



Netherlands Enterprise Agency

Tanzania Horticulture

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Tanzania Horticulture Sector Outlook

Opportunities and Challenges.



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Foreword

Agriculture, including horticulture is a mainstay of development in Tanzania. With an annual growth rate of 4.2%, agriculture contributes to approximately one quarter of the GDP and provides employment to approximately three quarters of all Tanzanian workers. It is also an area where significant achievements can and must be made for Tanzania to continue to provide sufficient food of good quality for its population that is growing by more than one million people per year. Growth of the sector is not a desired luxury but a dire necessity.

Changes in society at large have great impact on the development of the horticulture value chain. Today's increasing concerns about food safety, food security, sustainable and climate smart use of inputs, and the international context in which the horticultural sector operates will also all have an effect on how the sector will further develop in Tanzania.

The Netherlands is a large producer - and one of the largest exporters of horticultural products in the world. This includes fruits and vegetables, flowers and ornamentals, (vegetable) seed and propagation material. As such we also have a long tradition in the outsourcing of horticultural crops to countries with suitable climatological properties to guarantee year round production. The Netherlands has developed itself into a global knowledge center for horticulture and flower growing. Knowledge transfer, logistics, technical installations, pest management and water management, the Netherlands offers it all, often in smart combination of activities and with the flexibility to adapt to the local context.

Development of the horticultural sector in Tanzania is inevitable and will offer many opportunities for investors, technology suppliers and knowledge institutes but at the same time challenges related to the investment climate in Tanzania will have to be addressed.

This study provides an overview of the current features, trends and developments in the horticultural value chain as well as the institutional and political setting and challenges in Tanzania. Together with the SWOT analysis valuable information is given both for new investors as for entrepreneurs looking to expand to new areas in the country.

The Netherlands Embassy in Tanzania strives to support and facilitate the inclusive development of Dutch agribusiness in the horticulture sector in Tanzania to our mutual benefit.

Bert Rikken

Agricultural Counselor for Kenya, Tanzania and UNEP

Embassy of the Kingdom of the Netherlands

Nairobi, Kenya

Executive Summary

Within abundant natural resources, favorable climate conditions, available land, a growing economy fostering a rising middle class and a stable political system Tanzania has much potential for further growth and development. The local infra-structure has improved considerably over the last decade and ambitious plans for further improvement are present though the existing infra-structure is still in need for much improvement. The emergence of a middle class in the larger towns and main cities creates a new market for products with higher added value e.g. packed fruits & vegetables and processed products. On the downside the rural areas seem to have profited only to a limited extent from the overall growth leaving the majority of population living still at subsistence level.

Agriculture and horticulture in particular dominate the rural economy making an important contribution to local employment and food security. The bulk of horticultural production is produced by small scale growers according to traditional methods with surpluses being sold through middle man on local and regional markets. The national government policy is directed towards commercialization and increase of the scale of production. The Government of Tanzania views horticulture as one of the core areas for development and aims to provide more government support to foster the development.

The export oriented horticultural sector is small and concentrated in the Arusha area. Dutch investors and producers dominate these export oriented commercial companies. Most of them are involved in production of seeds, cuttings and cut flowers. The number of companies has remained stable over the last years with the majority of companies already active for over 10 years.

Table 1: Summary of county and economic indicators of Tanzania 2014

Indicator		Indicator	
Surface (km²)	947.303	GDP per capita	\$ 768
Neighboring countries	Kenya, Rwanda, Burundi, Congo, Zambia, Malawi, Mozambique.	Main sectors of the economy	Agriculture, mining, tourism
Population	49,2 million	Export value (2014)	US \$ 5,75 billion
Population growth	3%	Main export partners	India (15,2%), China (11,2%), Japan (6,2%), Germany (5,1%), UAE (4,8%)
Labor force (2013)	25,6 million	Import value	US \$ 10,8 billion
Unemployment rate	11,7 (2011)	Main import	China (21,3%), India (16,3%), South Africa (6,4%), Kenya

		partners	(6%). UAE (5%)
GDP 2014	US \$ 36,61 billion	Foreign Direct Investment (2013)	US \$ 12,7 billion
GDP Growth	7,1 (2014)	Exchange rate: \$- TZS	1740 (01.02.2015)

Main source: CIA World fact Book

The overall climate to run a commercial business in Tanzania is a challenge for most companies. Corruption is widespread, import- and export procedures time consuming, bureaucratic procedures seem to extend year-on-year while the tax burden is increasing in particular at local level. The investment climate seems to deteriorate in recent years though comparing the ease of doing business rate show that the business climate in Tanzania is comparable with neighboring countries.

Opportunities for investment are identified in vegetable , fruit and spice production as well as adding value by sorting, packaging and processing of fruits, vegetables and spices. For fruits & vegetable potential to export is identified to neighboring countries (Burundi, Rwanda), Middle East and South Asia as well as locally to serve the emerging urban middle class.

Opportunities for investment in export oriented horticulture and specifically the floricultural sub-sector seems limited. The competitive position to export to the EU seems to decline with growing competition from countries like Ethiopia (cut flowers) and northern African countries (vegetables) resulting in a consolidation of the production at the existing companies. Production of flower – and vegetable seed production is identified as an exemption as local climate conditions are very favorable to produce quality seeds at a competitive price.

A large need exists for low- en medium tech storage, grading, packaging and logistic solutions offering market opportunities for Dutch post-harvest handling technology suppliers. The technology should be adapted to the needs of the market: small scale and cost effective. Local presence for after sales services will be an importance pre-condition to be successful in this market.

Apart from post-harvest technology a market for Dutch input technology suppliers is identified in smart water using, water storage and water harvesting systems alongside crop advice on improved soil treatment and input efficient production systems. For greenhouse based production a niche market exists for innovative technology that will improve production efficiency and reduce production costs: solar based electricity generation, water recirculation systems, screening systems to optimize the production climate and biological crop protection methods.

A large need to training and educate local horticultural specialist exists. The current education and training system is not functional and lacking a practical orientation. Investment in practical training courses and adequate training facilities is needed to raise a new generation of skilled agronomists and production managers.

1. Introduction

1.1 Background

In the international agenda of the top sector “Horticulture and Propagation Material” Tanzania has been identified as one of the 5 most interesting developing countries with business opportunities for export of Dutch horticultural technology. This positioning is supported by the Netherlands Embassy in Dar es Salam and the agricultural attaché in Nairobi both being convinced that a pro-active approach towards the horticultural sector in Tanzania will result in more trade and investment opportunities for the Dutch agri-business sector in general and the horticultural sector in particular.

Till today the horticultural sector in Tanzania has received rather limited attention from the Tanzanian government. Over the last year, during two visits of representatives of the Ministry of Agriculture, Food Security and Cooperatives to the Netherlands, the Tanzanian government clearly expressed interest to develop the horticultural sector and create investment and business opportunities for foreign and local companies. In particular high interest was shown in Dutch horticultural technology and knowledge.

Taking this into account DLV Plant has been asked by the ministry of Economic Affairs of the Netherlands to investigate the current situation of the horticultural sector in Tanzania and critically review opportunities as well as bottlenecks for doing business in the country. DLV Plant has carried out the work in November and December 2014. The findings are presented in this report.

1.2 Objectives

The proposed study aims to provide up-to-date information on developments and opportunities for Dutch companies in the horticultural sector in Tanzania as well as to indicate bottlenecks and limitations trading companies and/or investors face and will face when starting up activities in Tanzania. In the study the current state of affairs in the horticultural sector will be presented, the climate for doing business will be analyzed and opportunities for entrepreneurs to start up trade or initiate investments in the horticultural sub-sector will be addressed and elaborated in terms of:

- Setting up of projects and activities, either public or private initiatives
- Detailing private sector opportunities on (green-field) investments and the supplying industry for products, services and knowledge related to *e.g.* water, energy and production for the sub-sectors falling under ‘food and flowers’

1.3 Methodology

The information presented in this report has been collected and reviewed in November and December 2014. The collection of information was done through

- A desk study to review existing documents, previous reports and data collected through internet search. An information reference list is presented in annex 1.
- Interviews conducted during a field research in Tanzania. Representatives of government organizations, private sector representatives and horticultural producers were visited. A list of persons interviewed is presented in annex 2.

The collected information and data is processed into a draft report which was discussed with representatives of the Dutch Ministry. Comments and adaptations were integrated into the final report.

It should be noted that collection of up-to-date data on the horticultural sector prove to be a challenging task in itself. Through the Tanzania Horticultural Association data about export and production were kindly provided however data on acreages and yields were not available either at TAHA or at the Ministry of Agriculture, Food Security and Cooperatives. Within the latter production related information should be registered at local level however it seems not to be available at the national level therefore for this report we mostly had to rely on estimates and qualitative assessments.

1.4 Guide to the reader

An introduction to Tanzania providing general information on the country's institutional setting, geographical features and economic situation is presented in chapter 2. The overall investment climate in Tanzania is analyzed and relevant local support organizations are introduced. This part is of particular interest for those readers who are not yet familiar with Tanzania.

In chapter 3 the main features, trends and developments in the horticultural sector in Tanzania are highlighted. Focus will be on the vegetables and cut flowers sub-sector being the most dynamic sub-sectors of the horticultural sector.

The horticultural sector outlook concludes with recommendations and suggestions addressing opportunities and challenges from a Dutch sector point towards the development of the Tanzanian horticultural sector

2. Country profile Tanzania

2.1 Introduction

With a surface of 947,303 sq. km Tanzania is the largest country in Eastern Africa. The country is bordering the Indian Ocean to the east constituting a coast line of 1,424 km with the largest city and main harbor of Dar es Salaam. Tanzania borders Kenya in the north, Uganda, Rwanda and Burundi in the north-west, Congo in the west, Zambia and Malawi in the south-west and Mozambique in the south. Dodoma, located in the center of the country, is the legislative capital hosting the Parliament during four sessions a year. Dar es Salaam, however, is the commercial, administrative, cultural and educative capital of the country, providing seat to the main institutional, cultural and business organizations. Strategically located at the Indian Ocean, Tanzania serves as the mayor point of entry for its landlocked neighboring countries.

Figure 1: Tanzania Topographic Map.



Tanzania is blessed with large natural resources, an abundant wildlife and world famous scenery. Among the latter the Serengeti National Park in the north-western Rift valley and the Kilimanjaro, being the highest mountain of Africa at 5,895 m are the most well-known. Within the country large resources of fresh water are present including Lake Victoria in the north-west, Lake Tanganyika in the west, Lake Rukwa and Lake Nyasa (Lake Malawi) in the south-west. The coastal areas are predominantly flat while the western territories are characterized by highlands with altitudes between 1500-2500 m above sea level.

Tanzania has abundant natural gas reserves, with over 1,4 trillion cubic meter been discovered so far. Most of the gas reserves are located off- shore and only recently discovered. Experts estimate that

the gas reserves are large enough to make Tanzania independent of foreign energy sources. The Tanzanian Petroleum Development Company has started a large scale project to develop a gas-infrastructure and connect Dar es Salaam residents to this gas network. It is foreseen that the use of gas in the near future will phase out the use of charcoal as a main sources for cooking and heating. Half of the annual charcoal consumption is estimated to be used by Dar es Salaam households. Charcoal has been responsible for massive environmental destruction and the production has put large pressure on the forest resources of the country. The development of gas reserves is expected to contribute to a steady growth of the local economy as well as generating resources for investment in the infra-structure and development of the economy. Agriculture has been identified as one of the economic sectors for development and investment.

Apart from gas Tanzania is rich in minerals including gold, diamond, nickel, iron and uranium. The location close to the equator and prevailing weather conditions allow for the large scale use of solar energy.

2.2 Political and economic situation

The United Republic of Tanzania is a constitutional union of the mainland of Tanganyika and the Zanzibar Islands of Unguja and Pemba. By constitution both Tanganyika and Zanzibar have their own government and president. Since 2005 Dr. Jakaya Kikwete has been elected and re-elected as president of Tanzania. He is the 4th president since independence in 1961.

