#### KENYA HORTICULTURE COMPETITIVENESS PROJECT (KHCP)

### **Global Competitiveness Study:**

Benchmarking Kenya's Horticulture Sector For Enhanced Export Competitiveness



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#### **Executive Summary**

Kenya's horticulture industry continues to face growing competition both regionally and globally. Although the country is the most successful producer and exporter of fresh produce and flowers in sub-Saharan Africa, it has been losing market share in the global horticulture market. The loss of duty free access and the failure to agree on final Economic Partnership Agreement (EPA) terms could cause massive losses for the industry and the farmers who support it.

In an effort to identify those areas where the government, private sector, and donor communities can support the industry's continued growth, the USAID-Kenya Horticulture Competitiveness Program (KHCP) commissioned this report to identify and diagnose critical constraints to the industry's competitiveness.

This analysis benchmarks Kenya's horticulture industry against key competitors globally to identify areas where Kenya is most in need of reform, then proposes specific, actionable activities to address these barriers to competitiveness. By benchmarking Kenya's horticulture industry against key competitors globally, reform priorities become clearer: of the 15 topics covered in this analysis, Kenya scored average to above average across 10 of them and below average across five of them. Key reform priorities coming out of this analysis include:

- Improving farm level competitiveness
- Branding Kenya as a premium quality exporter
- Streamlining and expanding Kenya's maritime transport
- Improving public-private cooperation to enhance food safety compliance

- Increasing cooperation of exporters
- Lowering the cost and time burden of regulatory compliance
- Consolidating Kenya's export promotion efforts
- Streamlining firm level export operations

USAID-KHCP envisions the final result of this effort supporting the Kenyan industry in multiple ways: (a) to inform the agriculture community of the areas where they are most (dis)advantaged vis-à-vis global leaders in the sector, (b) to inform the government's own strategic review process specific to the areas most in need of government support, (c) highlighting specific market opportunities, and (d) guiding donor resources to maximize impact on the horticulture sector.

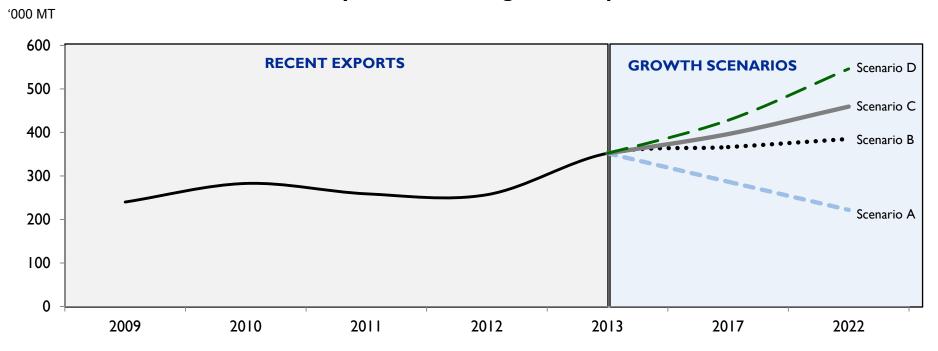
The purpose of this Global Competitiveness Study is to provide the Kenyan horticulture sector with a snapshot of its current level of competitiveness and a vision for a better way forward.

A number of recent analyses have highlighted serious concerns relating to the future of Kenya's horticulture* sector.
This report was commissioned to shed light on those areas most in need of public and private attention to increase Kenya's competitiveness.
<ul> <li>The analysis focuses on two areas in particular:</li> <li>Benchmarking Kenya's competitiveness against key international competitors.</li> <li>Developing a comprehensive list of market/crop combinations that are most strategic for Kenyan exporters in the near term.</li> </ul>
A "competitiveness action plan" follows the analysis, detailing critical, high impact interventions needed to improve Kenya's standing in global horticulture markets.

<sup>\*</sup> Except where stated otherwise, the report focuses exclusively on the fruit and vegetable segments of the horticulture market, and does not include coffee, tea, or floriculture.

Growth in the horticulture sector hinges on critical public and private responses to recent underperformance. We built out four possible trajectories.

#### Kenyan Fruit and Vegetable Exports

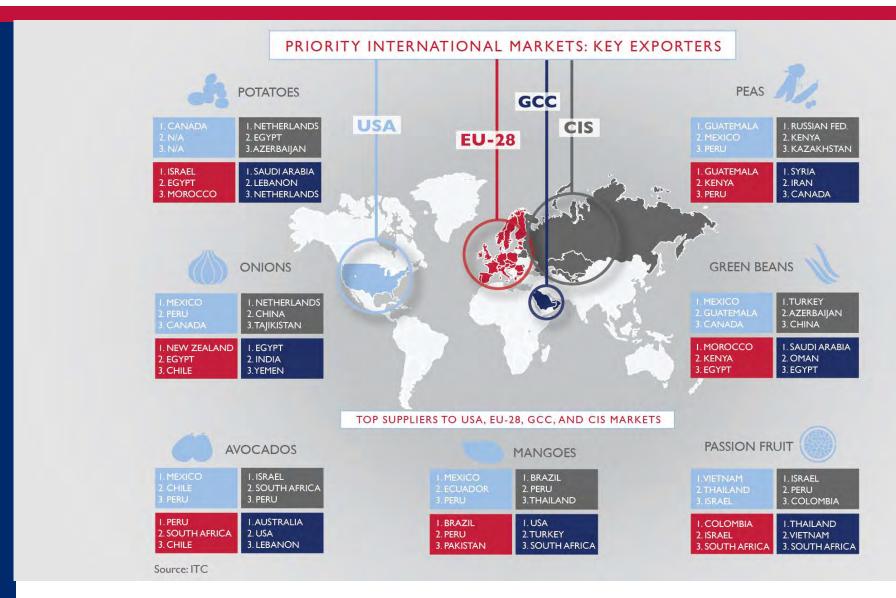


- □ Scenario A assumes -5% annual growth in line with growth rates between January and March 2014
- ☐ Scenario B assumes continuation of the status quo of 1%, growth in line with the last five years
- ☐ Scenario C assumes 3% growth, an achievable rate in the near term
- □ Scenario D assumes 5% annual growth in line with growth of high performing international benchmarks

To fully capture the competitiveness of Kenya's horticulture sector, we benchmarked critical cost elements including cost of inputs, production, logistics and regulatory compliance. This is one step in a larger reform process.



## We analyzed global and regional imports of the products under review to establish a foundation for a more aggressive export promotion strategy.



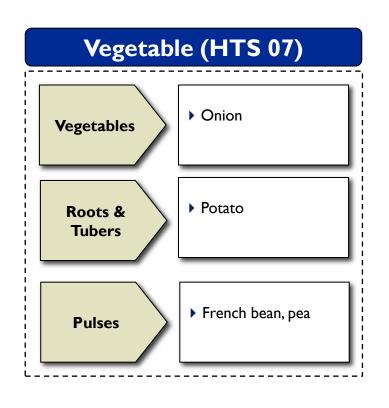
We conclude the report with a detailed "competitiveness action plan", providing the government, private sector, and donors with a clear path to a more competitive horticulture sector.

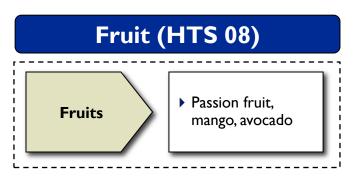
Major challenge	Priority actions
Improve farm level competitiveness	Improving the effectiveness of GAP and postharvest training to farmers monitored against technology adoption rates, yield improvements, and levels of crop quality/losses. Increase access to affordable irrigation to bolster status as year-round supplier.
Brand Kenya as a premium quality exporter	Create and launch Brand Kenya and crop specific brands for export promotion of quality assured horticulture products.
Streamline and expand Kenya's maritime transport	Coordinate efforts to merge volumes, increase utilization of reefer container service; explore ways to improve direct liner service to key distribution hubs in the EU.
Improve public-private cooperation to enhance food safety compliance	Increase support for KEPHIS to make necessary legal and regulatory changes. Increase severity of penalties for repeat offenders; increased scrutiny of outgrower schemes for agrochemical management, traceability, and contractual loyalty.
Increase cooperation of exporters	Pool industry resources to reduce value chain costs and increase GlobalGAP compliance; increase aggregation, communication and R&D to gain competitive advantage.
Reduce the regulatory burden across the horticulture sector	Increase coordination of border agencies, eliminate county cess, reduce the time for licensing, and other regulatory controls.
Consolidating Kenya's export promotion efforts	Revise existing framework for export promotion clarifying and differentiating mandates for key stakeholders; increase presence at international forums focusing on quality presentation above all else.

#### **Report Outline**

- I. Methodology
- II. Baseline Analysis
- III. International Benchmarking
- IV. Export Market Potential
- V. Competitiveness Action Plan

I. Methodology: Seven different crops are included in this analysis. Each of these crops currently represents an important part of the export portfolio or is considered to have great potential in the near future.





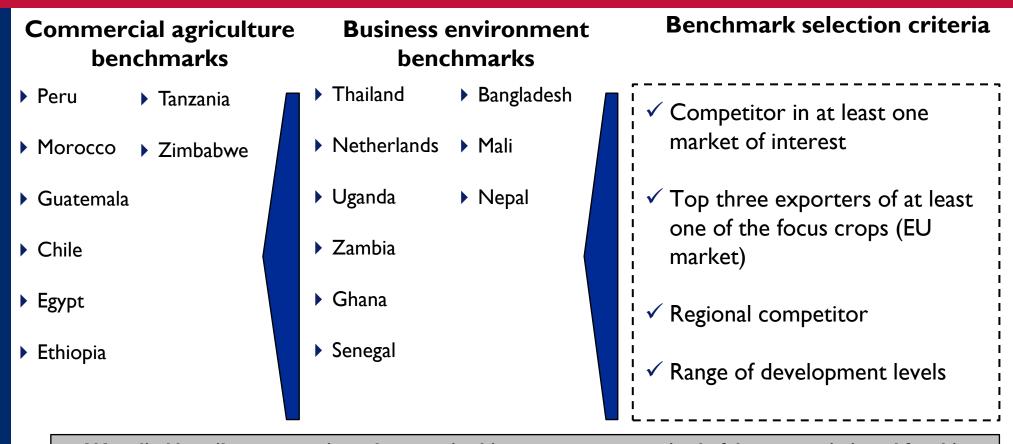
Of the seven crops selected for review, we chose crops representing different production zones, exporter characteristics, and demand and growth profiles.

We assessed the horticulture sector's performance using a variety of quantitative and qualitative tools to better understand the challenges and opportunities existing up and down the supply chain.

- Extensive review of past reports conducted for the government of Kenya and donors.
- Interviewed a wide array of industry experts, from the private and public sector, including producers, exporters, transporters, retailers, regulators, and other agriculture experts.
- Utilized a "key informant" methodology to identify and collect data from leading agricultural experts in each country.
- Sent written surveys by email to contributors in Chile, Egypt, Ethiopia, Guatemala, Morocco, Peru, Tanzania, and Zimbabwe. In person interviews were held with experts in Kenya and buyers in the EU and GCC.
- ☐ Compiled a comprehensive database of horticulture export statistics, cross-referenced from multiple sources to ensure data consistency.



Using two unique data sets and a wide array of publicly available data we were able to benchmark Kenyan horticulture across 25+ areas to drive our analysis.



We relied heavily on two unique data sets in this report, one comprised of data commissioned for this study, and the other data coming out of the USAID/Agribusiness Regulation and Institutions (AGRI) Index. Other sources of data, including the World Bank's Agribusiness Indicators and the World Economic Forum's Global Competitiveness Index, were also used to build a comprehensive picture of Kenya's relative competitiveness in the horticulture sector.

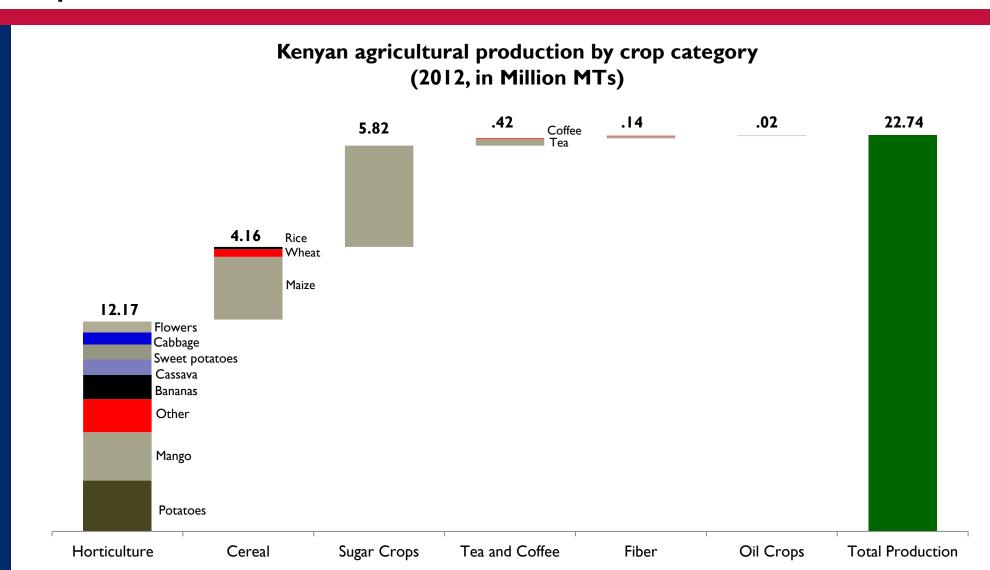
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### II. Baseline Analysis: This section is broken into six parts and provides readers with a review of recent sector and crop performance.

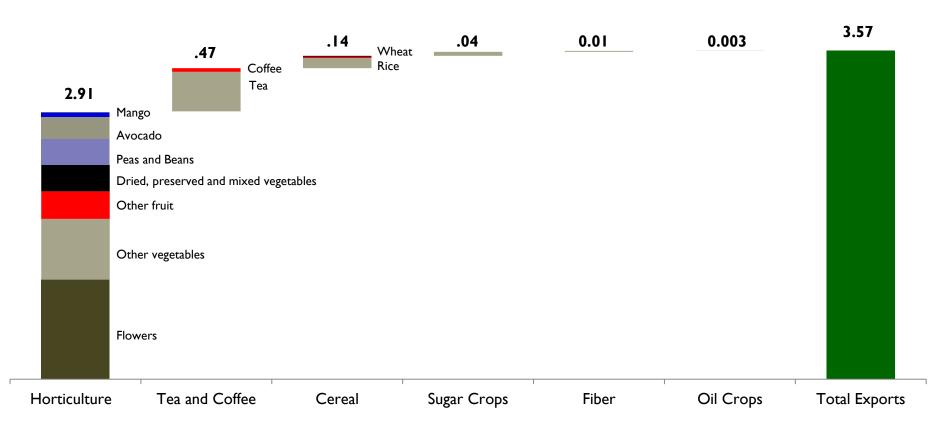
- i. Production
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- v. Market dynamics influencing Kenya's export competitiveness
- vi. Fruit and vegetable sector outlook

Horticulture represents the largest crop category in Kenya, followed by sugar crops and cereals.



