



Enhancing Competitiveness of Horticultural Industry in Tanzania

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Key Messages

- In the last seven years, the horticulture sub sector has grown twice as fast as the rest of agriculture thanks to an increase in the production of fruits and vegetables.
- Despite the huge potential of the horticulture sector, it is constrained by various challenges including poor transport networks, ineffective trade logistics, limited input supplies, post-harvest losses, and limited market strategy and information gap.
- Horticultural productivity and trade competitiveness can be increased by fast tracking trade logistics, boosting investment in research and development, expanding production incentives to farmers and harnessing the benefits of increasing digitalization of the sector.

Introduction

Tanzania's horticulture sub-sector is growing rapidly and has increasingly become one of the major contributors of the agricultural sector, with annual average growth of 11 percent which is two times the annual overall growth rate of agriculture¹. Currently, the sector employs 4.5 million farmers comprised of both large-scale and small-scale of which majority are women and youth (TAHA, 2020). Moreover, horticulture production is labor-intensive dominated by smallholder farmers who account for over 70% of the producers with land size less than 2 hectares (Guadagno et al., 2019).

In recognition of horticulture's potential to the economy, it has been identified as one of the priority Commodity Value Chain in the Agriculture Sector Development Program (ASDP) II. Most importantly, horticulture has contributed significantly to the attainment of various socio-economic benefits to the nation such as achievement of food security and nutrition, source of employment, source of raw materials for primary processing industries, as well as a source of foreign earnings to the nation. Hence, the horticulture sector is one the important drivers towards

realization of the National Development Vision 2025 which stresses on the promotion of citizens' welfare as well as a strong and competitive economy. As part of the horticulture supportive advantage, Tanzania is also endowed with favorable climatic conditions and a vast potential of arable land of approximately 44 million hectares which is ideal for horticultural growth (URT, 2015). In addition, the country is characterized with political stability; strong relationship with its neighbors essential for a conducive regional trade - which all pave way for the growth of a competitive horticulture industry. The major horticultural crops cultivated in Tanzania include fruits, vegetables, spices and flowers. These comprise of avocados, pineapples, bananas, oranges, jackfruits, onions, carrots, cabbages, round potatoes, tomatoes, baby corns, baby carrots, green (French) beans, and mangetout, cloves, roses, gerbera, flower seeds, aster, gysphilla and cuttings. Horticulture is practiced in different regions including Morogoro, Iringa, Mbeya, Ruvuma, Arusha, Kilimanjaro, Tanga, Manyara and Zanzibar region.

¹The potential of strengthening skills and training capacity to boost the Tanzanian horticulture sector; 2020 report.

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The recent uptick in horticulture is driven by an array of opportunities made possible by the improving business environment for trade (EUC, 2019; ITC, 2020). These include tariff reductions in European consuming countries, development of competitive long haul refrigerated air transport, growing market demand for fresh fruits, vegetables and flowers especially in the European Union (EU) countries, and the growing need in Tanzania for export diversification in response to receding market shares of traditional crops (coffee, cotton, sisal, tobacco and tea) in world markets.

This policy brief analyzes recent trends in horticultural production and trade in Tanzania. It aims to appraise contemporary understandings of market dynamics which are key to informing competitive trade policy practices as well as implementation of Tanzania's third Five-Year Development Plan 2021/22 - 2025/26 which prioritizes the development of a competitive economy and the transformation of livelihoods. Analysis draws on secondary data from multiple credible sources to arrive at recommendations for enhancing horticulture's trade competitiveness in Tanzania.

Status of horticulture production

Tanzania horticulture is a small dynamic sector which offers huge potential for poverty reduction and economic growth. The Tanzania horticulture export sector began in the 1950s where it was involved in the production and export of bean seeds to the Netherlands (Nishwitz, 2009). In recent years, Tanzania has registered impressive export performance of different horticultural products, and this presents an advantageous opportunity to the smallholder farmers to increase their production.

Currently, the demand for fruits and vegetables is high and it is expected to rise in response to changing consumer preferences. Globally, it is estimated the demand of fresh

fruits and vegetables is expected to reach 600 million tons and 850 million tons respectively by 2022 (Euromonitor International, 2018). Moreover, the year 2021 has been declared by the United Nations as the International Year of Vegetables and Fruits. This commemoration aims at raising awareness on enhanced consumption of fruits and vegetables for better nutrition and health status as well as, fostering policy transformation in the reduction of loss and waste of these perishable products (FAO, 2020).