Tanzania has the largest population in Eastern Africa estimated at 49,2 million inhabitants in 2014, up from 41 million in 2009. The annual growth rate is 3%. Though decreasing still around 75% of the population is living in the country side, adhering to traditional live styles. The overall population is very young with 44 % younger than 15 years.

The people of Tanzania comprise over 125 different tribes. Though related most have their own language and cultural traditions. Kiswahili is the common, national language while English is the common language in education and business. In general the command of English in particularly the country side is much lower than in neighboring countries Kenya and Zambia.

Picture Masaai village dancers



With a large number of ethnic groups of comparable size no group(s) dominate the political, cultural and economic sphere. Tanzania is one of the few African countries that never experienced any warfare, civil or political unrest since independence. The country is a stable democracy since the amendment of the constitution in 1992 allowed for other political parties than the ruling Chama Cha Mapinduzi (CCM) to be established. At this moment there are about eighteen (18) registered political parties. (<http://www.nec.go.tz>). Currently the CCM has 75% of the seat in parliament with also the president being from the CCM.

Since 1992, when the multi-party political system was introduced in Tanzania, there have been held four presidential and parliamentary elections in 1995, 2000, 2005 and 2010. In 2005 Dr. Kikwete was elected and he was re-elected in 2010. In 2015 presidential, parliamentary and local elections will be held on October, 25th 2015. The incumbent president Dr. Kikwete can't be re-elected for the 3rd term according to the constitution. It is still to be seen who will be his successor however no major changes in the political system are foreseen.

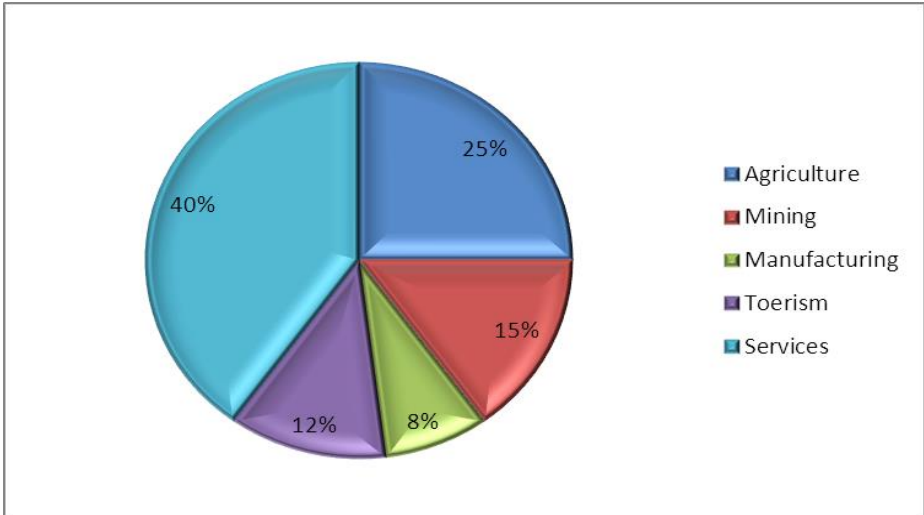
Since the mid-1980's a major political change took place moving the economy from a socialist, controlled way of management to a more private sector oriented economy. The economic reforms included removal of most price controls, easing of restrictions on the marketing of food products, freed interest rates, a restructuring of the financial sector, licensing of foreign banks and the establishment of an investment promotion center (Tanzanian Investment Centre (TIC) see par.2.4.2).

The Tanzanian economy has been growing at a steady rate around 7% annually over the last 3-4 years. Also for 2015 a similar GDP growth is forecasted while IMF and World Bank predict steady growth rates for the next decade to come. With a GDP growth of 7 % Tanzania is among the 20 fastest growing economies worldwide. Though showing impressive growth rates the effect in the rural areas are said to be limited or hardly noticeable. Main reason is that the growing economy needs to be shared among a still fast growing population in the rural areas. The agricultural sector provides most of the employment with an estimated 50% of the labor force being active in agricultural related activities.

Tourism is next to agriculture (25%) and mining (15%) an very important economic activity contributing to the GDP and being an important source of foreign currency and employment (11%). Tanzania has 6 World heritage Sites including Kilimanjaro (The Roof of Africa), Serengeti National Park and the Stone Town of Zanzibar. The development of tourism has been under pressure due to threats of terrorism in general (Kenya) and more recently the Ebola crisis. The potential to develop tourism is very large given the rich natural scenery with vast areas allocated for wild parks (33% of territory has a status as protected areas), climate conditions and diversity in cultures.

The manufacturing industry is relatively under-developed with a share of 8% in the GDP.

Figure 2 GDP per economic sector.



Notwithstanding the natural resources and large opportunities for development Tanzania is ranked among the poorest countries in the world. An estimated 35% of the population lives below the poverty level. Though official data is lacking the level of unemployment in the country side is estimated at 60-70%.

2.3 International Relations

Tanzania is a member of the East African Community (EAC), along with Uganda, Kenya, Rwanda and Burundi. The East African Community's (EAC) Customs Union came into force on January 1, 2010. In July 2010, the member states enacted a Common Market Protocol to allow free movement of goods, people, and capital within the region. Although the EAC member countries continue to discuss economic integration and harmonize regulations, non-tariff barriers--such as the administration of duties and other taxes, and corruption--remain a problem.

According to the East African Common Market Protocol of 2010, the free trade and free movement of people is guaranteed, including the right to reside in another member country for purposes of employment. This protocol, however, has not been implemented because of work permit and other bureaucratic, legal, and financial obstacles. In practice it means that it is complicated to employ citizens of EAC origin due to bureaucratic regulations. An example is that though there is lack of qualified teachers in Tanzania it is virtually impossible to appoint teachers with a Kenyan passport as the Tanzanian government is afraid it will create competition with local teacher who in general are less qualified.

Tanzania keeps up friendly and good relations with most countries. With Malawi a dispute on the location of the border at the Lake Nyasa exists while recently relations with Rwanda soured when Tanzanian politicians questions the role of Rwanda in East-Congo publicly.

Of large importance to Tanzania is the longstanding friendly relationship with China. For many years China has provided large-scale support to develop the local infra-structure (roads, railways). China is a main import and export partner next to India.

In October 2014 the European Union and the EAC finalized the negotiations on the new comprehensive Economic Partnership Agreement (EPA). The EPA will allow for the duty free importation of important export crops like flowers, cuttings, coffee and tea. The EPA is expected to be signed in the beginning of 2015. In 2013, total trade between the EU and the East African Community amounted to €5.8 billion. The EU imports from the EAC are worth €2.2 billion and consist mostly of coffee, cut flowers, tea, tobacco, fish and vegetables. Exports from the EU into the EAC, mainly consisting of machinery and mechanical appliances, equipment and parts, vehicles and pharmaceutical products, amount to €3.5 billion.

Since 1995 Tanzania is a member of WTO. Tanzania is also a member of the Southern Africa Development Community and the Common Market for East and Southern Africa (COMESA).

Tanzania is member of the Multilateral Investment Guarantee Agency (MIGA), a World Bank subsidiary promoting foreign direct investments in developing countries. MIGA offers political risk insurance (guarantees) to investors and lenders along with technical assistance to help developing

countries to attract and retain foreign investment. Tanzania is also member of the International Center for Settlement of Investment Disputes (ICSID).

2.4 Infra-structure

Due to its central location Tanzania serves as a logistic hub for its landlocked neighbors. In particular Zambia is heavily depending on the Tanzanian infra-structure to exports it's minerals. Over the last decade the infra-structure in Tanzania has made major step forward as the government has put a high priority to develop the local infra-structure and allocates US \$ 1,2 billion annually into infra-structural projects.

2.3.1 Transport & Logistics

The main cities in Tanzania nowadays are well connected by paved road. The main roads connect Dar es Salaam with Dodoma onto the north-west lake area and south west to Mbeya onto the Zambian and Malawi border. In particular the road conditions in the north-north-western part have improved.

An important north-south highway corridor is been reconstructed from Namanga at the Kenyan border passing the capital Dodoma to Mangaka, close to the Mozambican border with funds from the African Development Bank. A mayor part of this highway is part of the Cairo -Cape Town Trans African highway.

Two main railways connect Dar es Salaam with the interior country: A central-railway connecting Dar es Salaam through Dodoma to the north-northwestern parts of the country and a Southern railway linking Dar es Salaam with Mbeya in the south-west onto Kasama in Zambia. The latter railway has been developed with Chinese funds mostly aiming to facilitate the transportation of minerals (Copper) from Zambia to Dar es Salaam.

Tanzania has 4 major ports at Dar Es Salaam, Tanga, Mtwara and Zanzibar with modern port facilities. For international trade the port of Dar es Salaam is the most important harbor.

Julius Nyerere Airport (JNIA) in Dar es Salaam, Zanzibar International Airport, Kilimanjaro International Airport (KIA) and Mwanza Airport (Lake area) are the international airports within Tanzania. International operators like Emirates, BA, KLM, Kenya Airways, Swiss Air, Air India and South African Airways fly from and to Tanzania. Domestic airline connections are developing fast improving access to the more remote western and southern highlands from Dar es Salaam, Dodoma and Arusha.

Both JNIA and KIA are important cargo terminals. KLM is a major cargo handler at both JNIA and KIA. However the capacity and provided services are said to be limited.

According to Price Waterhouse Coopers PwC) is Tanzania expected to become one of the fastest-growing economies in the world. Key drivers will be recent natural gas discoveries, regional integration supported by an extension of transport infrastructure networks and long-term stable democracy.

Tanzania's infrastructure performs fairly well compared to its African peers, but quality is still too poor and has a negative impact on the economy's productive capacity. Infrastructure in Tanzania has witnessed impressive investment in recent years and there is more to come. Transport and utilities infrastructure projects worth \$19 billion are in the pipeline. <http://www.pwc.com/gx/en/transportation-logistics/publications/africa-infrastructure-investment/tanzania.html>

Major bottleneck for export of flowers, plants and related products is that the cargo quantity is too small to allow for regular and cost effective services. The Dutch government has made available funds (Orio program) to improve and upgrade the cargo handling facilities at KIA. However most Dutch producers of flowers and plant material based in the Arusha area use Jomo Kenyatta International Airport in Nairobi to export their produce to the Netherlands or elsewhere.

The plans for infra-structural development and the key locations for road, air and freight transport can be found in the figure below.

Figure 3: Tanzania Infra-structural development map

2.3.3. ICT (Telecom)

With the investment in its national fiber-optic cable network—the National ICT Broadband Backbone (NICTBB)—Tanzania has potential to become a regional ICT hub. The 7,500–km-long NICTBB connects various parts of the country to two undersea cable systems—SEACOM and EASSy. Telecommunications firms and Internet service providers can then connect to the NICTBB to benefit from the bandwidth that the undersea cables offer.

Nevertheless, recent improvements are from an very low base and internet speed in general remains very low by international standards. Another key constraints are the limited availability of ICT proficient staff and the ability to maintain the NICTBB, given the poor financial state of the state power utility service, Tanesco, which owns one third of the cable network system.

Despite these constraints the improvements in the ICT infrastructure will stimulate the growth in the ICT and telecom sector. One indicator of the potential in these sectors of the economy is the fact that some 55% of Tanzanians use mobile phones and most of them can access the internet by phone. Only some 12% uses in the internet through fixed connection (up from 4.3% in 2005) (Source: Economist Intelligent Unit, February 13th, 2013).

2.4 Enabling environment

As every country in the world Tanzania has its own regulatory framework, policies and rules regarding the establishment and operation of the economy. In this paragraph policy and regulatory issues relevant for horticultural and related business will be addressed.

2.4.1 Government policy on agriculture and horticulture.

Recognizing the important role agriculture plays in the Tanzanian society and economy in 2006/2007 the Agricultural Sector Development Plan was launched. For the implementation of the ASDP the Kilimo Kwanza (meaning Transforming Agriculture) approach was developed. Main goal of Kilimo Kwanza is to foster the modernization and commercialization of agricultural sector for small, medium and large-scale producers. Peasant and small-scale farmers should be transformed into commercially and market oriented producers. Medium and large scale farming is promoted Main pillars concern the improved access to finance, water, improved seeds and markets. The approach was approved in 2009 and is being implemented for the period 2010-2015.