## The breakdown of Kenyan agriculture exports by volume largely mirrors local production patterns.

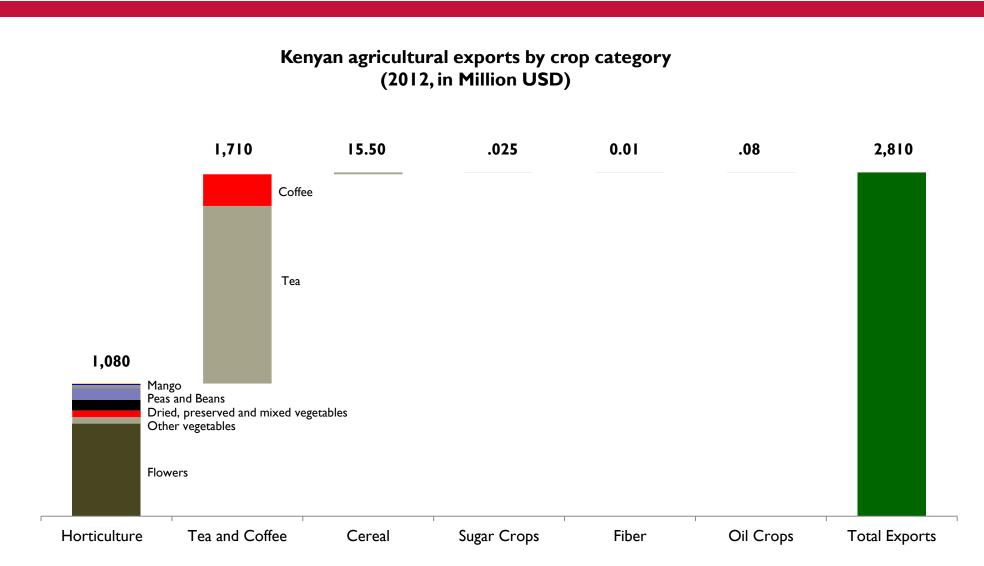




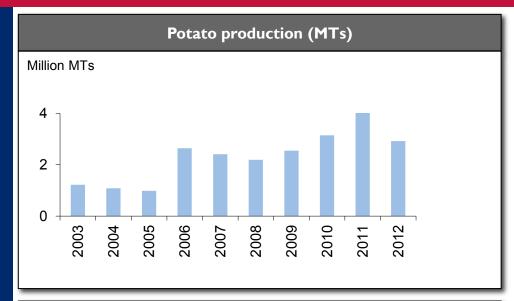
Source: UNCOMTRADE, Kenya Flower Council, Tea Board of Kenya, Coffee Board of Kenya

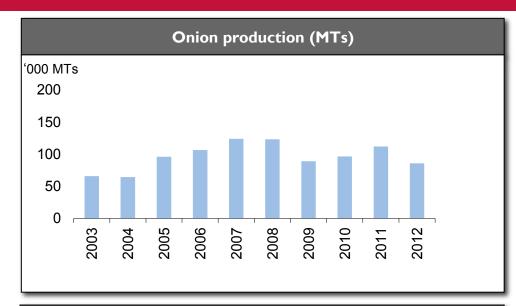
NB: The Tea Board of Kenya reports 429,600MT of exports against 369,200 MT in production. The difference is interpreted as export of carryover stocks.

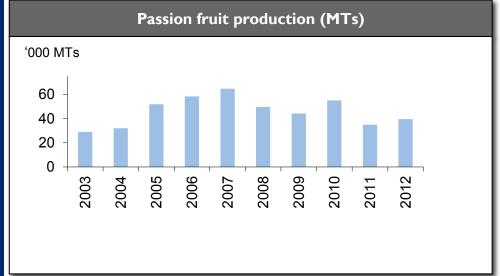
# The breakdown of agriculture exports by value shows a heavy reliance on tea and flower exports.

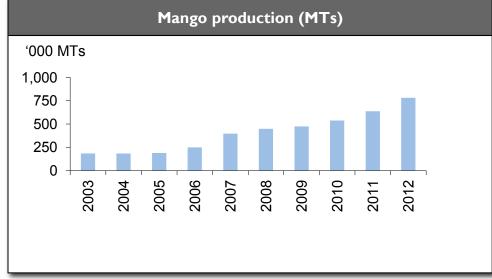


The products under review have a mixed record of production growth; mango and peas stand out as recent successes.



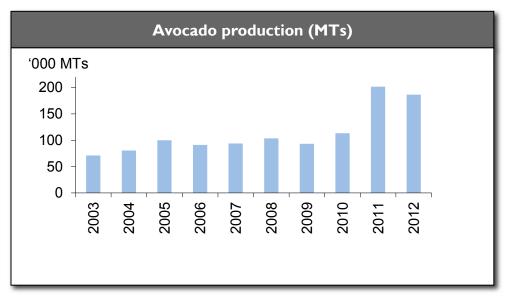


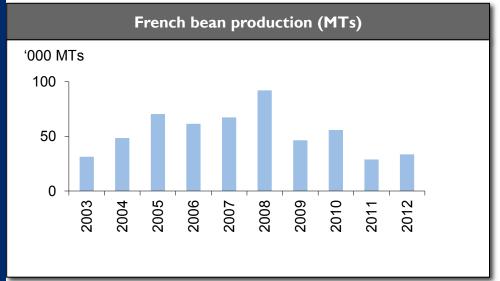


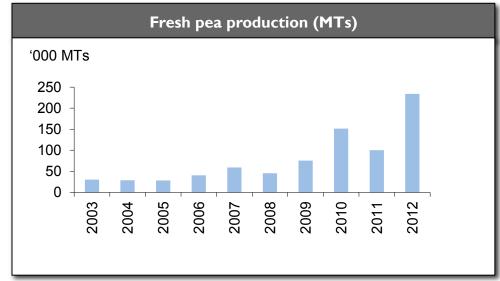


Source: ITC, FAOSTAT

Avocado and pea production have trended upwards while French beans have been trending downward for the last five years.







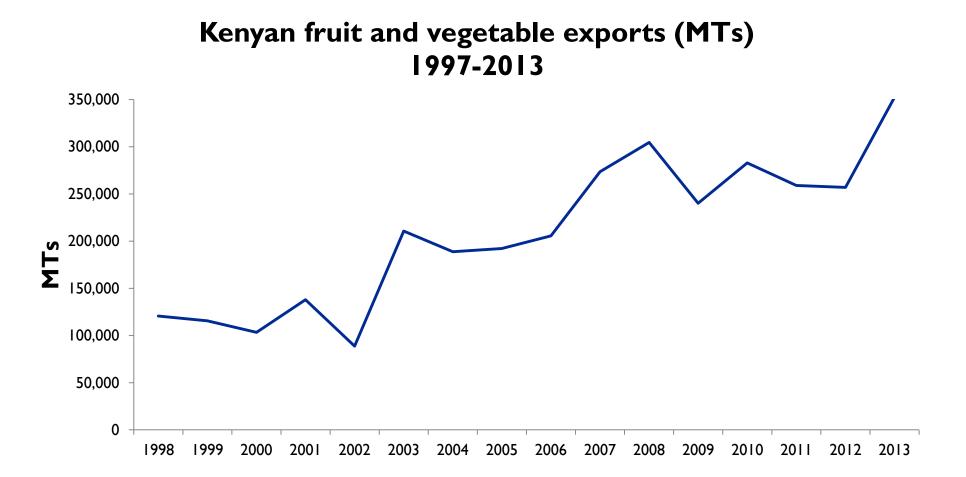
Source: ITC. FAOSTAT

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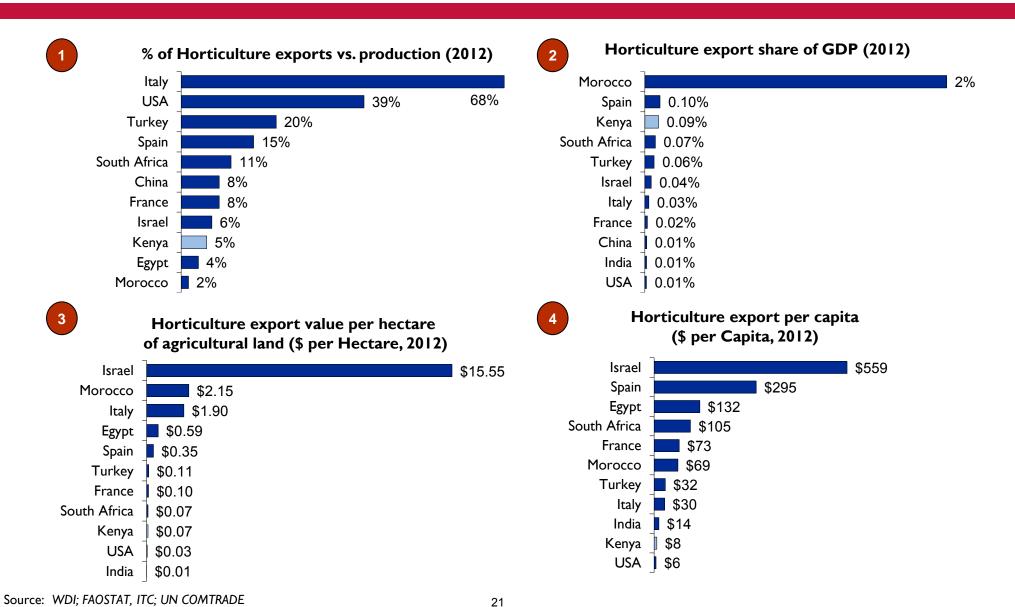
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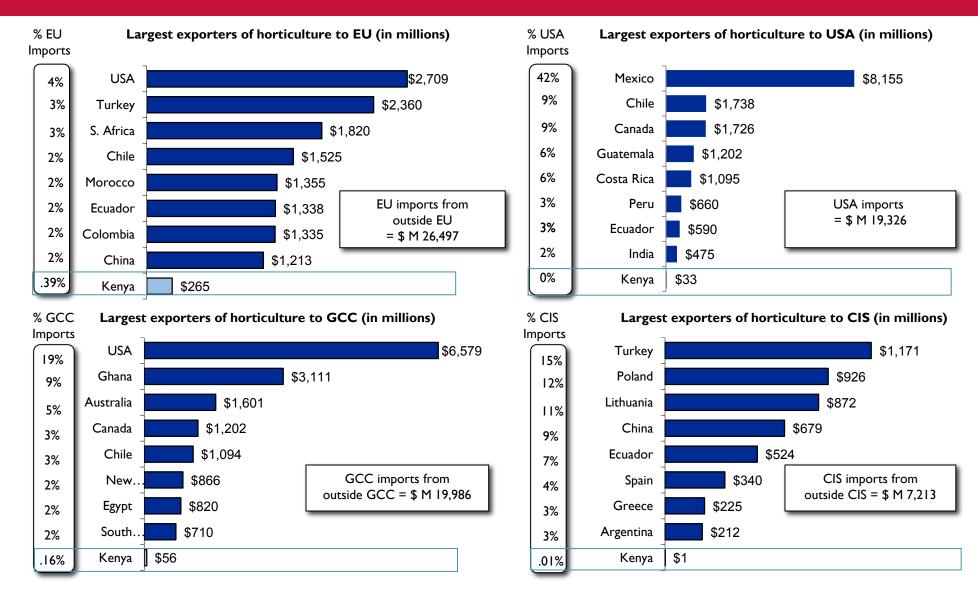
Fruit and vegetable exports have grown at a consistent pace for the last 15 years—what the next 15 look like will depend on the sector's response to current threats and opportunities.



Kenya's export performance remains well below its potential according to industry experts, given its agricultural production, size of economy, population, and arable land.

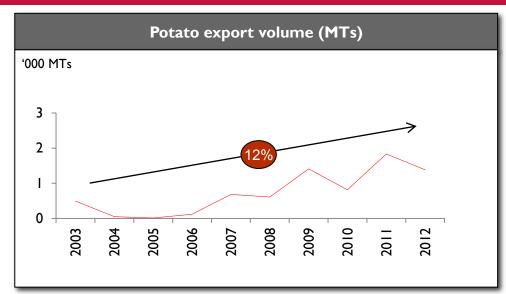


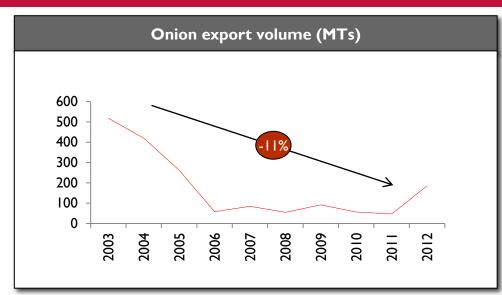
# The country is still a niche supplier in most export markets of interest but remains well-positioned across a number of core export products.

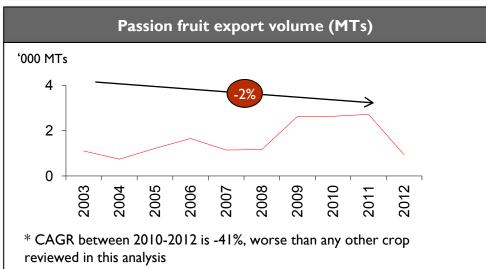


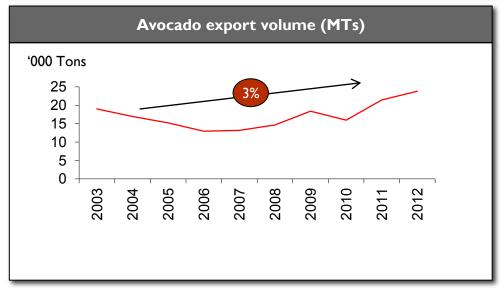
Source: FAO STAT; ITC

## Each of the crops under review experienced significant growth in export volume in recent years with the exception of passion fruit and onion.

