strong industry in Tanzania, but the industry has been given less attention, which is surprising given the existing potential in production as well as the growing world market demands.

Tanzania is one of the top 20 countries globally in vegetable production where the neighboring Kenya is not in the list according to FAOSTAT (2009). In contrast Kenya appears as one of the top 20 countries in the world to export vegetables, where Tanzania is absent from the export list. This mismatch is a result of the fact that most of the horticulture products grown in the

northern zone of Tanzania are exported through Nairobi because Kenya is attractive in terms of airport tariff than Tanzania. Also important to mention is another fact that Nairobi has the required airport facilities or infrastructure compared to the insufficient facilities present at Kilimanjaro International Airport (KIA) in Arusha/Kilimanjaro region and the Mwalimu Julius Nyerere International Airports in Dar-es-Salaam (such as aircrafts, cold rooms and bureaucracy).

With regards to policies and Institutional frameworks, the study findings reveal that the government policies in Tanzania are both supportive and un-supportive. The institutional framework for horticulture sub-sector in the country is fragmented and un-coordinated and practically weak to be able to support the sector.

Thus, Tanzania's horticultural industry faces several universal challenges that include: weak production base, low productivity and quality, invisibility and marginalization, limited access to finance especially long-term financing and investment, bottlenecks in land, policy and infrastructure, inadequate market development support, weak industry linkages, lack of entrepreneurship culture, and inadequate skilled and competent human resource. Five constraints have been identified as key to achieving the growth potential of horticulture in Tanzania i.e. Un-coordinated activities in the development of the sub sector, Inadequate information for development of the sub-sector, Inefficient investment environment, Insufficient awareness among Tanzanians about the economic and social potential for horticulture, and Limited access to long term financing and micro credit facilities for small-scale farmers.

#### **(e) Conclusion and Recommendations**

Export market development of agro-processed horticultural products should be further supported. Significant domestic and export market opportunities exist for traditional processed fruits and vegetables as well as a number of new agro-processed horticultural products. The horticulture industry should take advantage of the National Export Strategy to research and access the export market with high quality sustainable supply. Upgrading horticulture in the Ministry set up as a department like in Kenya and Uganda is a pre-requisite for the sub-sector to equally compete within the East African Community (EAC) and other international communities. Lastly there is a poor relationship between large and small scale farmers, researchers and LGAs. The policies on Corporate Social Responsibility (CSR), transparency and Accountability are therefore not compatible to the practice.

The government in collaboration with key stakeholders needs to ensure that all approved policies are implemented, monitored and evaluated regularly, need to put in place an effective resource mobilization strategy and institute a proper and strategic resource allocation and utilization in implementing relevant policies. In addition, the government needs to acknowledge the efficacy of the business (marketing) model (contract farming) and ensure that it is promoted and replicated in Tanzania. For such a model to work, the high quality packaging materials must be produced within the country.

Tanzania needs to strengthen and improve the services of all its ports. The government should assist producer/exporters to link with the European importers, either through strategic alliances or based on ownership structure of vertically integrated companies that control the value chain from primary production to the supply to retailers. The government of Tanzania should learn from the institutional coordination models of other countries such as Kenya and Ethiopia which have the horticulture sub-sector performing at the best.



## **Acknowledgement**

Economic and Social Research Foundation (ESRF) would like to express heartfelt thanks to the Investment Climate and Business Environment (ICBE) Research Fund, a collaborative initiative of TrustAfrica and the International Development Research Centre (IDRC) who are the core funders for this research project. For sure, without their financial and technical support, the execution of this study would have been impossible.

ESRF Research team also appreciates the efforts and commitment shown by its partners the Ministry of Agriculture, Food Security and Cooperatives (through the horticulture section) specifically Mrs. Adah Mwashu and HomeVeg Tanzania Limited specifically Mr. Mussa Mvungi, who worked closely with ESRF during data collection and analysis of findings. Their technical support is highly appreciated.

We would also like to extend our thanks to all farmers groups, all input suppliers, exporters, processors, associations and transporters visited in Kilimanjaro and Arusha counter. These were key respondents who were consulted during data collection in the mentioned regions. Again we appreciate their positive cooperation.

It will not be justice to forget various government Ministries, Departments and Agencies who are participated in this study. These include the local government offices for both Kilimanjaro and Arusha regions, the Ministry of Agriculture, Food Security and Cooperatives, the Ministry of Trade, Industry and Marketing, Tanzania Revenue Authority, Tanzania Airport Authority, Kilimanjaro International Airport, JK Nyerere International Airport, Board of External Trade (BET), Tanzania Investment Centre (TIC), Water Regulatory Authority (EWURA), Tanzania Civil Aviation Authority and Tanzania Ports Authority for their valuable time and information that availed o us during field visits. To all of them, we say thanks.

Finally, we agree that it is impossible to express our gratitude's to all individuals in their different capacities who made our consultation phase easy and enjoyable experience. ESRF team deeply appreciates their support and advice from the beginning up to the end of the study in Kilimanjaro, Arusha and Dar es Salaam.

## **1.0 Introduction**

### **1.1 Background Information**

Tanzania is among Sub Saharan Africa countries that largely depend on agriculture. Having more than 70% of its population living in rural areas, Tanzania employs approximately 80% of the country's labor force in agriculture. Due to the importance of this sector, of recent, Tanzanian Government announced its commitment to transform agriculture through *Kilimo Kwanza* (Agriculture First) Programme.

In Tanzania agriculture has two groups of small scale farmers. The first group comprises of very poor farmers who own very small pieces of land (normally an acre or less) and grow food crops only for their subsistence. The second group is for farmers with medium to large size farm plots (more than one acre) also referred to as commercial farmers who grow both food and cash crops. Some farmers in the latter group also fall under the category of own small and medium scale enterprises (SMEs) and very few large scale farmers have companies/estates. There are different SMEs in agriculture namely, SMEs producing inputs such as seeds, insecticides and animal feeds while others are for processing, packaging and trading agricultural products. In this study, we are focusing on SMEs in horticulture products.

There has been a rapid increase in demand and production of non-traditional horticultural products in recent past. The increased demand and production globally is due to the increased health awareness of the people in terms of the benefits of eating fruits and vegetables (Dolan and Humphrey, 2000). The increase in demand has also led to supermarkets taking a lead in stocking and sourcing vegetables and fruits from guaranteed sources in developing countries, in what is called "global governance" (ESRF, 2010). In developed countries for example, the availability of fresh vegetables and fruits in supermarkets is throughout the year (Dolan and Humphrey, 2000). The rise in demand in both developed and developing countries urban centres has stimulated the supply of the same by small-scale producers in developing countries (FAO, 2003).

The performance of horticulture exports is seen fluctuating in recent years which is a result of demand and supply of many players in the world market; change in world market prices and changing of consumer behavior and preferences. Some other factors contributing to such performance are such as inconsistent supply of the produce to the market due to poor market linkages in some cases the exporters do not know the suppliers and vice versa and value fluctuation which is attributed by price fluctuation determined by forces of demand and supply.

Currently Tanzania has less than 30 big growers/exporters while Kenya has a total of 240 small holder farmers contributing a larger share (200) leaving 40 to big exporters (MAFSC, 2012). Revenue earned as a result of horticultural activities in Kenya was US\$ 1.7 billion in 2007/08 while Tanzania earned approximately 113.0 million US\$ in the same year. Tanzania's contribution in the global production of fresh vegetables shows that between 1990 and 2008, annual average growth rate of production was 0.14%. Production of fresh vegetables was highest in 1990 at 1 million tonnes, but it tapered off two years later to 800,000 tonnes. Between 1994 and 2001, production showed an increasing but fluctuating trend (FAO Website).

According to FAO statistics (see Tables 1.1), Tanzania's position among world top producers of fresh vegetables improved from No 20 in 2003 to No 18 in 2007. The potential for increasing production of non-traditional horticulture products in Tanzania is enormous (URT, 2002, ESRF, 2010). However, the country lags behind in exporting the same in the world market.

**Table 1. 1: Top 20 Producers of Vegetables**

2000			2007		
Rank	Country	Production (MT)	Rank	Country	Production (MT)
1	China	121553141	1	China	146902838
2	India	28630000	2	India	29117400
3	Viet Nam	5632100	3	Viet Nam	6600000
4	Philippines	4100000	4	Nigeria	4861720
5	Nigeria	3945000	5	Philippines	4000000
6	Korea	3679000	6	Korea	3171000
7	France	3000000	7	Myanmar	3200000
8	Japan	2900000	8	Japan	2825000
9	Myanmar	2800000	9	Russian Federation	2542000
10	Korea (DPR)	2400000	10	Brazil	2410000
11	Brazil	2200000	11	Nepal	2328945
12	Italy	2400000	12	Korea (DPR)	2250000
13	Iran	1739000	13	Iran	1750000
14	Nepal	1489660	14	Italy	2000000
15	Germany	1484000	15	Bangladesh	1096000
16	Russian Federation	1401000	16	Pakistan	1026564
17	Pakistan	1102534	17	Thailand	1015000
18	USA	1054000	18	Tanzania	955000
19	Thailand	970000	19	USA	907680
20	Tanzania,	940000	20	Cuba	922601

Source: <http://www.fao.org>.

While Kenya is not among top producers of fresh vegetable, she was No. 6 in 2003 and 2007 in exporting the products in the world market. This shows that Tanzania has a comparative advantage in producing agricultural-based products, in this case, vegetables. It is therefore important to find out the reasons for this huge mismatch in the horticulture sub sector in Tanzania by investigating on overriding policies as well as institutional framework governing the sector.

The national policy frameworks in Tanzania which govern horticulture industry include the Tanzania National Development Vision 2025 (TDV 2025); the Five Year Development Plan (2011-2015); National Strategy for Growth and Poverty Reduction (NSGRP); and sectoral policies such as Agriculture and Livestock Policy of 1997, Agriculture Marketing Policy, Agriculture Sector Development Strategy (ASDS), and Agriculture Sector Development Plan (ASDP).

**Table 1. 2: Top 20 Exporters of Vegetables**

2000				2007			
Rank	Country	Quantity (Tonnes)	Value (1000 \$)	Rank	Country	Quantity (Tonnes)	Value (1000 \$)
1	USA	223565	155979	1	Mexico	531298	438944
2	Italy	151718	106888	2	Netherlands	161095	287461
3	China	370498	84588	3	Italy	179561	234486
4	France	61916	82563	4	USA	220887	189203
5	Netherlands	103432	70446	5	France	68774	177790
6	Kenya	25238	63827	6	Kenya	51506	168997
7	Spain	72305	36761	7	Spain	96071	121746
8	Israel	13718	33523	8	China	410048	104499
9	Thailand	27198	20992	9	Israel	35484	94670
10	Belgium	38149	18066	10	Thailand	33279	71861
11	India	55686	16120	11	Belgium	34985	55924
12	Syria	29174	14000	12	Germany	31859	40318
13	Mexico	55922	13147	13	India	65856	36860
14	New Zealand	32339	12124	14	Bangladesh	22744	31071
15	Bangladesh	7000	11000	15	Panama	49754	27405
16	Costa Rica	28865	10985	16	Jordan	18951	25491
17	Malaysia	50727	10927	17	Saudi Arabia	82745	25449
18	Philippines	5633	9705	18	Uzbekistan	28971	22401
19	Australia	8577	8099	19	Malaysia	69123	20792
20	Germany	8216	8082	20	Costa Rica	47658	19586

Source: <http://www.fao.org>

Many studies have been conducted in this subsector which documents various problems that limit or inhibit export of horticulture products both on the demand and supply side. Several recommendations have been made to improve for example storage facilities in our airports, packaging materials, use of quality seeds etc. These include a study undertaken by the Ministry of Agriculture, Food Security and Cooperatives (MAFC) in Tanzania (2002) on the horticulture development in Tanzania and a study on export market for high value vegetables in Tanzania undertaken by USAID in 2007. However, not much has been researched on the extent at which the current policy and institutional frameworks, and strategies are supportive to the horticulture industry such as tapping export opportunity on horticulture products like fresh vegetables and fruits.

This study therefore focuses on export potential for horticulture products by looking at current policy and institutional frameworks that are expected to support and set good business environment to stimulate trade and export of horticulture products.

## 1.2 Problem Statement

Tanzania offers a wide range of horticulture products including: Asian Vegetables, Baby corn, baby marrow, Beetroots, Beans, Cabbage, Carrots and baby Carrots, Cauliflower, Eggplant, Kale, Leeks, onions and shallots, Okra, Peas (mange-tout, snap and snow peas), Potatoes, Spinach and Tomatoes. The foreign income earned from horticulture industry has increased from USD 1.4million per annum in 2002 to USD 140 million in 2008 and was expected to rise to US \$ 340 million in year 2009/2010 (TAHA Report, 2008). According to data from the Ministry of Agriculture in Tanzania, the total export of horticulture crops (in metric tonnes) in

2006/7 was 82,000 and in 2007/8 it increased to 330,000MT. It started to drop again to 183,000MT in 2009/2009 and in 2010/11 the volume slightly increased to 197,000MT (MAFSC, 2012). The value of these produce in 2006/7 was 46,751,000USD. In 2008/9 the value of exports increased to 112,596,000USD and in 2010/11 the value was 127,707,000USD. Generally there seems to be increasing in the value of exports and volume of production. The percentage change of value earned since 2006/7 to 2010/11 is 25.5% while the percentage change in exports is 7.8% (et al, 2012).

Tanzania's level of production of fresh vegetables is increasing and there is still enormous production potential. However, the country does not contribute much in the vegetable export market though she is among the top 20 producers of the same globally. As noted earlier, though Kenya, is not among the top 20 producers she has maintained her 6th position among the top 20 exporters of fresh vegetables in both periods (see Table 1.1 above). This shows that Tanzania does not utilize her comparative advantage in the production of agro-based products in making potential impact in the world export market. In addition, there is a huge mismatch which needs to be investigated to find out the reasons for the inconsistency by looking at whether policies and institutions are supportive enough to address the widening anomaly in the horticulture industry.

Given the export potential, it is important to find out factors that limit Tanzania from utilizing and therefore benefiting from export opportunities. This inquiry has included analysis of horticulture export supporting institutions, policy frameworks and strategies. It also focused on the extent at which these policy frameworks and institutions facilitate or hinder exploitation of the export opportunity as a pre-requisite to transform horticultural SMEs in Tanzania.

### **1.3 General Objectives and Research Questions**

Thus the overall objective of this study is to present a synopsis of the status of the export sub-sector of horticulture products (performance), and investigate on the determinants of horticulture exports in Tanzania in the perspective of policy and institutional frameworks.

#### **1.3.1 Specific Objectives**

Specifically, this inquiry intends to focus at the following objectives:

- (a) To present an overview of the status and/or performance of the export of horticulture products from Tanzania
- (b) To assess the national policy frameworks and strategies supporting the horticulture sub sector in Tanzania
- (c) To assess institutional networks supporting the horticulture sub sector in Tanzania
- (d) To investigate the determinants of export of horticulture products in Tanzania
- (e) To analyze the performance and prospects of the business enterprises (SMEs) in terms of its contribution to export growth of the horticulture in Tanzania

### **1.3.2 Research Questions**

- (a) What is the status of the horticultural products exports in Tanzania?
- (b) How do the national policy frameworks, strategies and institutional networks support production and export activities in horticulture sub sector?
- (c) What are the major determinants of horticulture products exports in Tanzania?
- (d) What other challenges limit SMEs from processing and exporting horticultural products?

### **1.4 Rationale for Undertaking the Study**

Most of the empirical findings have shown that Tanzania has enormous potential of horticulture production, and it is producing even more than what Kenya is producing, but still Kenya appears on top of the list (i.e. the 6th position among the top 20) of exporters of horticulture products. This is an indication that Tanzania has not fully utilized its competitive edge in the world horticultural export market.

Unlike most of the studies undertaken on the horticulture exports, very few have gone deep to up-root the extent at which policies and institutional frameworks can have impact on the export markets. Moreover, there are few if any studies that have been undertaken to establish the factors which hinder the SMEs (who are participating in the horticulture production) from direct participation in the export markets. The issues of whether policies and regulatory frameworks could be among factors that inhibit the participation of SMEs in the export markets of horticulture products remain uncovered.

Given the importance of policies and regulatory frameworks in the implementation of programmes in the country, it is thus critical to analyze the existing policy and institutional frameworks to establish their adequacy in terms of addressing the challenges of horticulture industry in the country. In consideration of the fact that most of the agricultural related policies and strategies were formulated some years back even before the horticulture exports gained momentum (in the late 1989s), the chances that some of the important policies governing the horticulture sub-sector have been overlooked are high, thus placing the need for this study.

Another aspect that this study has focused on is what role the local government is playing to promote the SMEs participation, since most of the studies undertaken have not focused on the extent to which the local government plays its role in promoting and supporting the SMEs in the horticulture export markets. The exception of horticulture sub-sector with crops such as cashew, cotton, tobacco, coffee etc, is that the horticulture sub-sector does not have any crop board. This study therefore seeks to explore gaps that are likely to impact on the export market of the horticulture products.

### **1.5 Significance of the Sector**

Horticulture products are very important as they are the source of improving the quality of diet and human nutrition and income to the enterprises in the agricultural sector. Horticultural growth in Tanzania is recorded to be 8-10% per annum (Mkindi, 2009). The industry has

recently been recognized as an engine for economic growth and significant contributor in the national poverty alleviation strategy.

Promoting horticultural exports can greatly benefit the country in the following ways. Firstly, horticulture can be an important source of more diversified and higher value non-traditional exports. In contrast to the declining prices of traditional agricultural commodities, prospects for horticultural products are very promising. International demand has been rapidly rising since the mid-1990s. Secondly, horticultural production creates employment opportunities for the rural poor, notably women, and has significant impacts on poverty reduction. Studies also show that households who participate in horticultural production, in both rural and urban areas, earn higher incomes than households who do not. Thirdly, horticultural exports can enable the country to acquire new knowledge and technology in producing and marketing high-end products. The perishable nature of the horticultural products and high Sanitary and Phytosanitary standards (SPS) require technical know-how and quality control. The horticulture industry is characterized by rapid structural change, requiring upgrading by producing countries. Increasingly, distribution is dominated by large supermarket chains with quality standards (UNCTAD XII).

The horticultural industry in Tanzania is among the most important subsectors to the agricultural economy that needs serious attention to enable the industry move forward. At the moment, the industry earns the country about US \$ 380 million; which is equivalent to 40% of the total export economy of the agricultural sector and about 9 % of the country's total export value (TAHA, 2012)<sup>2</sup>. The industry is growing at the rate of about 9% % per year, being among the fastest growing sectors of the economy. With these registered achievements, horticulture industry provides an ideal position in providing opportunities to small holder farmers to increase their earnings per annum that would in return help alleviate poverty and achieve development goals set by the government.

Tanzania's contribution in the global production of fresh vegetables shows that between 1990 and 2008, annual average growth rate of production was 0.14%. Production of fresh vegetables was highest in 1990 at 1 million tonnes, but it tapered off two years later to 800,000 tonnes. Between 1994 and 2001, production showed an increasing but fluctuating trend (FAO Website).

According to FAO statistics (see Tables 1.1 and 1.2), Tanzania's position among world top producers of fresh vegetables improved from No 20 in 2003 to No 18 in 2007. The potential for increasing production of non-traditional horticulture products in Tanzania is enormous (URT, 2002, ESRF, 2010). However, the country lags behind in exporting the same in the world market.

## **1.6 Layout of the Report**

After the introduction, chapter two reviews related literature on the horticulture sector. This chapter critically reviews the literature on horticulture sector and draws best practices from

---

<sup>2</sup> Position Paper: Key Policy Issues Affecting Tanzania's Horticultural Industry (DRAFT) January

other countries. Chapter three covers the methodology which was used in this study. The methodology focuses on the study area and scope, type of data and data sources, sample size, sampling methods, data collection methods and analytical framework. Chapter four details discussion of the study findings which covers the performance of horticulture exports in Tanzania, assessment of policy frameworks and strategies supporting horticulture, assessment of institutional frameworks supporting horticulture, determinants of horticulture exports and performance and prospects of the business enterprises (SMEs). Chapter five concludes and provides main policy recommendations.

## **2.0 Lessons from Related Literature**

### **2.1 Introduction**

World trade in horticultural products has been growing steadily. The sector has become the single largest category in agricultural trade, accounting for more than 20 % of world agricultural exports. In line with this overall trend, horticultural exports from sub-Saharan Africa have also increased and now exceed US\$2 billion. The horticultural exports from sub-Saharan Africa represent only 4 % of world exports, which suggests that there is scope for the countries in the region to expand their exports of flowers, fruits and vegetables (*UNCTAD field case studies show success stories in Uganda, Ethiopia, and Senegal for horticulture trade, July 2012*).