The SAGCOT (Southern Agricultural Growth Corridor of Tanzania) was designed as important instrument to implement the Kilimo Kwanza through mobilizing private sector investments. As such the SAGCOT is a Public Private Partnership aiming to deliver fast and sustainable agricultural growth with major benefits for food security, poverty reduction and reduce vulnerability to climate change.

The Southern Agricultural Growth Corridor covers approximately one third of the mainland of Tanzania, extending north and south of the central rail, road and power connections that run from Dar es Salaam to the south-western highlands border Zambia and Malawi. The SAGCOT includes

some of the richest farm land in the country and therefore one of the most interesting areas for investment in the agri-business in the country.

Within the SAGCOT corridor US \$ 2.1 billion of private investment should be catalyzed over the next 20 years, alongside with public sector grants and loans budgeted at US \$ 1.3 billion. The result should be a tripling of the area's agricultural output. Around 350,000 ha is planned to be brought into profitable production, much of it farmed by smallholder farmers. A significant part of this area is under irrigation.

One of SAGCOT's main objectives is to provide opportunities for smallholder producers to engage in market-oriented agriculture. It will do so by stimulating stronger linkages between smallholders and commercial agribusiness, including outgrower schemes that allow smallholders in the vicinity of large-scale farms access to inputs, extension services, value-adding facilities and markets. SAGCOT will also support smallholder producer associations, helping them to enter into equitable commercial relationships with agri-processing and marketing companies.

Another important policy document is the Agricultural Climate Resilience Plan (ACRP). The ACRP is the action plan of the Ministry of Agriculture, Food Security and Cooperatives to implement the National Climate Change Strategy (2013). The ACRP will serve as a roadmap for integrating climate change aspects within the current agricultural policy and practices. In particular the issue of water, water availability, water management and application of water efficient growing strategies is addressed in the ACRP.

So far state policies focuses mostly on arable farming and animal husbandry. Informants complained that no specific policy has been designed to foster and stimulate the horticultural subsector while it has potential for development and makes a major contribution to the export. However, a new agricultural policy is under development and is expected to be published in 2015. Feedback from the Ministry indicates that the development of the horticultural sub-sector will be priority for the Tanzanian government. Education, training and advisory services are expected to get more attention and funding.

2.4.2 Investment climate and trade policy

Since about 20 years the Government of Tanzania (GOT) generally has a favorable attitude toward foreign direct investment (FDI) and has had considerable success in attracting FDI. In 2012, FDI into Tanzania rose to over USD 1.1 billion, the highest in East Africa. There are no laws or regulations that limit or prohibit foreign investment, participation, or control, and firms generally do not restrict foreign participation.

However the legacy of 30 years of socialist policies is still prominent and some officials remain suspicious of foreign investors and free competition. Such mentality is typical of a generation of government officials being raised with the idea that private business result in exploitation and personal wealth and does not contribute to the overall society. Red tape, excessive bureaucratic are still pervasive and form a serious hindrance to investors in particular at the regional and local level as

most of the informants involved in the management of large horticultural companies directed to export indicate. Few improvements are being noticed in practice though the central government policy is directed to improve the investment climate for (foreign) private investors.

Tanzania Investment Centre (TIC)

The Tanzania Investment Center (TIC) is the primary agency of the GOT to coordinate, promote and facilitate investment in Tanzania. Established by the Tanzanian Investment Act of 1997, TIC is a one stop facilitative center for all investors, and has the authority to manage Public Private Partnerships (PPPs). Registering with TIC is not mandatory, but offers incentives for joint ventures with Tanzanians and foreign investor for projects above USD \$300,000. The review process takes up to 10 days and involves multiple GOT agencies, which are required by law to coordinate fully with TIC in facilitating foreign investment, but in practice can create bureaucratic delays.

TIC does not have specific criteria for screening or approving projects, and considers factors such as: foreign exchange generation, import substitution, employment creation, linkages to the local economy, technology transfer, and expansion of production of goods and services. Currently, TIC does not require companies to disclose proprietary information or meet standard fair competition practices in order to be approved. Projects with all required documents submitted are seldom rejected. Approved projects receive TIC certificates of incentive and are allowed 100% foreign ownership; VAT and import duty exemptions; and 100% repatriation of profits, dividends, and capital after tax. Similar incentives are offered to investors in semi-autonomous Zanzibar through the Zanzibar Investment Promotion Agency (ZIPA). TIC promotes investment and trade opportunities in agriculture, mining, tourism, telecommunications, financial services, energy, and transportation infrastructure. However, investment tax incentives can be unpredictable; in 2010 capital goods tax exemptions were reinstated, and agricultural equipment imports were given generous exemptions.

The GOT uses the World Trade Organization's (WTO) Trade-related Investment Measures (TRIMs) to encourage investments in line with national priorities, and to attract and regulate foreign investment. Trade development instruments that Tanzania has adopted include Export Processing Zones (EPZs), Investment Code and Rules, Export Development/Promotion and Export Facilitation. EPZs were established by the 2002 EPZ Act and are open to both domestic and foreign investors in particular the agribusiness, textiles and electronics sectors.

Tanzania Investment Promotion Instruments.

- Tanzania Investment Centre (TIC): one stop shop to approve foreign direct investment projects under favorable tax regimes.
- Export Processing Zones: investment locations with favorable tax regimes.
- Specific Economic Zones: zones for greenfield investments in amongst others agri-processing activities.

The Export Processing Zones Authority (EPZA) is charged with allocating suitable areas for the location of EPZs. The status of EPZ can be attached to a company and not necessarily refers to a specific area. The EPZA also oversees incentive packages such as exemptions from corporate tax and withholding taxes on rent, dividends and interest; remission of customs duty, value-added tax (VAT)

and other taxes on raw materials and capital withholding taxes on rent, dividends and interest; remission of customs duty, value-added tax (VAT) and other taxes on raw materials and capital goods; and exemption from VAT on utilities and levies imposed by local authorities. In addition, working permits for foreign staff can be obtained. Several of the interviewed companies in the Arusha area have acquired the EPZ status or are still in the process. Though offering interesting incentives and tax reductions the downside is the lengthy and complicated procedures as the application of the EPZ act is not always clear. More information can be found on the website www.epza.go.tz.

The Special Economic Zones Act of 2006 authorized the establishment of Special Economic Zones (SEZs) to encourage greenfield investments in the light industry, agro-processing industry and agriculture sectors.

2.4.3 Land ownership

Land ownership remains restrictive in Tanzania. Under the Land Act of 1999, all land in Tanzania belongs to the state.

The Act recognizes three types of land: general land, village land and reserved land. General land is surveyed land usually located in urban and suburban areas. Village land is common land in rural areas around villages either privately or community owned. The majority of village land to-date is still not surveyed. Village land can't be used for investments unless it is transferred into general land. Reserved land includes land for forestry, National Parks and public recreational areas.

Procedures for obtaining a lease or certificate of occupancy can be complex and lengthy, both for citizens and foreign investors. Less than 10% of the land has been surveyed, and registration of title deeds is currently manual and mainly handled at the local level. Foreign investors may occupy land for investment purposes through a government-granted right of occupancy/lease ("derivative rights" facilitated by TIC), or through sub-leases through a granted right of occupancy. Foreign investors can also partner with Tanzanian leaseholders. Rights of occupancy and derivative rights may be granted for periods up to 99 years and are renewable.

In general land resources are abundant in Tanzania however available land for production and investment are scarce and difficult to get hold of in particular the north-western region of Arusha.

2.4.5 Protection of plant breeders rights

By 2014 Tanzania is still not a member of UPOV (Union for the Protection of New Varieties of Plants) though the application procedure is running for over a decade. Recently the UPOV council have made a positive decision on the conformity of the Zanzibar Plant Breeders Act with the 1991 UPOV Convention. With this decision all Tanzanian legislation is in line with UPOV requirements and therefore the Tanzanian Union government can now formally apply for UPOV membership. This is expected to happen shortly paving the road for official UPOV membership in 2015.

2.4.6 Phyto sanitary regulations.

Under the Ministry of Agriculture, Food security and Cooperatives (MAFC) the Plant Quarantine & Phytosanitary Services and the Tropical Pesticide Research Institute (based in Arusha) are responsible for the phytosanitary controls. Details about the phytosanitary inspections and certification issues can be found at www.kilimo.go.tz .

2.4.7 Business Climate

In the next overview a comparison between the political and economic performance of the East African Countries(EAC) is given. Next to the EAC countries Ethiopia and neighboring Zambia are added for comparison. The indicators show that Tanzania is rather comparable to its neighbors when looking to the business climate. It should be noted though that little improvement in the business climate can be noted over the last decade and still many gains can be made as the rating of Rwanda shows. Economically Tanzania is among the poorest countries but with a stable growth a positive development perspective exists.

Table 2: Comparing EAC

	Tanzania	Kenya	Uganda	Rwanda	Burundi	Zambia	Ethiopia
Ranking Ease of doing business 2015*	131	136	150	46	152	111	132
Ranking Ease of doing business 2014	130	137	152	48	150	107	129
Corruption Perceptions Index ranking 2014**	119	145	142	55	159	85	110
Population (Million)	49,2	44,4	37,6	11,8	10,1	14,5	96,6
Area (sq km)	945.000	580.000	241.000	26.000	27.830	753.000	1.104.300
Income per capita 2014 (\$)	630	930	510	620	280	1480	1300
Economic growth 2013	7	4,9	5,2	4,6	4,6	6,5	7

Economic growth 2015 forecast	7,1	4,7	6,8	7,4	4,7	7,4	7
Inflation rate 2013	7,9	5,7	5,5	4,2	7,8	7,1	8,4

* Based on World Bank data base for 10 indicators regarding doing business in 183 countries ** Out of 175 countries

In the next overview the main taxes are presented comparing Tanzania with its neighboring countries.

Table 3: Taxation in Tanzania compared to neighboring countries.

Data for 2013	Tanzania	Kenya	Uganda	Zambia
Corporate Income Tax	30%	30%, reduced rates for start-ups	30%	35%
Value Added Tax (VAT)	18%	16%	18%	16%
Social Security	15% (including labor tax)	5%	10%	
Fuel Levy	Tshs 418/l	KES 9/l	9,2%	15%
Tax on interest	10%	15%	15%	15%
Dividend Tax	10% Non-residents, 5% residents	10% Non-residents, 5% residents	15%	
Royalty Tax	15%	20% Non-residents, 5% residents	15%	

Source: World bank Doing Business and Deloitte.

2.5 Sector organizations

2.5.1 Producer and export organizations

Tanzania Horticultural Association (TAHA)

TAHA is a private sector organization of Tanzanian producers of horticultural crops. TAHA organizes producers of fruits and vegetables (both local and export), flowers and seed breeders as well as processors, traders and exporters of horticultural crops. TAHA was established in 2004. with the aim of promoting and developing horticulture in Tanzania and addressing the general and specific needs

of its members. Originally TAHA was set up to serve the interests of the export-oriented companies (flowers in particular). In recent years attention is shifting to small scale vegetable producers and more local/regional production.

TAHA is active in the field of provision of training and knowledge improvement, marketing and logistics (through TAHA-Fresh and collection centers), agro-financing, input supply as well as policy development, legislation and improving the investment and business climate for the horticultural industry. It serves as a discussion partner for the government in legislative issues touching the interest of producers of fruits, vegetables and flowers/ornamentals. More information can be found on www.tanzaniahorticulture.com

TAHAFresh Handling Ltd is a joint private business between TAHA and leading horticultural producers set up with the support of USAID in 2008. TAHAFresh provides logistics services to clients for the export of vegetables, fruits and flowers outside Tanzania e.g. Europe/EU. Services are provided from JKIA in Nairobi, Kilimanjaro International Airport and Julius Nyerere International Airport in Dar es Salaam. For more detailed info check: www.tahafresh.com.