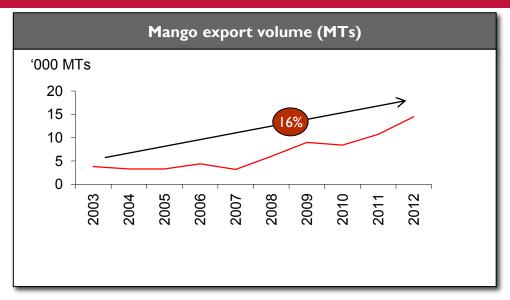


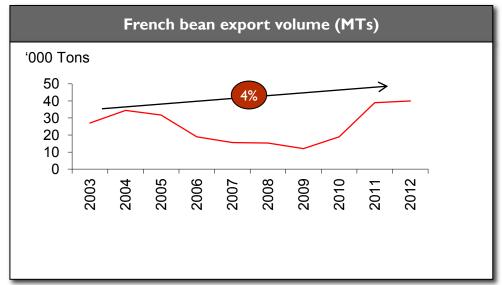


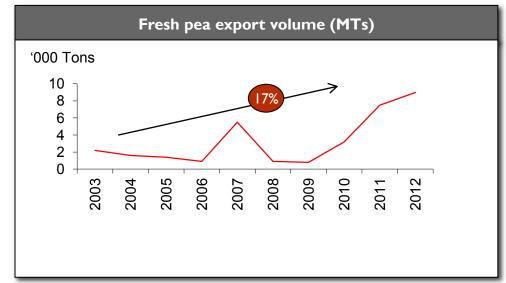




Mango and fresh pea exports experienced particularly strong growth over this ten year period, growing at 16% and 17%, respectively.

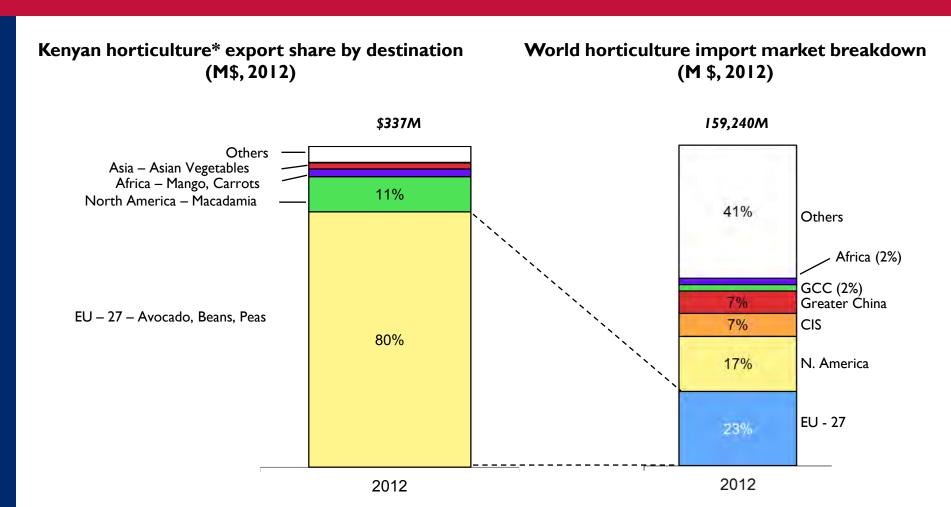






Source: ITC, FAOSTAT

Kenya directs most of its fruit and vegetable exports – mainly fresh beans and peas – towards Europe, the largest importer of horticultural products in the world.

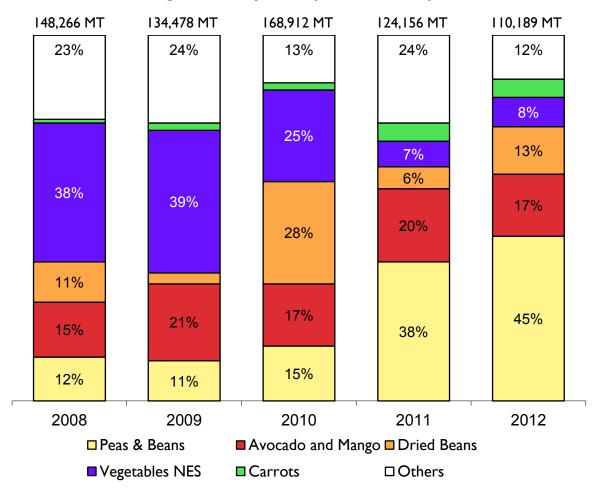


Source: ITC; UN COMTRADE

<sup>\*</sup> For the purposes of this analysis, only fruits, vegetables and nuts are considered

## Markets outside of the EU, notably Uganda and India, show the continued importance of export diversification.





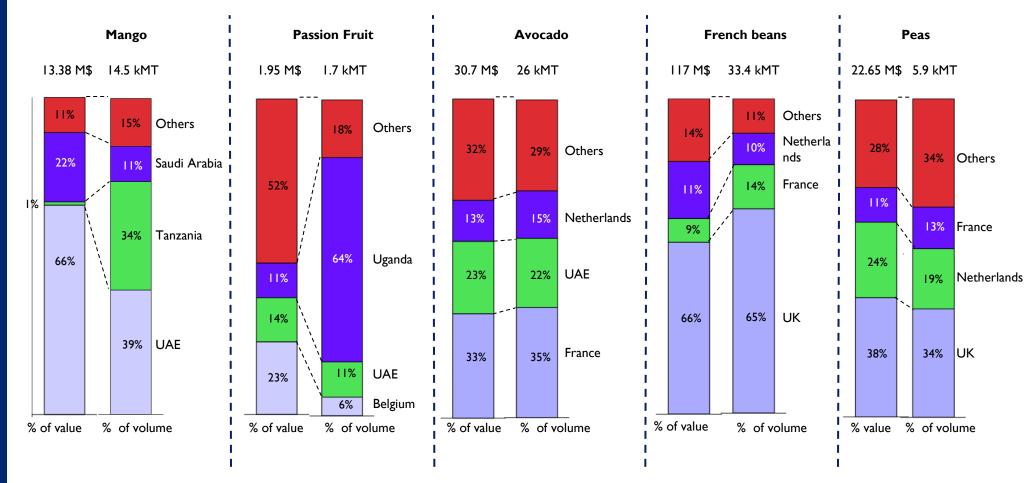
#### Main import country & mkt. share

Total Combined				
Others				
0706	Carrots – Uganda 44.5%			
0709	Vegetables NES UK 97% (Asian Veg)			
0713	Dried beans – India 57.2 %			
0804	Mango – Uganda 35%			
0804	Avocado – France 53.2%			
0708	Peas – UK 35%			
0/08	Beans – UK 59.5%			

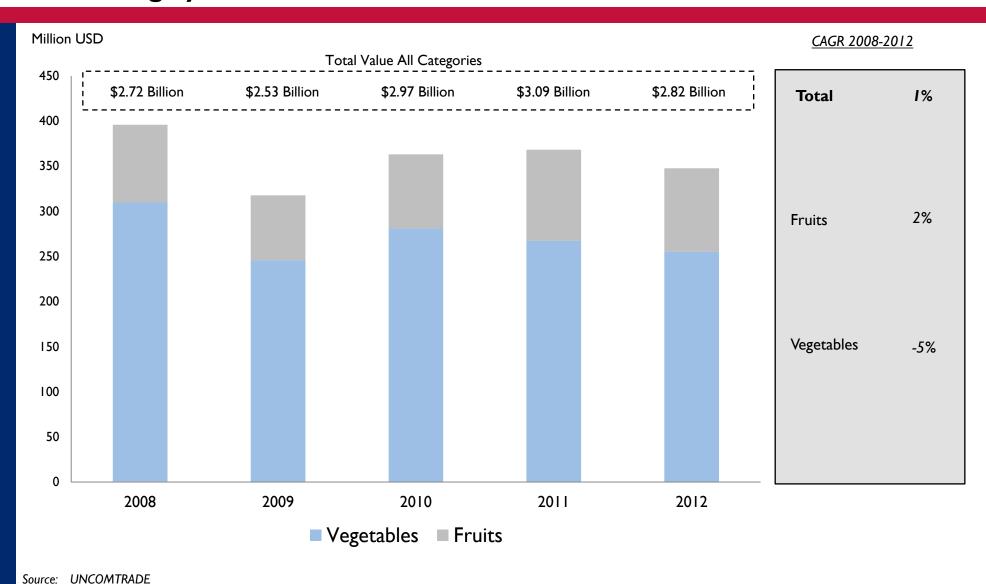
Source: FAO STAT; UN COMTRADE; ITC for breakdown of countries importing

On an individual crop level, Kenyan exporters tend to rely heavily on two to three markets for the majority of their sales, implying potential for further diversification.

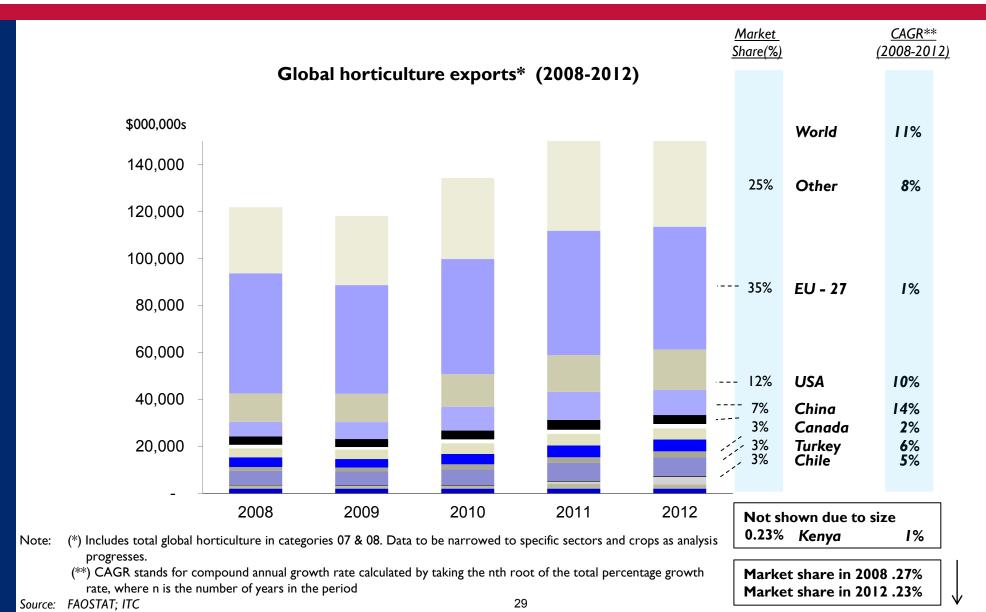
### Market Distribution of Selected Kenyan Horticulture Commodities (2012)



Fruit and vegetable export values have grown at markedly different rates in recent years with fruit growing by 2% over the last five years and vegetables contracting by 5%.



Despite a strong foundation, Kenya's horticulture sector has lost market share and achieved growth rates well below benchmark countries over the last five years.

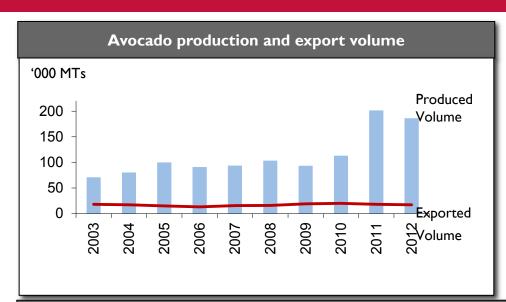


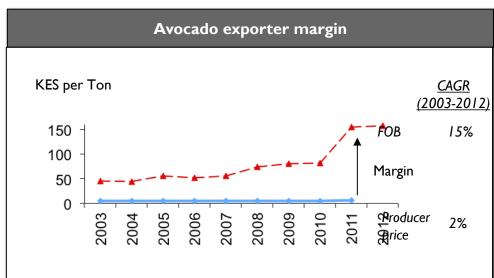
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#### Avocado export volumes have failed to keep pace with production growth while gross margins for exporters remain comfortable.





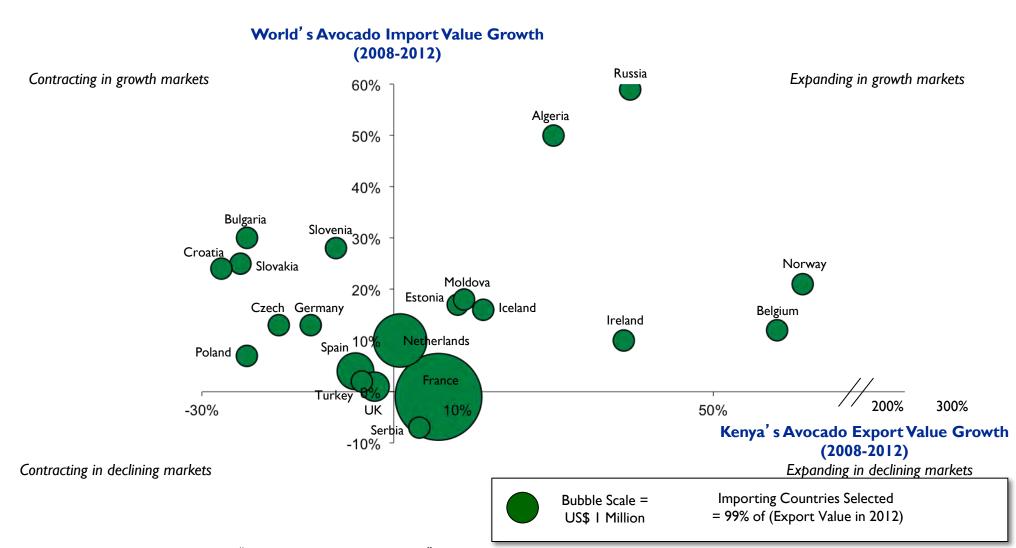
#### Avocado at a glance

- Avocado production led by smallholders who only have a few trees; the value chain is not yet benefitting from economies of scale in production.
- Kenya no longer sells its avocado at a discount and since 2010 has been slowly increasing prices to meet the world average price in 2012. This has predominately been driven by one firm.
- Margins for exporters have increased considerably in the last four years but this situation is not expected to last. Exporters report stiffening competition with Latin American producers who may be contributing to a glut in the EU market.
- Lack of supply consistency hurting prospects for Kenyan growth in the avocado market.
- Strong growth in global demand will continue to provide Kenyan exporters with opportunities, some of which will be in new markets.
- Exporters report an increased push towards organic certification, something that will help growers and exporters increase margins in the face of greater competition

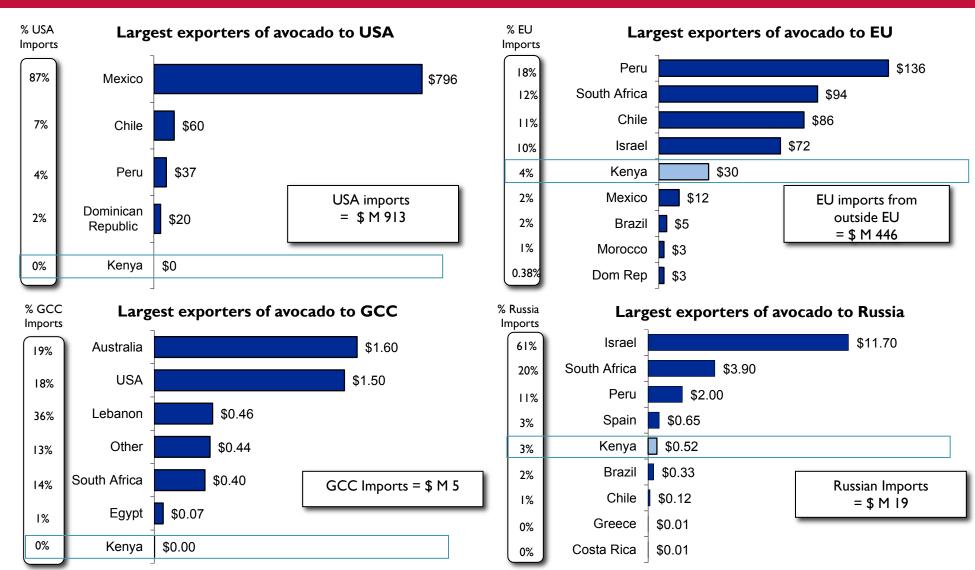
Source: ITC; FAOSAT; Ministry of Agriculture

Avocado export growth is oriented towards the EU where Kenya is gaining market share; EU demand is expected to continue expanding on the back of recent promotional campaigns supported by Peru, Chile, and Israel.