This chapter presents lessons learnt from the literature of countries including Ethiopia, Kenya, Rwanda, Tanzania and China in respect of (i) the status/performance of the export of horticulture products; (ii) National policy frameworks and strategies supporting the sector; (iii) Institutional networks supporting the sector; (iv) Determinants of export of horticulture products and (v) Performance and prospects of the business enterprises (SMEs) in terms of its contribution to export growth of the horticulture.

### **2.2 An overview of the status and/or performance of the export of horticulture products**

#### **2.2.1 Ethiopia**

Within the span of less than a decade, Ethiopia emerged as a global player in the cut flowers business. Production conditions in Ethiopia favour the cultivation of a wide variety of horticultural products. Given the diverse range of altitudes in combination with irrigation potential in different parts of the country it is possible to produce virtually all tropical, sub-tropical and temperate horticultural crops. During the past decade the floriculture sector in Ethiopia has developed considerably and Ethiopia is now the second largest exporter of cut flowers in Africa after Kenya. In terms of employment, technology transfer and generation of export revenue, the floriculture sector has significantly contributed to Ethiopia's economic development. For formerly unemployed Ethiopians who have jobs because of the country's burgeoning rose industry, they consider *a rose is a rose and also a means for a better life* (EHDA and EHPEA, 2011).



The export value of cut flowers and cuttings from Ethiopia has shown a steady rise up to more than USD 200 million in 2009 (EHDA and EHPEA, 2011). With a good mix of incentives and active facilitation, the Government of Ethiopia took a non-existing flower sector and developed it into millions of dollars from the export sector with more than 85,000 jobs created. The sector is very high on the priority of the Government of Ethiopia, and so the suitable land for investors has been prepared, creating a better business operating environment, as well as facilitating adequate cold chain and logistics investments to ensure produce reaches regional and global markets in an efficient manner.

Based on existing market positions in international trade statistics, three specific regions were selected as target markets for further development: European Union, Middle East and Regional Markets in East Africa (EHDA and EHPEA, 2011). In terms of total value of Ethiopian vegetable exports, the European market has gained a third position after the regional African markets and the Middle East. Existing Ethiopian producer/exporters are all well linked to the European importers, either through strategic alliances or based on ownership structure of vertically integrated companies that control the value chain from primary production to the supply to retailers. European importers look at new sources like Ethiopia through the lens of global sourcing programs: they want to serve customers with year-round programs against competitive prices with outstanding quality. This provides new sources like Ethiopia with opportunities in terms of supply windows (advantageous seasonality) or price/quality competitiveness.

### **2.2.2 Rwanda**

Rwanda's climate and topography are very suited to production of a range of fruits, vegetables and flowers. A broad band of cool and humid terrain in the west is suited to European-style fruits and vegetables, including beans, peas, cauliflower, mushrooms, citrus and strawberries. The warm and humid central-south is ideal for tropical fruits such as banana, passion fruit and pineapple. The warm and dry north-east is suited to groundnut, sunflower and pulses. In summary, Rwanda enjoys the same agro-climatic advantages for horticulture as other East African countries with some additional natural niche advantages due to the diversity of its topography (Booth et al, 2012).

The Government of Rwanda has identified horticulture as a "jobs-intensive" and "investment-attracting" sector. An estimated 1.5 million are employed in horticultural production, handling and marketing in Rwanda. According to (UNCTAD XII Publication), Rwanda produced some 4,633 tons and earned the country over Frw 775 million in 2007. This performance more than doubled the following year when 13,723 tons were produced fetching receipts of Frw 3.159 billion (Plunkett, 2008). The performance of horticulture sector has significantly improved over the past years. One of the main impetuses behind Rwanda's interest in exporting cut flowers is the example of nearby Kenya, which in the past 15 years has become a leading supplier of cut flowers to the European market (Plunkett, 2008). Unlike the case of major staples, yields for fruit horticulture in 2009 were already within the regional band – between Kenya and Ethiopia at the top end and Uganda and Tanzania at the bottom. This was before much investment had taken place in improved planting materials or methods. The government

considers this as indicative of an extraordinary potential for growth. Rwandan horticulture seems well placed to benefit from the current revival in global demand for horticultural products (from China, India and the Gulf more than from Europe) as well as in sub-regional markets (Congo) and domestically. (Booth et al, 2012).

Most Rwandan horticultural exports go to small retail shops in Europe targeting African population resident there, not to the chain supermarkets requiring the Global GAP standards. (Plunkett, 2008). The government hopes to lure investors into the sector and it equally sought to allay investment fears regarding issues of quality and standardization. Last year (2011), Rwanda had only three products that merited quality standards but this year the products have increased to 40. That is a sign of good progress and will continue to ensure that more products meet the required standards (UNCTAD XII Publication).

The government has supplied some of the infrastructural conditions for Rwanda to become a global player in horticulture, and has generally played an active facilitating role. It has constructed a cold storage facility at Kigali airport and a flower park is under construction. (Booth et al 2012) notes serious problems hitting the sector which among others are small size, scattered land dedicated for production and lack of high yielding varieties. Other problems include inadequate post-harvest infrastructure and facilities such as pack houses, cold rooms, cold trucks, just to name but a few. This is coupled with high transport costs (freight cost and road transport) and high costs for packaging materials as there's no local manufacturer.

Currently, however, commercial horticulture in Rwanda is constrained by series of problems of market coordination. For the time being, assured production volumes are low. There is a good deal of work to be done with groups of small-scale producers and their cooperative structures to establish the right expectations and incentives for producing at high volumes with the necessary quality standards. Rwanda has already experienced a temporary ban on exports to the EU because of a failure to comply with sanitary and phyto-sanitary standards. Getting the industry started on the cultivation side is transaction-intensive, and both the technical and the commercial learning costs are high. Until this is resolved, storage and transport facilities will be under-utilised, resulting in unit costs which cannot beat the competition (Booth et al, 2012).

The tentative solutions include mapping land and marshlands for horticultural production and providing farmers high yield seeds. Already around 15 hectares have been identified for East African growers to grow avocados whose international demand is very high. As for seeds, Rwanda agricultural board is helping to produce several resistant breeds but some imports are also being made from Kenya and Uganda especially for avocados and mangoes. Under the six-year (2012 – 2017) action plan for the sector, the government plans to construct a modern pack house with a capacity of 20,000 tones per day in Kigali at a cost of \$500,000. It also plans to construct 30 collection centres at a cost of \$1 million, and purchase post-harvest equipment, a move that is expected to reduce post-harvest losses from 40 % to about 10 % and improve the quality of export produce. "Currently Rwanda has inadequate post-harvest infrastructure and facilities. Four cold trucks will be put in place in partnership with the private sector on a 50-50 cost sharing arrangement. The sector is plotting to resort to high yielding varieties of fruits to

produce at least 147,551 tons by 2012 and increase this to 188,317 tons by 2017, this however will require some US\$ 1.4 million dollars. The country has estimated the needs to increase vegetable production and it will require some 10,000 hectares and mobilize farmers to increase area under production (e.g. marshlands, irrigated land and greenhouses). Between 2012 and 2017 the horticulture sector will actually require over US\$ 28 million, a hefty but worthy budget, looking at the potential it holds in the long run. Yet, the whole sector is actually looking at implementing at least 1,500 projects in 2012 alone and 2,500 projects by 2017. This will require establishing a Horticulture Investment Fund worth US\$ 15 million. Exporters are looking forward to development of the cargo sector. The structural challenges such as maintaining supply as well as organizational will be addressed by exporters through organizing themselves in to a strong cooperative which would give them the ability to export in volumes and being able to hire cargo planes easily. Aside from the demands by exporters to avail cargo services, prominent airlines have expressed their wish to invest in cargo services as the market continually grows. "Risk and cost-sharing for airfreight is in consideration where government pays the difference of freight prices in comparison with the tariffs of Kenya and Uganda (UNCTAD XII Publication).

Rwanda has started on the process of international certification by Global G.A.P (a key reference for Good Agricultural Practice (G.A.P.) in the global market) with 29 co-operatives (involved in horticulture) but the target is to have at least 50 co-operatives certified by 2017 to help the exporters to penetrate international markets. Through an array of interventions including agricultural extension agents, land consolidation and tax incentives for value addition are expected to encourage participation (UNCTAD XII Publication).

### **2.2.3 Kenya**

Horticulture is among the leading contributors to the Agricultural GDP at 33% and continues to grow at between 15 and 20% per year. The horticultural industry is among the leading foreign exchange earners and contributes enormously to food security and household incomes to a majority of Kenyan producers who carry out one form of horticultural production or another. Of the total horticultural production about 96% is consumed locally, while the remaining 4% is exported; yet in terms of incomes, the export segment earns the country huge amounts of foreign exchange (National Horticulture Policy, 2010).

The total horticultural production is close to 3 million tones making Kenya one of the major producers and exporters of horticultural products in the world. Europe is the main market for Kenyan fresh horticultural produce with the main importing countries being United Kingdom, Germany, France, Switzerland, Belgium, Holland and Italy. Other importing countries include Saudi Arabia and South Africa (EPZA, 2005).

Over the last several years Kenya has steadily increased her production and share of the world market for fresh fruits, vegetables and cut flowers. The industry has had remarkable growth, with exports climbing steadily from 200.6 thousand tons in 1999 to 346.1 thousand tons in 2003 (EPZA, 2005). The sub-sector contributes more than 10% of total agricultural production and employs approximately 4.5 million people countrywide directly in production, processing

and marketing while 3.5 million people benefit indirectly through trade and other activities. The sub-sector contributes positively to wealth creation, poverty alleviation and gender equity especially in the rural areas. It contributes to the Kenyan economy through income generation, creation of employment opportunities for rural people and foreign exchange earnings, in addition to providing raw materials to the agro-processing industry (HCDA, 2009).

It is stated in the National Horticulture Policy that Kenya is strategically placed to serve as the hub of air traffic for Eastern and Central Africa. The country has a relatively well developed air transport industry with three international airports, four domestic airports and over 400 aerodromes and airstrips. The horticultural industry can greatly benefit from the available and increasing advancement in air transport facilities in the country and the region by transporting high value of horticultural produce to local and regional markets.

The Horticultural Crops Development Authority (HCDA, 2009) further narrates that, a well-developed and dynamic private sector has profitably marketed a wide range of horticultural products to diverse international markets. Government intervention in this area has been mainly facilitating the sectoral growth through infrastructure development, incentives and support services. Structural and macroeconomic reforms, plus the introduction of more liberal trading environment has also provided a major boost to the country's horticultural prospects. The Horticultural Crops Development Authority is a parastatal established by the Government under the Agricultural Act 1967 with the aim of developing and regulating the horticultural industry. The organization does this through the provision of technical and marketing services to farmers and other stakeholders in the horticulture industry.

The horticultural industry earned the country Kenya shillings 71.6 billion in 2009 from exports and an estimated KES 153 billion from the domestic market. Despite the success, still agro processing, packaging and quality standards in the domestic market are not fully developed. There is need to invest in better production methods, post-harvest care and quality to improve consumer acceptance of produce in the local market. There are still several factors hindering the potential of the industry. These include multiple taxation regimes, low incentives in terms of local market prices, high costs of inputs, water, energy, and air freight, and a generally unregulated environment leading to produce poaching and lack of quality control for local produce (National Horticulture Policy, 2010).

The justification for the provision of the National Horticulture Policy (2010) in Kenya follows the increasing emergence of serious challenges both locally and internationally and it has been developed to provide sustainability and further spur growth in the industry. The policy also aims at addressing challenges due to inadequate and inappropriateness of the extension services, collapse of extension institutions and low budgetary allocations; limited use of modern science and technology in production; inadequate quality control systems, a multiple number of taxes at both national and local level in the form of cess without correspondingly providing the requisite services. Such taxes have contributed to a reduction of the net farm incomes and created distortions in marketing structures without necessarily improving the revenue for local authorities; low availability of capital and limited access to affordable credit to finance purchase of inputs and capital investment; Inadequate market and marketing

infrastructure particularly for the domestic market which lacks an effective marketing information system and infrastructure. The vulnerable of horticulture exports due to changes in the demand of horticultural products and unexpected non-trade barriers by foreign markets; high cost, adulteration and low application of key inputs; waste due to pre-harvest and post-harvest losses occasioned by pests and diseases and lack of proper handling and storage facilities which continue to be extremely high; droughts and floods resulting in horticultural crop failures; inadequate storage facilities constrain marketability of horticultural products; lack of horticultural processing facilities close to the sources of produce which limit the extent of exploitation of the sector-potential; underdeveloped rural roads and other key physical infrastructure leading to high costs for transporting horticultural products to the markets and farm inputs and in addition, electricity in rural areas is expensive and often not available, reducing investment in cold storage facilities, irrigation, and agro-processing.

#### **2.2.4 Tanzania**

The potential for growth in horticultural exports in Tanzania is very high. This is justified by the favourable climatic conditions the country is enjoying and the vast pieces of arable land suitable for horticultural production. A number of factors make northern Tanzania a prime location for export floriculture. The climate is favourable, the soils fertile, and locations at different altitudes/temperatures can be found to suit the needs of different varieties of flowers, cuttings and seeds. Proximity to main roads and international airports (KIA, Kenyatta, Dar es Salaam) are added advantages (Cooksey B. 2011).

It is reported that presently the industry earns the country about US \$ 380 million; which is equivalent to 40% of the total export economy of the agricultural sector and about 9 % percent of the country's total export value. Moreover the growth of the industry is recorded at about 9% percent per year, which is one of the fastest growing sectors of the economy. However, despite a number of potentials which the industry has, many have not yet been exploited, due to the undesirable investment climate such as multiple taxes, inadequate availability of inputs, high costs of transportation, the problem of Local Government Authorities not abiding by the national laws and regulations governing production and trade etc., (TAHA 2012).

According to (Cooksey, 2011), he quotes the National Horticulture Development Strategy (2010 -2014) as saying, "...the horticulture development potential of Tanzania is bolstered by notable strengths including ideal conditions for cultivation of a diverse range of horticulture crops, commitment by the government to support agriculture, and proximity to the well-established Kenya horticulture cluster, among others. He also notes the strategy as saying the numerous opportunities available for further development of the industry including increasing investment flows into agriculture activities in East Africa, proximity to rapidly growing export markets, and increasing awareness of the health and nutritional benefits of horticulture products. On the other hand Cooksey, 2011 notes a statement in the national horticulture development strategy questioning the ability of the sector to realize the potential due to many constraints, gaps and weaknesses across the various supply, value and market chains ranging from on-farm productivity to delays at the border crossings. The strategy also reveals the

serious threats including the continuously rising international standards and the uncertainty of climate change...”.

TAHA (2012) reports key policy and related issues affecting the horticulture following the current domestic and international trade and investment atmosphere as it is increasingly becoming complex with frequent and unpredictable adjustments in legislation, procedures and market requirements. As a result, producers, traders, service providers and other players have to put considerable efforts to keep themselves updated with these changes so that they can achieve their production and trade goals including meeting market requirements and in Tanzania however, the policy environment for horticultural industry is surrounded with a number of hurdles which, as a result, makes the investment climate not as attractive as it should to allow for production and trade competitiveness. TAHA (2012) reports that these challenges arise due to the incorrect translation of laws and procedures at both national and district level and the laws and procedures themselves being not appropriate for investment climate.

The National Export Strategy (2010 – 2014) identified constraints which undermine participation of horticulture exporters in export markets. Some of these constraints include unfavourable financing terms, lack of dedicated cargo flight from Tanzania and this negatively impacts the sector in terms of ability to portray itself positively globally. With limited number of flights at present many exporters have problems accessing freight out of Tanzania and this necessitates trucking to Nairobi which is an extra cost. Nairobi flights are expensive particularly for the exporters who have low volumes of produce. In relation to this, Cooksey B. (2011) reported that, most horticultural products are exported from Nairobi, which involves a 250 km journey, with possible delays at the Namanga border because goods going into Kenya from Tanzania reach Namanga, but then get stuck due to bureaucracy and corruption at the border post. This adds the cost to the exporter. Unless these non-tariff barriers are removed in the end they become real tariffs. The urgency to move perishable produce may make the additional costs to flowers and cuttings exporters.

Cooksey B. (2011) also revealed that Tanzanian horticulture producers are still below the critical mass that would allow for dedicated freighting. He further noted that Dar es Salaam and Kilimanjaro airports are much more expensive than Jomo Kenyatta International Airport in Nairobi for horticulture exporters because freight handling in Tanzania is a monopoly of Swissport, and landing fees and fuel taxes are much higher than in Kenya. His study also established that, in the recent past, exporters have used Kenyatta, Kilimanjaro, and Dar es Salaam airports, however, currently (2011) most produce is transported to Nairobi and Dar es Salaam. Kilimanjaro airport has the advantage of proximity for most horticultural exporters but has suffered from high costs that give a competitive edge to Nairobi, despite the time and cost of transporting goods across the Kenyan border. Although the cost and availability of freight services pose a market coordination problem, Cooksey B. (2011) recommended that transport costs can be reduced if small producers can come together to find collective solutions, noting that, however, Tanzanian horticulture producers are still below the critical mass that would allow for dedicated freighting. Ideally he recommended that, horticulture exporters will reduce transport risks by contracting a dedicated freight service to ship produce. He calculated the minimum freight to make this a viable transaction to the European Union as about 40 tonnes

per consignment. Clearly this need for exporters to coordinate their exports during the early, formative stages of an industry, before it achieves critical mass and can contract with air freight companies from a position of relative strength, he argued.

As reported in the statement in the National Export Strategy (2010 – 2014), Cooksey B. (2011) also noted that the stringent market conditions in the importing countries are a strain on the exporters and the evolution of multiple standards resulting to increased compliance costs which has become a stumbling block for many growers in accessing new markets.

The National Horticulture Strategy (2010) also acknowledges that, although there are numerous opportunities for further development of the industry including increasing investment flows into agriculture activities in East Africa, proximity to rapidly growing export markets, and increasing awareness of the health and nutritional benefits of horticulture products etc., the ability to realize the potential is constrained by many gaps and weaknesses across the various supply, value and market chains, from on-farm productivity to delays at the border crossings and it foresees that any future growth is subject to serious threats including the continuously rising international standards and the uncertainty of climate change. It compares the costs of transport incurred by horticulture exporters in Tanzania and Zambia as 46% and 17% respectively and this demonstrates how bad the roads infrastructure in Tanzania is.

Regarding the taxes constraint, Cooksey B. (2011) reported that the government did not reduce taxes on the horticulture sector despite that many governments around the world reduced taxes on key productive sectors in response to the financial crisis of 2008-09 following the heavy blow to global horticulture. Although the government has shown some sympathy towards the sector, but he thinks it has not acted decisively to lessen the fallout from 2008. Following such low state commitment to promoting private sector profitability discourages potential new investors from venturing into the Tanzanian market. He further revealed that during the early 2000s, the Tanzanian Investment Centre (TIC) offered a package of attractive incentives to horticulture investors, but ‘their implementation is poor, and businesses frequently have their imported inputs held up at the border point until duty was paid, despite the fact that they should be duty free.’ Claiming back duty paid is ‘a long and often futile task.’ Cooksey (2011) narrates that these tax issues constituted a ‘major disincentive to FDI, especially when compared to Ethiopia where investors get considerable help.

In his study, Cooksey B. (2011) argued that VAT and import duty exemptions granted by the Ministry of Finance through the Tanzania Investment Centre are not honoured by the TRA or the Director of Customs respectively. TRA officials routinely inflate tax liabilities as a ploy to negotiate unofficial deals. Claims for VAT refunds can take up to two years to complete. Bureaucracy and lack of coordination between government departments costs horticulture businesses hundreds of thousands of dollars. Delays in clearing containers at Dar es Salaam harbor are costly and add cost to inputs. Some suppliers preferred to bring inputs through Mombasa. These and other weaknesses in the business environment add to the cost of doing business. In the 2009 budget, the government also announced the imposition of VAT of 18 percent on air freight exports. TAHA protested that imposing export taxes on its members would make Tanzanian floriculture uncompetitive, and some exporters declared that they

would relocate to Kenya if the tax were not rescinded. After three months intensive lobbying involving the Ministries of Agriculture and Finance, TRA and the Prime Minister's Office, the government withdrew the proposed tax. TAHA has played an aggressive and pro-active role in lobbying government on behalf of its members, nevertheless, the transaction costs of such lobbying are high, and 'the bureaucratic nature of the government system makes it very difficult to push matters to the required levels as there are many layers to unfold before getting there.

TAHA (2012) also summarizes serious issues that affect the horticulture industry in Tanzania as numerous taxes and costs associated with production and transportation of the products hence making the horticultural businesses expensive and difficult to run; High airfreight at the Kilimanjaro International Airport and Julius Nyerere International Airport - exporters paying more at KIA than what freighters are offering at JKIA/NBO; Delays in clearance of goods at Namanga Border when exporters export through JKIA and also purchase agro-input from the neighboring country; Land Conflicts between horticulturalists and villagers/pastoralists; Unreliable, expensive and unaffordable electricity accessibility is to many farmers; Inadequate and sometimes inefficient Cold Room Facilities at the ports, just to mention but a few.