These projections pave way for the rise of horticulture production which is more likely to increase the welfare of its individuals through increased incomes, widened horticulture markets, and government revenue.

Table 1: Production of horticulture products in tons

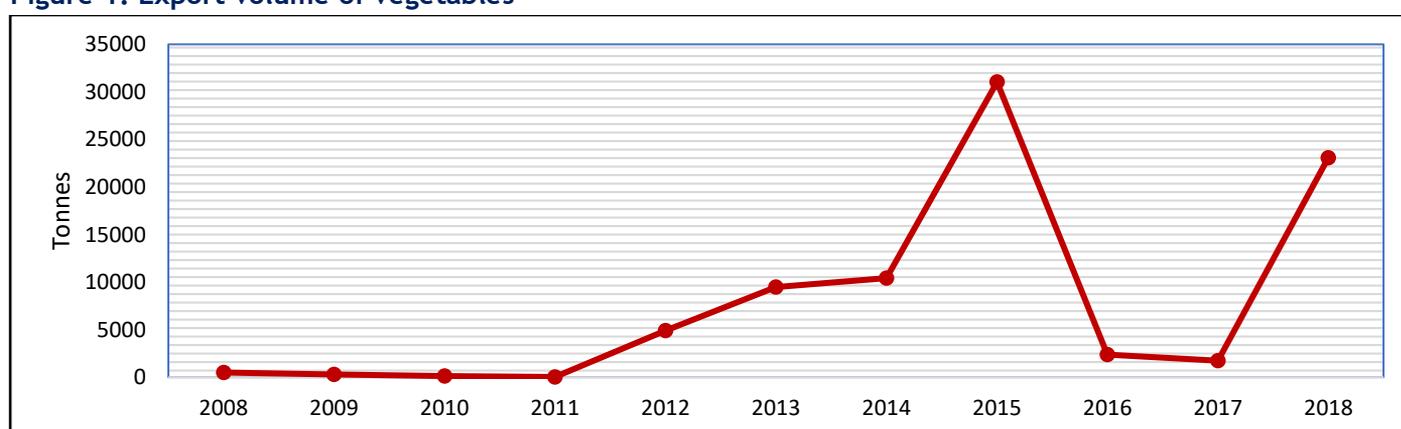
Years	Fruits	Vegetables	Flowers	Spices	Total
2012	3,938,730	901,680	9,850	7,370	4,857,630
2013	4,096,280	937,750	10,200	8,125	5,052,355
2014	4,416,690	1,005,305	10,790	8,377	5,441,162
2015	4,574,240	1,041,375	11,140	8,609	5,635,364
2016	4,711,000	1,189,000	11,500	20,400	5,931,900
2017	5,243,343	1,298,388	11,615	22,062	6,575,408
2018	3,703,124	1,595,489	12,622	22,062	5,333,297
2019	4,576,948	1,926,927	13,240	38,987	6,556,102

Source: Ministry of Agriculture, 2019

Horticulture production in Tanzania increased by 35 percent from 4.9 to 6.6 million tons in 2012-2019 (Table 1, above). Yet despite the increase, current production remains below peak production recorded in 2017 as fruit production recovers following reversals in 2018.

Despite growth in production, horticultural exports account for less than 10% volumes produced, underlining the challenges of transitioning from production to trade.