Avocado



### Despite its recent growth, Kenya's positioning remains as a niche supplier of avocado to world markets.

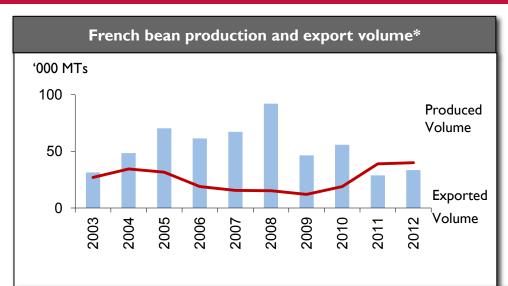


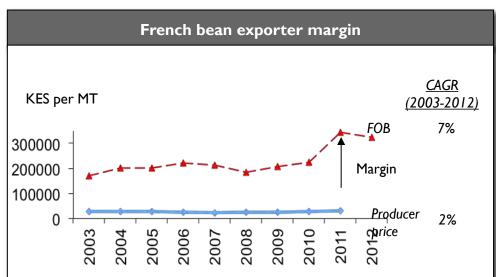
NB: All country values in millions

Source: FAO STAT; ITC, All data in million (M) USD



### Kenyan beans have become downgraded to a commodity pricing structure contributing to barely adequate margins for continued operations.



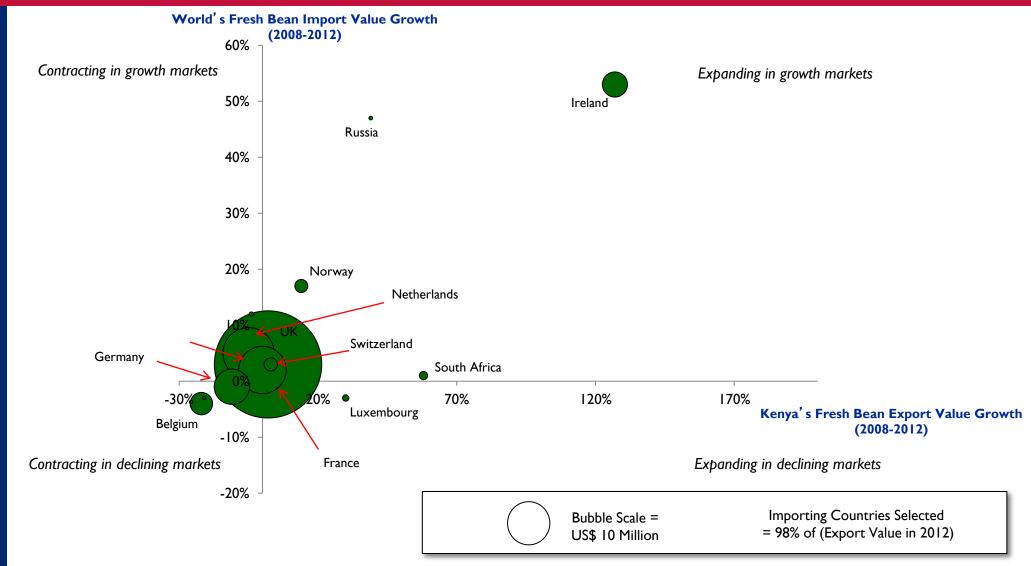


#### French bean at a glance

- French beans have been Kenya's export success story, which led the way for increased horticulture production and growth.
- ▶ By far the largest export crop, accounting for one quarter of Kenya's vegetable exports.
- Decent returns and potential for three crops per year provide smallholders with good income generation potential. Fifty thousand smallholders are involved in the production of French beans, accounting for three quarters of total Kenyan production.\*
- Kenya still sells it's beans at a significant premium to world market prices, but recent increases driven by inflationary pressures are beginning to encourage buyers to look elsewhere for supply.
- Pesticide residue levels and the temporary duty application in the EU (related to the EPA negotiations) are weighing on the Kenyan industry. Increased EU border inspections pose a near term threat to the industry barring improvements in domestic MRL testing and enforcement.

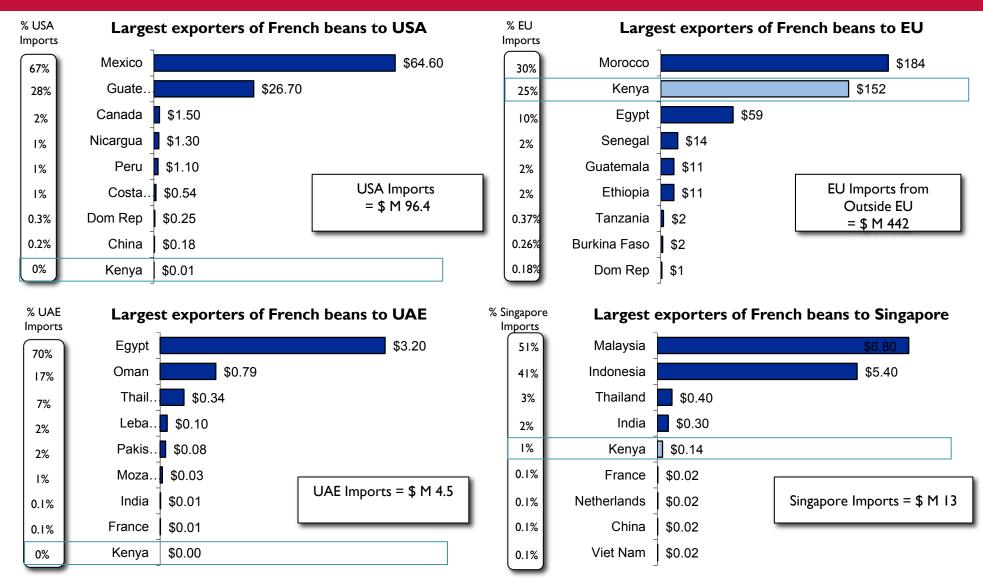
<sup>\*</sup> Where exports exceed production volumes we assume issues of data consistency, common across Kenyan agriculture (\*\*) Margin is defined as the difference between the FOB and the producer price divided by the producer price; Source: ITC; FAOSAT; Ministry of Agriculture, \*SNV 2012 34

French bean export growth has been greatest in small markets across Europe, while stagnating or contracting in larger, more established markets such as the UK.





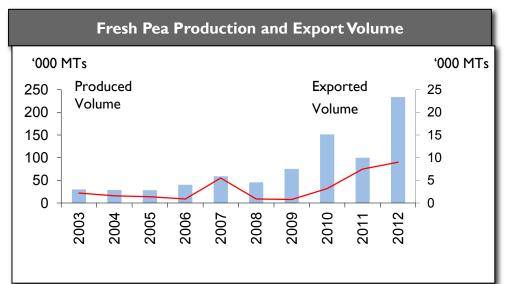
## Despite the growth in the French bean market, Kenya's positioning remains completely tied to the EU.

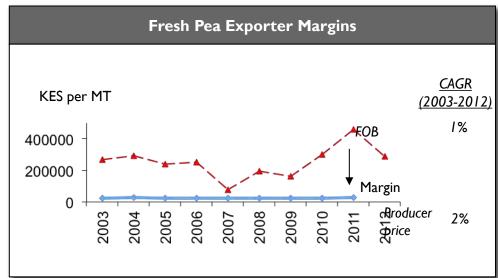


Source: FAO STAT; ITC; Note: All data in million (M) USD



Fresh pea export volumes have failed to keep pace with production growth – although Kenyan produce is still sold at a premium, gross margins for exporters have been narrowing.





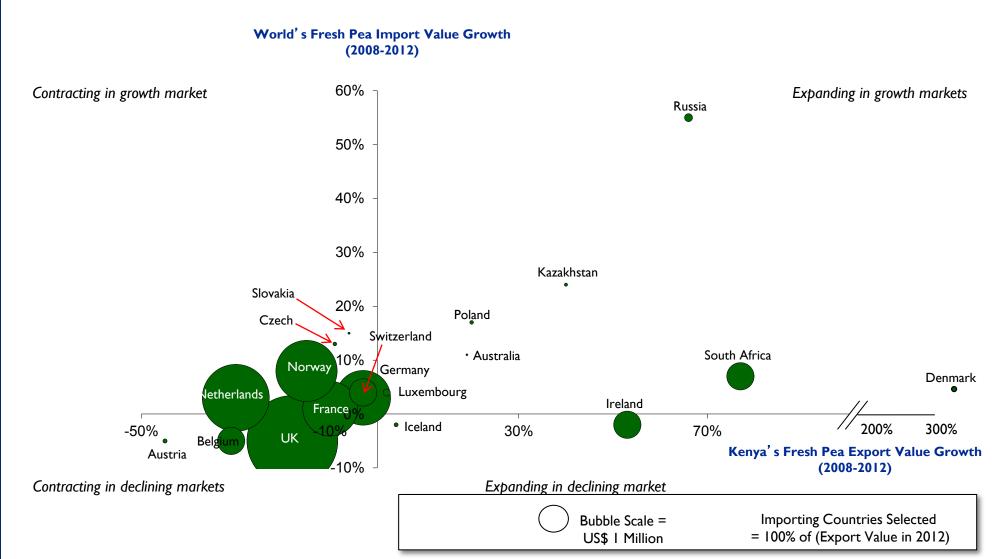
#### Fresh Pea at a glance

- Fresh pea was one of Kenya's key success stories and has helped lead the way for horticulture export growth.
- ▶ Kenya sells its peas at a significant premium to world prices, but since 2011 has come under pressure on international markets. Kenya is now underachieving in its primary markets in the EU.
- Pesticide residue levels and the impending duty application in the EU is weighing on the industry to take appropriate action to support the sector.

(\*) Margin is defined as the difference between the FOB and the producer price divided by the producer price; Source: ITC; FAOSAT; Ministry of Agriculture

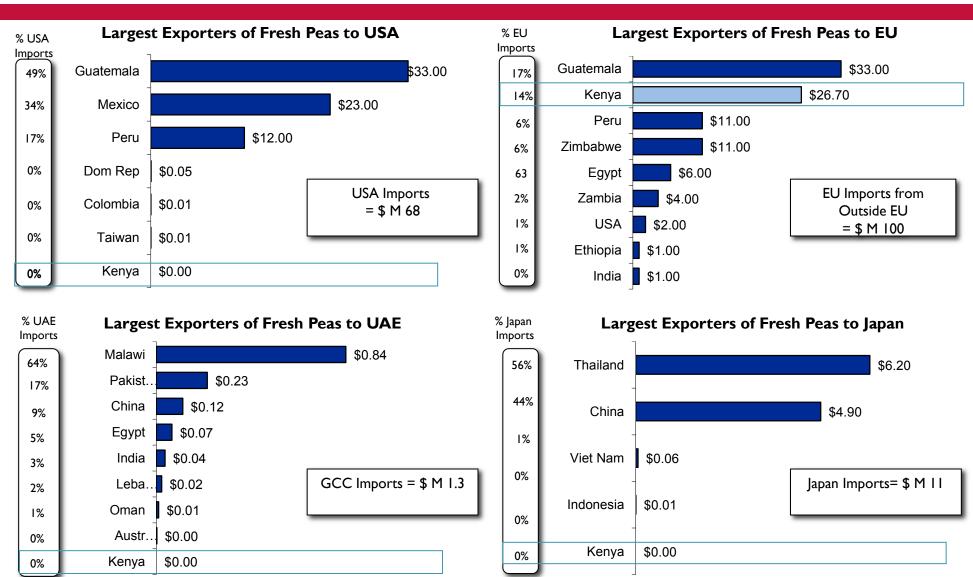


# Fresh pea exports are contracting in the largest European markets but expanding quickly where growth is highest.





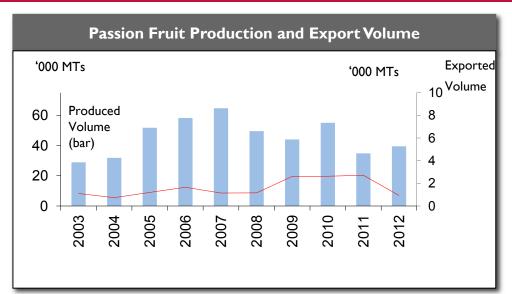
### Kenya remains a major supplier of fresh peas to the EU market but has yet to break into other major export destinations.

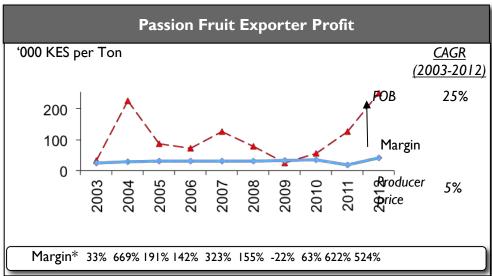


Source: FAO STAT; ITC; Note: All data in million (M) USD



### Passion fruit exports have failed to match growth in production but continue to sell at a premium, assuring higher gross margins for exporters.