## **2.3 National Policy Frameworks and Strategies Supporting the Horticulture Sub Sector**

### **2.3.1 Ethiopia**

In line with its Poverty Reduction Strategy Paper the Government of Ethiopia identified Agricultural Development Led Industrialization (ADLI) as its core development policy and road map to industrialization. As a follow-up from the Sustainable Development and Poverty Reduction Program (SDPRP), the Government of Ethiopia formulated a comprehensive development strategy for the period 2005/06 – 2009/10 called 'Plan for Accelerated and Sustained Development to End Poverty' (PASDEP). Ethiopia has set itself the objective to lay out the directions for accelerated, sustained and people-centred economic development so that the Millennium Development Goals (MDGs) will be attained by 2015. To this effect the Ethiopian Government aims amongst other to build an economy which has a modern and productive agricultural sector that plays a leading role in the economy. To achieve this, a further commercialization of the agricultural sector and an acceleration of the private sector development are to be promoted. Expansion of the production and exports in the floriculture, fruits and vegetables sub-sectors forms an integral part of this policy objective (Joosten, 2007).

For the period 2010/11 up to 2014/15 the Ethiopian Government developed the Growth and Transformation Plan (GTP). This policy document continues to stress the leading role of agriculture in the economic development of the country. For the fruit and vegetable export sector the Ethiopian Government has the objective to increase the land under cultivation from 2500 ha in 2010 to 33,000 ha at the end of the GTP-period. The scaling up of successful production and marketing strategies to potential production regions and the creation of a conducive market environment is part of the GTP strategy for the horticultural sector. Services and industries that support the development of the horticultural industry are being expanded. Ethiopia wishes to become less dependent on imported inputs and equipment necessary for



high-productivity horticulture. Both in the supply of services and in the production of high quality export products, the number of domestic producers will have to increase. In order to streamline the Government's support to the high value export horticulture – floriculture, fruit and vegetables – the Ethiopian Horticultural Development Agency (EHDA) was established in June 2008 (EHDA and EHPEA, 2011).

### **2.3.2 Rwanda**

In Rwanda, as in many countries of sub-Saharan Africa, the official vision and development strategy documents accord a central place to the overall agricultural transformation. The National agricultural policy is evolving fast and appropriate policy approach has taken shape, funding to the sector is going up and there are grounds for optimism about implementation. The favorable investment regime positioned Rwanda as one of the costliest countries in the world in which to start a business. The horticulture industry extracts maximum benefit from Rwanda's general selling points as an investment destination. Those include its low corruption indicators, high level of public security and recent star rating under the World Bank's Ease of Doing Business survey. Most observers attribute this to the forceful and persistent attention to the implementation of policy commitments that President Kagame impresses on his subordinates. The political economy of agricultural policy in Rwanda is distinguished by a capacity for learning from errors as well as a seriousness about implementation that are not widely observed elsewhere in the region (Booth et al, 2012). The same leadership style has made its mark on Rwanda Horticulture Development Agency (RHODA) and the implementation of the horticulture plans. In late 2009 or early 2010, the then head of RHODA was removed from his post by the president on grounds of proving insufficiently dynamic and replaced by a younger man. Kagame makes quite regular and well publicised visits to projects under RHODA's remit such as the apple banana pilot scheme in Kibungo (Booth et al, 2012).

The Public Private Partnership Policy is working very effective for Rwanda. For example, projects which require huge investments such as construction of cold rooms and the purchase of cold trucks are shared on a 50 – 50 cost sharing arrangements. Again the government is considering putting in place the risk and cost-sharing for airfreight such that the government pays the difference of freight prices in comparison with the tariffs of Kenya and Uganda.

### **2.3.3 Kenya**

According to the Horticulture Strategic Plan (2009 – 2013), a well-developed and dynamic private sector has profitably marketed a wide range of horticultural products to diverse international markets. Government intervention in this area has been minimal, mainly facilitating the sectoral growth through infrastructure development, incentives, support services and providing structural and macroeconomic reforms, plus the introduction of more liberal trading environment has also provided a major boost to the country's horticultural prospects.

The horticulture sector is guided by the national horticulture policy (2010) whose objective is to sustain the industry's growth and development to ensure food and nutrition security, provide industry with materials for primary processing, compete favourably in the export market and

earn more foreign exchange, generate increased incomes and employment for producers, and generally contribute to the broader economic goals as envisaged in Vision 2030.

The policy analyzes the various industry concerns and highlights the challenges they face. It offers policy interventions for production, support services (financing the industry, research and extension), marketing (local, regional and export markets), infrastructure as well as regulatory and institutional arrangements. Cross-cutting issues affecting the industry are also analyzed and policy interventions proposed while industry sustainability, being such an important issue, is handled exhaustively with a view of maintaining or improving the recorded growth of 15–20% per year. Indeed, this is the only subsector of the economy that continued to grow in the recent past in the background of declining performance of other subsectors like tourism and general agriculture. The policy is further assurance that most of the issues hitherto hindering the growth of both domestic and export horticulture have adequately been addressed to harness the potential in the local market while maximizing on increased foreign exchange earnings from the export market. With this holistic approach, the policy ensures that the industry will continue in the lead and surpass current performance multiple times for the good of stakeholders and the economy as a whole (National Horticulture Policy, 2010).

#### **2.3.4 Tanzania**

The National Horticulture Development Strategy sets a road map for transforming the sector in Tanzania through achieving the seven pillars of its strategic initiatives including the promotion of horticulture; expanding long-term financing & investment; addressing land, policy & infrastructure bottlenecks; expanding production base and improve quality; strengthen industry linkages and mobilize human resources which are expected to directly address the most critical constraints in the industry and provide the catalyst for expanding the market for Tanzania horticulture. The national horticulture development strategy is the culmination of many years of public-private cooperation in horticulture and has been developed with the inputs and experiences of representatives from the entire horticulture sub-sector including business, government and academia; and it is integrated with the principles, objectives and activities of MKUKUTA, Millennium Development Goals (MDGs), Agriculture Sector Development Strategy (ASDS), Agriculture Sector Development Programme (ASDP), Tanzania Trade Integrated Study (TTIS), and Kilimo Kwanza Initiative. The Horticultural Development Council of Tanzania (HODECT) is a public-private council which is the Steward of the National Horticulture Strategy.

According to the “Trends and Outlook Report” on key agriculture and rural development indicators for 2011 in Tanzania, the horticulture sector is supported by key agricultural policies which include the draft national agricultural policy (2010), national livestock policy (2006), national irrigation policy (2009) and agricultural marketing policy (2007). The report further states that the novelty of the draft national agricultural policy document lies in the fact that it seeks to revolutionize agriculture through modernization and productivity enhancement. While the essence of the national irrigation policy is to expand land under agriculture and improve agricultural productivity through irrigation, the agricultural marketing policy targets institutional reform, tax reform in value chain, infrastructure and private sector development

in line with sectoral and national policies and strategies, which include the ASDS, NSGRP II (commonly known as MKUKUTA) among others.

In contrary to the documented policies, TAHA (2012) views the policy environment for horticultural industry in Tanzania as surrounded with a number of hurdles which, as a result, makes the investment climate not as attractive as it should to allow for production and trade competitiveness. The report analyses the challenges as a result of the incorrect translation of laws and procedures at both national and district level and the laws and procedures themselves being not appropriate for investment climate. Furthermore, the report elaborates the policy gaps as having numerous taxes and other charges with unfair administration following the nature of operating horticultural business which goes with paying a number of taxes and charges through the course of the whole value chain. For example, during production, producers have to pay prices to some of the production inputs which are inclusive of taxes, while when selling, they have to pay produce cess which is charged as a portion of total earnings. Moreover, service levy adds to the already heavy burden carried by the producer. The industry has, as a result, for a long time suffered from these multiple taxes together with other costs associated with production and transportation of the products hence making the horticultural businesses expensive and difficult to run. TAHA (2012) analyses the charges as follows:

**(a) Produce cess and service levy**

According to the law, produce cess is charged to the buyers at 3-5 percent of farm gate price although most districts have resorted to the maximum allowable rate of 5%. However, as it is well-known, horticulture is a unique industry in which commercial production involves mainly producing for selling at the international markets hence producers carry the burden of paying produce cess which is divergent to the LGA Finance Act Cap. 290 - By-laws, section 4(1) and 5(1) which stipulates that the Produce Cess is to be charged on Buyers and not on Producers. In addition to that, the Local Government Finance Act No. 4 of 1982-as amended by Finance Act 1999 Section 13(4) further advises that the business entities charged Service levy should not be charged Produce Cess. It is apparent that the Government recognizes that the produce cess is improper and a big burden to farmers and a stumbling block to farmers' productivity and overall welfare. In his budget speech for Financial Year 2009/2010, Minister for Finance, Hon. Mustafa Haidi Mkulo proclaimed that effective from 2010/2011, produce cess rates would be amended from the current range of 3-5% to a fixed rate of 3%. However, this policy decision has never been implemented and the government has not given clarification. Service levy on the other hand is also charged to horticultural investors at the rate of 0.3% of turnover. This act adds to the costs of producers and makes the horticultural business difficult to achieve profit margins. The collection of cess by the local government authorities (LGAs) involves the use of roadblocks to control transport of horticultural produce from outside the districts in order to ensure revenue collections. This act by the LGAs has been causing unnecessary crop damages, disturbances and delays considering the perishable nature of horticultural produce. This act violates government policies and laws. According to Local Government Finance Act, 1982 – amended by the Finance Act no 15 of 2003, as produce cess is paid at the point of origins, it is prohibited to use roadblock to collect the cess. In addition, the Government, understanding the weight of the matter, and through the Prime Minister Hon. Mizengo Kayanza

Pinda, made official announcement on 18 October, 2007 that “produce cess must be collected at the points of production and the LGAs are instructed not to use roadblocks to collect produce cess”. A further issue attached to roadblocks is several police checks executed on the highway when transporting the produce from production areas to Julius Nyerere International Airport in Dar es Salaam. Again, this act has proved costly to horticultural producers and exporters due to reported delays in getting the products to Dar es salaam Airport hence sometimes product spoil.

**(b) Taxes on Imported Agro Inputs**

Imported agro-inputs such as seeds and plant materials are subject to tariffs and VAT charges. Most of horticultural planting materials are charged at the rate of 25% tariff and 18% VAT. It should be noted here that some high-value seed varieties such as baby corns, fresh beans and mangetouts are not available locally and hence farmers have to import from the neighboring countries. This has some implication on the price of seeds and consequently the cost of production to local farmers.

**(c) Tax Charges on Agro-Nets**

Locally produced agriculture nets are exposed to tax charges (VAT) and as a result attracting higher and unaffordable prices to smallholder farmers. In this technology, specially designed nets are used for covering horticultural crops against insects and pests that cause damage to crops, thus should have been zero rated and treated in the same manner as locally produced pesticides.

**(d) Consumables for Export**

Nearly all of packaging materials for horticultural produce are sourced from outside the country. However, import procedures at the border are cumbersome and slow taking as long as a month to complete. Worse enough, whenever horticultural investors import consumables for export like flower sleeves, they are asked to pay duty on them unless they are labeled as “for exports”, even if the box in which they are contained is already labeled. To label more than 1,000 flower sleeves in a carton is not only tedious but also exceeds the cost at which the sleeves were bought. Indeed, most of these items are too specific to be used for anything other than the flower export. Unfair treatment by Customs officials cause avoidable delays and subsequently damage of crops due to their perishable nature, thus the investors are forced to dump them. A further consequence is that the investors loose trust to their clients in overseas markets since they cannot meet delivery requirements including deadlines.

**(e) Refunds on VAT Claims**

Whenever horticultural exporters pay VAT, they are always told that they can reclaim these payments from the TRA offices with relevant documents of evidence. However, it takes as long as one year for one to get these refunds. Furthermore, the TRA officers can deliberately delay the whole process just because of a minor omission in one (among a hundred) documents. Such

actions do not facilitate but instead stifle trade which is earning the country millions in foreign income.

#### **(g) Confusion over the VAT Exemption List (Capital Goods)**

Whenever an investor is granted the TIC incentive of VAT exemption on imports, he/she is usually provided with an approved list from TIC depending on what he presented. It is this list that he submits to the customs officers whenever he is importing these goods which are VAT exempt. Nevertheless, in the process, the customs officer frequently starts another cross check of the list and cancels out some items which had already been approved by TIC. This cause grave suffering to the investor which results from misunderstanding between TIC and TRA. Respondents in Cooksey B. (2011) are more concerned with what the government does than with what it says. Their worry is that government actions often contradict policy commitments and investment conditions.

### **2.4 Institutional Networks Supporting the Horticulture Sub Sector**

#### **2.4.1 Ethiopia**

In Ethiopia, institutional frameworks have made a remarkable contribution towards the success of the horticulture sector and according to Joosten (2007), the Ethiopian Horticultural Development Agency (EHDA) was established in June 2008 in order to streamline the Government's support to the high value export horticulture i.e. floriculture, fruit and vegetables. The access to land is facilitated by EHDA and the regional authorities in high potential areas of the countries. The Ethiopian Airlines and Ethiopian Shipping Lines are facilitating the growth in horticultural exports through infrastructure development and logistical services provision. The National Bank of Ethiopia (NBE) oversees the commercial banks in the country and has a regulatory and monitoring function where it concerns the availability of foreign exchange and the repatriation of foreign earnings. Since 2008 the NBE Directives regulating the repatriation of foreign exchange earnings from the export horticulture industry have become more stringent and tighter controls and monitoring mechanisms have been put in place through the commercial banks, customs and exporting companies. Loans for capital investments and operational expense are available from both the commercial banks and the Development Bank of Ethiopia (DBE). The DBE loans have favourable conditions, including grace periods for loan repayments, relatively low interest rates, debt: equity ratio of up to 70:30 and it provides medium and long term loans for investment projects, which are engaged in agriculture, agro-processing and manufacturing with an export focus. In line with the Growth and Transformation Plan (GTP) the fruit and vegetable exports are identified as one of the DBE priority sub-sectors. The Ministry of Agriculture and Rural Development is promoting the agricultural development and issues of plant protection and regulation on the use of agrochemicals. The Crop Protection Department has the mandate to deliver phytosanitary services of regulation and control of the import and export of planting material and produce.

The main stakeholders of the private sector that are active in or have an influence over the export oriented horticultural sector are the Ethiopian Horticulture Producers & Exporters

Association (EHPEA), the Ethiopian Horti Share Company (EHSC), airlines, handling agents in Ethiopia and Europe, importers and the (Dutch) flower auctions. The EHPEA was established at the end of 2003 as a not-for-profit organization based on the voluntary membership of horticultural growers cum exporters. EHPEA is the only association related to the horticulture sector in Ethiopia and aims to promote the sustainable growth of the sector in general and the private sector participation in particular. EHPEA is recognized by Government, international organisations and other agencies as the representing body of the horticulture sector. It has facilitated constructive dialogue and coordination (see EHSC below) amongst stakeholders in and around the sector. Other private sector stakeholders include EthioHorti-Share Company (EHSC) which was established in mid-2004 by a number of horticulture producers and exporters with the objective to collectively arrange for airfreight and handle administrative issues with the airlines. In its few years of existence, EHSC has contributed to the launch of chartered regular cargo flights operated by Ethiopian Airlines. Moreover, it has ventured into collective purchase of supplies like agro-chemicals and small equipment. All exports of flowers, cuttings and vegetables are by air. The B-757 of Ethiopian Airline (EA) takes the majority of all cargo, but fresh produce is exported and loaded onto different passenger planes operated by KLM and Lufthansa. EA also leases DC-10 cargo planes for freight services during peak seasons. Other airlines do not operate dedicated cargo planes out of Ethiopia to Europe as yet. The number of cargo flights varies between 2 and 7 flights weekly. Bole airport has a number of handling agents who expand to be able to handle large volumes of fresh produce. EA opened new facilities and a Dutch/Ethiopian consortium is preparing a complete cool chain service (Ethiopian Perishable Logistics). A substantial part of the cut flowers is sold through the Dutch flower auctions Flora Holland and VBA (Aalsmeer). Both auctions have their own representatives in Ethiopia. Upon arrival on the auctions, flowers are handled and prepared for auctioning by an importer (like Global Flower Service, Van BeekBloemen and Decofresh).

Apart from public and private stakeholders, there are a number of civil society organisations that are active in the horticulture sector. Civil society organisations monitor the use of natural resources such as land and water as well as the use of agro-chemicals and its impact on the natural environment. Moreover, primary as well as secondary labour conditions are monitored and discussed with relevant authorities and EHPEA. Recently six civil society organisations have organized themselves into the National Flower Alliance (NFA) aiming to work constructively together with floriculture stakeholders and aspire to contribute to the sustainability, corporate social and ecological responsibility of the flower industry.

One of the areas given high priority of institutional networks is where export growers and Government agencies work together closely on promotional activities in export markets and 'branding' Ethiopia as a reliable and important production and exporting country for horticulture products (EHDA and EHPEA, 2011).

#### **2.4.2 Rwanda**

The Rwanda Horticulture Strategy (2006) considers that nowhere is public-private-partner collaboration more important than in horticulture and that the implementation of horticulture

programs requires close collaboration between public and private sectors, financial institutions and/or sponsors, and non-governmental organizations. The role of private sector in horticulture is paramount. Horticulture is a private sector driven industry and everywhere the industry has succeeded, private sector players have been at the helm of the transformation.

The government has established a strong institutional and regulatory base to support development of the horticulture sector. The President and Cabinet have identified horticulture as a priority growth sector and are prepared to provide support at the highest levels to accelerate investment. Dedicated institutions and special units have been established to support development of the sector. The Rwanda Horticulture Development Authority (RHODA) has been established to spearhead policy development, regulation, promotion and smallholder support in the sector. A dedicated agribusiness unit has been established within the Rwanda Development Board (RDB) to promote opportunities to investors and facilitate investments in the sector. The Rwanda Standards Bureau establishes and manages certification and quality control systems for the sector. The Agricultural Information Communication Centre (AICC) collects stories and disseminates information on market prices, pest management, and appropriate cropping practices. In addition a number of forums have been established to enable all stakeholders to work together to remove bottlenecks to sector development. These include a special public-private horticulture taskforce mobilised by the RDB with support from the World Bank Group and private associations such as the Rwanda Horticulture Inter-professionals Organization (RHIO) and Rwanda Organic Agriculture Movement (ROAM). Clear systems have been established to ensure access to critical inputs:

- New laws on protection of plant health and control of agrochemicals have been developed based on international best practices, providing efficient processes for approval of planting materials and chemicals.
- All imports of planting materials, agrochemicals, packaging materials, agricultural equipment and processing equipment are duty-free and VAT-free.
- Rwanda's market-based fertilizer distribution system is seen as a model, resulting in significant increases in fertilizer use by smallholders.

RHODA and RBS are working with donors to establish certification and quality systems for the sector and have enabled Rwandan horticulture investors to attend international agricultural trade fairs. The government is working with local banks and insurance companies to develop suitable products for horticulture out growers (RDB, RHODA; 2010). Another very important institution is the Rwandan Customs. The elimination of the export tax assessed by the Rwandan Customs Service (MAGERWA) is an encouraging sign, as is the 0% VAT on exports. MAGERWA has made efforts to facilitate export procedures in recent years, allowing on-site shipment inspections for exporters of perishable goods (UNCTAD XII publication). Since 2007, a specialised agency for horticultural development (RHODA) has been running alongside the agency for agriculture (RADA). Through RHODA and the one-stop-shop for investment promotion (RDB), the government is making a strong play to make Rwanda the place where international and regional investors will go (Booth et al, 2012). A Rwanda Horticulture Inter-professionals Organisation (RHIO) was formed with official support in 2009, and has 60 business and technical professionals as members. There is an active and much

needed programme of research led by ISAR on planting materials and disease control, (Booth et al, 2012).

### **2.4.3 Kenya**

In Kenya, the institutional framework supporting the horticulture industry is governed by various public and private institutions with legal and institutional mandates. According to Minot (2004), the country's legal framework in regard to horticulture is handled by the government ministries and their relevant agencies, e.g. Ministry of Agriculture, and Ministry of Trade and Industry, Horticultural Crops Development Authority (HCDA) etc. It is also adhering to international rules e.g., the legal framework of trade bodies like the WTO and the EU. The Horticultural Crops Development Authority (HCDA) is a government parastatal established under the Agriculture Act, CAP 318 by an order in 1967. HCDA is the main regulatory body of the horticultural sub-sector in Kenya and is charged with the responsibility of promoting the development of horticultural crops, licensing exporters, and disseminating information on horticultural marketing (Minot et al, 2004).