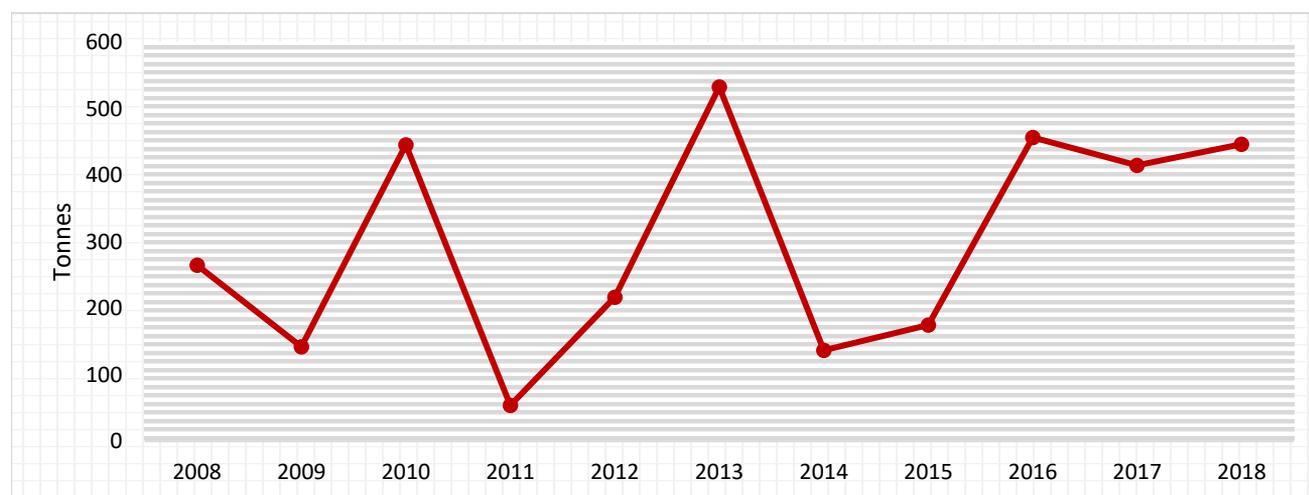
Figure 1: Export volume of vegetables³



Source: FAO, 2018

Figure 1 above demonstrates the export volume of vegetables in Tanzania. It shows Tanzania has witnessed impressive growth of export volume of vegetables from 4893 tons in 2012 to 31,030 tons in 2015. Further, despite notable decline in 2016, export volumes increased by 12 percent between 2017 and 2018. The impressive performance of export volume of vegetables is more likely attributed to the growing demand of fresh vegetables in the EU market.

Figure 2: Export volume of fruits⁴

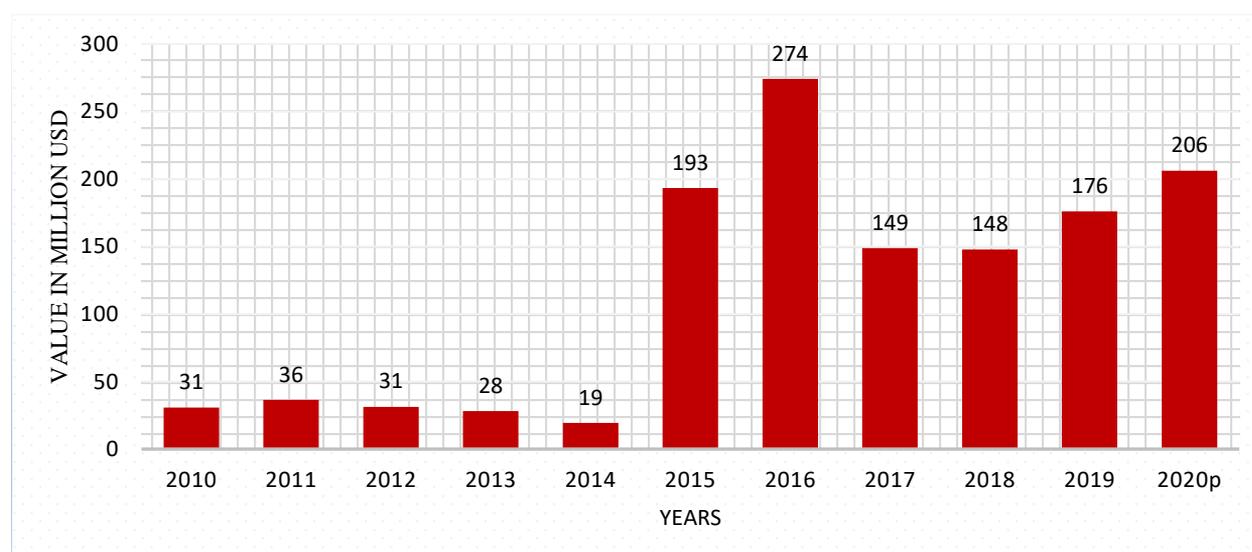


Source: FAO, 2018

Figure 2 above shows the export volume of fruits in Tanzania. It shows that export volume has undergone fluctuations over the past decade. Tanzania experienced export climax of 533 tons in 2013 and export volume has increased to 447 tons in 2018, up from 415 tons in 2017 which is equivalent to 8 percent increase.

The growing demand of fruits in global market has created a great export opportunity for Tanzania. Exploitation of such potential is however constrained by pervasive instability of supply chains characterized by weak market linkages between producers, traders and markets, lack of consistency in the delivery of quality fruits associated with lower prices (Dube, Paremoer, Jahari, and Kilama, 2018; Mashindano et al., 2013).

Figure 3: Export value of horticultural products (million US Dollars)⁵



Source: Bank of Tanzania, 2020 and Tanzania Revenue Authority, 2020
p stands for provisional average data of January to September, 2020

³ Based on FAO computation: Vegetables, fresh or dried products August 2016.