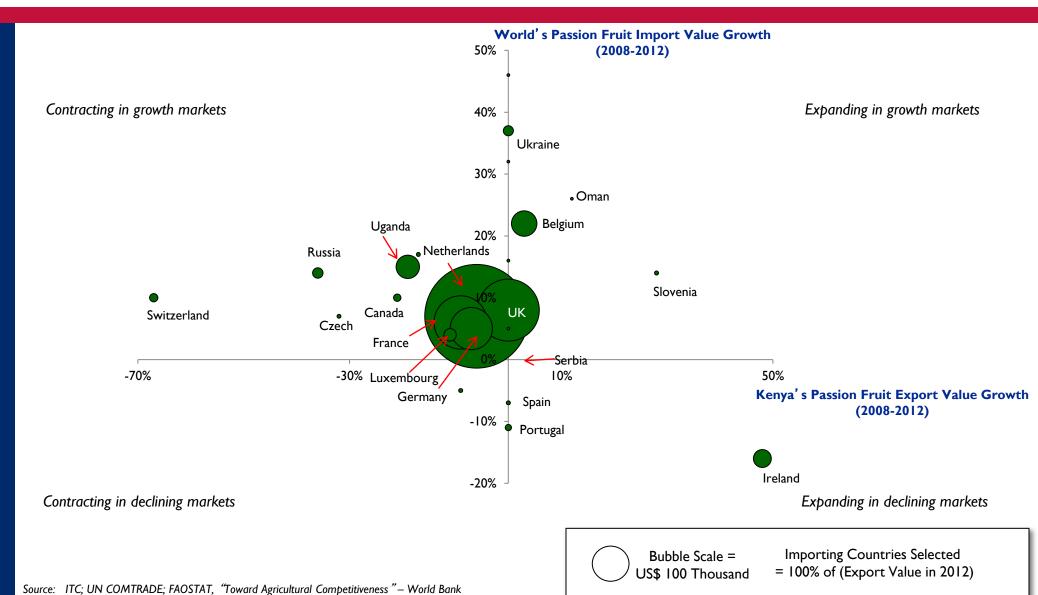


#### Passion fruit at a glance

- Despite capacity to produce year-round, a lack of irrigation limits production to rainy season.
- Passion fruit has been gaining ground as a value-added export from Kenya, but overall has been underachieving in growing markets.
- Kenya is a minor producer by global standards but with noteworthy exports to Europe and strong sales to regional markets. Market opportunities in the GCC and Far East, have not begun to be exploited to the extent possible.
- ▶ While Kenyan export prices have recovered since 2009, premature harvesting is negatively effecting its market growth opportunity.
- Despite the challenges listed above, margins for exporters have increased considerably since 2010.
- ▶ Kenya's share of the EU market declined significantly in recent years (from 26% in 2005 to less than 10% today), largely attributable to MRL and product deterioration related interceptions.

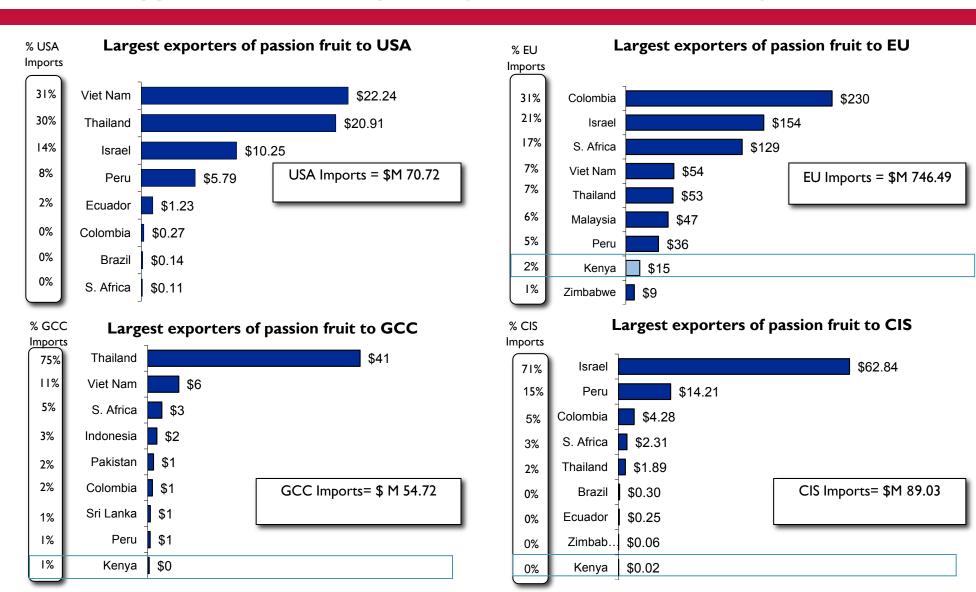


### Kenyan passion fruit exports are generally contracting in growth markets.





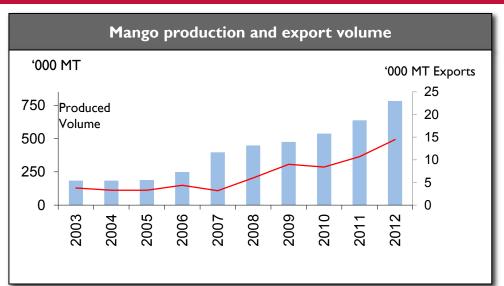
# Kenya is a minor supplier of passion fruit to the EU and other smaller markets, but market opportunities are expanding and there is room for growth.

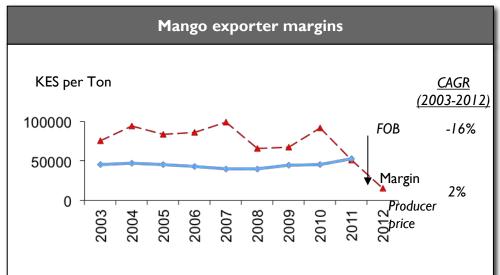


Source: FAO STAT, ITC, Note: All data in million (M) \$USD



### Margins for mango exporters have plummeted while production growth has increased exponentially.





#### Mango at a glance

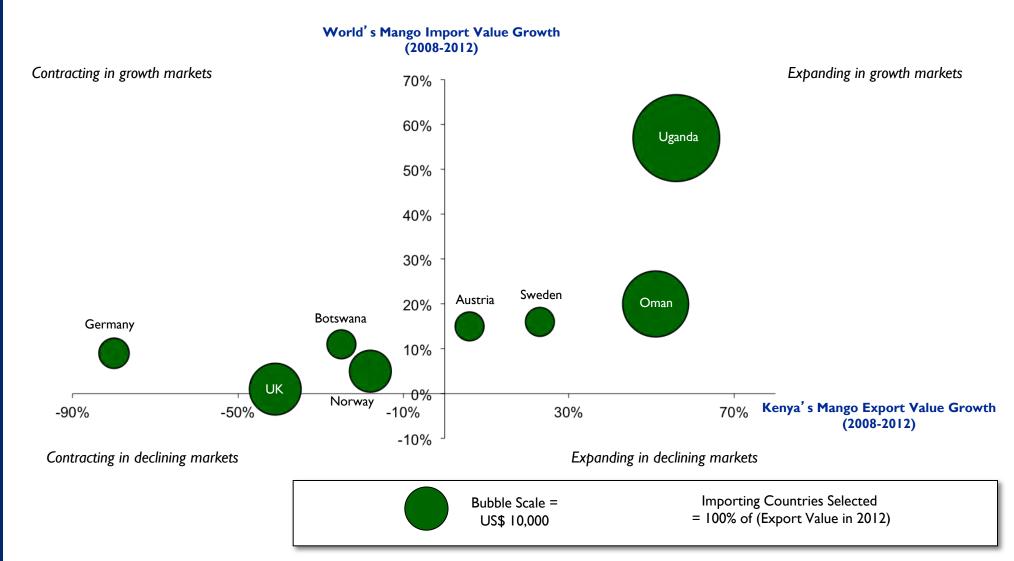
- Mango has been a domestic success story driven by local and regional demand. Despite the increase in volumes, margins have come down sharply in recent years with a strong downward trend in prices, a significant discount to world prices.
- ▶ High postharvest losses, estimated at 40 percent of production, continues to weigh down the volume of produce available for processing and export markets.
- Similarly, the proportion of export grade fruit is still inadequate to fully supply exporter requirements, which together with increases in transport and packaging costs, has reduced export margins.
- There has also been an increased demand for fruit for processing into juice which sells at a significant discount to fresh fruit. Yet processors remain well below capacity, averaging 40 percent capacity.
- The market opportunity in both domestic and export markets remains strong, but only if the sector can increase volumes and quality while lowering time to market.

(\*) Margin is defined as the difference between the FOB and the producer price divided by the producer price; Source: ITC: FAOSAT: Ministry of Agriculture. USAID/KAVES analysis

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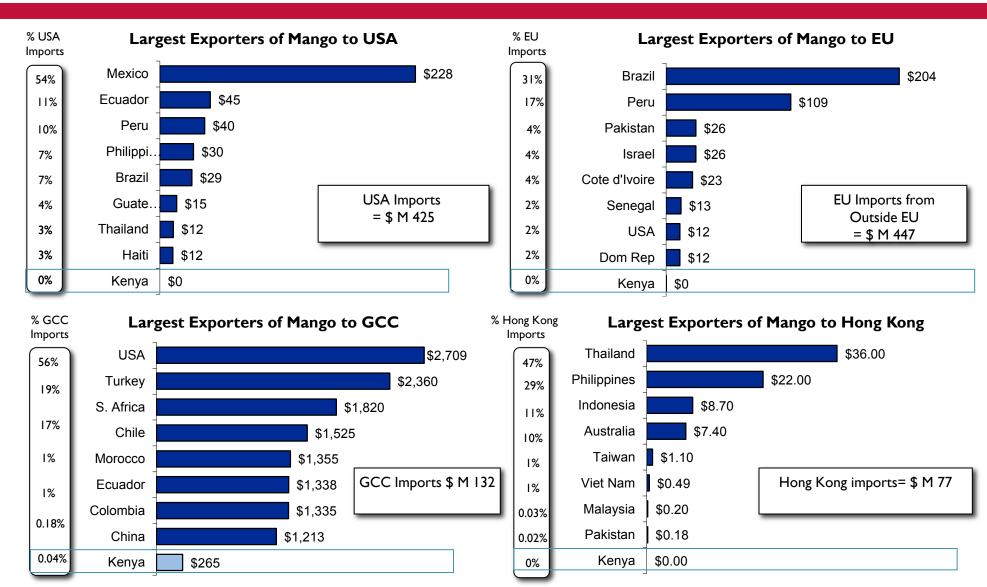
### Mango export growth has been strong towards Uganda with smaller volumes spread through the EU and GCC.



Source: ITC; UN COMTRADE; FAOSTAT, "Toward Agricultural Competitiveness" – World Bank



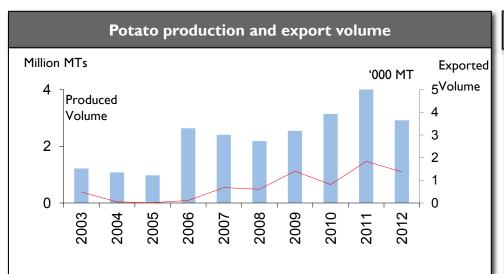
# Despite the recent growth in a few European markets, Africa, and the GCC, Kenya remains a small, niche supplier of mango to the world market.

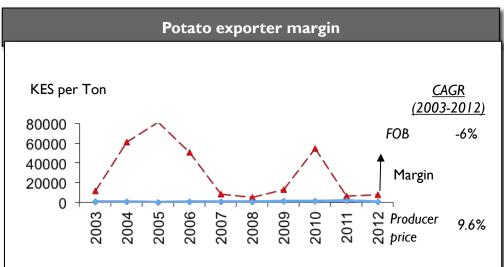


Source: FAO STAT, ITC. Note: All data in million (M) USD



### Gross margins for exporters are under considerable pressure as rapid growth in domestic consumption is increasing competition and prices for raw material.





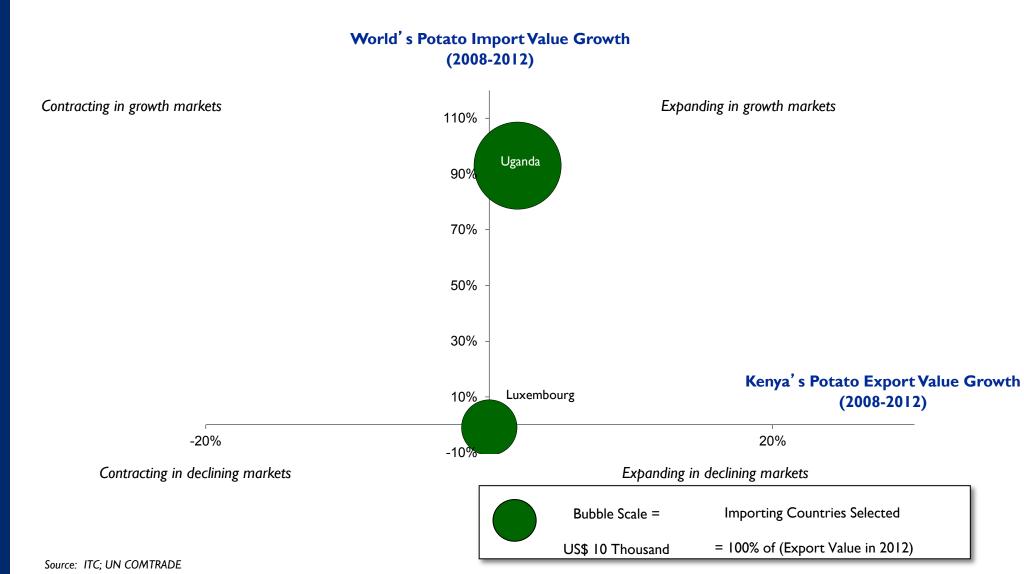
#### Potato at a glance

- Potatoes have not been one of Kenya's more profitable or noteworthy exports though the country is starting from a strong foundation: Kenyan yields are higher than the global average and better than most potato growing countries.
- Margins for exporters are under considerable pressure with producer prices rising with FOB prices falling.
- Imports are also up coupled with increased production and lower exports indicating increasing domestic demand.
- Potato production remains far below its potential, due to limited use of clean seed, low or sub-optimal use of fertilizer, improper use of pesticides, and physical stresses (e.g., weather variation).

(\*) Margin is defined as the difference between the FOB and the producer price divided by the producer price; Source: ITC; FAOSAT; Ministry of Agriculture. USAID/KAVES.

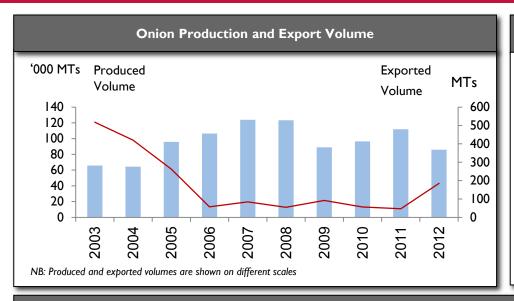


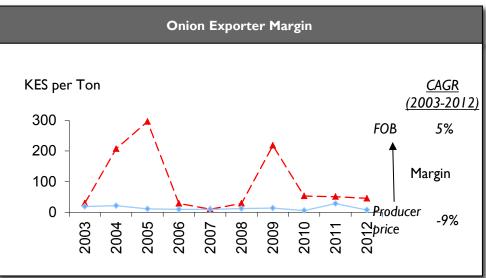
Despite large production volumes, Kenya has not significantly penetrated regional export markets to date. Existing potato exports are primarily low value consignments to Uganda.





Onion export volumes have fallen considerably over the last ten years – while Kenyan produce is still sold at a discount, gross margins for exporters remain comfortable.