Dutch Business Group (DBG)

Recently an initiative was made to bring together the Dutch business interest in Tanzania. The Dutch Business Group was officially launched in November 2014. Aim of the DBG is to act as a platform for information exchange and a meeting point to take joint initiative that will benefit the local Dutch business community. As the majority of Dutch business is linked to the horticultural sector addressing horticultural relevant issues will be a main point of attention for the DBG.

2.5.2 Research, training and extension

Sokoine University of Agriculture (SUA).

Located in Morogoro, 200 km west of Dar es Salaam, Sokoine University of Agriculture offers Bsc and Msc courses in agriculture, horticulture, bio-technology and environmental science. Apart from education and training Sokoine is involved in research, extension and consultancy activities. The extension and consultancy works mostly related to training of extension staff of the Ministry of Agriculture, Food Security and Cooperatives. Next to the main campus in Morogoro the SUA has branches in Arusha, Moshi and Lushoto. More info: www.suanet.ac.tz.

Tengeru Horticultural Research and Training Centre (HORTI).

At the HORTI-Tengeru research and training Centre, located 15 km east of Arusha town, specialized training in horticulture is provided. The training center resorts under the Ministry of Agriculture,

Food Security and Cooperatives. At the center a 2-years course is offered with a practical oriented curriculum. HORTI organizes also short course for extension workers and field days for farmers. In the past HORTI received support of the Dutch government for the development of the training curriculum.

Extension Services

Under the Ministry of Agriculture, Food security and Cooperatives farm extension services are residing. In each of the 96 districts an extension office is operating. Information and advisory services are performed free of charge. The effectiveness and knowledge level are important points to address in order to improve the services, which performance are judges as being poor by informants.

Apart from the government extension services many crop advice activities including farm visits and organization of field days are organized in the framework of international donor funded initiatives e.g. USAID and GIZ.

Some of the Dutch cut flower and seed companies hire private crop advisors including advisors from the Netherlands.

3. Horticulture in Tanzania

In this chapter general information on the agricultural sector in Tanzania is presented along with more specific information on the horticultural sector.

3.1 Introduction

The agriculture sector in Tanzania is a sector of contrasts: despite having a rich base of fertile land, fresh water resources and a favourable climate in many areas, the sector is hampered by low productivity and persistent poverty. Crop diversity is high, but the majority of households engaged in the sector grow a limited number of food crops for subsistence. Notwithstanding growth in the Tanzanian economy and in the agriculture sector, little has translated to the rural household farmers, who still depend on rudimentary technologies and uncertain rainfall for their livelihood and food security.

Tanzania is endowed with 44 million hectares suitable for agriculture constituting 46% of its land territory. However, part of this arable land is only marginally suitable for agricultural production due to a combination of factors including low soil fertility, erosion and soil degradation as well as proneness to drought. In fact, according to the Agricultural Sector Development Strategy only 14 million ha (32% of arable land) is cultivated. This includes 2.2 to 3 million hectares of annual crops, fallow land for a duration up to five years and permanent crops and pasture.

Tanzania has a huge potential for irrigated agriculture: the area suitable for irrigation is estimated to be about 29.4 million ha, of which currently only around 450,000 ha is used (1.5%). To date agricultural productivity gains in Tanzania have been based more on the expansion of cultivated land rather than yield increases, and this expansion of land for cultivation is one of the major drivers of deforestation and land degradation in the country.

3.2 Climate and soil.

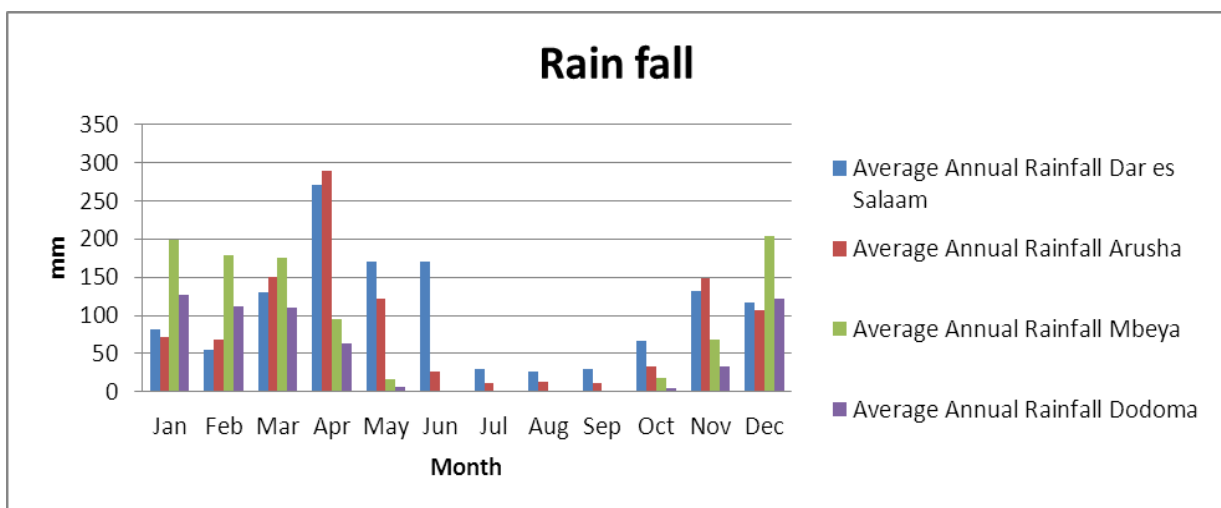
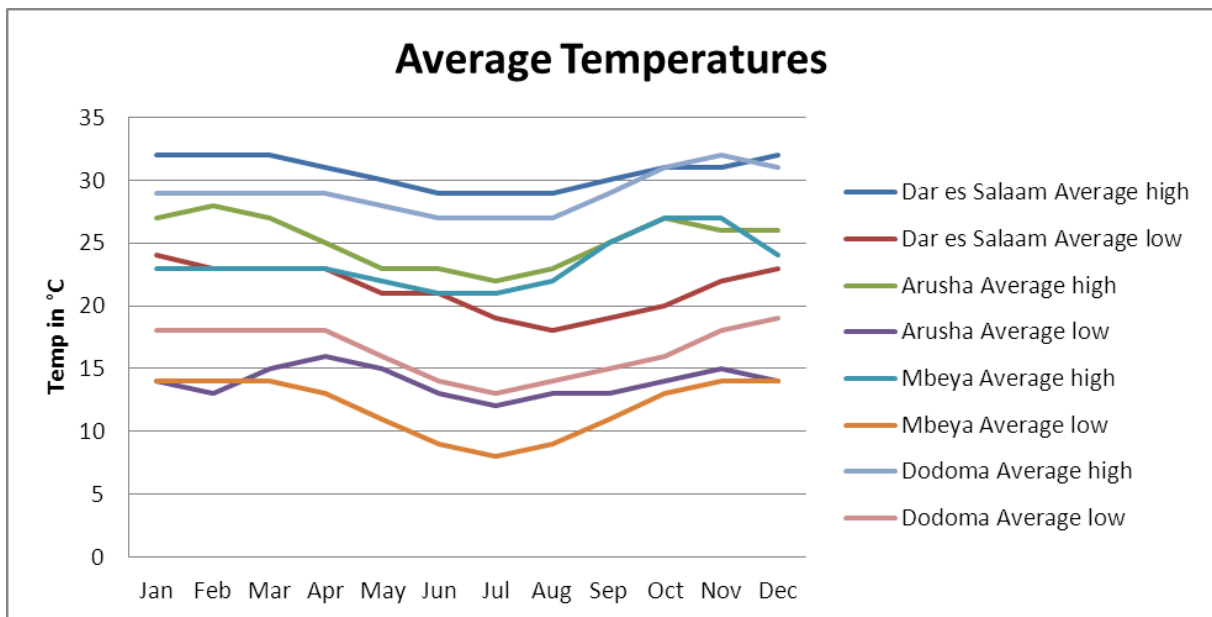
Due to its location close to the equator Tanzania has a tropical climate with variable conditions depending on the altitude. The flat coastal areas have a humid and warm climate with temperatures ranging between 20 to 35 °C throughout the year. In the western and southern highlands more moderate conditions prevail with temperatures ranging between 10-25 ° C.

The average rainfall is 1100 mm annually. The rainfall has a seasonal character with a single, long rain season in the southern and eastern part from October to March while the north-north-western part (Arusha area) experiences a short rain season from October to December and a longer rain season from March to June similar like in Kenya.

Rainfall reliability in general is rather low even in areas with high average rainfall. Risks for longer periods of droughts should be anticipated esp. in the central plain area. The irregularity in rainfall is said to have increased in the last 10-15 years with higher risks for longer dry periods as well as more extreme rainfalls and risks for flooding.

In the next tables the average temperatures and rainfall of Dar es Salaam (Coastal Area, Arusha (North-West), Mbeya (South-West) and Dodoma (Central) are presented.

Figure 3: Climate data of main locations in Tanzania



Source: www.climatedata.eu

Tanzania has a rather large variety in soil conditions. The following main soil types can be identified:

- 1) Volcanic soils. Fertile soils with a high production potential. These soils predominate in Arusha area, Kilimanjaro and south-western highlands.
- 2) Light sandy soils. These soils are mostly present in the coastal areas. Rather poor in terms of nutrients and sensitive to drought and nutrient leaching.
- 3) Granite soils. Infertile soils mostly located in the mid-western areas around Mwanza.
- 4) Red soils. Red soils are the dominant soil type in the central plateau area. They are of medium fertility and most suitable for grazing.

- 5) Ironstone soils. Ironstone soils are present in the very western part of Tanzania near Kigoma. These soils are low in nutrients and have a low pH but can be made productive by application of manure, mulching and chemical fertilizers.
- 6) Mbuga (black vertisol) soils. Mbuga soils are common throughout Tanzania. Mbuga soils have a deep profile and rather high humus content (giving the dark colour) and therefore very suitable for agricultural and horticultural production. Mostly found in valleys.

Lack of nutrients and availability to water are mayor issues determining the suitability of the soils in Tanzania for agricultural activities.

3.3 Main horticultural crops and production regions.

Tanzania produces a wide assortment of fruits and vegetables. The country has favorable conditions for horticultural production being located close to the equator, production locations at higher altitudes and available water resources.

There are six main horticultural production zones in Tanzania. These are:

1. Northern Zone (Arusha, Kilimanjaro, Manyara and Tanga).
2. Coastal Zone (Coast, Morogoro, Dar es Salaam)
3. Southern Highlands (Iringa, Mbeya, Njombe and Ruvuma)
4. Central Zone (Dodoma, Manyara and Singida)
5. Lake Zone (Mwanza)
6. Zanzibar (Pemba, Zanzibar)

Each zone has its own specific growing conditions and therefore is suitable for a different product range. In the next overview the target horticultural crops per each production zone is specified based on information provided by TAHA.