⁴Fruits were a combination of; Fruit, dryness, Fruit, freshness, Fruit, preparedness based on FAO estimates.

Figure 3 above shows a trend of export value of horticulture products. It shows Tanzania has experienced an unstable and sluggish growth of export earnings between 2010 and 2014. Tanzania registered impressive increase in export earnings from 193 million USD in 2015 to 274 million USD in 2016. Then a notable decline to 148 million USD in 2018 was noted. A 17 percent increase in export earnings was evident between 2019 and 2020.

This is more likely attributed program interventions through the government and private sectors such as TAHA which focus on seeking markets for the farmers' produce, trainings on better farming techniques including better storage facilities to keep the sector attractive and competitive. Further, the increase in export earnings could be the result of different fiscal reforms by the government such as cutting of duty rate from 10% to zero on packaging papers for a year, reduction of customs duty, exemptions of custom duty on imported agricultural supplements by either individuals or entity engaged in horticulture, abolition of multiple and unnecessary fees and costs. All these efforts are in line with the improvement of the horticulture industry.

Bottlenecks hindering the growth of horticulture in Tanzania

Despite the identification of the horticulture sector as a priority sub sector in agriculture, it is constrained by multiple bottlenecks currently impeding the ability to transform the livelihoods of its farmers. These include: **One, lack of reliable and effective transport networks from the farm gates to the export gates (airports and ports).** Some of the horticultural producing areas are characterized by poor feeder and main roads which lead to long transit time of horticultural products. This is a big obstacle for product quality as most of the products end up being wasted thus losing value before getting to the markets. Considering horticultural products are perishable in nature, long transit time due to poor transport network is more likely to weaken horticulture trade competitiveness of our country.

Two, ineffective trade logistics of horticultural products from the farms to the point of exit (ports and airports). For instance, most of the horticultural products particularly from Arusha are transported via our neighboring country Kenya.

This is because Tanzanian horticulture exporters find it less bureaucratic and more cost-effective. By road transport, it takes about 3 -5 hours to transport horticultural cargo to Jomo Kenyatta International Airport in Nairobi while it takes 8 - 10 hours if the cargo goes through Julius Nyerere International Airport in Dar es Salaam. Further, long trade logistics procedures including prolonged time consumed in checkpoints and weigh bridges, slow customs clearance, lack of specific cargo freighter for agricultural products which includes horticulture and limited cold storage facilities leads to deterioration of the quality of these products thus hindering horticulture competitiveness as these products (fruits, vegetables and flowers) are perishable in nature (Nguni, 2013).

Three, horticulture sub-sector has limited access to input supplies such as fertilizers, improved seeds and credit. Also, horticultural farmers have limited linkage with financial institutions essential in providing them with credit facilities. Therefore, failure of the horticulture farmers to effectively access and utilize these input supplies is more likely to hinder their production capacity hence lower production yields.

Four, post-harvest loss, which hinders the steady and reliable supply of horticultural products. Post-harvest losses occur due to poor handling techniques, limited packaging facilities, poor transport, poor storage facilities of the horticultural products as well as poor marketing and processing. Apparently, in terms of post-harvest vulnerability, fruits and vegetables are more wasted due to their perishable nature (URT, 2019).

Five, limited marketing strategy and information gap hinders horticultural productivity and trade which involves branding of our potential horticultural products in the world market, seeking of potential market sources for our horticultural products and a clear understanding of the international standard requirements for horticultural products. Despite the role played by different horticulture actors such as TAHA in linking various farmers to different market channels, farmers and traders in general have limited to market techniques and information essential in sustaining production and trade competitiveness of the horticulture sub-sector.

Policy recommendations to enhance a competitive horticulture market.

Based on the challenges discussed above that hinder horticulture's productivity and competitiveness, the following measures are recommended for the subsector to prosper:

⁵This brief relied on data from BOT but there is a wide discrepancy in the export values of horticultural products between those reported by Bank of Tanzania and Tanzania Horticulture Association (TAHA).

One, fast tracking logistics of horticulture products from the producers to the point of exit (airports and ports)

This is a crucial factor towards promoting horticulture industry in the country. Given that horticulture products are perishable, they need to be treated differently from other cargo. Hence, the government needs to ensure a smooth transportation of horticulture products through reduction of roadblocks, reduction of customs clearances procedures at the airports and ports and ensure availability of cold storage facilities at the export gates.