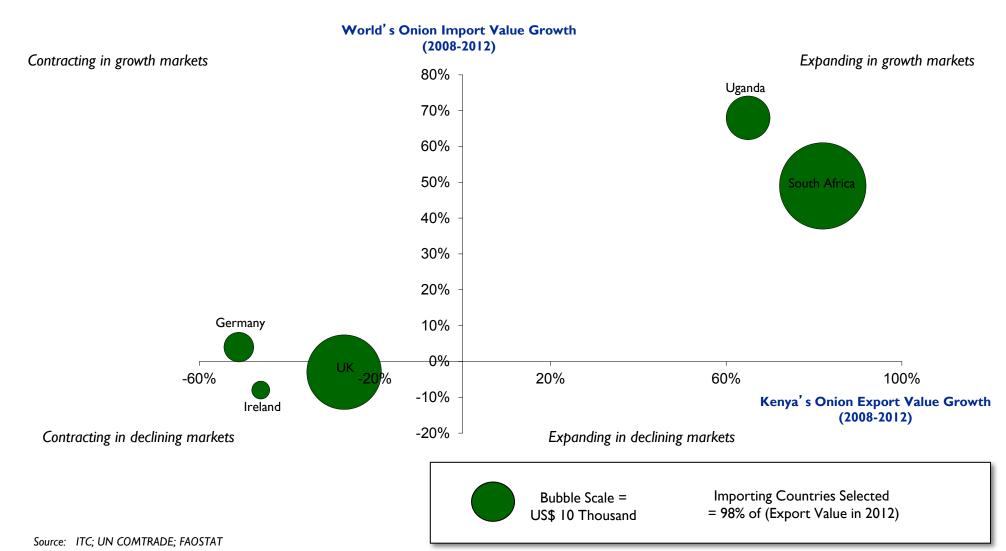
#### **Onion Key Characteristics**

- Onion has not been one of Kenya's export success stories.
- ▶ Kenyan onion exports remain negligible at less than 2,000MT/yr, of which 94% are sold at a significant discount to world prices.
- There is an ongoing increase in imports from Egypt, Tanzania, and India offset by reductions in production and lower exports in 2012 indicating increased domestic consumption.
- There is a significant amount of loss in postharvest handling and increased demand for irrigated production expansion.

(\*) Margin is defined as the difference between the FOB and the producer price divided by the producer price; Source: ITC; FAOSAT; Ministry of Agriculture 48



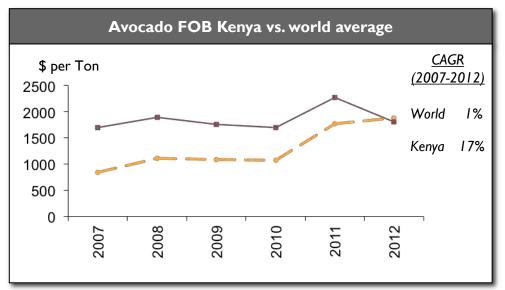
## Onion export growth is focused on African countries where Kenya has been gaining market share.

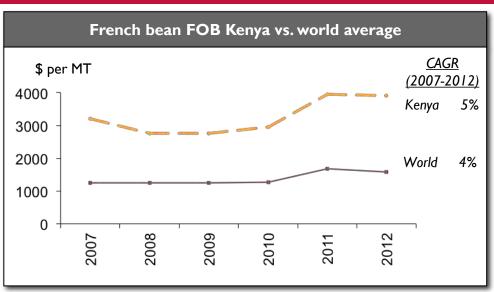


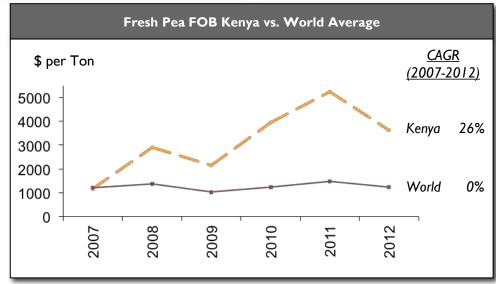
### II. Baseline Analysis

- i. Production
- ii. Aggregated export sector performance
- iii. Crop specific export performance
- iv. Prices
- v. Market dynamics influencing Kenya's export competitiveness
- vi. Fruit and vegetable sector outlook

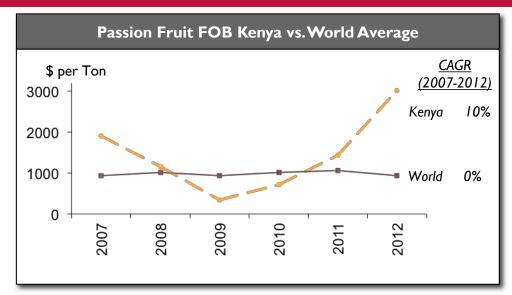
# With the exception of avocado and potato, Kenyan FOB prices tend to be significantly higher than global averages for the same crop.

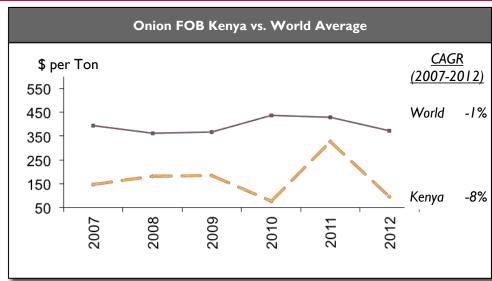


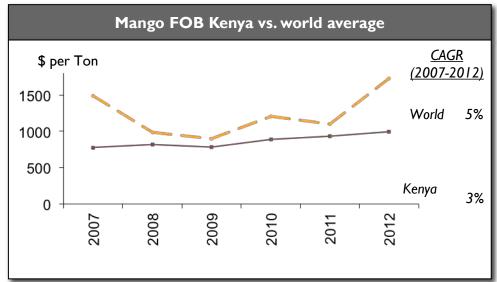


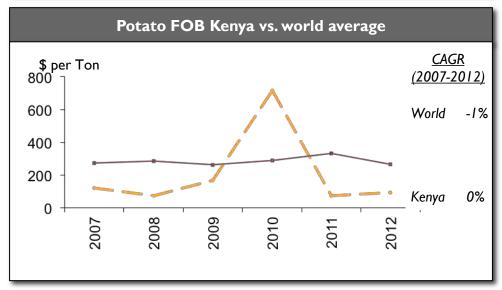


# The Kenyan price "premium" is associated with high costs from farm to market — explored in depth in the benchmarking section of this report.









### II. Baseline Analysis

- i. Production
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- vi. Fruit and vegetable sector outlook

# In addition to the priorities highlighted by the quantitative benchmarking process in Section II, our qualitative review suggests the horticulture export sector faces six key challenges.

	Major Challenge	Description
1	High unit costs at the farm level	<ul> <li>Implementation of Good Agricultural Practices (GAPs) is low, and compounded by limited (or costly) access to inputs, including seed, fertilizer, irrigation equipment, and finance.</li> <li>Postharvest losses are substantially reducing the amount of product available for export.</li> <li>Low yields and inconsistent volumes reduce the attractiveness of Kenya as a supplier.</li> </ul>
2	Little to no branding	<ul> <li>Kenyan products are losing out on brand differentiation opportunities. Horticulture producers are not leveraging Fair Trade or other certification trends. They are not associating their products with the natural heritage of specific regions, and not emphasizing the role of small farmers in producing the crop.</li> </ul>
3	High cost and low option transport to market	<ul> <li>The supply chain from exporter to consignee for maritime transport is hindered by administrative processes and long transportation days to market. Many containers are re-positioned empty from Kenya to other countries.</li> <li>Lack of dedicated investment into Kenya-based lines to main target markets requires multiple stopovers that negatively affect transportation time.</li> <li>Shippers complain that there are more administrative steps to complete than actual logistics steps.</li> </ul>
4	Lack of coordination among exporters*	<ul> <li>Fierce competition among exporters. Each exporter sees their neighbor as competition.</li> <li>Little willingness to consolidate different shipments together towards a common market.</li> <li>While Kenya maintains a number of organizations and agencies that all offer support to exporters, they fail to address the critical constraint of getting export market coordination for Kenyan companies.</li> <li>Limited number of export promotion events and no advertising campaigns</li> </ul>
5	Insufficient systems to handle food safety compliance	<ul> <li>Little current capacity to fully trace horticulture commodities along the supply chain.</li> <li>While KEPHIS is attempting to reign in the problems, the lack of an integrated quality system and required budget hinders its effectiveness.</li> </ul>

<sup>\*</sup> This is apart from the effective airfreight consolidation under the air charter hub at JKIA. Source: USAID-KHCP \$54\$

### II. Baseline Analysis

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- vi. Fruit and vegetable sector outlook

Kenya's fruit and vegetable sectors face a number of serious constraints to growing market shares despite the substantial global opportunity. Our analytical process was structured so that we could better understand these issues.

Th	e Vegetable Sector						
	Facing a steady decline in profitability through the combination of rising cost of production and static sales prices in the context of a very competitive retail marketplace in Europe.						
	Inconsistent production volumes from smallholders with limited irrigation capacity and the risk from pesticide residues has contributed to a drop in fine bean volumes that remains the most important product for the sector.						
	Several prominent exporters have stopped operations, or been forced into refinancing or joint-venture investment to stay afloat during 2014.						
	The vegetable sector will be temporarily disadvantaged by the loss of duty free access to EU markets. Tariffs will increase from 0% to nearly 11% for certain products (e.g., mixed vegetables) until the EPA accords are ratified by the EU in three to six months.						
Th	e Fruit Sector						
	EU avocado sales coming under pressure from the growth in global volumes, particularly from South America.						
	The mango market is recovering after several years of decline due to poor fruit quality from pest and disease, though quality fruit is still considered to be in short supply.						
	The main markets in the Gulf respect and demand the premium taste of Kenyan fruit and its suitability for fresh juic sales.						
	The passion fruit sector remains a niche in terms of volume with limited supplies of purple fruit keeping farm prices						
	high. Given these market dynamics the priority is to increase overall volumes and reduce freight and logistics costs throughout the distribution chain.						
	Fruit exports, especially processed exports will face tariffs up to 15.7% (e.g. processed pineapples) for three to six months until the EPA accord is ratified by the EU.						

Each of the seven crops under review faces a unique set of challenges and opportunities. We use this information to frame the crop-specific export strategy at the end of this report.

Crop	Relevant Variety	Constraints	Opportunities	
Avocado	Hass/Fuerte	<ul> <li>Insufficient availability of Hass</li> <li>Inadequate linkages between small-holders and exporters; getting product to market</li> <li>Control of fruit fly</li> </ul>	<ul> <li>Existing trees that may be grafted over to Hass</li> <li>Existing market demand will encourage supply chain linkages</li> </ul>	
French beans	French bean	<ul> <li>Pre-harvest crop management and postharvest handling</li> <li>Losing competitiveness on pricing: higher costs</li> <li>Maximum Residue Limit problems in EU</li> <li>Sustainability: water, soil, and carbon footprint</li> </ul>	<ul> <li>#I supplier to the world.</li> <li>Existing distribution channels</li> <li>The Kenyan success story is well-known in the produce marketplace</li> </ul>	
Mango	Apple, Ngowe	<ul> <li>Insufficient varieties for the international market</li> <li>No Global-GAP certification</li> <li>Expensive; high postharvest losses</li> <li>Pest control with mango weevil and fruit fly</li> <li>Getting product to market</li> </ul>	<ul> <li>Significant volume exported to GCC</li> <li>Seasonal availability provided market window</li> <li>High juice content in fresh apple variety</li> </ul>	
Onion	Green onion, White Lisbon, Red Comet, etc	<ul> <li>High postharvest losses</li> <li>Low to no industry organization</li> <li>Production primarily by smallholders</li> <li>Insufficient storage</li> <li>Getting product to market</li> </ul>	<ul> <li>Low cost to produce</li> <li>Increasing prices providing high grower returns.</li> <li>Demand for spring onions is increasing and offers higher prices internationally</li> </ul>	
Passion Fruit	Purple passion	<ul> <li>Disorganized production system</li> <li>Inconsistent supplier</li> <li>Quality consistency and standards implementation</li> <li>Processing industry demands yellow passion</li> </ul>	<ul> <li>Broad production in Kenya</li> <li>Existing demand in Uganda, and several EU countries</li> </ul>	
Peas	Snow pea	<ul> <li>High incidence of MRL issues in the EU</li> <li>Smallholder coordination</li> <li>Postharvest losses – weather sensitive</li> </ul>	<ul> <li>#4 supplier to the world.</li> <li>Well-known in global markets with significant volumes in EU</li> </ul>	
Potato Source Fintered	Many  Analysis: Interviews with ac	<ul> <li>Poor technical and extension support</li> <li>High postharvest losses</li> <li>Low productivity: seed supply and quality</li> <li>Expensive production</li> <li>Getting product to market</li> </ul>	<ul> <li>Second most important food crop in Kenya</li> <li>Increasing demand</li> <li>High selling cost</li> <li>Price seasonality</li> <li>Robust local market</li> </ul>	

Source: Fintrac Analysis; Interviews with agriculture experts

### **Report Outline**

- I. Methodology
- II. Baseline Analysis
- III. International Benchmarking
- IV. Export Market Potential
- V. Competitiveness Action Plan

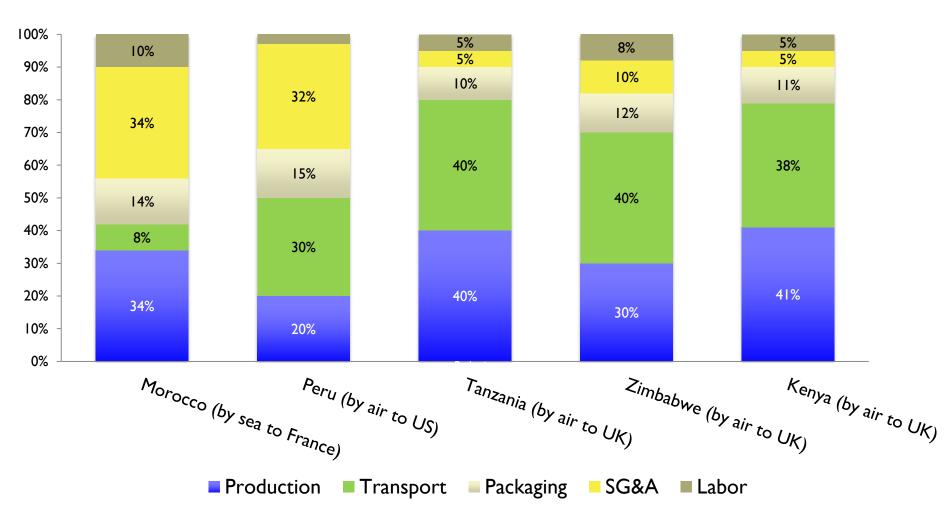
### III: International Benchmarking

This section provides comparisons across 15 key areas of competitiveness, including inputs, production, transportation, and cost of regulatory compliance based on the underlying assumption that knowing how Kenya fares against key competitors will motivate and focus reform efforts. These include:

I	Inputs	Transport		Regulatory compliance
☐ Water	□ Seed	☐ Infrastructure		Time, cost, and procedure of
☐ Labor	☐ Fertilizer	Inland transport		complying with agricultural
☐ Finance	Agro-chemicals	International freight		regulations
☐ Land	Electricity	Production		
☐ Land preparation	☐ Petrol/Diesel	☐ Crop yields		

Kenya's exporters pay more at the production stage than four global benchmarks but remain competitive due to low labor, selling, general and administrative (SG&A), and packaging costs.