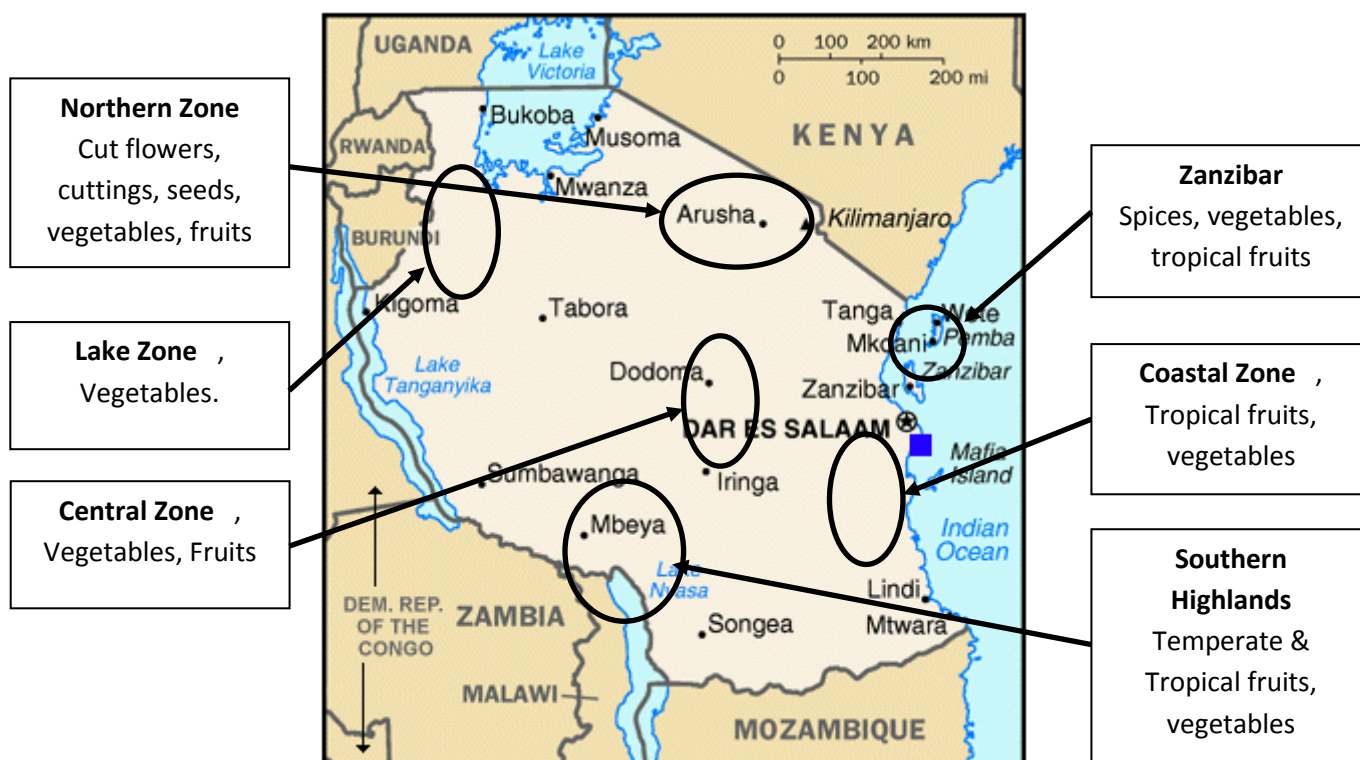
Table 4: Target Horticultural Crops in Specific Production Zones

Zone	Main Crops
Northern Zone	Vegetables (high value) ---- Fresh beans, baby corns, baby carrots, sugar snaps-mangetouts, High volume vegetables: carrots, tomatoes, cucumbers, onions, cabbage Fruits: avocado, bananas, citrus, and passion Flowers —Cut flowers (Roses) and cuttings
Coastal Zone	Vegetables: tomatoes, carrots and cabbage Fruits: Pineapples, watermelon and mangoes
Southern Highlands	Vegetables: Onions, Tomatoes and carrots Fruits: avocado, passion, apples
Central Zone	Vegetables: Onions , cabbages Fruits: grapes

Lake Zone	Vegetables: capsicums
Zanzibar	Vegetables: Spices, carrots, capsicums and tomatoes Fruits: watermelon and pineapples

The location of the horticultural production zones are indicated on the map below.

Figure 4: Map indicating the main horticultural production zones



The north—north western area (Kilimanjaro-Arusha) has so far been the only area in Tanzania where export horticulture has developed. The climate and soils around Arusha and Mt Kilimanjaro are favorable for floriculture and the year-round cultivation of sub-tropical and temperate vegetables. The region has developed into the center of floricultural production since 1990. In particular since 2000 exports of floricultural products (flowers, cuttings, seeds) gained in significance and the number of producers increased, mostly European investors with a Dutch background. However since 2008-2009 the development has stagnated; hardly any new foreign investors appeared while local investment is practically non-existent. Roses are the largest cut flower crop followed by chrysanthemum. A specific niche related to the excellent climate conditions in the Arusha area is the production of vegetables seeds, flower seeds and cuttings for the production of ornamentals and cut flowers

Picture: Impression Arusha based flower production companies



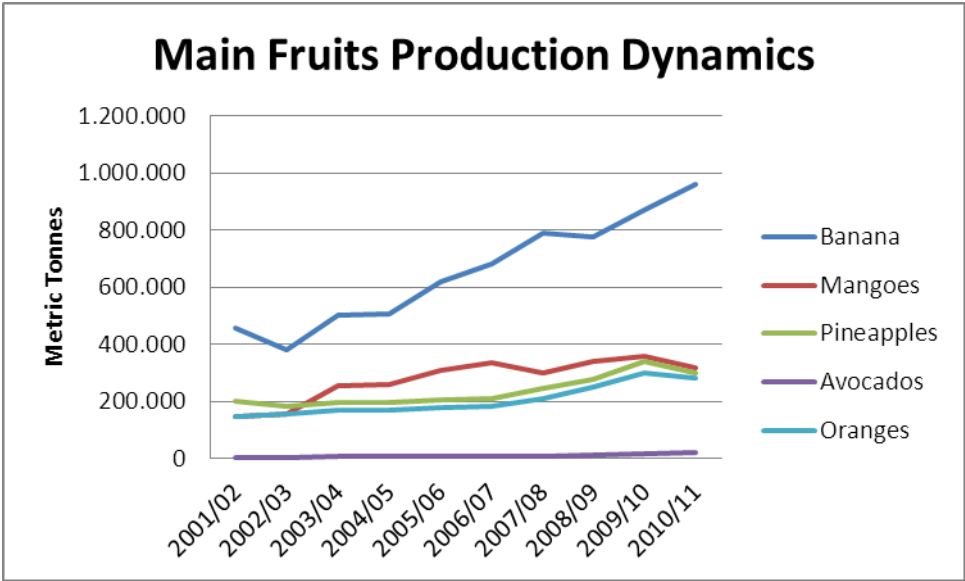
In the next figures an overview of the production dynamics of the key horticultural crops is presented over the period 2001-2011. More recent production data are not available, however no major changes are said to have happened between 2011 and 2014. A more detailed table is presented in annex 3.

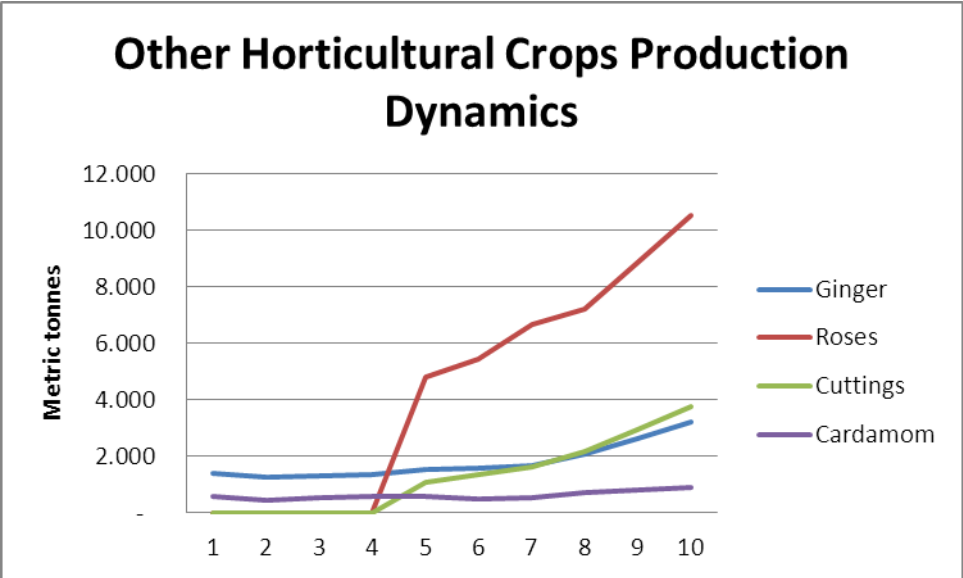
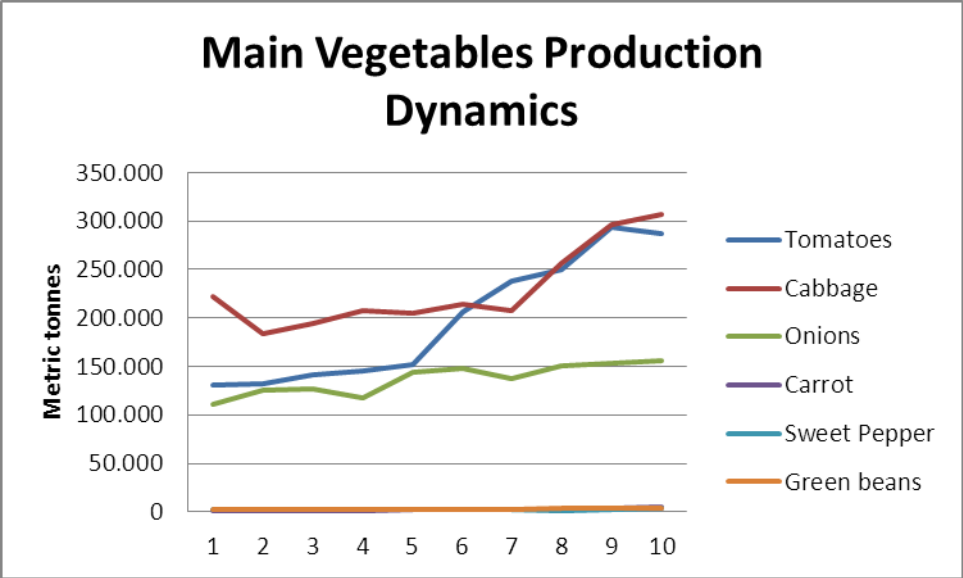
In quantitative terms tropical fruits like banana, pineapple and mango are the most important horticultural crops. Most of the production is consumed locally or processed for juice. Interesting to note is the fast increase in the production of avocado’s which is currently one of the main export products for fruits. Traditional vegetables like tomato, onion and cabbage form the bulk of vegetable production, mostly for internal consumption. Peas and beans are predominantly exported.

Spices are traditionally mostly produced in Zanzibar and the coastal zones and are an important export commodity to India and Middle East markets.

Though in quantity limited cut flowers and cuttings became an important export product in the 2001-2011 period. The export value has increased from almost zero to over 100 million US \$ in 2014 as is shown in figure in paragraph 3.5 and comes second nowadays after vegetables.

Figure 5 Dynamics of main horticultural crops





Picture: Traditional vegetable growing



3.4 Post-harvest handling and agro-logistics.

Access to post-harvest management facilities is almost non-existent for the majority of fruit & vegetable growers. Lack of storage facilities and cooled trucks contribute to large post-harvest losses that are reported for the horticultural sector. For Kenya post-harvest losses are indicated to range between 20-50% (WUR, 2012); for Tanzania it can be estimated that post-harvested losses will be at least at the same level or even higher which is confirmed by feedback from informants. Through donor-funded projects, initiatives are developed to organize collection points for fruits and vegetables with storage and handling facilities for groups of growers. Amongst others TAHA is actively involved in these initiatives.