Other public and private institutions directly impacting the horticulture industry are ministries of water and irrigation, health, environment and natural resources, local government, trade and regional development authorities; the Kenya Plant Health Inspectorate Services (KEPHIS); The Kenya Agriculture Research Institute (KARI); The Pest Control Products Board (PCPB); The Kenya Bureau of Standards (KEBS); The Kenya Industrial Research and Development Institute (KIRDI); The Export Promotion Council (EPC); The National Environmental Management Authority (NEMA); Universities and Colleges of Agriculture; The private sector organizations include Fresh Produce Exporters Association of Kenya (FPEAK); The Kenya Flower Council (KFC); The Kenya National Federation of Agricultural Producers (KNFAP); The membership of Agrochemical Association of Kenya (AAK); Seed Traders Association (STAK) etc., (EHDA and EHPEA, 2011).

### **2.4.4 Tanzania**

The Horticulture Development Council of Tanzania (HODECT) - A Private-Public Partnership (PPP) body is a key horticulture stakeholder and is a Steward of the National Horticulture Strategy although instead the only hope remains on the Tanzania Horticultural Association (TAHA) which has become a catalyst promoting Public-Private-Partnership thereby providing a platform for industry networking, and partnership at both the local and international levels. As a member based apex organization, TAHA represents the needs of the industry and drives change through its advocacy initiatives. Its success in lobbying on behalf of its members and the industry at large is complimented by other services it provides such as market and information, technical support, and industry analysis. Together with its members and partners are working to address the challenges affecting horticultural businesses in Tanzania, thereby hoping to create the enabling environment necessary to promote industry growth and sustainability.



## 2.5 Determinants of Export of Horticulture Products

As stated above in this chapter, Ethiopia, Rwanda, Kenya and Tanzania all share similar determinants of horticulture exports such as:

**Location and climate.** The climate is favourable, the soils fertile, and locations at different altitudes/temperatures (which suit the needs of different varieties of flowers, cuttings and seeds), proximity to main roads and international airports.

**Production factors:** Areas of concern in production include provision of adequate and affordable planting material (i.e. green houses), employing appropriate crop production management practices including the use of recommended inputs and control of pests and diseases etc.

**Support services:** Provision of adequate support services is critical to improved horticultural production. The main support services needed for the success of this industry are appropriate research and development, financial services, insurance, extension, marketing information and communication, insurance services etc.

**Trade and value addition:**

- Availability of domestic markets
- availability of regional and international markets
- compliance with quality standards,
- market information system: The horticulture industry requires accurate and timely information for planning purposes
- Traceability: The traceability of produce is an important component of trade.
- value addition

**Infrastructure**

- **Roads:** Horticultural produce is highly perishable and requires fast transportation to market outlets.
- **Electronic communication:** Electronic communication is vital in keeping pace with development of a vibrant and dynamic industry such as horticulture.
- **Energy:** In horticultural production energy is used for irrigation, cold storage, lighting, plant and machinery operation, transportation and packaging.
- **Water and irrigation:** Water is the most valuable agricultural input and the provision of adequate water for irrigation is critical to increased production in horticulture.
- **Sea ports:** The sea ports are important to ship bulky fresh fruit exports and trials on shipping flowers by sea can be made to improve competitiveness since it is cheaper than airfreight.
- **Railways:** Rail has the potential to transport for bulk horticultural commodities for both local and regional markets.

- ***Air transport:*** Air transport remains the key mode of transport for high-value perishable export produce. Availability of efficient airfreights is amongst the key factors that horticulture exporters rely on for successful exports of the perishable horticulture produce to the local, regional and international markets.
- ***Produce cold chain facilities:*** cold storage facilities are required at some selected major production areas and departures such as airports to prevent produce from going bad.
- ***Legal, Taxation, Regulations and Institutional frameworks:*** The horticulture industry requires strong harmonized legal, regulatory and institutional frameworks. Fiscal policy is a powerful tool for providing incentives for FDI.

## **2.6 Performance and prospects of the business enterprises (SMEs) in terms of its contribution to export growth of the horticulture**

### **2.6.1 Ethiopia**

During the past decade the floriculture sector in Ethiopia has developed considerably and Ethiopia is now the second largest exporter of cut flowers in Africa after Kenya and the contribution of SMEs to the horticulture exports is highly acknowledged and significantly contributing to Ethiopia's economic development. For formerly unemployed Ethiopians who have jobs because of the country's burgeoning rose industry, they consider ***a rose is a rose and also a means for a better life***. The export value of cut flowers and cuttings from Ethiopia has shown a steady rise up to more than USD 200 million in 2009. The sector has developed into millions of dollars from the export sector with more than 85,000 jobs created and numerous small producers growing a range of vegetables for the local and regional export market (EHDA and EHPEA, 2011).

### **2.6.2 Rwanda**

Horticulture is a job-intensive and investment-attracting industry and is expected to generate jobs to a large proportion of Rwandans and provide foreign currencies to the country. Besides economic receipts and jobs, other horticulture related benefits include improving people's nutrition situation, creating a better image for Rwanda, encouraging Private-Public Sector partnerships in horticulture-related industries, and generating public awareness for the industry. The standard formula for private company investment in Rwandan horticulture requires the investor to establish production agreements with smallholders organized in cooperatives. The bulk of production is done by the individual cooperative members, with the cooperative serving as the channel for input supply, sensitization on quality issues and commitments on volume Booth and Golooba-Mutebi, (2012). An estimated 1.5 million are employed in horticultural production, handling and marketing in Rwanda with 29 co-operatives (involved in horticulture) and targeting to help at least 50 co-operatives by 2017 to penetrate international markets (UNCTAD XII Publication). This exemplifies the contribution of SMEs to the horticulture exports in Rwanda.

### **2.6.3 Kenya**

As stated in the Horticulture Strategic Plan (2009 – 2013), the Horticulture Crops Development Authority (HCDA) focuses mainly on the small-holder farmers who had the potential to utilize their own labour, as the production processes is labour intensive, with a view to getting high return for their limited land. The sub-sector has been the focus of most government policies, to which SMEs can make substantial contribution. The sub-sector employs approximately 4.5 million people countrywide directly in production, processing and marketing while 3.5 million people benefit indirectly through trade and other activities. It is the most vibrant sub-sector in the agricultural sector and contributes immensely to socioeconomic development. The sub-sector contributes more than 10% of total agricultural production and the sub-sector contributes positively to wealth creation, poverty alleviation and gender equity especially in the rural areas. Horticulture is among the leading contributors to the Agricultural GDP at 33% and continues to grow at between 15 and 20% per year. It contributes to the Kenyan economy through income generation, creation of employment opportunities for rural people and foreign exchange earnings, in addition to providing raw materials to the agro-processing industry. Therefore SMEs have performed positively towards the development of the horticulture industry in Kenya.

### **2.6.4 Tanzania**

The horticultural industry holds tremendous importance to the agricultural sector economy. According to TAHA (2010) the records show that presently, the industry earns the country about US \$ 380 million annually; which is equivalent to 40% of the total export economy of the agricultural sector and about 9 % of the country's total export value. Growth of the industry is recorded at about 9% per year, which is one of the fastest growing sectors of the economy. Studies that directly show the contribution of SMEs to the performance of horticulture exports are limited but as noted from TAHA (2012), it is obvious that the sub-sector employs a substantial number of SMEs with respect to production, processing, logistic handling, and export value chain.

**Box 2.6 EVIDENCE OF THE CONTRIBUTION OF POLICIES AND INSTITUTIONAL FRAMEWORKS TO THE SUCCESS OF THE VEGETABLE CLUSTER IN SHANDONG PROVINCE, CHINA**

One of China's most successful agricultural clusters is the vegetable cluster in Shandong Province. This "Vegetable City" is a leading vegetable production, trading and exporting center. Its 53,000 hectare vegetation plantation produces about four million tons annually. Shouguang was one of the poorest areas in the Shandong province until early 1980s, when vegetable production started. In 2011, 5 state and provincial level agricultural demonstration gardens and 21 non-polluted vegetable facilities were established. More than 700 new vegetable varieties were introduced from over 30 countries and regions. Shouguang also hosts China's largest vegetable seed facility aimed at developing new variety. The facility is co-sponsored by the China Agricultural University. Over the years, vegetable production increased, leading to the emergence of an agro-industrial cluster that has helped to raise per capita income for Shouguang's previously impoverished rural poor.

The cluster evolved through four distinctive phases.

In the *first emergence phase (1978 to 1984)* Shouguang authority launched programs for massive vegetable planting as a priority for the local development agenda. Shouguang had three main advantages that helped it to emerge as a leading vegetable cluster. They included a long history and tradition of vegetable production, raising domestic and international demand for vegetables, and higher profits exceeding revenue from crops such as rice and wheat. In 1983 Shouguang's vegetable production exceeded 450 tons. The local market could not absorb it all, so about 50 tons went to waste. The loss prompted Shouguang to construct a vegetable market the following year, thereby laying the foundation for the next phase.

In the *second phase* of the development of the cluster, local government officials used their authority to bring more peasants and clients into the new market. For example, the officials persuaded the Shengli Oil Field, China's second largest oil base, to become a customer of Shouguang vegetables. This procurement arrangement contributed to the market's early growth. The authorities also helped to set up more than 10 small agricultural markets around the central wholesale market, creating a market network in the city. The markets directly benefitted thousands of local farmers. Despite these developments, high demand for fresh vegetables in winter exceeded the supply.

The *third phase* of the development of the cluster was associated with rapid technological improvements in greenhouses and increased production. In 1989, Wang Leyi, chief of a village in Shouguang, developed a vegetable greenhouse for planting in the winter, characterized by low cost, low pollution, and high productivity. This inspired peasants to adopt the technology and led to incremental improvements in the construction and maintenance of greenhouses. Communication among peasants and the presence of local innovators helped the spread of the new technology. By the end of 1996, Shouguang had 210,000 greenhouses, and the vegetable yield had grown to 2.3 million tons. The Shouguang government focused on promoting food markets. It helped to create more than 30 specialized markets and 40 large processing enterprises. In 1995 the central government authorized the creation of the "Green Channel" an arrangement for transporting vegetables from Shouguang to the capital, Beijing. The transportation and market network evolved to include the "Green Channel," and the "Blue Channel" (ocean shipping), the "Sky Channel" (air transportation), and the "Internet Channel."

After 1997 the cluster entered its *fourth development phase*, which involved the establishment of international brand names. The internationalization was prompted by the saturation of domestic markets and raising nontariff trade barriers such strict and rigorous standards. International safety standards and consumer interest in "green products" prompted Shouguang to establish 21 pollution-free production bases. Foreign firms such as the Swiss-based Syngenta Corporation played a key role in upgrading planting technologies, providing new seed and offering training to peasants. This was done through the Shouguang Syngenta Seeds Company, a joint venture between Syngenta and local government. Syngenta signed an agreement with the Ministry of Agriculture's National Agricultural Technical Extension and Services Center to train farmers in modern techniques. Since 2000, the one-month (starting April 20) Shouguang vegetable fair has encapsulated and perpetuated this cluster's many successes and has become China's premier science and technology event.

*Source: Juma C. (2011); The New Harvest – Agricultural Innovation in Africa.*

### **3.0 Methodology**

#### **3.1 The Study Area and Scope**

This study was carried out in Tanzania where two out of seven administrative zones were covered. The two zones are Eastern (Dar-es-Salaam) and Northern zones. Eastern zone has three regions namely Dar-es-Salaam, Coast and Morogoro, while the Northern Zone has four regions namely Arusha, Manyara, Tanga and Kilimanjaro. While only Dar-es-Salaam region from Eastern Zone was included in the survey, two regions from Northern Zone (Arusha and Kilimanjaro) were covered.

The main reason for choosing Dar es Salaam is the high concentration of Ministries, Government Departments and Agencies (MDAs) and therefore government executives that are also decision makers as well as policy champions. Arusha and Kilimanjaro are chosen due to their known potential for growing and trading in horticulture products and also strategic points for export i.e proximity to the Kilimanjaro International Airport (KIA) and Jomo Kenyatta International Airport. Most of the horticulture related enterprises (production, processing, transporters as well as exporters) are concentrated in the Northern Zone especially Arusha and Kilimanjaro regions.

#### **3.2 Type of Data and Data Sources**

This policy research used both secondary and primary sources to get the required data. Secondary sources includes government policy documents, progress reports and strategic plans by the government and private sector (especially the Micro-Enterprises in the horticulture sub-sector), related studies done in the past particularly studies on production, processing and export of horticulture products and SME development. A few examples of the secondary data sources are related documents which were desk reviewed are:

- National agriculture and livestock Policy
- Agricultural Marketing Policy
- National Development Vision 2025
- Kilimo Kwanza document
- National five year strategic plan, 2011-2015
- Agriculture Sector Development Strategy (ASDS)
- Agriculture Sector Development Programme (ASDP)
- Trade policy
- SME development policy

On the other hand, primary data was collected through in-depth interviews which were conducted with government officials in Ministries, Departments and Agencies (MDAs) responsible for the development of this subsector. The key players in SMEs producing and/or exporting fresh agricultural products were also interviewed on various issues related to both production and marketing (exports) of fresh agricultural products such as challenges they face in producing, processing and exporting horticulture products. These players include farmers,

input suppliers, traders and operators of the infrastructure and institutions supporting the horticulture sub-sector in Tanzania.

### **3.3 Sample Size**

A number of major actors in the value chain of the horticulture sub-sector were consulted. Major players in the value chain include commercial horticultural farmers, small and medium enterprises (SMEs) including input suppliers, exporters, transporters, processors, institutions, and some key respondents from MDAs such as Ministry of Agriculture, Food Security and Cooperatives (MAFC), Ministry of Transport (MoT), Ministry of Trade, Industry and Marketing (MTIM) and Tanzania Revenue Authority (TRA).

Note that, in many cases some actors operate more than one activity. For example, some of the processors are also producers and exporters or transporters etc. Selected institutions include operators of the infrastructure supporting exports of horticulture products such as Kilimanjaro International Airport (KIA), Associations responsible for subsector development such as Tanzania Horticulture Association (TAHA), the Horticulture Development Council of Tanzania (HODECT) and the Local Government Authorities (LGAs). The research team therefore conducted discussions with input suppliers, processors, transporters, exporters and farmers. SMEs especially farmers' groups were also interviewed through Focus Group Discussions (FGDs) and each group consisted of members between 5 and 15 respondents in order to control the discussion.

Two Districts from each region (Arusha and Kilimanjaro) were sampled for the survey. A total of 20 Focus Group Discussions (8 FGDs in each of the Arusha and Kilimanjaro regions and the remaining 6 FGDs were conducted in Dar-es-Salaam) were organized for interviews and discussions. In addition, the following MDAs have been consulted: Ministry of Agriculture, Food Security and Cooperatives (MAFC), Ministry of Trade, Industry and Marketing (MTIM), Tanzania Revenue Authority (TRA), and Energy and Water Regulatory Authority (EWURA). Others included Tanzania Airport Authority (TAA); Tanzania Civil Aviation Authority (TCAA); and Tanzania Port Authority (TPA). A number of private organizations and Associations were also interviewed. They include Swissport (the airflights logistics handling company for the Dar es Salaam International Airport), Tanzania Horticulture Association (TAHA); TAHA Fresh Handling Company Limited, Kimnyaki Horticulture Association; Mamkwe Multipurpose Association; and Home Veg Tanzania Limited.

**Table 3.1: The Sample Size (In Terms No of people and institutions)**

Sn	Respondents	Arusha	Kilimanjaro	Dar-es-Salaam	Total (Sample Size)	Field Instruments
1	Large Scale Farmers	2	2	0	4	Interview Checklist
2	Small Scale Farmers	49	26	Na	79	FGD Interview Checklist (12 FGDs)
3	Transporters	2	2	Na	4	Structured Questionnaire
4	Processors	4	2	Na	6	Structured Questionnaire
5	Exporters	4	2	Na	6	Structured Questionnaire
6	Input Suppliers	5	0	Na	5	Structured Questionnaire
7	LGAs	2	2	Na	4	FGD Interview Checklist (2 FGDs)
8	Private Organizations and Associations	3	1	1	5	Interview Checklist
9	Ministries	Na	Na	3	3	3 FGD Interview Checklist (3 FGDs)
10	Government Departments and Agencies (TAA, TCAA, EWURA, TPA and TRA)	Na	Na	5	5	4 FGD Interview Checklist (4 FGDs)
12	<b>TOTAL</b>	71	37	9	121	

In addition, a total of 6 farmers' groups, 5 input suppliers, 6 exporters, 6 processors and 4 transporters from the two regions were also consulted to get their views on performance of the fresh vegetable SMEs. In each of the two regions Arusha and Kilimanjaro 2 District Councils (local Government Authorities) were interviewed. These are Meru and Arusha district councils in Arusha region and, Hai and Siha district councils in Kilimanjaro region.

The total sample size is therefore 130 respondents representing various institutions. The breakdown for each category of respondents is presented in Table 1.1. This sample size was based on our careful consideration of the number of days and financial resources (budget) allocated for the field work.

### 3.4 Sampling Techniques

Owing to the heterogeneity of the key respondents this study employed a multistage sampling technique to sample the required respondents for this study as presented in Table 3.2.

**Table 3.2: Sampling Method**

Sn	Item	Sampling Method	Rationale and Criteria
1	Regions	Purposive	Horticulture products growing regions
2	District	Purposive	Horticulture products growing districts
3	Farmers	Random and purposive	They are many and homogeneous and therefore were given equal chance
4	Transporters	Random	They are homogeneous and have equal chance
5	Processors	Random	They are homogeneous and were given equal chance
6	Exporters	Random	They are homogeneous and were given equal chance
7	LGAs	Purposive	We targeted LGAs in the horticulture growing areas
8	Central Government	Purposive	We targeted departments or persons dealing with horticulture industry
9	Input Suppliers	Random	They are homogeneous and were given equal chance
10	Airports Authorities	Purposive	There are mainly two airports

### 3.5 Data Collection Technique and Data Analysis

This study combined various techniques and field instruments in the collection of data. Interview checklist and/or guide were used to administer farmers' Focus Group Discussion (FGDs), interrogate LGAs officials, Central Government officials and airport authorities. While the FGDs were organized for farmers, individual and direct interviews were organized for LGAs, Central Government officials and airport authorities. Similar field instruments were also used to interview officials from the private organizations, agencies and associations. Structured questionnaire were prepared and were administered to the input suppliers, transporters, exporters, and processors. The study has further reviewed a range of relevant and related literature to enable the team collect additional information related to the current study. This review was meant to make the researchers become more conversant and knowledgeable on the respective research problem and be able to draw lessons useful to the current study.

Each of the team members prepared a comprehensive field report (Field Notes) based on a standard format which focuses on the major themes from the study objectives. Thus, the field notes covered the status of the horticulture sector in Tanzania; major actors of horticulture sub-sector; categories of producers and types horticulture products they produce; and marketing. Other topics depicted by the field notes include the general challenges of the sector and determinants of exports of horticulture products; policy framework; institutions and legislations. This process was meant to clean and organize data and/or information and produce the required data set for analysis. Thereafter these transcripts were closely read and refined. The research objectives were used as the initial criteria to categorize the data set and afterwards the responses in each category were analyzed by looking at dominant and strong themes and sub-themes that emerged. This was mainly for the qualitative analysis.

Data obtained through the structured questionnaire and secondary sources was analyzed using SPSS and STATA computer software. This process included generation of descriptive statistics to describe the sample and obtain the quantitative study findings. In addition to the descriptive statistics, the relationship between export performance and the major export determinants was gauged through the use of correlation matrix.



### **3.6 Involvement of Other Partners**

In order to ensure that implementation of this work is a collaborative process between ESRF and other practitioners, and in order to ensure involvement of private sector and decision makers, the team worked closely with Home Veg Tanzania Limited, a private sector company dealing with exports of horticultural products and the Ministry of Agriculture, Food security and Cooperatives, Horticulture Unit.

Home Veg Tanzania Limited is located in Arusha regions and was mandated to undertake five interviews with farmers groups as well as large scale famers and exporters in Arusha and Kilimanjaro. The subsequent field report (or field notes) is part of the data set used for the analysis. This is a locally owned small processing and exporting company specifically for horticultural products. Home Veg is practicing contract farming with small scale famers in horticulture products and provides all inputs to these farmers through farmers groups. Like TAHA (who were also important in providing a profile of key stakeholders and players in horticulture value chain), Home Veg is closely attached to a number of SMEs in this industry including farmers associations, and it was therefore felt that this organization can work very well with the team in terms of providing the team with the horticulture profile. Home Veg and its partners including SMEs are affected by the current policies, programmes and institutions. We therefore believe that Home Veg was the best implementers of any change that will be recommended to improve the subsector.