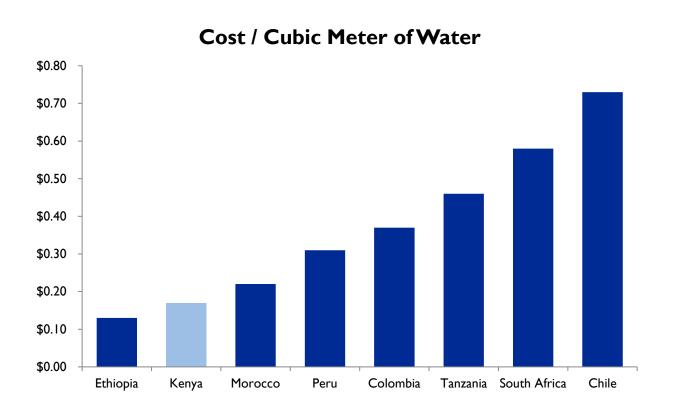
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Source: Fintrac surveys

<sup>&</sup>lt;sup>1</sup> Morocco's primary transport to Europe is via truck or sea freight due to their proximity to market.



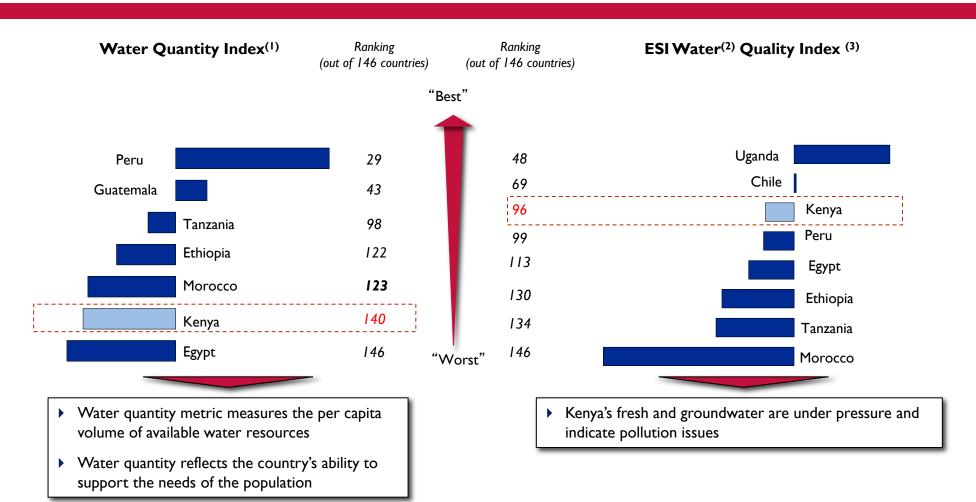
While Kenya's current fees for water are competitive, prices will eventually have to rise given the need for investment in irrigation infrastructure.



Kenya's pricing system is not applied on a national basis, with larger growers paying for water while small rural farmers do not. Water prices remain regionally competitive.



# Water supply issues, partly the result of the current pricing regime, are emerging as key threats to further growth of agriculture production and exports.



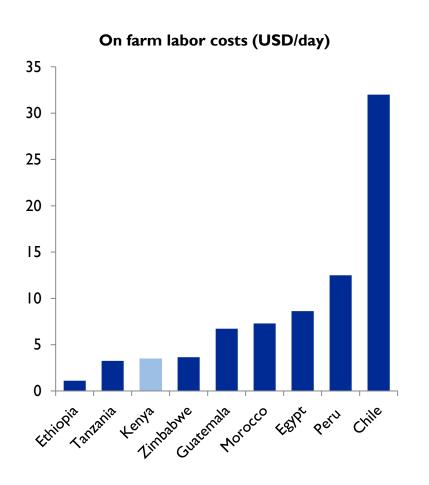
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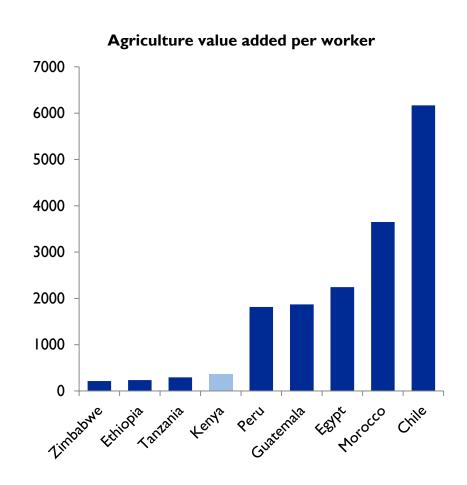
- (1) Internal renewable resources: rain, surface and groundwater
- (2) Freshwater and groundwater
- (3) Water Quality index measures the level of pollution of fresh and groundwater

Source: Environmental Sustainability Index



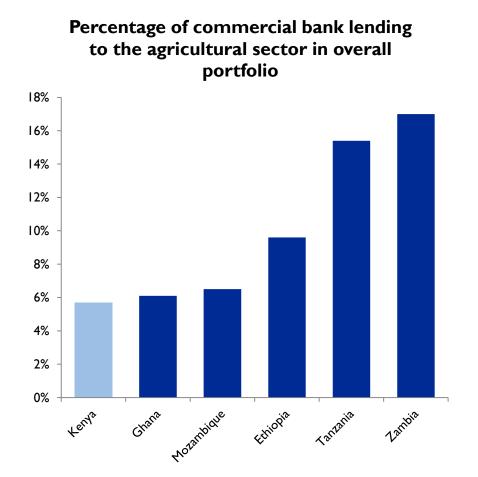
### While Kenyan labor costs a fraction of Chile or Morocco's, agricultural output per worker also remains much lower than these growing competitors.

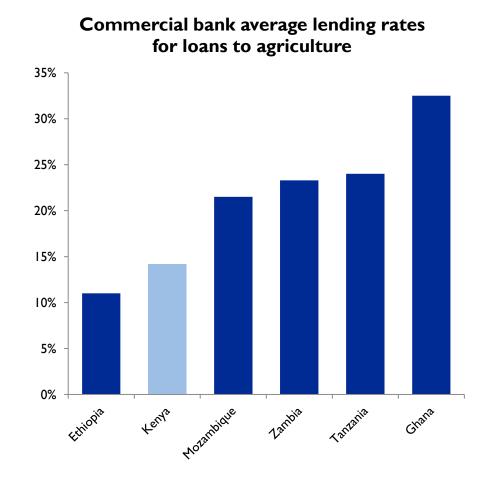




Source: Fintrac survey of exporters; World Bank World Development Indicators

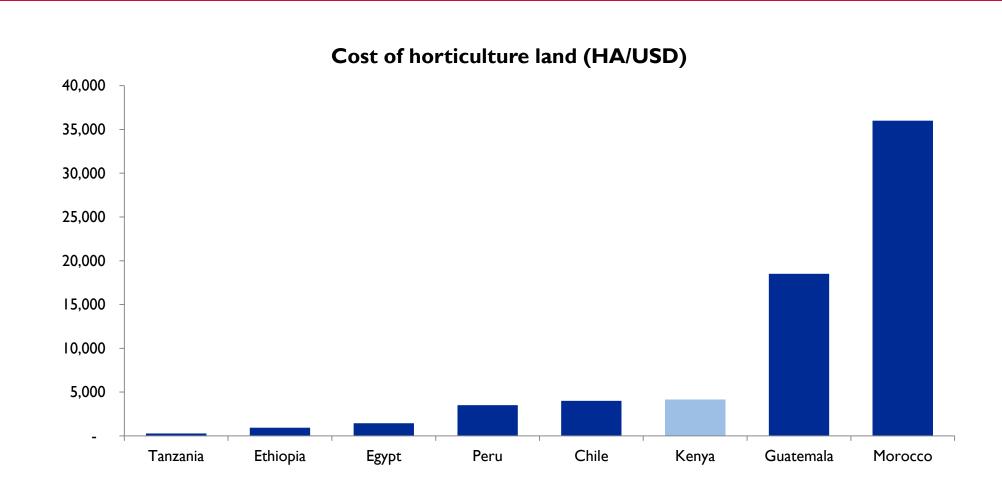
The amount of finance going to the Kenyan agriculture sector is less than half that of regional competitors, but those that do access finance are able to access some of the lowest rates in the region.





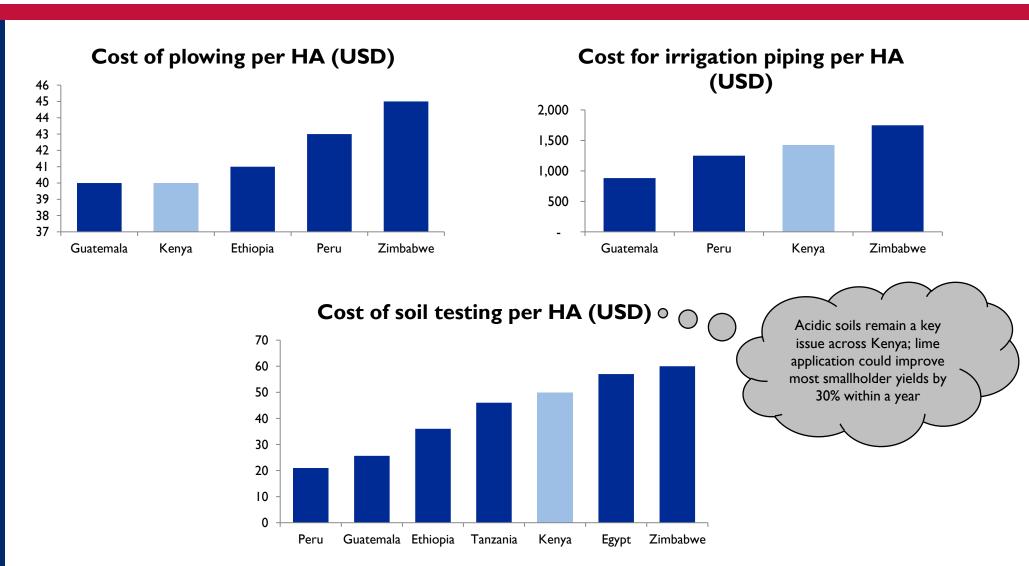


Acquiring suitable agricultural land in Kenya is becoming extremely expensive when compared with neighboring countries (e.g., Tanzania and Ethiopia).



5/10 Inp

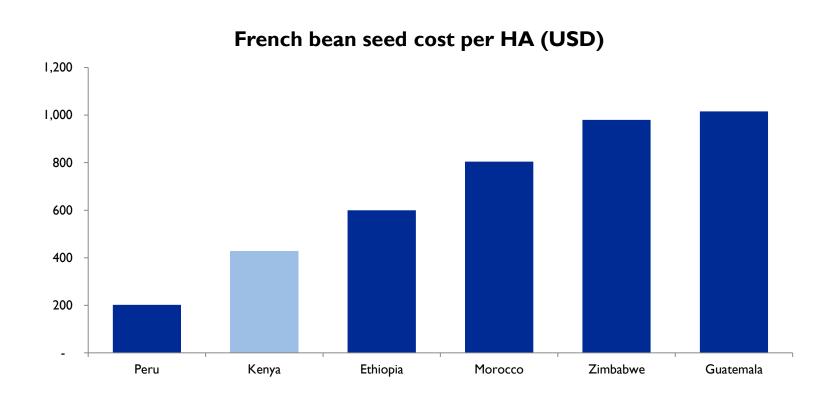
Cost of field preparation, including plowing, irrigating and soil testing fall within the range of benchmark country results, with irrigation equipment providing substantial room for cost savings.



Note: The cost of plowing and installing irrigation piping per HA is provided for fresh beans only. This is used as a proxy for other crops under review due to issues of data availability. Source: Fintrac Survey



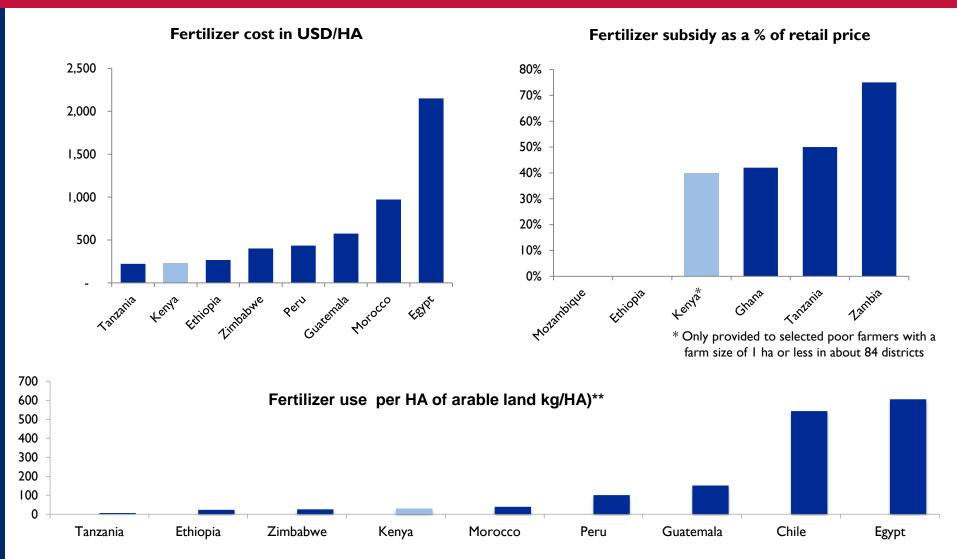
Kenya has the third largest seed industry in Africa, with a well-functioning private sector that delivers high quality seed at a relatively low cost compared to international benchmarks.



Despite the strength of the private seed sector, farmers report that seed availability remains a problem in Kenya with most getting seed through export companies who have exclusive contracts with major seed producers.