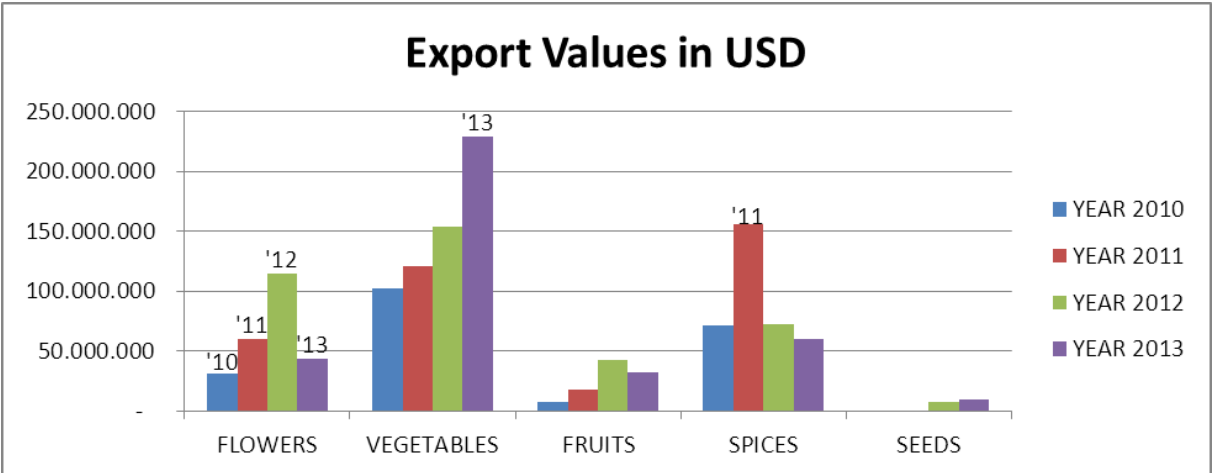
Most of the larger vegetables and flower exporting companies have their own storage facilities and organize their own logistic chain. Both at JNIA and KIA post-harvest handling facilities exists.

Though the local infra-structure is valuable at JNIA and KIA a majority of cut flower and cutting production is shipped to JKIA in Nairobi and exported from there (estimated at two third of the total Tanzanian production). Main reason is that the total export volume in Tanzania is still not large enough to allow for frequent services of air freight companies. KLM is providing cargo freight services from KIA however informants indicate that available space is irregular and unreliable depending on the situation in Dar es Salaam. Therefore for fresh cargo the majority prefers to work directly via Nairobi (which is located at a 260 km from Arusha; distance of Arusha to Dar es Salaam is 650 km).

3.5 Export & import.

In the figure below the trends in export of horticultural products is shown. In particular export of vegetables is of increasing importance for the Tanzanian economy.

Figure 6: Export value of horticultural crops, 2010-2013



Source: TAHA, 2014.

The Netherlands is the second main export destination in terms of value and quantity after India. To the latter mostly peas, beans and spices are exported. Netherlands is the main destination for cuttings, vegetables seeds, cut flowers, vegetables and avocados. United Arab Emirates takes a third

position (peas, vegetables, spices) while neighboring countries Rwanda, Burundi and Kenya are of increasing importance as export destinations.

Cut flowers are mostly market through the Netherlands. Other important destination markets for cut flowers are Norway, UK and Switzerland.

Export data show a significant increase in the export of vegetables. Growth markets for vegetables are neighboring countries, India and Middle East.

3.6 Trends and development in the horticultural supply chains.

Flowers

The international cut flower market becomes more and more competitive since the global financial crisis in 2008. European consumers have shifted preference to cheaper and less luxurious flowers and flower arrangements. This has put producer prices seriously under pressure, forcing flower producers to cut production costs. Particularly international competition in rose production has increased resulting in the closure of rose production companies in Tanzania. The total acreage for cut roses declined though partly production has been taken over by the 2 largest production companies (KiliFlowers and Mt. Meru Flowers).

Input saving and production enhancing technologies are introduced aiming at reducing the cost price and meeting internationally accepted CSR standards. Of particular interest are energy saving and water saving technologies. CSR standards have become common production requirements forcing producers to integrate labor, social, environmental and sustainability aspects into their business strategy.

Vegetables & Fruits

In Tanzania the southern and north-north-western highlands are the main production areas for vegetables. Tropical fruit production is concentrated in the coastal zones as well as in the highlands. The bulk of vegetables and fruits are produced locally and sold through middlemen to wholesalers, regional and urban markets.

Though still at a much slower pace than in Kenya in Tanzania also a growing amount of vegetables and fruits are sold through retail chains. With the steady economic growth an urban middle class is developing in Dar es Salaam and regional towns. The growing retail sector in particular serves this middle class. This trend will open up markets for packed and sorted fruits and vegetables not only in Tanzania but in the wider East African region. For Tanzania of particular interest are Rwanda and Burundi: highly populated neighboring countries with limited land and natural resources to produce food products for the own population.

Export of vegetables to the EU are more and more subjected to strict quality demands in particular related to pesticides residues. This will ask for a well-organized supply chain and a strict control system which currently is under-developed in Tanzania. With increased production of vegetables in

northern African countries (Egypt, Morocco, Tunisia) and Western Africa (Senegal, Gambia) the prospects for development of export vegetable production to the EU seems low.

A growing market for fruits and vegetables is in India and Pakistan as well as the Middle East. Historically Tanzania has strong ties with India, Pakistan and Middle Eastern countries with an Indian/Pakistani minority being very active in trade and retail. This in particular relates to spices and peas, beans and okra but also traditional crops like onions, tomatoes and eggplant.

A growing number of large investors from Chinese, Arab countries as well as Western origin see agriculture in general and horticulture to a lesser extend as a profitable business opportunity. In several African countries large-scale investment projects are set up comprising the whole supply chain from inputs, production, storage& handling to sales and export. Tanzania has a large potential to meet the investment requirements of these large scale investors.

Propagation material (seeds, cuttings, young plants)

The local climate conditions in north-western Tanzania are very favorable for seed propagation and breeding. For this reason a number of reputed seed firms like Rijk Zwaan, East West Seeds, Enza Seeds Korfovouni Seedpro (Schoneveld breeding) Multiflower have set up a production facility in the Arusha area. The local weather conditions and day length enable the seed firms to breed and produce seeds crops year round.

Comparable to the situation in the cut flower sub-sector competition from other locations worldwide have increased. Quality assurances, certification, variety ownership and patent regulations are of increasing importance to be able to be competitive. Annually a limited increase in acreage is mentioned by informants. In recent years no larger new investors have come in and neither are such investments to be expected in the near future. The foreseen signing of the UPOV protocol by the GOT will be an important step to consolidate and stimulate the development of this sub-sector.

Picture: Production of flower cuttings



3.7 Strengths and weaknesses of the Tanzanian horticultural sector

Strengths

- ✓ Stable political, economic and safety situation.
- ✓ Growing economy with rising middle class.
- ✓ Rich of natural resources bringing in hard currency and creating sources for investments (e.g. gas, diamonds, nickel, uranium).
- ✓ Fertile soil and excellent climate conditions close to the equator at higher altitudes.
- ✓ Improving and expanding infra-structure (roads, airports, power supply, ICT).
- ✓ Young population; low labor costs.
- ✓ Pro-investment government policy at national level.
- ✓ International cargo connections to EU and Middle East.

Weaknesses

- ✓ Lack of skilled, trained cadre/work force (practical training is lacking).
- ✓ Many bureaucratic obstacles to put government policies into practice.
- ✓ Weak institutional infra-structure (customs, tax offices) without pro-business attitude.
- ✓ Under-developed export infra-structure due to small size of horticultural export-oriented sector (both at airports and harbors).
- ✓ Low productivity of workers.
- ✓ Land ownership is complicated and sensitive issue.
- ✓ Lack of technology suppliers with local presence to provide after sales and maintenance services.

4 Horticultural supply industry

4.1 Introduction

In this chapter an overview is given of the presence and activities of suppliers of input and production technology as well as knowledge and information.

4.2 Market size

Taking into account the concentration of horticultural production at small-holders with a low capacity to purchase higher-end inputs and the rather small number of export oriented production companies, the horticultural input supply sector can be characterized as still small and underdeveloped. However with a growing economy and a government policy aimed at stimulating market oriented, commercial farming the growing market for medium-tech and higher-tech horticultural technology can be foreseen.

The number of export oriented production companies is estimated at around 25. Most of them are located in the Arusha area having a link to Netherlands either Dutch being the owners or exporting the produce to and through the Netherlands. The product range comprises cut flowers (mostly rose), cuttings, seeds and vegetable crops (mostly beans). One company is specialised in raspberry production. The number of export oriented companies is said to be more or less stable with the majority being established for 10 years or longer.

The limited number of the export oriented companies and the dominance of small-holders in the horticultural sector has resulted in a lack of local presence of technology suppliers. This is mentioned by many respondents as a serious bottleneck for the development of the horticultural sector.

4.3 Suppliers in the market

Crop inputs

Feedback from Dutch horticultural producers indicate that most of them rely on import of inputs and services from Kenya. This relates to fertilizers, crop protection products, biological control, substrate, plant care products, trays and packaging materials. Suppliers include Yara and Elgon (fertilizers), Syngenta, Monsanto (Crop protection, vegetable seeds), Rijk Swaan (vegetable seeds) and Koppert Kenya, RealIMP and Dudutech for biological control products. Sales and marketing of specific crop protection products and biological control products is hampered due expensive and time consuming registration procedures.

Local suppliers of agri-inputs operate on a regional basis with the largest suppliers having an office in Dar es Salaam. Most of them offer fertilizers, crop protection products and seeds. Among the largest crop input suppliers is Balton Tanzania, sister company of Amiran Kenya.

Production technology

As the greenhouse sector is relatively small, few if any technology suppliers are operating in Tanzania. Balton Tanzania is among the largest suppliers of greenhouse and irrigation technology with an large local network. Irrico International is also active in Tanzania operating from their Nairobi based premises. Dutch greenhouse technology suppliers Vanderhoeven BV and Bosman International BV operate in Tanzania on an occasional basis for Dutch owned/Dutch managed horticultural production companies.

No Dutch technology suppliers have a local presence. Bosman International BV has a Kenyan branch from where they can also serve clients in Tanzania. Bosman represents a larger number of Dutch greenhouse technology suppliers including Hoogendoorn (process automation), Hortimax (fertigation systems), PDI (screening systems) and Genap (water storage solutions).

Crop Advice

In Tanzania, extension service providers are active via the Ministry of Food and Cooperatives, the Tanzanian Agricultural Research Institute, several agricultural universities and sector organizations like TAHA . However, they mainly support the small-scale vegetable growers with knowledge and information. On an individual basis larger-scale commercial companies, mainly in the flower sector, hire crop advice services through private consultancy firms or individual consultants including Israeli and Dutch crop and/or postharvest advisors. Some suppliers of technology provide their own training with sales of their products.

Research & Training

Through the SEVIA project Wageningen University (WUR) is active in applied research in Tanzania. The SEVIA project aims to develop and safeguard the supply of affordable, locally adapted vegetable seeds varieties. The project cooperates with Sokoine University of Agriculture and HORTI-Tenguru. SEVIA is sponsored through the FDOV program of the Dutch Ministry of ELI. Within SEVIA WUR cooperates with Rijk Zwaan and East West Seeds. SEVIA will run till 2019.

5 Opportunities in the horticultural sector in Tanzania

5.1 Introduction

The horticultural sector in Tanzania is gradually developing and therefore offers opportunities for suppliers of inputs, growing technology, equipment and technical knowhow. However the market is still small and the purchasing power of the majority of producers is very limited. Therefore offered technologies must be affordable and adapted to low-tech or medium tech production situations.

The necessity for export oriented companies to produce in a cost effective and input efficient way offers specific opportunities for Dutch technology suppliers.

5.2 Business opportunities

5.2.1 Production

For those considering investments in production related activities, opportunities are identified in the niche market for propagation of plant material and seeds taking advantage of the excellent local climate conditions in the north-western region of Tanzania. Availability of suitable land can be a major bottleneck to be tackled when starting-up production activities in this part of Tanzania.

Vegetable and fruit production can offer interesting investment opportunities when linked to a supply chain offering sales opportunities in either the export market (neighboring countries, Middle East and Africa), the growing local and regional retail market chains (freshly packed) or initiatives in the processing of vegetables and fruits. With increasing competition from Northern and Western African regions and stricter quality demands (GlobalG.A.P., pesticide residues) opportunities to export freshly packed vegetables to Europe seems limited.

With a developing retail sector, a growing economy and growing population the perspectives for sales of fruit and vegetables in Tanzania as well as surrounding countries is positive. Looking to the perspective of the different production regions in Tanzania in particular the southern highland area seems to have a high potential for development. Such development will be encouraged through the ambitions of the SAGCOT investment initiative.