As noted earlier, the second partner is the Ministry of Agriculture, Food Security and Cooperatives. This is the overall custodian of agricultural policies, programmes and government resources which partly determines and influences expenditure in the sector. The ministry was therefore mandated to prepare the report (based on a given Terms of Reference) which forms a major input to the analysis of the findings<sup>3</sup>.

## **4.0 Discussion of the Study Findings**

### **4.1 Performance of Horticulture Exports in Tanzania**

The data obtained from Ministry of Agriculture (MAFSC) as per figure 5.1.1 shows horticulture export volumes between 2006/07 and 2010/11. The performance of horticulture exports is seen fluctuating during the period which is as a result of demand and supply of many players in the world market; change in world market prices and changing of consumer behavior and preferences. Some other factors contributing to such performance as reported by respondents are such as inconsistent supply of the produce to the market due to poor market linkages in some cases the exporters do not know the suppliers and vice versa and value fluctuation which is attributed by price fluctuation determined by forces of demand and supply.

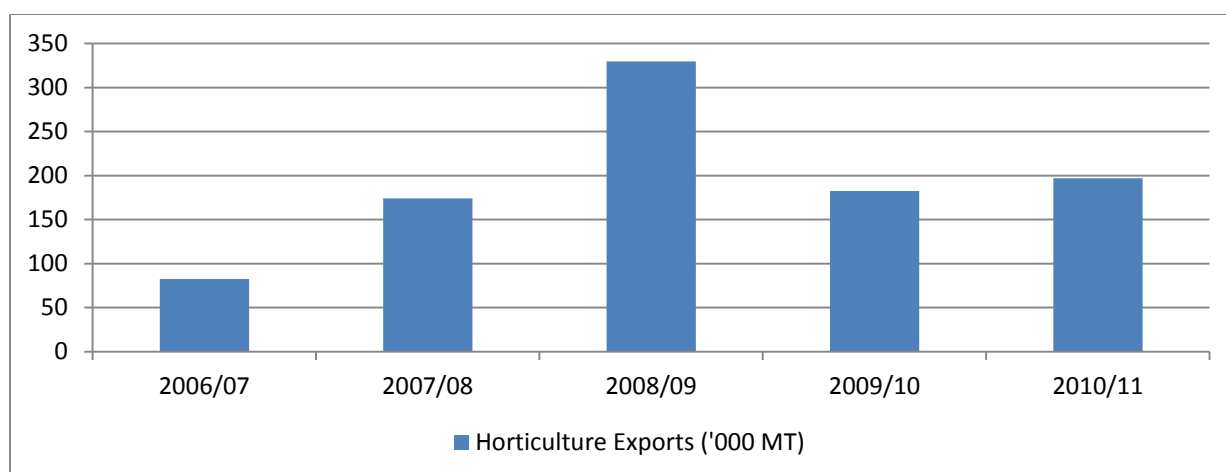
Currently Tanzania has less than 30 big growers/exporters while Kenya has a total of 240 small holder farmers contributing a larger share (200) leaving 40 to big exporters (MAFSC, 2012).

---

<sup>3</sup> See Appendix 3.1

Revenue earned as a result of horticultural activities in Kenya was US\$ 1.7 billion in 2007/08 while Tanzania earned approximately 113.0 million US\$ in the same year (see fig. 4.1).

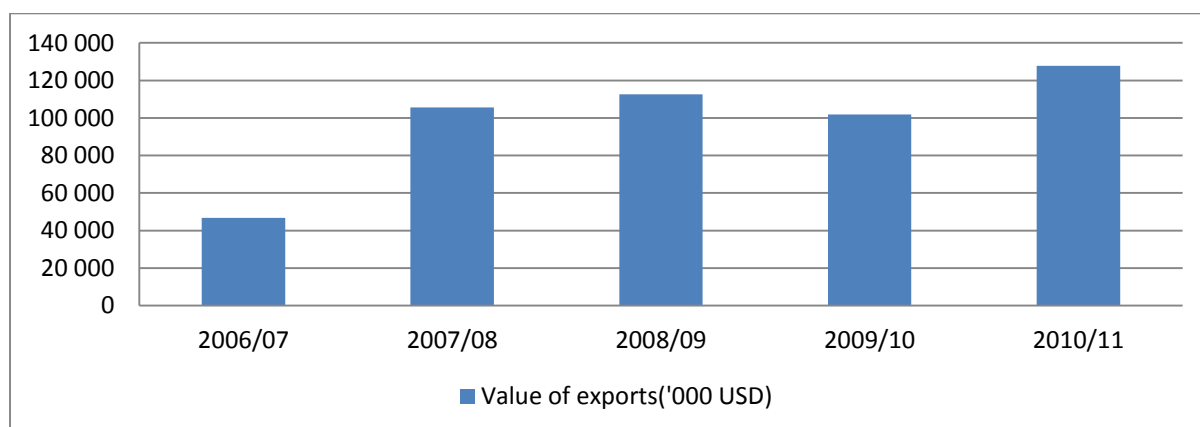
**Figure 4.1: Average of Net Weight on Horticulture Exports (in Tonnes)**



Source: Ministry of Agriculture, Food Security and Cooperatives (MAFSC) and Authors' own calculations, 2012

Figure 4.2 below shows the corresponding amount of money earned from the horticulture exports during the years. As it can be observed, the trend in value of horticulture produce exported is almost similar to that of quantity exported. However the study revealed that, there are times when the rate of increase in quantity exported is lower than that of value earned from the exports signifying fluctuation of prices and value of the exports, vice versa also true. For instance, in 2007/08, exports more than doubled attaining an increase of 111 percent from previous year; however, the value earned from such exports was 126 percent higher than the previous year. Furthermore, as the value earned in that year was higher than exports, in 2008/09 saw a different case where quantity exported increased by 90 percent compared to previous but the value earned from these exports was only 7 percent higher than amount earned previous year(see table 4.2).

**Figure 4.2: Value of Horticulture Exports (in USD)**



Source: MAFSC and authors' own calculations, 2012

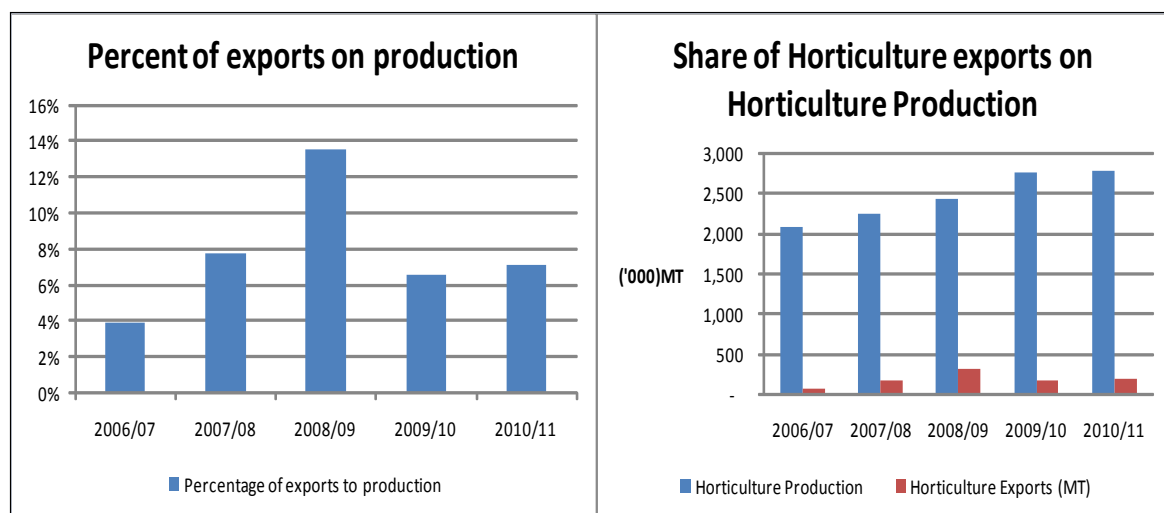
**Table 4.1: Comparison between Change in Quantity Exported to Value Earned from Exports**

	2006/07	2007/08	2008/09	2009/10	2010/11
Horticulture Exports ('000 MT)	82	174	330	183	197
Value of exports('000 USD)	46,751	105,598	112,596	101,789	127,707
Percentage change in Exports	-	111.2%	89.5%	-44.7%	7.8%
Percentage change in value earned	-	125.9%	6.6%	-9.6%	25.5%

Source: MAFSC, 2012

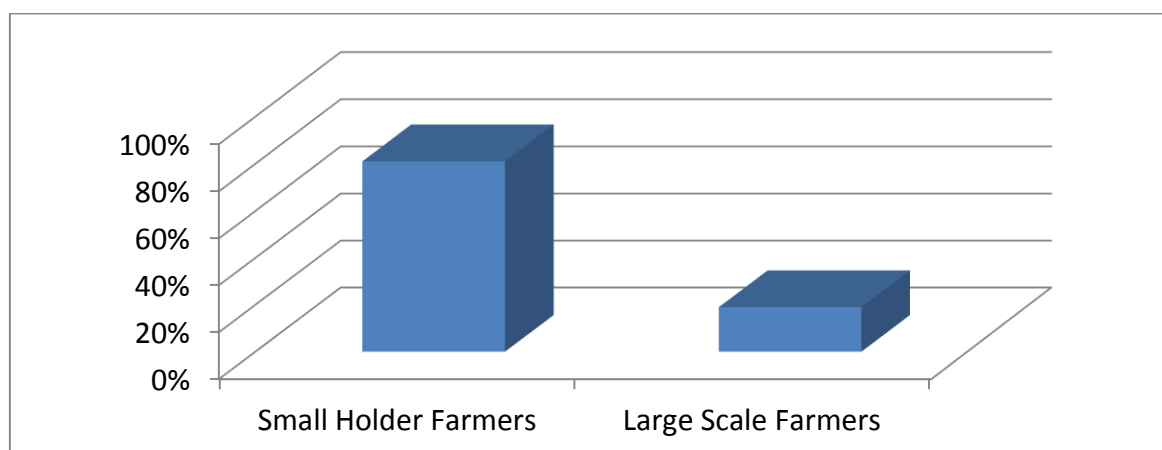
Figure 4.3 below compares the volumes exported to the volumes produced during the years 2006/07 and 2010/11. The volume of exports represents very small proportion of the volumes produced during the same period. This can be explained from different perspectives. According to the field results (see figure 4.4) and literature review, producers of vegetables are dominated by informal small scale farmers and are not connected to the regional and international markets and therefore have limited chance to conduct export business. In addition, small scale farmers do not have access to export infrastructures such as cold chains and the lack of appropriate postharvest care, cooling, and cold chain maintenance during transport to market severely limits the capability of producers to provide consistent supplies of high quality products. The figure also implies that most of the produce are consumed by the local market mainly as raw and a very small proportion processed, although a significant proportion also go to waste due to lack of post-harvest facilities given the perishable nature of horticulture.

**Figure 4.3: Comparison of Exports to Production**



Source: Ministry of Agriculture (MAFSC) and authors' own calculations, 2012

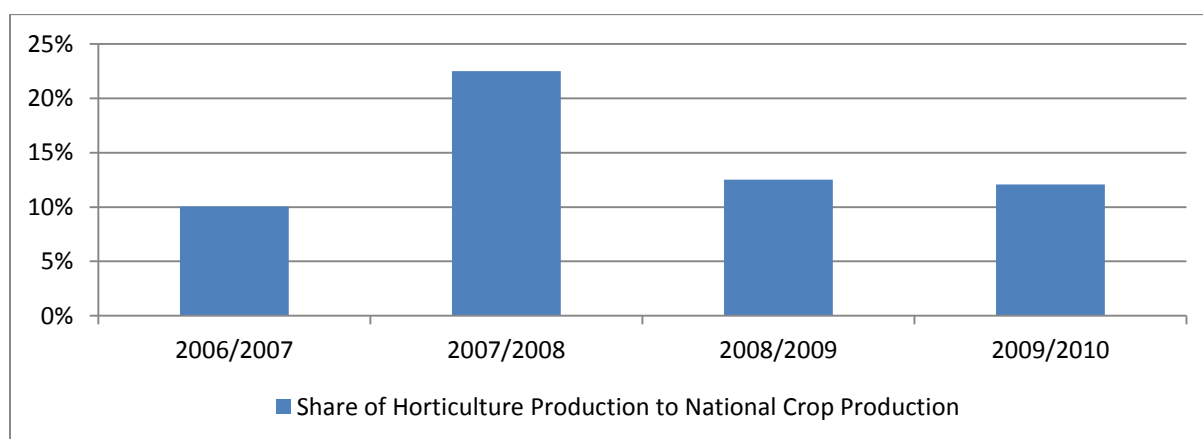
**Figure 4.4: Comparison of Smallholder farmers Companies/associations to Large Scale Farmers**



Source: TAHA and Authors' own calculations, 2012

When compared to the total agriculture production within the same period, the share of horticulture production to total agriculture production is proportionally low (see figure 4.4). This has also been confirmed by the ministry of Agriculture Food Security and Cooperative that although the horticulture sub-sector has grown significantly in the last decade, by volume it still represents a small part of the overall agricultural industry. The ministry sees the horticulture subsector as one of the priority sectors in the National Export Strategy (2008), the Kilimo Kwanza Resolution and a key component in the diversification of the agricultural sector from overdependence on traditional primary agricultural products with a potential to become one of the main sources of foreign exchange earnings and a significant driver of economic growth.

**Figure 4.5: Share of Horticulture to Total Agriculture Production**



Source: MAFSC and authors' own calculations, 2012

However, when asked on how they viewed the performance of the sector in Tanzania, both large scale and small scale farmers were optimistic of future positive performance despite the several challenges and setbacks emanating from the sector. Though they are optimistic, several concerns have been raised especially by the small scale farmers such as the following:

**Box 4.1: Perception of Small Holder Farmer**

It becomes very difficult for small holder farmers to secure loans on time for their agricultural activities. The procedures are very long and cumbersome, at times it may take even three years of which you are still not sure to get that loan and by the time you are in the position to access the loan, the cultivation and harvest season would have passed thus making the loan of no importance at that moment.

*Ms. Grace Kweka- Director of Evergreen Farms in Hai, Kilimanjaro*

*Source: Field Research Findings, 2012*

**Figure 4.6: Researchers with MTAZAMO small growers in Arumeru, Arusha**



**Figure 4.7: Researchers with Flowers and vegetables women group in Arumeru, Arusha**



*Source: Field research findings, 2012*

Lack of reliable cargo planes at the Kilimanjaro international airport is amongst the most pressing issues raised by the large scale farmers, who in many cases are forced to sell via the Jomo Kenyatta International Airport in Kenya. Though some use KIA, but the monopoly of KLM airline has also raised concern as it becomes difficult to export their consignments in time. A good example was raised by large scale farmer from Vasso Agroventures in Kilimanjaro as follows:

**Box 4.2: Perception by large scale farmer on performance of the sector**

Our company exports through KIA, but we have to use the Commuter Airlines due to the lack of Cargo planes at the airport. KLM has monopoly over the airport, thus at times we do not get to export all of our consignment because there is no other airline that we can use to export to Europe.

*Mr. Alphonsus H.B.M Nijenhuis- Managing Director of Vasso Agroventures Ltd., Kilimanjaro*

*Source: Field Research Findings, 2012*

The officials from the local government authorities (LGAs) stressed on poor cooperation they receive from the large scale farmers as well as lack of information between them and the farmers. The interests from several traders getting involved with the horticulture sector is growing, but due to lack of information the local authorities become unaware of the types and details of the contracts these traders enter with farmers making it difficult for them to later

protect the farmers as they were not involved from the initial stages. A good example was provided as follows:

**Box 4.3 : Perception of LGAs**

In 2007, a company called Gomba Estate Company organized farmers to produce French beans in Hai district Kilimanjaro region. However as the harvest season approached this company never turned up to purchase the crops. Farmers became very furious, and presented this matter up to the Prime Minister's Office. But, if farmers had involved us from the beginning, we would have been able to have a close follow up on the matter based on the contractual agreements that they entered with the farmers.

*Ms. Matilda Mfoi- District Agriculture Officer-Vegetables, Fruits, Flowers, Hai, Kilimanjaro*

*Source: Field Research Findings, 2012*

## **4.2 Assessment of Policy Frameworks and Strategies Supporting Horticulture Industry in Tanzania**

Horticulture value chain development is one of the specific positioning choices made by Tanzania in its national policy framework<sup>4</sup>. According to these agricultural related national policy frameworks, Tanzania intends to promote horticulture value chain for the purpose of sustainably contributing to increased production, income and employment to the poor in Tanzania. Horticulture products have the potential for a strong industry in Tanzania, but the industry has been given less attention, which is surprising given the existing potential in production as well as the growing world market demands. The horticulture products are among the main export oriented crops mainly from part of the northern zone of Tanzania (Arusha, Kilimanjaro regions) but also in many other regions such as Coast, Morogoro, Iringa, Mbeya, Manyara and Tanga.

The findings of this study have revealed that the government policies in Tanzania are both supportive and non-supportive. The next section demonstrates a few examples where government policies have been working with an impact as well as cases where government policies are lacking. Perceptions from key respondents on policies and legislations are also summarized in a matrix presented in section 4.2.3.

### **4.2.1 Government Policies and Export Diversification**

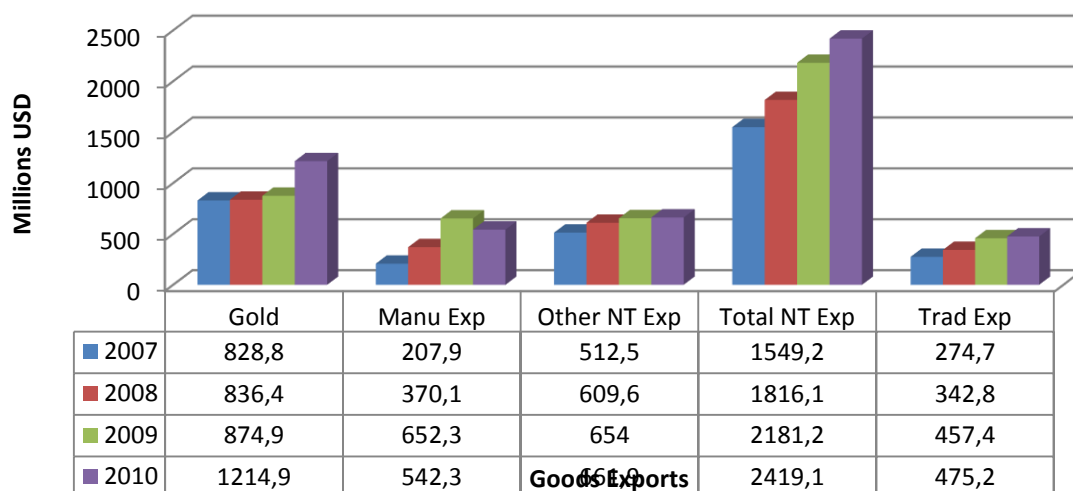
The existing weaknesses in the sector within the regions include the passive government interventions along the horticulture value chain. Unfortunately, this is happening despite the government acknowledgement on the importance and huge potential which the horticulture industry in Tanzania has. Most horticulture products are high value crops whose demand has been growing, and the government has been promoting production of the products owing to the high values attached to the products and the fact that opportunities in the world market are high. Tanzania's Exports have gone through a considerable diversification process over the last 20 years. UN COMTRADE data suggest that the share of top 5 exports has decreased from 67.4 % in 1997 to 57.3 % in 2009, implying a broadening of the range of exported products. In the

---

<sup>4</sup>See for example the Tanzania Five Years Development Plan (URT 2011); Rural Development Strategy (URT 2001); and Agricultural Sector Development Programme (ASDP) – URT 2002)

past the top five exports were all traditional crops. This is because the traditional crops are now being replaced by non-traditional including horticultural crops.