Two, provision of production incentives to horticultural farmers in form subsidies, tax reliefs towards accessing opportunities such as access to inputs should be considered.

In making sure that farmers produce high quality and quantity of horticultural products with international standards, the government in collaboration with various horticulture stakeholders need to ensure farmers are equipped with better-improved seeds, fertilizers, as well as lower interest loans. This will foster more engagement of actors in the chain thus boost productivity and trade.

Three, is the enhanced capacity building programs for horticulture value chain actors on better and innovative farming practices, better storage and packaging in line with international standards.

Given that horticulture agriculture is identified as an agro-tech based agriculture which depends on technical skills and knowledge, the government in collaboration with horticulture stakeholders need to update production skills and knowledge of value chain actors through trainings, workshops, seminars and dialogues. However, it should not end only on capacity building, but monitoring is highly recommended to check whether value chain actors are implementing the knowledge and skills acquired.

Four, investment in research and development is highly recommended in boosting the horticultural trade competitiveness.

As Tanzania strives to enhance its export competitiveness of horticultural products, research and development is an inevitable driver towards the realization of its export potential. Unless Tanzania recognizes the potential of investing heavily in research and development in enhancing horticulture productivity and trade, its horticultural exports are more likely to remain less competitive in both regional and international markets.

Five, digitalization of the horticulture sub sector through adaptation of digital technology in providing advisory extension services and market information to the horticulture value chain actors.

Despite TAHA having a Management Information system (MIS) that provides various information to the farmers such as prices of products, buyers' details, transport details and production techniques details via text messages, there is need to go extra miles by developing a digital platform such as a phone application that is compatible and detailed with all advisory information related to all activities of the horticulture value chain. This will help bridge the gap of market information and services to the producers such as accessibility of market opportunities, input opportunities, financial opportunities, better storage facilities, as well as post-harvest techniques and better production techniques.

References

- Dube, S. C., Paremoer, T., Jahari, C., & Kilama, B. (2018). *Growth and development of the fruit value chain in Tanzania and South Africa* (Working Paper 5/2018). Retrieved from South Online: <https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/5b7180d24fa51a50b7d3ba88/1534165219063/Tanzania+RVCs-Fruit+value+chain+WP.pdf>
- EUC. (2019). *Agri-Food Trade Statistical Factsheet: European Union - Tanzania*. Retrieved from Brussels: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agrifood-tanzania_en.pdf
- Euromonitor International (2018). Fresh food global industry overview. 40p
- Fruit, F. A. O., & Essentials, V. Y. D. (2020). The International Year of Fruits and Vegetables 2021. *Background Paper*.
- Guijt, J., & Reuver, R. (2019). *Seed companies and the Tanzanian horticulture sector: case study*. Wageningen Centre for Development Studies.
- ITC. (2020). *Tanzania's trade in times of COVID-19: An analysis of the avocado, coffee, spices and tea sectors*. Retrieved from Dar es Salaam:
- Match Maker Associates. (2017). Mapping of production of fruits and Vegetables in Tanzania. Study commissioned by the Embassy of the Kingdom of the Netherlands. Embassy of the Kingdom of the Netherlands in Tanzania
- Mashindano, O., Kazi, V., Mashauri, S., & Baregu, S. (2013). Taping Export Opportunities for Horticulture Products in Tanzania: Do We Have Supporting Policies and Institutional Frameworks?
- Ministry of Agriculture, Nature and Food Quality (2020) *The potential of strengthening skills and training capacity to boost the Tanzanian horticulture sector report*. Netherland Embassy Dar es salaam. <https://www.agroberichtenbuitenland.nl/actueel/nieuws/2020/11/11/the-potential-of-strengthening-skills-and-training-capacity-to-boost-the-tanzanian-horticulture-sector>
- Nguni, W. (2013). Supply chain challenges constraining horticultural enterprises in Tanzania to achieve international market reliability.
- Nishwitz, J. (2009). Sustainable Horticultural Crop Production in Tanzania.
- TAHA. (2020). Horticulture in Tanzania. June-October Newsletter.
- URT (2015). Agricultural Sector Development Strategy (ASDS) - II 2015/2016 - 2024/2025
- URT. (2019). National Post-Harvest Management Strategy-NPHMS 2019-2029. Ministry of Agriculture

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This policy brief is an output of the project “Targeted support to strengthen capacity of policy makers, exporters, and trade associations to assess and review trade and related economic policies to promote trade competitiveness and diversification for widening trading opportunities with the EU”.



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