Growing international competition will force existing producers in the floricultural sub-sector to continue on the current strategy to cut costs and improve efficiencies in order to remain competitive. The perspective for the investments and growth in the next years is therefore small certainly if no improvements are made within the existing bureaucratic and corrupt administrative system.

5.2.2 Value addition

The bulk of fruits and vegetables is produced by smallholders during a short period of the year. As storage facilities commonly are lacking or limited in capacity large quantities are being wasted and left to decay. Opportunities exist for food processing technologies that will increase the life cycle/shelf life of fruits and vegetables. This will include production of juices and concentrates of fruit & vegetables, drying of spices, fruits and vegetables and preservation of spices, fruits and vegetables (pickles, curries, sauces). A local and regional market for processed and preserved foods is developing alongside the growth of the retail chains.

Apart from the processing technology itself additionally opportunities exist for service providers including quality control, HACCP, certification, testing on residue levels.

5.2.3 Opportunities for the supply sector

Protected horticulture

Business opportunities in protected horticulture concentrate around improved efficiencies in energy and water usage. Climate control systems, application of screens, re-circulation of irrigation water, smart water storage systems and possibly solar energy to generate electricity are amongst the technologies with a market opportunity.

Biological control application is still in an infant state. Registration procedures seem to be a bottleneck to allow sales of biological control products on the horticultural market in Tanzania. However pesticide registration is costly and time consuming whilst a growing demand for low residue or even residue free flowers and vegetables will limit the possibilities to apply pesticides and will induce a market for alternative pest control strategies. When adapted to local growing conditions in particular products that will enhance plant health, root production and soil activity will be of interest.

Open field production

Perceived changes in climate conditions resulting in irregular rainfall with longer periods of drought ask for water saving technologies as well as smart and efficient water storage and irrigation methods combined with high quality seeds (open polinated as well as hybrid) and affordable, compound, slow release fertilizers.

Plant health enhancing and soil activity stimulating products and new varieties adapted to local, variable climate conditions have good perspectives.

Post-harvest and logistics

Storage, post-harvest handling and logistics are underdeveloped in the Tanzanian horticultural sector. With high post-harvest losses and reduced product quality large opportunities exist to supply storage, packaging and handling technology. As mentioned before such technology should be simple, smart and cost effective in order to attract the interest of an increasing number of small but developing commercially oriented fruit & vegetable growers.

Training and knowledge transfer

A large need for training and knowledge transfer exist. Most informants judge the knowledge and experience level of local Tanzanian graduates and students as poor. Training is not practically oriented and specialized training in the field of horticulture is lacking. With a growing number of more commercially oriented vegetable and fruit growers a market for training and advisory services is emerging where growers will be willing to pay for training and crop advice that will bring direct benefits to their business. Provision of these services through a local service provider will be more cost effective.

Many donor funded projects pay attention to and allocate money for training and crop advice services creating business opportunities for providers of such services.

A niche market for private advisory services exists which is already served by foreign advisors. This market is linked to the export oriented companies in the floricultural sub-sector. As this sector is not expect to grow in the near future perspectives for provision of private advisory service seems limited.

5.3 Image of horticultural technology of Dutch origin

Although Dutch technology suppliers are currently small players in the horticulture sector, they do have a positive image in the market. Especially the quality level of the Dutch suppliers is acknowledged to be good. However, the Dutch technology is often considered 'too advanced'. The market in Tanzania requires mostly low-tech to intermediate technologies with a lower price versus quality ratio. Suppliers from Israel, India and China are more competitive in this segment. Furthermore, several competitors have a local presence offering greenhouse equipment, irrigation systems, etc. in combination with agronomic assistance and financing solutions. Local presence and the provision of local support and services will be of crucial importance to attract and keep clients in the future. Informants mentioned the lack of local technology suppliers and lack of after sales services and timely delivery of spare parts as a serious bottleneck for the development of the horticultural sector in Tanzania.

6. Opportunities and challenges

A. With growth rates of 7% over the past years and similar growths predicted for the coming years the Tanzanian economy is amongst the best performing economies worldwide. Tanzania is a safe country with a stable political system and as one of the few countries in Africa has never experienced any civil unrest, coupes d'état or terrorism. The population is young with 45% of the population under 15; the annual population growth is 2,8%.

B. The growing economy contributes to the rise of a middle class in the main city of Dar es Salaam and regional towns creating a local market for products with a higher added value. though an estimated one third of the population is still living below the poverty line the living standards of the majority of population has been lifted above the poverty level. So far economic growth has trickled down to a rather limited extend to rural areas where the vast majority of people is still bound to traditional ways of living based on self-sufficiency.

C. Tanzania has abandoned natural resources to its disposal including large reserves of natural gas which are currently being exploited. The gas reserves are expected to make Tanzania self-sufficient in energy and will generate funds for investment in the economy and infra-structure. Over the past decade the infra-structure has improved significantly (ICT, roads, airports, ports) however much investments are needed to upgrade and expand the infra-structure in particular in the more remote western and southern regions of the country.

D. Running a commercial business in Tanzania is a challenging task. Though the overall rating of the business climate in Tanzania is similar to neighboring countries as judged by the World Bank in the "easy-to-do business" rating feedback from informants makes it clear that the prevailing business climate is very difficult and unfriendly towards private business. Corruption is widespread among government officials, import and export regulations are tiresome, red tape is everywhere and local and regional governments see private companies as a welcome source to supplement their budgets through ever increasing local taxes. The policy to promote private investment and create favorable conditions for private and foreign investments at the national level seems to be contradicted at the regional and local level.

E. Apart from the ever changing taxation regimes, time consuming customs procedures and regular disputes with the Tanzania Revenue Authority, the complicated rules on land ownership and regulations to acquire long-term control over the land are another limitation for investors in particularly for capital intensive production activities like greenhouse based horticulture.

F. Horticulture is and remains an important sector for the rural economy, food security, employment and for earning foreign currency. With a fast growing, young population the need to stimulate horticultural production is large. The new agricultural policy for the years 2015-2020 which is currently under preparation, has identified horticulture as one of the key sectors for development and support from the side of the government.

G. Opportunities for investment are identified in vegetable and fruit production as well as adding value by sorting, packaging and processing of fruits and vegetables. The growing middle class in Dar

es Salaam and regional towns is creating a local market for higher quality sorted and packed products. Export opportunities are present towards neighboring countries (Burundi, Rwanda) and to Middle Eastern countries and India. Processing of fruits and vegetables is under developed.

H. Scope for development and investment in floriculture seems to be limited taking into account the stagnation of sales in traditional markets in Europe and the growing competition from other countries (Ethiopia, Kenya, Latin American countries) on the one side and the relative small size of the sector in Tanzania on the other side. The latter results in difficulties to purchase specific inputs and have a reliable service and supply of growing technology. For instance the rather small size of the market makes it unattractive to register new crop protection products for which the registration procedures are already time consuming and costly. Also service provision by technology suppliers can be complicated and is mostly done from Kenya where more companies have a local representation.

I. Within the floricultural sub-sector production of seeds is an interesting and still growing niche market taking into account the excellent climate conditions in the north-north-western part of the country. Keep in mind though that major companies are already present.

J. A serious bottleneck for the development of the horticultural sector is the lack of specialists and the low level of knowledge and expertise available locally. Most companies indicate they have to train their own staff starting from basics while constant support and control is needed in order to get the work done. Skilled local agronomists and managers are hard to find. Interest to study agriculture or horticulture amongst students is low as the sector, as in many African countries, doesn't have an attractive image. Practical training curricula/training courses and adequate facilities to train students in practical topics are lacking.

K. Opportunities for Dutch technology suppliers are in post-harvest technology and technology to add value to raw products as well as processing of fruits and vegetables. Currently it is estimated that 40-50% of the harvested fruits & vegetables are wasted before reaching the final consumer. A large shortage of cooling facilities, sorting & packaging units and logistic solutions exists. Important is that the technology is adapted to the needs of the market: small-scale, low- to medium tech and cost-effective. Local presence for after sales services will be of large added value.

L. With the growing need to reduce the costs price of the products in order to remain competitive a small market exists for greenhouse production technology that will save on fuel, water and other inputs as well as for crop advisory services that help to optimize the growing process. The technology will range from solar based electricity generation to replace diesel fuelled generation and/or unreliable supply through the power grid to screening systems to optimize the growing climate, clever water & fertilizer recirculation systems and biological control methods. .

M. With an increasing irregular rain fall and large periods of drought the need for smart water using, water harvesting and water storage systems is increasing alongside the need for information and advice on clever soil treatment and input efficient production systems. Dutch companies have the knowledge and expertise to provide the technology in this particular niche, but growing market as is proofed by the Dutch managed company Quality Food Products.

Annexes

Annex 1: Information Reference List

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Tanzania Ministry of Agriculture, Food Security & Cooperatives: www.kilimo.co.tz /
www.agriculture.go.tz

Tanzania Revenue Authority: www.tra.go.tz

World Fact Book: www.cia.gov

Annex 2: List of Informants

	Name of Company	Contact Person	Position
1	AVRCD-World Vegetable Centre	Mr. Thomas Dubois	Regional Director Easter & Southern Africa
2	Dekker Chrysanthemum	Mr. Lucas Geritsen	Manager
3	Embassy of the Kingdom of Netherlands Dar es Salaam	Mrs. Hinke Nauta; Mrs. Theresia Mcha	Deputy head of mission; Contact for Agriculture
4	Enza Zaden	Mr. Wytze Salomons	Director
5	Fides	Mr. Bert Kuyper	Manager
6	Moerman Bruins Flowers	Mr. Amots Oko	Management
7	Mt Meru Flowers	Mr. Herwig Twetter	Director
8	NMB Bank	Mr. Tom Borghols	Managing Director
9	Oasis Young Plants	Mr. René Kleinveld	Owner
10	Rabobank	Mr. Sierk Plaat	Senior Analyst Africa
11	Quality Food Products	Mr. Ekko Oosterhuis Mr. Willem Warmenhoven	Owner Executive director
12	Rotian Seed Company	Mr. Sjouke Bruinsma	Director
13	Tanzania Horticulture Association	Mrs. Jacqueline Mkindi Mr. Richard Daniel	Chief Executive Officer Vice Chairman
14	Tanzania Investment Centre	Mr. John Mathew Mnali	Investment Promotion Manager
15	Tanzania Ministry of Agriculture, Food Security & Cooperatives	Mrs. Mwashu	Department Crop Development
16	Vasso Agro ventures	Mr. Fons Nijenhuis	Owner/director

Annex 3 Annual Fresh Fruits, vegetables, spices and flowers production data.