**Figure 4.8: Trends of Trade Traditional and Non-Traditional Exports (2007 – 2010)**



Source: Constructed using Bank of Tanzania (2010) Data

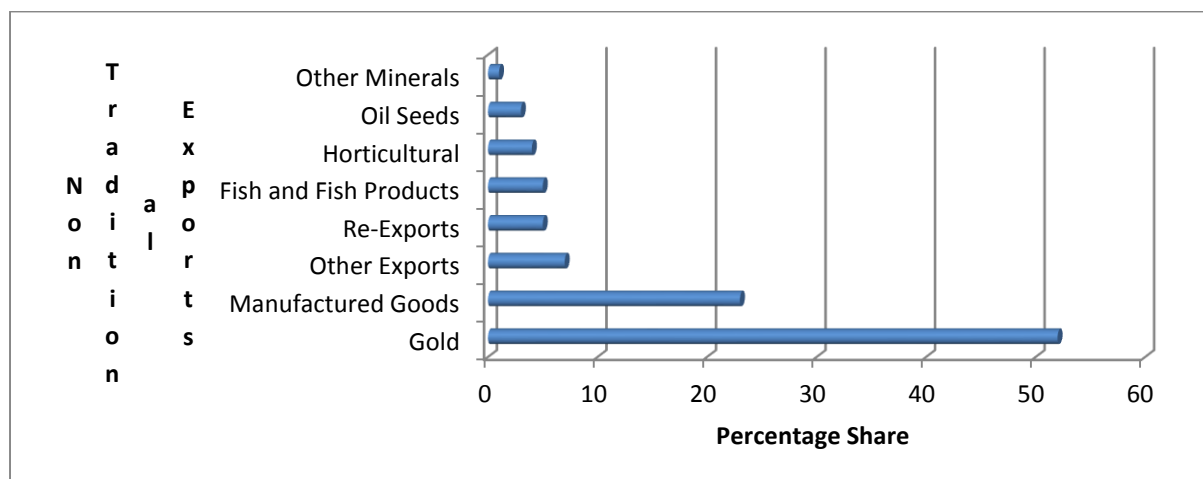
Diversification takes place mainly towards non-traditional exports which comprises 8 major categories of products namely: Gold; Manufactured Goods; Fish and Fish products; Oil Seed; and Horticultural. Others are Re-Exports, Other Minerals, and Other exports. There has been some growth in non-traditional crops over the last 10 years, despite the fall in some export crops notably traditional crops. Other well performing non-traditional export crops are paddy, tomatoes, maize, cassava and oilseeds (groundnut and sesame). Also important to mention are spices (such as vanilla, cardamom, paprika, pepper and ginger). There are also horticulture and floriculture products. Most of the non-traditional crops are grown by the poor. However, there are some of them such as flowers, French beans, baby corn, fruits, spices, and peas which are grown by rich farmers mainly for export markets.

There are several factors driving diversification process in Tanzania. On one hand, the availability of natural resources and in particular the new discovery of gold and minerals has contributed to the diversification during the last decade. However, some of the diversification and the expansion of the exporting sector in general are also likely to be attributed to the reduction of trade barriers. Regional integration agreements, such as the Southern African Development Community (SADC) and the East African Community (EAC), as well as the removal of requirements for export registration, licensing, and surrender of proceeds, and the elimination of most commodity export taxes were an important step to facilitate export diversification<sup>5</sup>. Furthermore, Tanzania has a Duty Free Quota and free market access to the European Union, US under AGOA, and preferential access to China.

<sup>5</sup>Walkenhorst, P. 2005: Trade Policy Developments in Tanzania: The Challenge of Global and Regional Integration. MPRA Paper No. 23399



**Figure 4.9: Contribution to Total Non-Traditional Exports for the Year Ending March 2010**



Source: Constructed using Bank of Tanzania (2010) Data

Put it differently, export diversification is basically the substitution of traditional crops by non-traditional ones among which are the horticulture products which are currently contributing more of the total horticulture exports than before. Though to a small extent a small achievement recorded in Tanzania has partly been possible due to the new government policy initiatives to promote export of non-traditional and high value crops. Thus, to some extent policy change has led to increased exports of the horticulture products in Tanzania - a huge potential still existing in the sector notwithstanding.

#### **4.2.2 Evidence of Policy Implementation Failure affecting Horticulture Industry in Tanzania**

The experience from Arusha and Kilimanjaro horticulture industry reveals that most of the requisite policies are in place, but they are ineffective thus suffocating the industry. For example, the agricultural liberalization policy provides for the government's gradual withdraw from the direct participation in productive activities and service provisions. The government is now a regulator focusing mainly on policy formulation and regulation including monitoring. Certainly the government is now a facilitator who is also entrusted to ensure a fair game in the economy. The private sector is now mandated to take a leading role in the economy in terms of production of both goods and services. The government therefore has the obligation to make interventions whenever there emerge unfair games or distortions<sup>6</sup>.

However, in practice the situation is different. The roles assigned to both private players and the government is lacking, and in many cases and/or areas the services expected from them is not sufficient enough to meet the prevailing demand. This situation has tended to affect the horticulture industry negatively. In Arusha and Kilimanjaro regions for example the following inconsistencies are evident:

<sup>6</sup> This is based on the interview we conducted with the Deputy Permanent Secretary, Ministry of Agriculture, Food Security and Cooperatives (MAFC) and the Assistant Director – Directorate of Crop Development – MAFC on the 4<sup>th</sup> July 2012



**(a) Tanzanian Port of Exit to the World Market**

As pointed out earlier, Tanzania is one of the top 20 countries globally in vegetable production where the neighboring Kenya is not in the list according to FAOSTAT (2009). In the contrast Kenya appears as one of the top 20 countries in the world to export vegetables, where Tanzania is absent from the export list. This mismatch is a result of the fact that most of the horticulture products grown in the northern zone of Tanzania are exported through Nairobi because Kenya is attractive in terms of airport tariff than Tanzania. Also important to mention is another fact that Nairobi has the required airport facilities compared to the insufficient facilities present at Kilimanjaro International Airport (KIA) in Arusha/Kilimanjaro region and the Mwalimu Julius Nyerere International Airports in Dar-es-Salaam. James Person – the Managing Director of AFRICADO (a large scale producer and exporter of horticulture products) says it all as follows:

**Box 4.4: Perception of Producers**

I am not using airports because my product is bulky. Airports will therefore be expensive. Thus, my company exports by sea. I would not have the courage to use Tanzanian Ports because of bureaucracy and corruption. The use of legal system in this country is non-starter. The average lawyer is interested to make a deal instead of providing professional services. It is cheaper in Kenya than in Tanzania! My town of exit is therefore Mombasa because it offers more than Dar-es-Salaam. East African Integration has not been a reality as we have not started to benefit from the integration.

*James Person – the Managing Director of AFRICADO, Hai District, 6<sup>th</sup> June 2012*

*Source: Field Research Findings, 2012*

Many other essential facilities for export services were mentioned as obstacles to the horticulture export sector. They include transportation, packaging materials, and corruption. Exporters of horticulture products import packaging materials from Kenya because the domestic materials are of very low quality. A number of questions have been raised by respondents (See also Box 4.5). Why is Tanzania exporting through Nairobi when the country has three international airports? Why is Tanzania importing packaging materials from Kenya when the country has its own factories?

**Box 4.5: Kenya outcompetes Tanzania**

Tanzania is less competitive compared to Kenya. Nairobi International Airport in Kenya is more attractive than Kilimanjaro International Airport (KIA) in Tanzania. Unlike Tanzania, in Kenya shipping options are many. There are adequate number of facilities and infrastructure. There are many airlines, and multiple service providers. It is much cheaper to export through Nairobi than doing it through KIA. Nairobi is cheaper to all exporters

*Mussa Mvungi – Managing Director, HomeVeg in Arusha, the 5<sup>th</sup> of June 2012*

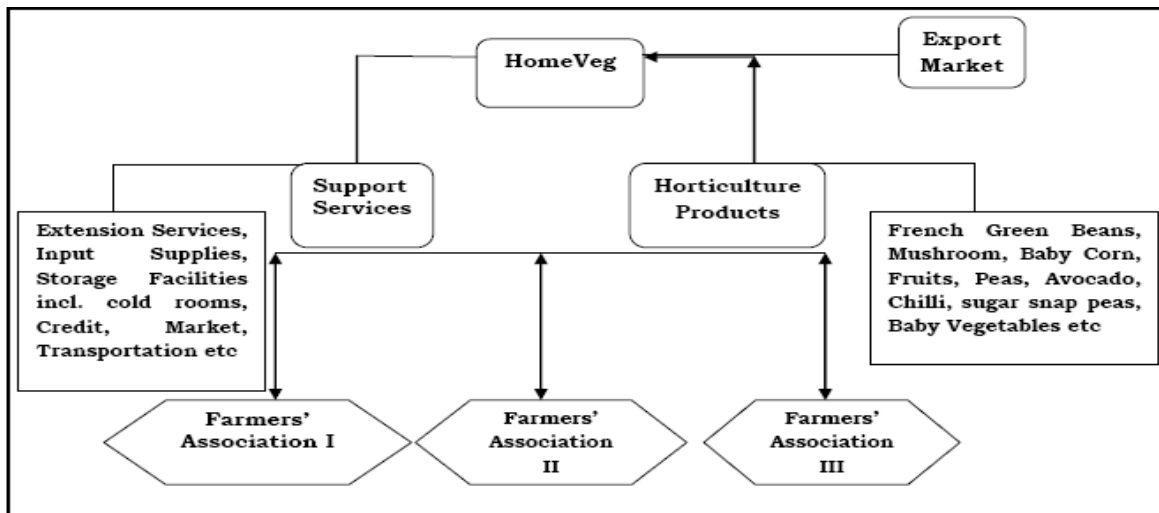
*Source: Field Research Findings, 2012*

The government's policies have not been supportive in this area. As a result Tanzania is loosing substantially. For example, the opportunity cost is high as Tanzania exports through Nairobi and Nairobi. Transporters, airport authorities and service providers, as well as Tanzanians (through employment) are therefore denied their potential livelihood sources and/or incomes.

**(b) The Business Marketing Model**

There has been a notable achievement in Arusha and Kilimanjaro regions horticulture industry in terms of enabling small scale producers to access markets for horticulture products; agricultural inputs; storage facilities and extension services. A few private organizations such as York Limited and especially HomeVeg based in Arusha have introduced a Marketing or Business Model which performs relatively well in the two regions (See Figure 4.10.).

**Figure 4.10: Marketing (Business) Model**



Source: Constructed by the team based on the Field Survey (2012)

The structure and operations of this marketing model is different from other marketing models in the country. The key players in the Home Veg Business Model include Private Organization like HomeVeg, small scale producers, Transporters, Exporters (like HomeVeg in this case), Airport Authorities, and Clients (in the export market). This marketing model operates through *contract farming* where private organizations like HomeVeg enter into contract with farmers association or groups created through HomeVeg initiatives. Through contract farming HomeVeg promotes and help small scale producers to form groups where group members are initially trained thoroughly on group dynamics, farming techniques, preliminary processing, extension services and storage.

In addition HomeVeg supports these groups in terms of input supplies (on credit), extension services, storage facilities including input storage rooms, cold rooms, credit, markets for their products, transportation, international market standards and food safety requirements etc. In turn all producers under contract farming sell their products to HomeVeg at a given price.

Note that this model has been widely acknowledged by stakeholders in the horticulture industry, particularly farmers' groups and/or individual members of the groups, TAHA as well as the government through Ministries of Agriculture, Food Security and Cooperatives (MAFC) and Ministry of Industry, Trade and Marketing (MITM).

**Box 4.6: Acknowledgement of the Contract Farming System**

The government acknowledges the strength and usefulness of this model, and has therefore been encouraging more and more private organizations to join hands. The only major concern is the different agreements (contracts) used by different private organizations. Taking advantage of the low literacy rate and low capacity of the farmers these contracts are prepared by private organizations themselves thus making them more favourable to these organizations at the expense of farmers. Farmers are just required to sign without necessarily knowing what exactly has been spelt out in the contract. To address this problem the government has prepared a contract template which will be used by all players in the sector, thus enabling uniform and fair treatment to all players

*Deputy Permanent Secretary, Ministry of Agriculture and Food Security, Tanzania: 4<sup>th</sup> of July 2012*

*Source: Field Research Findings, 2012*

The new system has been helpful to farmers and other players along the market value chain compared to the old marketing system. Previous marketing system was more exploitative as it encouraged inefficient and unreliable players in between (middlemen) who used to suppress producer prices and temper with weights and measures in their favour. A part from creating 8 farmers groups with farmers between 100 and 150 members each since its inception, HomeVeg has built the capacity of their groups to enable them use irrigation and subsequently grow 3 seasons (cycles) a year and harvest after 8 to 10 weeks after planting. Each group members is required to have at least 0.2 ha of land for the project.

In addition the model has been helpful to farmers' groups in terms of Global Gap Certification where HomeVeg provides guidance to farmers on the requisite standards and requirement in the world market to enable their horticulture products penetrate the world market. A number of storage facilities are being constructed by HomeVeg for all the farmers groups under their custody (Figure 4.12). The plan is to also furnish the groups with cold rooms. Extension services are provided in good time whenever farmers report to Home Veg of related requirements. Productivity and therefore area under cultivation has since then been increasing, and most of the farms are healthy with increasing productivity (See Figure 4.11).

**Figure 4.11: Maize Farm under Contract Farming, Kiransi Village, Siha District**



**Figure 4.12: A Storage Facility under Construction, Kibosho Area**



*Source: Field Research Findings, 2012*

It should however be noted that many challenges and weak spots still exist in this model. For example, all the contracts are prepared by private organizations and farmers are just asked to sign without necessarily customizing the contents. This process has very limited participation of farmers.

The Government of Tanzania through the Ministry of Agriculture, Food Security and Cooperatives (MAFC) has discovered this anomaly, and has decided to come up with a generic contract template which will be used by all players in the sector to prepare farmers' contracts. This initiative is meant to protect farmers from any possible fraud. This template is now with the government legal experts for authentication. This is one of the cases where the government responds favorably in favor of producers in the sector, despite the fact that the response is very long overdue.

In addition, price setting mechanism is biased in favour of these private organizations because there is no evidence that farmers are involved in price setting. When we asked farmers about price setting almost all of them said they have no idea. Price is therefore dictated by buyers. Despite the achievement recorded by this model the government does not have an effective interventions geared towards promoting this model, which is disquieting. In Arusha and Kilimanjaro Regions for example, only 2 active private Organizations are working with farmers in Horticulture through contract farming.

There are cases where private organizations under this model delay product collection from farmers and therefore producers also lose the crop value through shrinkage. Tumaini Mushroom Group which was created in 2008 has been suffering huge losses due to the cheating buying organizations. The group for example was once linked to a buying firm based in Arusha which is known as YORK Tanzania Limited. This buyer has been buying mushroom from members of this group in bulky on credit. However, at the end of the buying season this firm has been paying farmers only for products it has managed to sell. Unsold stocks which are now in bad shape or quality are surprisingly taken back to the farmers groups without any compensation. This is a deliberate distortion of the market which needs the government attention.

### **(c) *Large Scale versus Small Scale Farmers***

Most of the respondents especially small scale farmers surrounding large scale farms acknowledged the benefits accruing to them through employment and certain Corporate Social Responsibility (CSR) related benefits. However, there is also a general feeling that large scale farmers in this sector are not among the reliable investors. This is particularly true because of the poor relationships with small scale farmers as well as the government. There has been a hostile relationship between the two parties. In most cases, large scale farmers are not friendly to any visitor including researchers because they don't feel secure to interact with visitors. The current research team also experienced a similar treatment. It was a nightmare to confirm an appointment with large scale famers in Arusha and Kilimanjaro. We subsequently managed to interview 4 out of 10 sampled farmers. Most of the interviewed farmers and other stakeholders

have the belief that such behavior and attitudes is defensive mechanism aimed at concealing violation of rules and regulation practiced by the investors.

**Box 4.7: Audience with Large Scale Farmers and Exporters**

You are very lucky to at least get a 40 minutes audience and discussion with the Top Management of this company. It is not common. A number of visitors have been denied access to the industry. The company Management refuses visitors because to them most of these visits are unproductive.

*Members of the Communities Surrounding Large Scale Farms in Kilimanjaro and Arusha Regions – June 2012.*

*Source: Field Research Findings, 2012*

On the other hand, investors have not been receiving a fair treatment from government officials such as Tanzania Revenue Authority due to nuisance taxes and unethical revenue collectors who have been demanding bribes and deliberately inflating taxes to scare and forcing tax payers to pay bribes (Interviews with Large Scale Farmers and Exporters).

As noted earlier, this is not to say large scale investment does not entail spillover benefits to small scale farmers and the community at large. Such benefits do not appear here because the section is meant to present whether or not existing policies are supportive to the sector development. The policies on Corporate Social Responsibility (CSR), transparency and Accountability which Tanzania has adopted are therefore not compatible to the practice.

**(d) Invasion of Private Organizations to the Farming Communities**

There are many cases reportedly private organizations go straight to the grassroots (farming communities) without the knowledge of District Councils, and cheat small scale farmers by encouraging them to grow certain crops on promise that the company will purchase the crop at attractive prices – just to find that buyers are nowhere to be found during the harvest season. Such incidences are widespread in the country and causes huge losses on the part of farmers because they invest huge amounts of resources which cannot be recovered. This is another area where the role of the government is missing.

**4.2.3 Perception from Major Respondents**

The matrix table 5.1 below summarizes the views and perception of key respondents on policies and legislations governing the horticulture industry in Tanzania. As can be depicted from the matrix, key stakeholders in horticulture are on the view that Tanzania has many good policies and legislations in place. However, most of these good policies and the legal framework are not known by the beneficiaries because they are not effective, and therefore not supporting the sector sufficiently.

**Table 4.2: Views and Perceptions by Key Horticulture Stakeholders on Policies and Legislations**

Sn	Respondents	Stakeholders' Views and Perception	Conclusion
1	Large Scale Farmers	For us (investors) in agriculture the practice in Tanzania has been completely different from what has been portrayed through websites eg the National Website, Tanzania Investment Center (TIC) Website etc), international exhibition or trade fair, branding and other programmes to promote the country. For example, graduates from local universities are incompetent, and they lack skills and work ethics; the infrastructure being promoted such as the Dar-es-Salaam port is full of unnecessary bureaucracy, corruption etc. One finds it economical and convenient to use Nairobi airport and Mombasa port than using Tanzanian airports and ports. Investors find it difficult to get advisors such as lawyers from Tanzania. An average lawyer in Tanzania looks for a deal rather than providing the required services etc	The private sector and especially foreign investors are not protected adequately. The working environment is still not suitable.
2	Small Scale Farmers	Homeveg Tanzania is doing a good job. The services they provide to small scale farmers in the Horticulture sub-sector is what farmers have been grappling with for many years to improve access of the export market. However, Homeveg alone does not meet the expanding demand within the Horticulture industry and Tanzania as a whole. There are millions of farmers out there who do not have access to the export market and yet they are growing crops which have high demands in the world market.	There is a need to promote the private sector participation in agriculture, and encourage the private sector actors to work with farmers so as to develop farmers' capacity and enable them access the export market.
3	Transporters	One of the most prohibiting factors to most transporters is lack of cold trucks for transporting crops from the farm yard to cold facilities namely pack-houses and cold rooms at the airports. The cost of cold trucks is prohibitive. Transporters require loans or subsidies or exemptions to be able to acquire the required number of cold trucks. There are policies in Tanzania which advocate for empowering the private sector through loans and some kind of preferential treatments. However, these policies are mainly on paper. Implementation of the same is almost absent.	Unless existing policies are put in practice, transformation of the businesses on horticulture products can not materialize.
4	Processors	Processors have been complaining on many challenges they face, but limited policy support have been coming on their way. For example the reason why most of the horticulture products produced in Tanzania (by both Tanzanians as well as Kenyan companies) is exported through Kenya, and labeled as the Kenyan products is lack of the quality packaging materials. The exemption of packaging materials has been stated clearly in the policy. However, in practice the prices of packaging materials keeps on rising with time.	Most processors in Tanzania are micro and small scale. There are very few large scale processors. The tendency has been for the large scale processor to monopolize and dominate the market thus, marginalizing micro as well as small scale processors in the country.
5	Exporters	Most of the exports are made through Kenyan airports because some aircrafts are not landing in Tanzania. Kilimanjaro International airport for example is appropriate because it has most of the facilities. However, exporters are not using it because the cold facilities for example are small and some aircrafts do not land at KIA.	Tanzania can only make use of this opportunity if adequate airport facilities are put in place, other airlines are attracted to operate in Tanzania, and some landing fees as well as handling fees are reduced.
6	Input Suppliers	Input suppliers face a number of challenges which hamper performance of their operations. For example, the local market is full of counterfeit agricultural inputs which cannot easily be recognized. Suppliers are therefore incurring massive losses when their consignments are discovered to be counterfeits.	There is a need to build capacity of the local institutions so that they can control the influx of counterfeit products in the domestic market.
7	LGAs	Coordination among the local institutions such as Ministries, Government Departments and Agencies (MDAs) is lacking. The Ministry of Transport is not aware of what takes place within the Ministry of Agriculture, Food Security and Cooperatives (MAFC), thus losing the synergies. MDAs do not talk to each other sufficiently. There are limited forum for MDAs to share experiences and understand the activities of each other.	The President's Office - Planning Commission (PO-PC) needs to play the role of a convener.
8	Private Organizations and Associations	Lack of institutional coordination was considered among the strong factors for poor performance of the Horticulture sector. Like what is being done in other successful countries, the government of Tanzania requires strengthening the capacity of the Horticulture Development Council of Tanzania (HODECT), to make it competent to assume its institutional coordinating role and work in collaboration with Tanzania Horticulture Association (TAHA). With HODECT Private Organizations and Associations will find a forum to discuss issues pertaining to their operations.	To make HODECT effective, the government needs to empower it by way of building its capacity.
9	Ministries and Government Departments and Agencies (TAA, TCAA, EWURA, TPA and TRA)	Tanzania has been applying contract farming for a number of years now. After some investigation, it was discovered that the contracts used are mainly prepared by private companies which enter into contract with farmers. Subsequently, most of them have been favoring companies at the expense of farmers. The government has therefore intervened and came up with a template contract which is balanced and will be used throughout the sector.	The legal process has not been completed and therefore delays in using the new template.