(Amounts in metric tons; Source: Ministry of Agriculture, Food Security & Cooperatives, 2012)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Fruits										
Banana	455.000	380.593	500.000	505.000	617.204	682.330	787.966	775.650	868.970	962.290
Mangoes	146.000	154.302	255.000	257.550	309.174	334.986	300.000	340.000	360.000	320.000
Oranges	145.000	155.865	168.854	170.542	177.881	181.550	210.000	250.000	300.000	280.000
Pineapples	200.000	181.629	196.765	198.733	207.284	211.560	245.600	275.650	339.740	300.000
Plums	18.000	16.818	18.219	18.401	19.193	19.589	20.800	21.000	22.411	20.800
Tangerines	11.300	16.310	21.502	22.527	22.636	22.490	27.100	28.545	34.600	32.655
Lemon	1.200	3.155	7.200	7.272	9.331	9.500	10.500	6.720	7.650	6.580
Pawpaw	3.000	4.320	4.680	4.727	4.930	5.032	6.038	6.620	8.208	9.796
Avocados	5.500	5.366	5.813	5.871	6.124	6.250	7.500	10.420	15.540	19.660
Pears	1.750	1.620	2.800	2.828	3.000	3.200	3.840	4.150	5.100	6.050
Peaches	3.800	4.685	5.076	5.127	5.347	5.458	6.200	5.550	5.642	5.734
Passion fru	1.700	1.391	3.000	3.030	3.849	4.259	5.111	5.090	5.800	5.200
Guava	1.500	2.000	2.166	2.188	2.282	2.329	2.795	5.550	8.771	7.992
Apples	4.020	3.860	5.070	5.121	5.751	6.066	7.279	2.590	2.842	3.094
Jackfruit	150	740	1.200	1.212	1.781	2.066	2.479	2.500	2.934	3.068
Loquat	320	500	920	929	1.348	1.558	1.870	1.425	1.530	1.535
Sour sop	120	209	226	228	238	243	292	300	314	280
Total	998.360	933.362	1.198.491	1.211.286	1.397.353	1.498.466	1.645.370	1.741.760	1.990.052	1.984.734
Vegetables										
Tomatoes	130.500	132.801	142.000	145.420	151.750	206.595	237.914	250.000	293.405	286.810
Cabbage	222.700	183.619	195.000	207.550	204.515	214.273	207.128	256.635	296.435	306.235
Onions	110.500	126.132	126.643	118.010	143.948	147.601	137.121	150.500	153.399	156.298
Amaranthus	2.400	2.370	2.520	2.705	1.919	2.090	2.600	3.700	4.310	4.920
Chinese ca	1.900	2.213	2.600	1.843	2.408	2.562	2.154	1.250	1.764	2.278
Eggplant	1.900	1.950	2.400	2.434	2.276	2.714	2.900	3.120	3.526	3.932
Sweet pepp	2.100	2.090	2.300	2.540	2.595	2.694	2.700	1.485	2.876	3.267
Green peas	1.850	2.011	2.196	2.325	2.200	2.428	2.554	3.050	3.300	3.550
Green bean	1.750	1.836	2.250	2.510	2.590	2.800	2.970	3.120	3.526	3.932
Carrot	1.450	1.365	1.700	1.727	2.108	2.362	2.514	2.750	3.138	4.526
Swiss chard	570	576	624	630	657	674	809	1.271	1.868	2.465
Okra	300	342	560	566	678	736	883	1.250	1.764	2.278
Cauliflowe	300	360	410	590	625	680	658	550	610	600
Total	478.220	457.664	481.203	488.849	518.269	588.209	602.905	678.681	769.921	781.091
Spices										
Cardamom	560	432	550	600	580	500	530	740	820	900
Ginger	1.380	1.254	1.300	1.350	1.520	1.600	1.670	2.063	2.631	3.199
Garlic	150	250	350	450	380	400	480	500	580	650
Vanilla (fre	NA	5	6	NA	NA	NA	18	NA	NA	NA
Total	2.090	1.941	2.206	2.400	2.480	2.500	2.698	3.303	4.031	4.749
Flowers										
Roses	NA	NA	NA	NA	4.792,00	5.450,00	6.659	7.200	8.850	10.500
Cuttings	NA	NA	NA	NA	1.070	1.348	1.618	2.150	2.952	3.754
Total	NA	NA	NA	NA	5.862	6.798	8.277	9.350	11.802	14.254

Annex 4 Investment Support Initiatives

1. Dutch Good Growth Fund (DGGF)

Through the Dutch Good Growth Fund (DGGF) the ministry of Foreign Affairs supports small/medium Dutch businesses and entrepreneurs in emerging markets and developing countries by facilitating financing for development-based local investments and exports. DGGF is not a subsidy but a financial instrument. The loans provided must be paid back to the fund so that other companies can also make use of the facility. Companies are helped via one desk at the Netherlands Enterprise Agency (www.RVO.nl). Various parties including RVO.nl and Atradius (www.atradiusdutchstatebusiness.nl) are involved in the specific services under the DGGF.

The DGGF might offer a solutions for the following situations:

- Financing investments in Dutch SMEs in emerging markets and developing countries.
- Financing local SMEs in emerging markets and developing countries, via intermediary funds.
- Financing/insuring exports that are relevant for development from Dutch SMEs to emerging markets and developing countries.

The DGGF is intended to be used by:

- Dutch small and medium-sized (SME) companies that wish to invest and/or export to the 66 DGGF countries.
- Small and medium-sized companies in the 66 DGGF countries

2. Subsidy facility for demonstration projects, feasibility studies and knowledge transfer (DHK)

Emerging markets and developing countries offer opportunities for Dutch export and investments. Through the DHK facility the Dutch Ministry of Foreign Affairs intent to stimulate Dutch business to become active in these markets. The DHK facility is open for 88 countries. Tanzania falls under the DGGF component of the DHK facility.

The DHK facility has 3 modules:

1. Demonstration Projects: in order to convince potential clients Dutch companies can receive a subsidy to set up a demonstration of a product or a technology in one of the target countries.
2. Feasibility Studies: Dutch companies can receive a subsidy to carry out a feasibility study to determine the technical and financial feasibility of an investment in a target country on behalf of a potential client who intent to invest or for an own investment project.

3. Knowledge Transfer: Dutch companies can get a subsidy to hire external expertise. It may concern advice on taxation issues, juridical aspects to set up a business or a search for local partners.

The DHK facility is available for Dutch SME companies with international ambition and interest to do or set up business in emerging markets and developing countries. More information can be found on : www.rvo.nl/subsidies-regelingen.

3. Facility for Sustainable Entrepreneurship and Food Security (FDOV)

The Facility for Sustainable Entrepreneurship and Food Security - FDOV stimulates public/private partnerships within the sphere of food security and private sector development in developing countries.

In concrete terms this means that governmental parties, businesses and NGOs or knowledge institutions can collectively enter into a cooperative partnership with the Dutch ministry of Foreign Affairs and become eligible for a grant for a project respecting the following thematic conditions:

Food security:

- Proposals should evidently contribute to improving local or regional availability of qualitatively good food and nutrition.
- Proposals aiming at market efficiency and at making (food)chains sustainable should in any case focus on national and regional markets.
- Proposals exclusively concerning non-food trade crops are excluded from this call.

Sustainable entrepreneurship:

- Proposals should aim at inclusive business, evidently positively impacting low-income groups – employees, producers and entrepreneurs alike.
- Alternatively proposals should aim at stimulation of women–entrepreneurship
- Proposals concerning the financial sector are excluded from this call, except when such proposals concern (the set-up of) insurance schemes.

Participation in the facility is open to public institutions, businesses, NGOs and knowledge institutions, within a cooperative partnership which encompasses at least one business and a NGO or knowledge institution. The public component in the partnership will, in any case, comprise the Ministry of Foreign Affairs. Preferably the cooperative partnership should additionally include local public institutions.

Involvement of a NGO or knowledge institution is a condition and will be assessed on the basis of the proposal. Of the participating parties, at least one (other than the Ministry of Foreign Affairs) should

be legally registered in The Netherlands and also at least one should have its legal base in the country in which the activity is being set up. One of the parties will act as (lead)applicant for the partnership. This role can be taken on by either a Dutch or a foreign party.

The FDOV grant will contribute at the most 50% of the financing for a project. This is complementary to the financial contribution made by the partnership.

4. African Enterprise Challenge Fund (AECF)

The AECF is a US\$ 207m challenge fund capitalized by multilateral and bilateral donors (the AECF donors) to stimulate private sector entrepreneurs in Africa to innovate and find profitable ways of improving access to markets and the way markets function for the poor, particularly in rural areas. The Fund awards grants and repayable grants to private sector companies to support innovative business ideas in agriculture, agribusiness, renewable energy, adaptation to climate change and access to information and financial services. Its purpose is to improve incomes of smallholder farmers and the rural poor. The AECF is supported by the governments of Australia, Denmark, Netherlands, Sweden and the United Kingdom, as well as the International Fund for Agricultural Development (IFAD). The AECF is hosted by AGRA: Alliance for a Green Revolution in Africa.

The AECF TZAW is a special fund of the AECF that is only open to agribusinesses investing in Tanzania. It is for businesses in the agricultural sector which have good innovative ideas that will have a positive development impact. The widest possible range of agribusinesses are eligible for support, including farming, plantation and ranching companies, out grower schemes, producers, manufacturers and distributors of agricultural inputs - seeds, fertilizers, pesticides, tools and equipment, agro processors, traders, merchants and other private sector service providers including market information, extension and other agricultural services. So far 22 projects have been committed under the AECF TZAW fund with a total value of US \$ 20,7 million.

The AECF runs competitions open only to **for-profit private companies** that are starting, or intend to start, new ventures in specific fields. Companies are invited to submit proposals outlining their business idea or concept for funding.

Some background information on AECF

- Funding from AECF is based on a competition, open only to for-profit companies having or starting up business in Sub-Saharan African countries in the field of agriculture-agri-business, rural finances and media and information supporting services.
- There are two tender rounds a year. Currently a tender is open to 28th February 2015 under the Agribusiness Africa window.

- The AECF provides both grants and/or repayable loans at zero interest up to a maximum of 50% of the total project costs.
- The application is an open competitive process.

More details on the application procedures and tender opportunities can be found at www.aecfafrica.org.

5. Global Agricultural Food Security Program (IFC)

The Global Agriculture and Food Security Program (GAFSP) is a multilateral mechanism to assist in the implementation of pledges made by the G20 in Pittsburgh in September 2009. The objective is to improve incomes and food and nutrition security in low-income countries by boosting agricultural productivity.

GAFSP picks up where emergency funding leaves off and works with countries to develop in a sustainable way so that they can be more resilient to climate, political, and market shocks in the future. It focuses on agricultural productivity growth, linking farmers to markets, and increased capacity and technical skills.

GAFSP is country-led, supporting countries' priorities reflected in their national agriculture and food security investment plans, and provides a platform for coordinated donor financing around country programs and sustainable private sector investment. GAFSP is already setting a new standard for development effectiveness. It stresses country ownership, good governance, inclusivity, high-quality projects, and intensive monitoring and evaluation of factual results.

GAFSP is divided into two distinct windows for financing:

- The Public Sector Window assists strategic country-led or regional programs that result from sector-wide country or regional consultations and planning exercises such as CAADP in Africa.
- The Private Sector Window is designed to provide long- and short-term loans, credit guarantees, and equity to support private sector activities for agricultural development and food security.

Funding:

- Financing pledged: US\$1.35 billion (of which \$1 billion to the Public Sector Window, \$308.7 million to the Private Sector Window, and \$68.5 million remains unassigned).
- Current Donors: Eight donors to the Public Sector Window (Australia, the Bill & Melinda Gates Foundation, Canada, Ireland, South Korea, Spain, the United Kingdom, and the United States) and five donors to the Private Sector Window (Canada, Japan, the Netherlands, the United Kingdom, and

the United States).

- Financing received to date: \$1.2 billion (of which \$979.2 million to the Public Sector Window, and \$238.3 million to the Private Sector Window).

GAFSP is a global program, with 67 countries eligible for funding, and projects all over the world.

GAFSP expects to reach over 13 million beneficiaries, mainly smallholder farmers and their families.

Public Sector Window Allocations and Project Implementation

- \$912.5 million allocated for recipient-executed grants in 25 countries: Bangladesh, Burkina Faso, Burundi, Cambodia, Ethiopia, Haiti, Honduras, the Gambia, Kyrgyz Republic, Liberia, Malawi, Mali, Mongolia, Nepal, Nicaragua, Niger, Rwanda, Senegal, Sierra Leone, Tajikistan, Tanzania, Togo, Uganda, Yemen, and Zambia.

- Eligibility: GAFSP funds technically sound proposals from IDA-only countries that have a strong agriculture investment plan, have had a technical review, and have a high level of need.

Private Sector Window Allocation and Project Implementation

- Projects: The Private Sector Window has funds to 11 Investment Projects totaling \$44.1 million including: africaJUICE, CISA, COPSL, FDL, GWFP BICIS, GWFP HSBC, GWFP Nedbank, Pearl Dairy, PRAN Group, Root Capital, and SIB RSF; as well as 20 Advisory Services Projects totaling \$4.1 million
- Eligibility: GAFSP funds private firms and financial intermediaries that operate in IDA-only countries and support activities that are consistent with the national food security or agriculture plan.
- The loans will be concurrent with additional funds from IFC.



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