Source: Field Survey June – July 2012



### 4.3 Assessment of Institutional Networks Supporting Horticulture

This study involved key government institutions in the interviews which included Ministry of Agriculture Food Security and Cooperatives, Ministry of Transport, and Ministry of Industry and Trade. Others from the public sector were Tanzania Revenue Authority (TRA), Tanzania Airport Authority (TAA), Energy and Water Regulatory Authority (EWURA), Tanzania Port Authority (TPA), Tanzania Civil Aviation Authority (TCAA), Local Government Authorities (LGAs), Tanzania Pesticide Regulatory Authorities (TPRA) and HODECT. On the part of the private sector the institutions which were interviewed included, Tanzania Horticulture Association (TAHA), the representative of horticulture producers, input suppliers, traders, processors, logistics handling, transporters and exporters were interviewed. Each category of stakeholders expressed various views regarding institutional frameworks for the horticulture subsector.

Almost all respondents had views that there is no structured forum which brings horticulture stakeholders together to discuss issues of the sector except those meetings coordinated by the Tanzania Horticulture Association (TAHA) in the course of implementing its functions including advocacy programmes and other meetings. The Horticulture Development Council of Tanzania (HODECT), is the Public-Private Partnership (PPP) umbrella, which plays the role of coordination among stakeholders in the implementation of the national horticulture development strategy. According to responses of the players of the sector, HODECT has proved failure in performing its role, leaving the industry surrounded with a number of hurdles.

**Figure 4.12: TAHA officials (first from left and third from right) with researchers at TAHA headquarters in Arusha**



*Source: Field Research Findings, 2012*

This study revealed concerns of actors such as input suppliers, producers (farmers), processors and exporters which were directed to the government and they argued that the role of government has been put into serious doubts and the specific issues of concern were as follows:

**Box 4.8: Issues of Concern directed to the Government**

- Imposing numerous taxes and other charges including taxes on the production inputs, produce cess (which is 5% of the earnings), service levy on top of other production and transportation costs. This act is perceived as divergent to the law since the law requires produce cess charged to the buyers only and not the producers and so deceiving the unique features of the horticulture sub-sector where some of the producers are also exporters or processors and end up being double charged for cess and at the same time carry the burden of paying service levy. Therefore the concern of the actors has been “what those charges for if no extension services are provided - is this not a fundamental violation of the law?”
- Input suppliers are charged tariffs and VAT on horticultural planting materials such as baby corns, fresh beans and mangetouts which are not available locally and hence they have to be imported from the neighboring countries. Such costs are burdening producers as they are passed on to them.
- The influx of counterfeit cheap input supplies such as seeds, pesticide is ruining the power of fair competition. Actors are questioning the role of TPRI and TBS.
- The cumbersome import procedures at the border which take a long time to clear and as a result causing damage to crops due to their perishable nature. The role of the customs clearance officers at the borders has a lot to be desired.
- VAT refund from the TRA offices take as long as one year to have them refunded and so deny exporters from acquiring cash necessary for running the business.
- The airfreight charges at the Kilimanjaro International Airport and Julius Nyerere International Airport are very high as compared to those charged at the Jomo Kenyatta International Airports in Nairobi Kenya.
- Unreliable and high tariff of electricity leaving actors of the sector with no choice other than the use of generators which are even more costly to maintain and so as a result making horticulture produce from Tanzania uncompetitive at the international markets.
- The cold room facilities that are used to preserve horticulture produce at the airports are inadequate and sometime not working, causing damage and losses of the stored goods.
- The problems as high costs of jet1 fuel and limited number of passenger airfreights and cargo airlines landing at the airports are affecting cost of export. The cost of export was alleged higher than those of Kenya and Uganda partly due to high cost of jet1 fuel. Although, the Energy and Water Utilities Regulatory Authority (EWURA) and Tanzania Revenue Authorities (TRA) which are mandated to charge tax and other costs confirmed that no tax is imposed on the Jet1 fuel, however the Tanzania Ports Authority (TPA) revealed that the demurrage charges which are commonly imposed on Jet1 fuel are directly transferred to the end users and so affecting the cost of export.
- The Kilimanjaro International Airport and Julius Nyerere International Airport are not benefitting from the economies of scale due limited number of cargo and passenger airfreights landing at the airports and therefore the higher aircraft service charges are transferred to the end users who among them are the horticulture exporters.
- Aircrafts cannot afford loss and take risks of returning empty due to the inadequate cargo goods and so exporters are not benefitting from economies of scale which is contributing to the high airport service charges in contrary to the Jomo Kenyatta International Airport where huge fleet of aircrafts are operating competitively.
- The government guideline for “One District One Crop” which requires each local government to choose one product/ crop it would support in production during the year has proved to be a problem. The guideline is among the efforts put by the government in trying to dissociate itself from direct participation of production and rather leave the private sector. These efforts however put the horticulture sector in a very unfair environment as many of the local governments put their efforts in production of cereals and grains leaving horticulture products unsupported and no government resources allocated to it to cater for such activities, making it very difficult for the officers to put their efforts into un-budgeted crops.
- Authorities’ failure to prevent illegal traders from the neighboring countries such as Kenya from entering the boundaries of Tanzania unauthorized to mobilize smallholder farmers and purchase their produce directly from the farms. This is alleged to be poor institutional frameworks raising the question on how Kenyan traders flock inside Tanzania boundaries and mobilize smallholder farmers and purchase tons of crops from farmers and transport them to Kenya for packaging and exporting without the authorities noticing? This has become famous practices for cereal and horticulture crops as well, which portray the inefficiency of the law enforcing institutions in the country.
- In conclusion, this study shows evidence of the failure of the institutional networks in playing their role and it is vivid that they are not functional and are uncoordinated to play their role to support the sector. The role of the public-private partnership has been weakened as a result of having weak institutional frameworks for the sector and is a reflection of failure to the institution given the mandate to coordinate stakeholders

Source: *Field Research Findings, 2012*



On the part of the government officials, they also revealed the following:

**Box 4.9: Issues of Concern from the Government official**

- Acknowledged the lack of skills in horticulture which attributed to failure of providing extension services to producers.
- The problem of inadequate funds in the local government authorities contributed to the failure of training extension workers for the horticulture subsector and provision of facilities for field work including transport facilities.
- The uncooperative attitude of some producers of horticulture posed a challenge to the local authority. The evidence of Gomba estate (a foreign company) was made a reference to the incidence of 2007 when the company mobilized farmers to grow french beans, promising them ready market for their harvests. However upon the harvest season, the company was nowhere to be found which caused a lot of chaos among farmers who on their part fumed up their complaints to the Prime Minister's Office. Small-scale producers therefore bypass the role of the local authorities when entering agreements with investors but seek the authorities' interventions when encountering problems with investors.
- Some foreign companies investing in the horticulture sector also do not involve the authority of local governments as they go directly to farmers.

Source: Field Research Findings, 2012

## Recommendations

Lessons learnt from the literature show that countries successful in horticulture exports have their key governmental stakeholders such as the Ministry of Agriculture, Ministry of Trade & Industry and its Export Promotion Department, Investment Authority, Regulatory Authorities, Ministry of Finance (MoF) and its Tax Revenue Authority, Development Banks, Airlines, Agricultural research institutes, etc., coordinated by their umbrella body of the horticultural sub-sector, in collaboration with the national horticulture associations to become functional in the promoting the sector. As this platform holds each stakeholder accountable for its responsibilities therefore there is a need of:

- (i) Strengthening the Horticulture Development Council of Tanzania which is the government's agency responsible for playing the coordination role. The council needs to be autonomous and exclusively be in charge of the industry's development and must support and encourage the private sector in playing its role. Being a coordination platform, needs to push for the implementation of the strategy as per the action plan.
- (ii) Since TAHA has already playing a vital role in the promotion of the industry, it still requires a great support from all stakeholders i.e. the government, development partners, the NGOs and in particular HODECT which is playing the central coordination role of the implementation of the horticulture strategy.

## 4.4 Determinants of Horticulture Exports

In order for farmers to export their horticulture products, there are several factors that are very crucial in determining successful export:

- (a) **Global Gap Certificate:** This is one of the main and most important criteria for any horticulture exports in the world. Farmers are supposed to produce their products in

accordance to this requirement, where by external extension officers visit their farms once per year with intentions of ensuring that the farms meet the set standards. All farmers are supposed to have these standards, although unfortunately, in Kilimanjaro and Arusha regions, extension officers from Kenya are brought to train and audit the farms as Tanzanian extension officers lack this knowledge and skills.

- (b) **TBS certification and Barcode:** These were also cited as among the most important aspects that need to be observed by farmers for them to export their products. It is very important for the local authority in charge of ensuring quality of standard of products has certified the products. This raises the level of confidence from the buyers as the products are safe for consumption, which in our case farmers complain as it is very difficult for them to get the certification from TBS. The barcode is also very important and this has recently started being issued in the country. Farmers from Hai cited the following incident

**Box 4.10: Smallholder farmers**

We got an opportunity to supply mushroom products to Kilimanjaro Kempinski Hotel; we made all preparations and travelled all the way from Kilimanjaro to Dar es Salaam. Unfortunately, they were pleased with our response but demanded us to have a barcode and Tanzania Bureau of Standards certification for them to accept our products. Because we didn't have these important requirements, we were forced to return back to Kilimanjaro with our products.

*Tumaini Mushroom Growers, Moshi, Kilimanjaro*

*Source: Field Research Findings*

- (c) **Adequate cold rooms:** This sector is composed of products with very little shelf life period, demanding enough cold rooms that would be able to store these products and prevent them from damage. However, Homeveg revealed that they had increased efforts in building more cold rooms to increase storage capacity of their products.

**Box 4.11: Homeveg on cold rooms**

We are now in the process to secure funds from ADF that will enable us not only to construct a Homeveg Pack house but would also facilitate construction of cold rooms and car tracks that have cold rooms which shall be used to transport products from the farms.

*Mr. Musa Mvungi, Managing Director-Homeveg, Arusha*

*Source: Field Research Findings*

- (d) **Quality packaging materials:** Packaging plays a great role in horticulture exports. However, it has been noted that many of the farmers use packaging materials from Kenya as they are stronger compared to those made in Tanzania. In many cases, if the boxes used in packing these products are weak, by the time the package reaches the intended destination, the boxes would have been badly damaged resulting to destruction of the products. Respondent from Vasso Agroventures Ltd revealed that they had to add 2 boxes in 1 to make the box thick.

**Box 4.12: Large scale farmer on packaging**

We get our boxes from Arusha (Tanzania) but we have to make the boxes thicker by adding additional box to each box to increase the thickness. If this is not done the boxes will not be able to handle the horticultural products that we put in them.

*Mr. Alphonsus H.B.M. Nijenhuis Vasso Agroventure Ltd., Kilimanjaro*

*Source: Field Research Findings*

- (e) **Exports Transport and Logistics:** upon completion of packaging of the products, exporters ought to use the planes to export their commodities. However, Tanzania's international airports, i.e. the Kilimanjaro International Airport (KIA) and Julius Nyerere International Airport (JKIA) offer high airfreight charges compared to neighboring country Kenya. Exporters complained that they had been paying more at KIA than amount offered by air freighters in JKIA/NBO. The table below provides a comparison on costs of operating at KIA as to those of JKIA (Nairobi).

**Table 4.3: Comparison of charges at Kilimanjaro International Airport and Jomo Kenyatta International Airports**

Cost Element	KIA/JRO (USD)	JKIA/NBO (USD)	Difference (USD)
Trucking – farm to airport	0.03/kg	0.15 – 0.20/kg	
Handling charges	0.06/kg	0.03/kg	0.03kg
Documentation charges	55.00/shipment	48.00/kg	7/shipment
Airfreight	2.10/kg	1.85/kg	0.25/kg
Aviation fuel per litre	0.83/kg	0.77/kg	0.06
Turnaround charge	2,500	1,100	1,400
Landing fee	1,850	1,750	100
For 30,000kg per flight	74,340	55,500	18,840

*Source: TAHA 2012*

The results from correlation matrix show that there is a strong relationship between exports of horticulture products on one hand and price of inputs and the exchange rate. The export relationship with export price and institutional budget is relatively normal. While correlation between exports and the price inputs stands at 97%, the exchange rate and exports have a correlation of 97%. For export price and institutional budget the correlation is 27% and 1% respectively. The exchange rate coefficient has a positive sign implying that it is positively related to the export of horticulture products. Exchange rate is therefore an important policy instrument which can be used by the government to improve export performance in horticulture industry. On the other hand, the export price variable appears with unexpected negative sign. This is clearly due to the fact that majority of farmers in horticulture sub-sector do not have access to export market and therefore export market does not matter to their business performance. The institutional budget (which is a proxy for policy and institutional support) appears with a weak correlation demonstrating that policy and institutions in Tanzania have not been adequately supportive towards transformation of the horticulture industry.

## **4.5 Performance and Prospects of the Business Enterprises (SMEs)**

### ***4.5.1 Introduction***

In this study, business enterprises and small and medium enterprises (SMEs) are used interchangeably. As stated earlier, the study was confined to SMEs in the agricultural sector who specifically do commercial farming of horticultural crops. Others are input suppliers, traders and exporters in horticultural sub-sector.

The analysis on the performance of business enterprises is basically focusing on the current methods of production by SMEs, the trend in the production of horticultural crops, the trend in the level of export and the impact of the performance in the livelihood of the people. Secondary data from the TRA shows that, export in horticultural crops is increasing gradually. Furthermore, the status in the lives of commercial farmers who grow fruits, vegetables, spices and flowers has changed though the changes are not significant. For instance, the report released by SIDO in 2011 stated that Tanzania can produce two million tonnes of fruits worth US\$1bn annually and 1.2 million tonnes of vegetables worth US\$600 million. However, in many of those agro-climatic zones, the potential is not fully utilized and 60 % of fruits and vegetables are left to rot due to lack of processing and preservation facilities.

### ***4.5.2 Current Methods of Production***

In this study, SMEs who are practicing commercial farming in horticultural crops use different methods of production. They use a combination of drip irrigation, furrow farming and traditional method of farming that largely depends on seasonal rains. The use of drip irrigation is mainly for large farmers and farmers who are in groups/associations. In both Kilimanjaro and Arusha, contract farming is a new farming system. Due to the increasing demand of horticultural crops in the world market and the fact that these are value crops, a number of private firms from both local and regional/international level have introduced contract farming in the area. Contract farming is practiced by among others, HomeVeg Tanzania and Serengeti Fresh.

**Figure 4.13: Irrigation infrastructure in place in a large scale farm in Karansi-Kilimanjaro region, Tanzania**

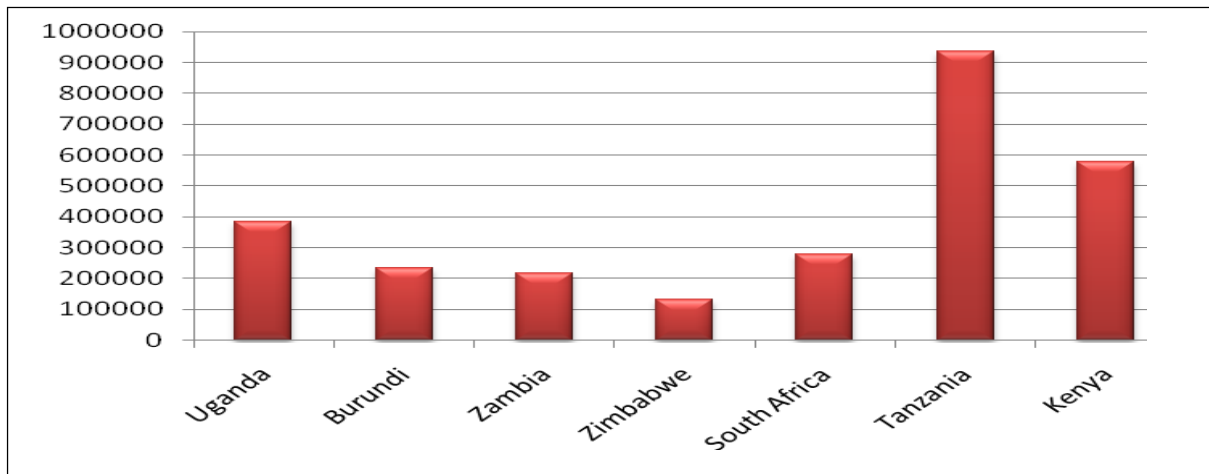


Source: *Field Research Findings, 2012*

#### 4.5.3 Production Trend in Horticulture Crops

Production trend in horticulture crops in Tanzania is increasing as compared to other African countries. Figure 4.7 shows that between 1990 and 2008, Tanzania was far ahead of other countries in terms of level of production, followed by Kenya. While Tanzania’s level of production of fresh vegetables is impressive, it does not do well in the export market literature review?

**Figure 4. 14: Average Annual Production of Fresh Vegetables in MT: 1990-2008**



Source: [www.fao.org](http://www.fao.org)

#### 4.5.4 Prospects of the Business Enterprises (SMEs)

The findings reveal that, despite the fact that there are many challenges in the production and exporting of horticultural crops, the income received after selling the produce is helping the farmers to sustain their living. The findings from the focus group discussions with farmers in both Arusha and Moshi support this argument. The findings have shown that small-scale

farmers who produce fruits and vegetables earn more than those who produce cereals. Thus, given that production of non-traditional horticulture products in Tanzania is dominated by small-scale producers, the potential for reducing poverty by enhancing their productivity and incomes is enormous. One of the farmers at Arumeru horticultural farmer association which is in contract farming with HomeVeg Company reveals that,

*“We now have assurance of farm inputs such as seeds and fertilizer but also reliable market because HomeVeg buys all our produce and they export to European countries. Contract farming, if practiced by medium and large scale farmers can in future give a promising performance of this business”*

In this study, different stakeholders i.e. processors, small scale farmers, large scale farmers, input suppliers, exporters, LGAs, central government (Ministries, Departments and Agencies), private sector as well as transporters provided their opinions on the performance and prospects of business enterprise in the horticulture subsector. Their perceptions are provided in table 4.4 below.

**Figure 4.15 Researchers pose at Horticultural processing plant of Serengeti Fresh Company in Arusha, Tanzania**



**Figure 4.16: Workers at Serengeti Fresh Company, a processing plant in Arusha, Tanzania**



Source: Field Research Findings, 2012

**Table 4.4: Views and Perceptions by Key Horticulture Stakeholders on Business performance and prospects in horticulture subsector**

S/N	Respondents	Stakeholders' Views and Perception on Business performance and prospects in horticulture subsector	Conclusion/Remarks
1	Large Scale Farmers	Business environment is not favourable. Large scale farmers complain that their performance is affected by the poor support provided by the authorities on better business environment. There are stick conditions when it comes to export in their goods. A large scale farmer from one of the flower industries in Arusha was complaining that their production and therefore performance is much affected by export limitations and cross-boarder trade challenges. The package materials are imported from Kenya and very expensive, therefore affects the performance	The large scale farmers are not given favourable business environment to encourage more production and hence improved performance.
2	Small Scale Farmers	The business performance as perceived by small scale farmers is not improving. This is due to different challenges encountered in the production, marketing and limited capital. For example, one association of small scale flower grower in Arusha were complaining on their limited production due to lack of capital to expand and unstable market. However, there is a prospect of improvement only if contract farming is encouraged to farmers through farmers association. The model used by HomeVeg or Serengeti fresh on contract farming between processors and farmers (through farmer groups) is said to be effective to promote marketing and boost performance	Contract farming between processors and farmers (through groups) is highly encouraged
3	Transporters	The researchers consulted a number of transporters who work with processors and exporters in horticulture industry such as TAHA Fresh Company (transporters). Their perception on the performance is varying. The transporters were complaining on problems of infrastructure as key to limit the performance of business enterprise and that of transporters themselves. This was due to poor feeder roads especially during rainy seasons. This has resulted to failure to collect farm produce when ready (after harvesting) and ended up rooting in farms. In addition, sometimes the transporters face with challenges at the airport. TAHA Fresh was giving an example of the situation where they transported fresh vegetables to Dar es Salaam from Arusha region but found that at the Mwl Nyerere international airport, the cold rooms were full and that affected the quality of the products and of course affected the future market	-Improved infrastructure to boost production  -Ensure enough cold rooms at the airports
4	Processors	Processors face with a number of challenges in the horticulture subsector. For example, the problem stated under number 3 above also affects the processors and their performances. When goods are not kept in cold rooms, their chances of poor quality are big and future market potential becomes difficulty.  There is also another challenge of packaging materials which is not in Tanzania but in Kenya. Cross boarder trade barriers also affects the future performance of processors because of long term procedures imposed by TPRI when processors export their produce through Kenya.	There is missing middle processors as most of them currently are large processors. Government should encourage and support young generation and local Tanzanians to invest in this subsector as processors
5	Exporters	The performance of business enterprises in horticulture largely depends on good performance of exporters who connects small business enterprises and end users/consumers of horticultural products.  Most of the exporters are faced with challenges of transporting their goods through Tanzania airports. Exporters in Arusha could use KIA but some aircrafts are not landing at KIA due to high airport charges and limited cold facilities.	If these problems are solved, exporters will be encouraged to export more and therefore bright future for business enterprises

S/N	Respondents	Stakeholders' Views and Perception on Business performance and prospects in horticulture subsector	Conclusion/Remarks
6	Input Suppliers	The perception of input suppliers on the performance of business enterprise and its prospects is positive. If favourable environment is in place, small scale business enterprises/farmers in horticulture industry can do better. This includes encourage them to practice contract farming with local owned processing companies in which seeds and fertilizers are given by the processors as loans. However, input suppliers were of the view that in order to encourage farmers to produce more in future, input subsidy is recommended	Input subsidy by government is highly recommended to encourage and promote business enterprises in the horticulture sector
7	LGAs	Researchers interviewed a number of LGA officials in both Arusha and Kilimanjaro. It seems that these officials are not that much closer with neither small scale business enterprises nor large scale farmers (big farming companies) and therefore do not know well on the performance of business enterprises. When asked on their perception of the performance of business enterprises in this sector, they acknowledge the positive contribution of these enterprises and the current practice of contract farming between processors and farmers. However, they pointed out that they have limited agriculture extension officers who can assist farmers on proper farming modalities and negotiation skills when entering into contracts with processors which may led to contracts which favors processors and . This was the case for LGA officials in Arumeru district (Arusha region) and Arusha town.	LGAs to provide extension services to farmers and regular training to farmers associations on contract farming
8	Private Organizations and Associations	As it was pointed out in table 4.3, Lack of institutional coordination was considered among the strong factors for poor performance of the Horticulture sector. There is Horticulture Development Council of Tanzania (HODECT) which is a government body expected to play a coordination role and ensure that horticulture strategy is implemented. It ensures that the participation of private sector, public sector and other stakeholders in the implementation of policies and strategies of horticulture industry are implemented. However, the council lacks capacity and funding to play this role.	To make HODECT effective, the government needs to empower it by way of building its capacity.
9	Ministries and Government Departments and Agencies (TAA, TCAA, EWURA, TPA and TRA)	Interviews with TAA, TCAA, EWURA, TPA and TRA reveals that despite several challenges in the horticulture subsector, still the performance of the business enterprises is encouraging. Figures from TRA shows that there has been some increase on the revenue from this industry over time. If proper regulation and policies are put in place and if we improve the procedures in handling exported goods, the industry will have promising future	Improve on regulation and export procedures. Need to have horticulture policy

Source: Field Research Findings, 2012

## 5.0 Conclusion and Recommendations

This study was undertaken as part of the initiatives by Trust Africa in collaboration with the Economic and Social Research Foundation (ESRF) together with partners to present a synopsis of the status and performance of the export sub-sector of horticulture products, and investigate on the determinants of horticulture exports in Tanzania in the perspective of policy, regulatory and institutional frameworks. A number of conclusions and recommendations have subsequently been drawn from the analysis and the study findings presented in the preceding chapters.



## **5.1 Status and Performance of the Export of Horticulture Products**

As mentioned earlier, most of the horticulture products produced in Tanzania are exported through the Nairobi (Jomo Kenyatta International Airport) mainly because the tariffs charged in Kenya are comparatively low and for exporters the process is smooth in terms of time it takes, availability of standard and quality packaging materials, the number of check points and other bureaucratic tendencies. Other reasons given during the survey include availability of all the necessary export facilities at the port of exit such as the cooling and preservation facilities and the aircrafts. Tanzania loses significantly in terms of employment opportunities and incomes because the export procedure is relatively un-attractive to most exporters interviewed. In addition, international export statistics are naturally distorted because the horticulture products produced in Tanzania and exported from Tanzania are recorded as products produced and exported from Kenya.

*Recommendation 1:* Tanzania need to strengthen and improve the services of all its ports namely Kilimanjaro International Airport (KIA), Mwalimu Julius Kambarage Nyerere International Airport (JKNIA), Dar-es-Salaam Port, Tanga Port as well as Mtwara Port so that they attract exporters of horticulture products. The Government and private investors need to ensure the port charges are competitive enough to win the users of the ports; the standard and quality packaging materials are produced locally and are made available for the exporters; the necessary export facilities at all the ports (such as the cooling and preservation facilities and the aircrafts) are available.

Transportation of high value fresh horticulture produce requires efficient and reliable direct airfreights to the destination markets. One of the factors that are contributing to good performance of countries like Kenya and Ethiopia in horticulture exports is the reliable and efficient of airfreights direct to markets destination. These countries have dedicated cargo airfreights which transport the horticulture produce direct to the markets destinations. They have also made available cargo handling facilities with cold storage facilities to accommodate all types of perishable products such as meat, flowers, fresh herb and vegetables.

*Recommendation 2:* If Tanzania needs to succeed and become among the major horticulture exporter of the world, it will have to make such provisions. The dependence of Jomo Kenyatta International Airport will only benefit Kenya since all the resources will be flowing to Kenya from Tanzania.

## **5.2 National Policies and Strategies Supporting the Horticulture Industry**

Agricultural policies in Tanzania are fragmented and prone to political interference. This, together with inconsistent national policies and policy gaps constrain the horticulture products value chain development and promote dysfunctional accountability relations. In a nutshell, there is a huge mismatch between the national policy statements on one hand and practice on the other hand. In other words some good policies related to horticulture sub sector in Tanzania are not consistent with practice on the ground. There is a huge divergence of the national policies. Thus, policies and strategies in Tanzania are not supportive enough to spur

development in the horticulture sub-sector. This trend needs to be reversed if Tanzania is to achieve its development goals and targets.

*Recommendation 3:* The government in collaboration with key stakeholders needs to ensure that all approved policies are implemented, monitored and evaluated regularly in order to meet the public expectation and transform the horticulture industry in Tanzania. In other words, the government needs to ensure that the requisite policies are in place, functional and support the players in the horticulture industry.

*Recommendation 4:* To ensure smooth functioning of national policies, there is an urgent need to put in place an effective resource mobilization strategy and institute a proper and strategic resource allocation and utilization in implementing relevant policies.

### **5.3 Institutional Networks Supporting the Horticulture Sub Sector**

The institutional framework for horticulture sub-sector in the country is also fragmented and un-coordinated and practically weak to support the sector. The role of the local government towards supporting this sector has been put into serious doubts after receiving numerous complaints from farmers towards their operations and attitudes. Farmers are rarely getting extension services from local governments as a result traders from Kenya get loophole to penetrate illegally and supervise farmers in groups in order to buy the products directly from the farms. Most extension officers from the Local Government Authorities (LGAs) are not experts of the horticulture farming. There are cases where experts in livestock are brought as extension experts for horticulture farming. At the central government, there is no strong mechanism to coordinate the various institutions responsible for supporting the horticulture value chain sub-sector and as a result this weakness has greatly affected the performance of the sector due to the unresolved multiple challenges emanating from these institutions.

*Recommendation 5:* The government of Tanzania should learn from the institutional coordination models of other countries like Kenya and Ethiopia which have the horticulture sub-sector performing at the best, in order to capacitate and strengthen HODECT, an institution similar to those in Kenya and Ethiopia which play the role of institutional coordination.

*Recommendation 6:* There is a need to have specialized extension officers in that Tanzania should train extension experts in different crop varieties. For example, the country should have experts in coffee (and coffee alone). Specialized extension officers in cotton, specialized extension officers in horticulture farming etc. Currently, there are experts in agriculture, livestock etc.

Another important aspect to consider is on relationships and linkages between the key players along the product value chain. The key players along the market value chain of the horticulture products in Tanzania are not talking to each other which is extremely disquieting. Each of these actors work on his own and does not feel to have any obligation to ask or remind other player along the same market value chain. The transport department for example which is one of the key player along the horticulture market value chain never question the Ministry of Agriculture,

Food Security and Cooperatives (MAFC) even when MAFC causes inefficiency in the market. The players reportedly don't know which institution has the mandate to make them meet and talk.

*Recommendation 7:* There is therefore an urgent need for the government to create an enabling environment which will allow key players along the market value chain to communicate and/or link to each other in order to improve the market efficiency. The Presidents Office – Planning Commission (PO-PC) for example could have been the right convener of such meetings.

#### **5.4 Determinants of Export of Horticulture Products**

Export of horticulture products is influenced by a number of factors. Chief among them according to the views and perception of respondents can be categorized under policy, the regulatory framework, institutional frameworks, the infrastructure etc.

*Recommendation 8:* If Tanzania is to succeed in the exports of horticulture, it should place a very high priority of the sector by creating a better business operating environment, as well as facilitating adequate cold chain and logistics investments to ensure the produce reaches regional and global markets in an efficient manner. It must dedicate an organ that can ensure the accelerated and sustainable growth of horticulture production and productivity and facilitate the export of diversified horticultural products which meet international standards and that can coordinate the development of supporting services. These services include, efficient use of irrigation facilities, infrastructure development and logistical services, improvement of the main roads and airports connecting the production regions, ensure that efficient customs services and phytosanitary inspection services so that exports of fruits and vegetables can be handled without unnecessary delays. Experiences of customs officials and phytosanitary inspectors in the horticulture sector are relevant in this context, develop the smallholder extension and training services, focus horticultural research programmes on production and quality improvements on market standards and requirements, modernization of the smallholder horticultural sector in terms of introduction of hybrid seeds and other improved planting materials. Furthermore, enhancing irrigation efficiency and water conservation; improved soil fertility management; integrated pest management techniques; improved harvesting and post-harvesting handling of fruits and vegetables, dialogue with producers and exporters is essential for identifying and addressing current problems and constraints are also important to the development of this sector. For example, arranging public-private partnerships (ppp) meetings through platform to discuss matters related to customs issues, phytosanitary procedures and requirements, design and progress of new infrastructure developments, etc.

*Recommendation 9:* Another aspect the government requires to support is knowledge and experience. Lack of skills, professional education and experience in the export horticulture denied Tanzanians the opportunity to use their own endowed resources and as a result leave this opportunity to be enjoyed by other nationalities. If Tanzania is to succeed in this business, the government should support in the provision of expertise to its people. It can secure the required expertise through identification of joint ventures between Tanzanians and foreign business partners and at the same time an increasing number of Tanzanian managers can gain

experience and technical knowhow on horticultural production. It is very important however that the Tanzanian export horticulture further develops its own cadre of well-trained and experienced managers and production staff. This applies not only to the primary production process, but also to farm planning, marketing management, the post-harvest handling processes and public and private services sector (e.g. phytosanitary services, chain quality management).

### **5.5 Performance and Prospects of the Business Enterprises (SMEs) and its Contribution to Horticulture Export Growth**

There has been a notable achievement in Arusha and Kilimanjaro regions horticulture industry in terms of enabling small scale producers to access markets for horticulture products; agricultural inputs; storage facilities; accessing the world market and extension services. A few private organizations such as Serengeti Fresh, York Limited and especially Home Veg based in Arusha have introduced a Marketing or Business Model which performs relatively well in the two regions.

*Recommendation 10:* The government needs to acknowledge the efficacy of this business model and ensure that it is promoted by persuading more private organizations to invest in this business and replicate the model to other horticulture growing areas in Tanzania.

*Recommendation 11:* With the support of such organizations, it is proposed to establish stronger input finance arrangements and make the farmer organizations bankable and exportable. Firms from the private sector must show interest to support and work with horticulture producing smallholder farmers. Apart from exporting raw products, value addition options should also be emphasized to generate more employment opportunities and add value to the raw products.

Also important to notice is the fact that, in other countries, the sector has the collective responsibility to ensure quality and food safety systems are adhered to. In Kenya for example, the Ministry of Agriculture has established quality standards for major horticultural export produce, covering size, appearance/colour, packaging module/weight etc. Plant quarantine check is applied to all horticultural exports by ministry inspectors at the airports and seaports by extracting samples from various products. Export rules and regulations are enforced in the sector.

*Recommendation 12:* Tanzania should therefore learn the success stories from other countries such as Kenya. Likewise, in Ethiopia the government has created Ethiopian Standard Agency which is mandated to develop standards based on domestic as well as international markets.

Many countries have succeeded and improved the performance of the sub-sector by learning through mistakes and worked to address the challenges facing inhibiting performance. Some of the counties which have realized success through this approach are China and Rwanda, among others. China for example went through four levels before it realized full success. Every proceeding phase was a result of resolving challenges encountered in the previous phase until it features on a global map as one of the top exporters of horticulture produce. Likewise

Rwanda is following the same suit. It has been always working towards addressing challenges that inhibit performance of the sector. For example Rwanda realized that it is lacking bulk exports that can interest cargo freights to do business, thus it is now working to mobilize small scale farmers into groups in order to make mass production sufficient for hiring cargo planes. Given the high cost of cargo transportation, the government is ready to subsidize for the cost to make the product competitive at the international markets. In Kenya for example, the Horticultural Crops Development Authority (HCDA) is a parastatal established by the Government under the Agricultural Act 1967 with the aim of developing and regulating the horticultural industry. The organization does this through the provision of technical and marketing services to farmers and other stakeholders in the horticulture industry.

*Recommendation 13:* Tanzania therefore, ought to learn from such success stories.

## REFERENCES

- Booth D and Golooba-Mutebi F, (2012); Policy for Agriculture and Horticulture in Rwanda
- BoT (Bank of Tanzania) (2010): Recent macroeconomic Development, Directorate of Economic Policy, BoT, Dar-es-Salaam
- Cooksey B., 2011: The investment and Business Environment for Export Horticulture in Northern Tanzania; Background Paper 02
- Cooksey B., 2011: The investment and business environment for export horticulture in northern Tanzania
- Dolan, C., and Humphrey, J., (2000), “Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticulture Industry”, *Journal of Development Studies*, Vol. 37 (2), pp.147-176.
- EHDA and EHPEA, 2011; Assessment of development potentials and investment options in the export-oriented fruit and vegetable sector
- EPZA (Export Processing Zone Authority Kenya), (2005): Horticulture Industry in Kenya
- ESRF (Economic and Social Research Foundation) (2011): Promoting Agriculture (Food Security) – Climate Change – Trade Linkages for Development in the East African Community (EAC): The Case of Tanzania; A Consultancy Report Submitted to CUTS Geneva
- Ethiopian Horticultural Development Agency (EHDA) and Ethiopian Horticultural Producers and Exporters Association (EHPEA), 2011; “*Assessment of development potentials and investment options in the export-oriented fruit and vegetable sector.*”
- Evidence from Kenya and Côte d’Ivoire
- Export Competitiveness and Development in LDCs: Policies, Issues and priorities for Least Developed countries for action during and beyond UNCTAD XII
- FAO (2003), “Rise of Supermarkets across Africa Threatens Small Farmers: Opportunities and Challenges in a Changing Market”, website accessed on 09/09/2008.
- Horticultural Crops development authority (HCDA) Strategic Plan 2009-2013; 2009
- Horticulture Strategy for Rwanda, 2006
- Joosten F, 2007; Development Strategy for the Export- Oriented Horticulture in Ethiopia
- Joosten Frank. (2007): Development Strategy for the Export – Oriented Horticulture in Ethiopia
- Juma C., 2011: The New Harvest – Agricultural Innovation in Africa Kenya National Horticulture Policy
- Minot N., Ngigi M. (2004): Are Horticultural Exports a Replicable Success Story?
- Mkenda, B., Mashindano, O., and Kazi, V, 2000. Strengthening Microenterprises in Tanzania: The case of horticultural products. Published by the Economic and Social Research Foundation (ESRF), 2010).
- Mkindi, J, 2009. Horticultural constraints and challenges in Tanzania, a Final Report Submitted to TAHA, Arusha, Tanzania
- Plunkett D., 2008: UNCTAD Expert Meeting of LDCs in Preparation for the 4th United Nations Conference: Export Diversification in Rwanda-Promoting Sales of Handicrafts and Horticultural Products
- Rwanda Development Board (RDB) and Rwanda Horticulture Development Authority (RHODA), 2010; Opportunities for Investors in Rwanda’s Horticulture Sector
- TAHA, 2012, Position Paper: Key Policy Issues Affecting Tanzania’s Horticultural
- Tanzania National Export Strategy (2010 – 2014), 2009.
- The Agricultural Sector Development Program monitoring and evaluation thematic working group (2011): Trends and outlook report on key agriculture and rural development indicators in Tanzania

The Councilors of HODECT, 2010; The National Horticulture Development Strategy  
URT (United Republic of Tanzania) (2001): Rural Development Strategy (RDS), Prime Minister's Office – Regional Administration and Local Government (PMO-RALG), Dar-es-Salaam  
URT (United Republic of Tanzania) (2002): Agricultural Sector Development Programme (ASDP), Ministry of Agriculture, Food security and Cooperatives (MAFC), Dar-es-Salaam  
URT (United Republic of Tanzania) (2011): The Tanzania Five Years Development Plan 2011/12 – 2015/16: Unleashing Tanzania's Latent Growth Potentials, President's Office – Planning Commission (PO-PC), Dar-es-Salaam  
URT, (2002), "Study on the Horticulture Development in Tanzania", Ministry of Agriculture and Food Security, December.

## **Appendix**

### **Appendix 1**

#### **Taping Export Opportunities for Horticulture Products to Improve SMEs and the Economy in Tanzania: Do we Have Supporting Policies and Frameworks Terms of Reference for the Ministry of Agriculture, Food and Cooperatives (MAFC)**

##### **I: Background Information**

Economic and Social Research Foundation (ESRF) is a Non-Governmental, Non for Profit and an independent Research, Policy Analysis and Capacity Building Organization which is based in Dar-es-Salaam, Tanzania. The Foundation has been assigned to undertake a research on “Taping Export Opportunities for Horticulture Products to Improve SMEs and the Economy in Tanzania: Do we have Supporting Policies and Frameworks?” The main objective of this study is to understand how the Government has exploited the export opportunities for horticulture products by critically analyzing the efficacy of National Policies, Strategies and Institutional Frameworks that are linked to the horticulture export sector in Tanzania.

This is therefore one of the interviews the study team is conducting to gauge perceptions of key stakeholders on export opportunities and challenges of horticulture products as well as understanding the efficacy of National Policies, Strategies and Institutional Frameworks that are linked to the horticulture export sector in Tanzania.

##### **II: The specific tasks to be performed**

The main task assigned is collection of data on the following:

1. How does your institution associate with horticulture industry in Tanzania? The role of your institution, your relationship with the sector, networking etc
2. Describe the institutional framework for horticulture industry in Tanzania?
3. Describe the current status and the potential, if any, in the Horticulture industry in Tanzania? Production, demand, export market, income generation, whether Tanzania has been successful or not, future prospects etc
4. The performance of both the local market and export market of horticulture products. What are the constraints and bottlenecks of the local market and export market?
5. Existence of any initiatives and/or programmes (ongoing or in the pipeline) which are meant to support this sector e.g. training programmes, capacity building programmes etc
6. Challenges facing Tanzanian horticulture industry; Production, Marketing, Packaging, Revenues, Policies, Institutional Framework, Transportation etc
7. Any necessary mitigation measures and/or interventions and how can they be made effective?
8. Describe any necessary policies that are in place to support transformation of this industry? If not, what is exactly needed in the policy arena to transform the industry?
9. Do we have the necessary institutional framework in place to support the sector? If not, what is exactly needed institutionally to transform the industry?
10. Provide the volumes of horticulture exports (Trends and reasons for fluctuations)?



11. Provide the value of horticulture exports (Trends and reasons for fluctuations?)
12. Many times people have been accusing you for nuisance tax, crop cess and other deductions in agriculture? Can you say something on this?
13. One of the most recent guidelines given to District Councils in Tanzania can be gauged from the slogan “ONE DISTRICT – ONE CROP” or “ONE DISTRICT – TWO CROPS”. Are you aware of this? Why should it be like that? Who will be supporting other crops in Tanzania and how?

**III. Number of days to accomplish the task**

We expect that this task shall be accomplished in two weeks after signing the contract.

**IV. Output expected**

Upon accomplishment of this task, it is expected that the consultant shall submit a draft report addressing the questions and/or topics in the ToR presented above.