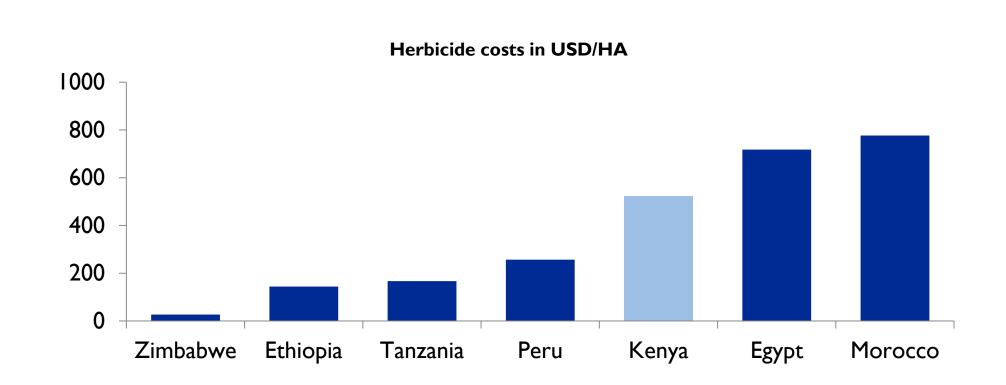
Kenyans consume far less fertilizer than the global benchmarks, while generally paying less per unit, including a sizeable subsidy scheme.



Source: World Bank, Agribusiness Indicators Project, World Bank, Trading Economics, Kenya Bureau of Statistics, Fintrac survey \*\*Data include usage of all fertilizer products that cover nitrogenous, potash, and phosphate fertilizers.



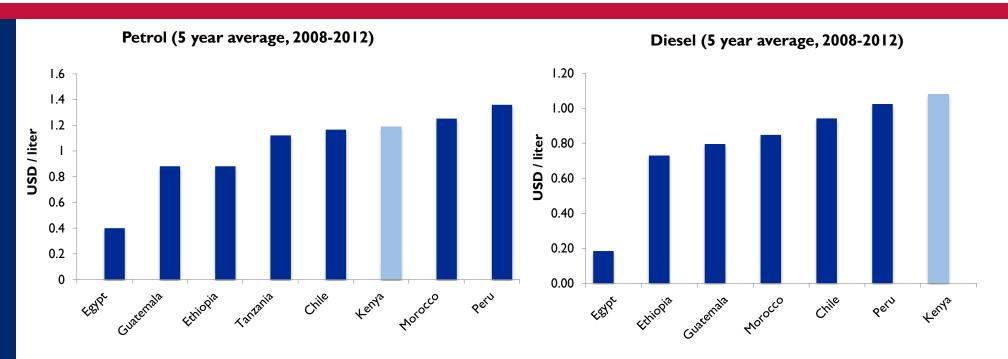
Crop protection chemicals in Kenya are more than three times the cost in neighboring Tanzania and twice the cost in Peru.



The high cost of crop chemicals has created an incentive for farmers to resort to products that are either counterfeit or not recommended for use with particular crops. The use of pesticides containing dimethoate has been particularly problematic and now represents a threat to Kenyan market access into the EU.



Despite having one of the largest crude oil refineries in the region, Kenyans pay more for diesel and petrol than most players in the global horticulture market.

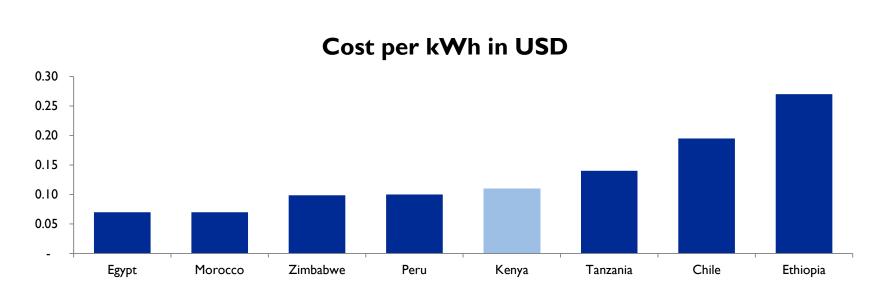


Truck transport costs are one of the key constraints to Kenyan horticulture sector. Stakeholders note three key issues that need to be addressed by authorities:

- Adulterated fuel
- Poor availability of ultra-low sulfur diesel (necessary for use in modern engines)
- A fuel policy that favors kerosene over diesel



## Kenyan electricity rates are extremely competitive by regional and global levels but frequent disruptions to power supply increase the costs for processors.

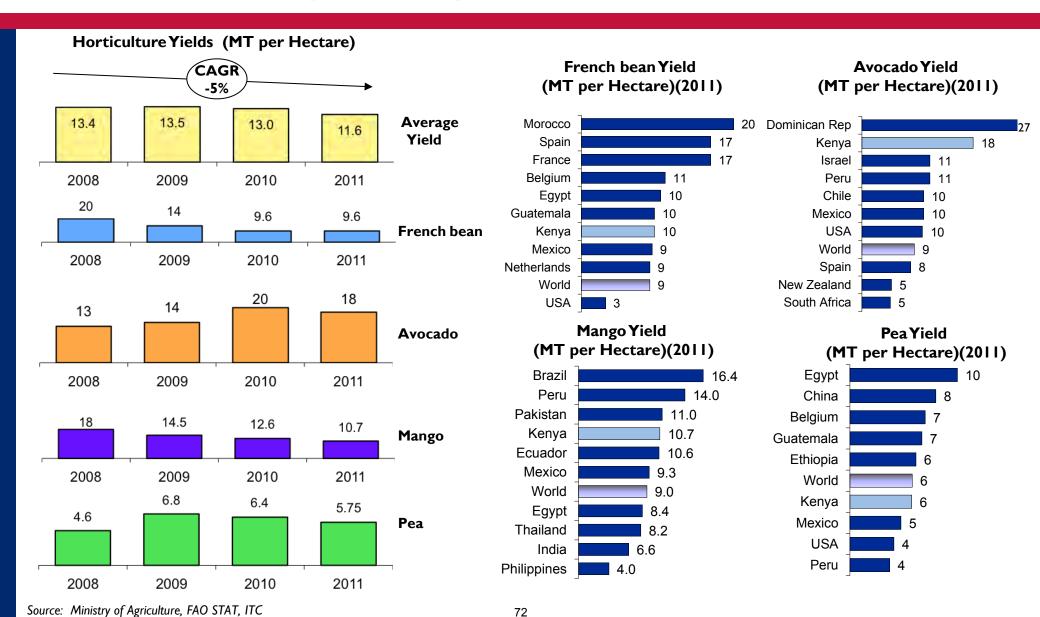


Despite the low costs per kilowatt-hour (kWh), horticulture businesses report that Kenya's electricity supply is a substantial limitation to enhanced competitiveness.

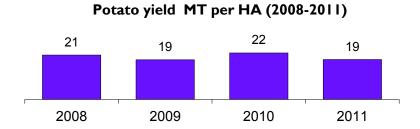
- ☐ Supply fails to meet demand and distribution of the available supply is inefficient.
- ☐ Rural areas are rarely covered by electrical networks, and where they are available power shortages and outages are the norm.
- Unreliable supply of electricity leads to underinvestment in perishable horticulture supply chains where cold storage and preservation are essential.

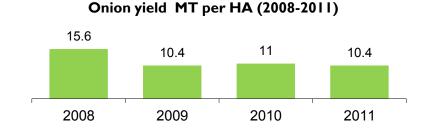


# Kenyan yields are above the world average for three of the six crops with insufficient data to compare global passion fruit yields.

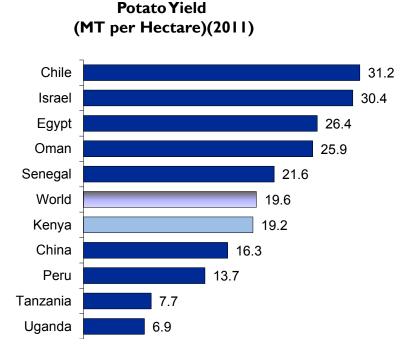


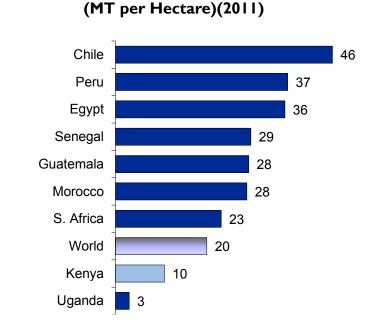
# Yields have generally decreased since 2008, and provide substantial room for improvement across all crop categories.





**Onion Yield** 

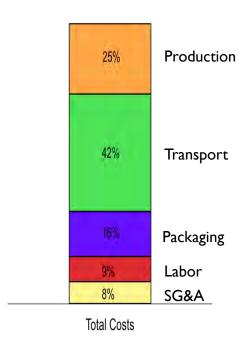




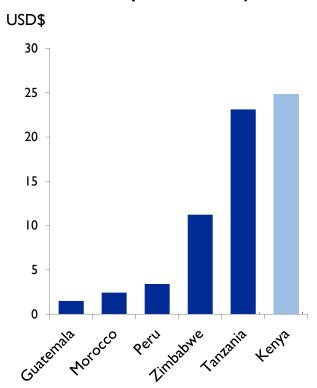


Transportation represents a significant portion of horticulture export cost structure; inland transport is more than five times key benchmarks and air freight nearly double.

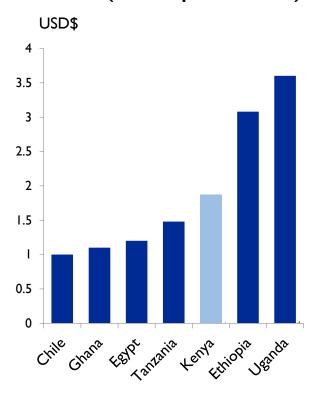
Cost structure for integrated avocado/mango exporters (From Kenya to UK by Sea 2013)



Inland Truck Transport Rates (in USD per 40' Container per Km 2013)



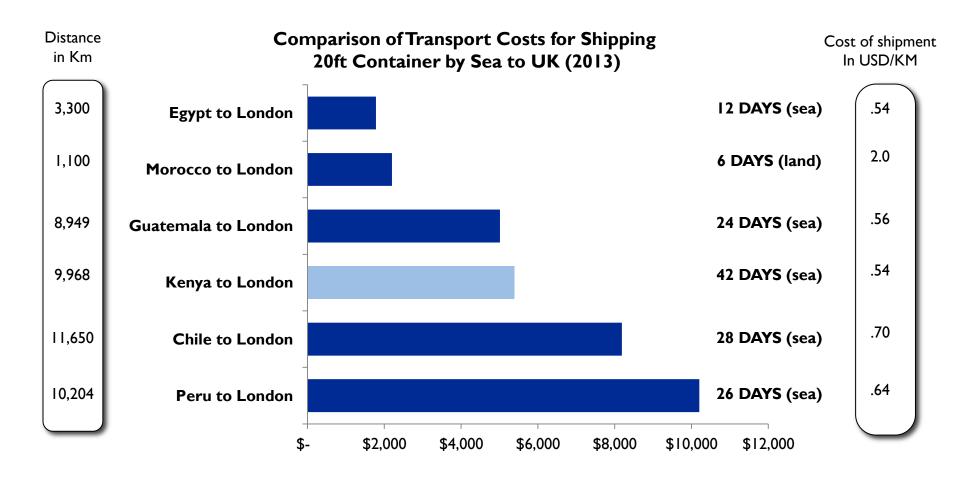
Air freight rates (in USD per kilo 2013)



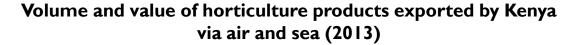
Source: Shipping agents, TAHA Fresh, Fresh Handling, Ethiopian Airlines, HEIA, Fresh Plaza)

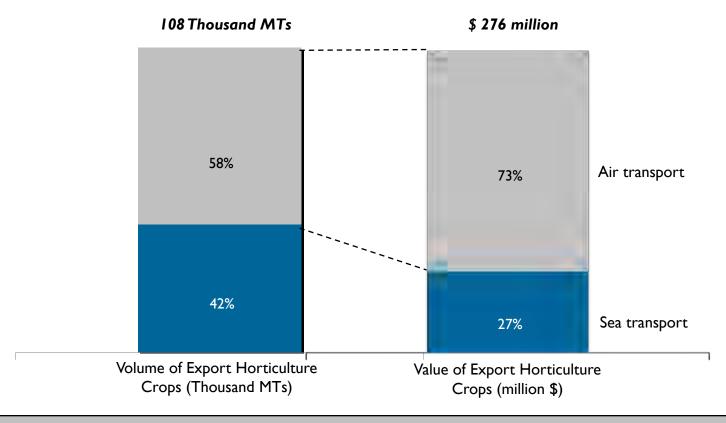


Kenyan sea freight rates to the UK market are on par with global benchmarks, but produce takes nearly twice as long to get to market as key global competitors.



More than half of Kenya's fruit and vegetable exports are transported by air; the remainder represents a small basket of fruit and vegetable shipments by sea. The logistics of shipping these products must be a target area for cost reduction.



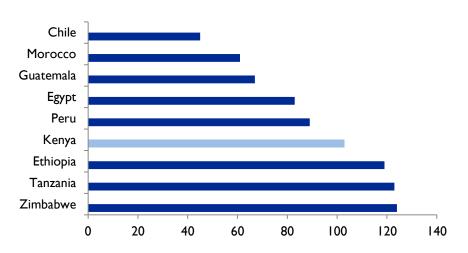


The 2010 disruption in air travel due to the Icelandic volcano was a stark reminder of Kenya's reliance on one form of transport, a serious risk in the just-in-time global horticulture logistics system.

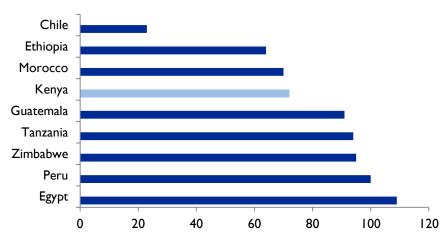
Source: HCDA

Kenya's transportation infrastructure remains weak compared to regional and global benchmarks, ranking 3<sup>rd</sup> or 4<sup>th</sup> to last across road, air, and port infrastructure categories.

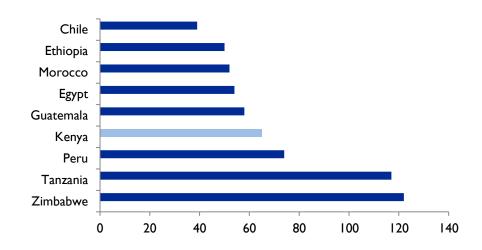
### GCI quality of infrastructure (Global rank)



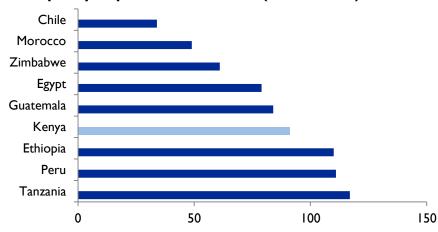
### GCI quality of roads (Global rank)



### GCI quality of air transport infrastructure (Global rank)



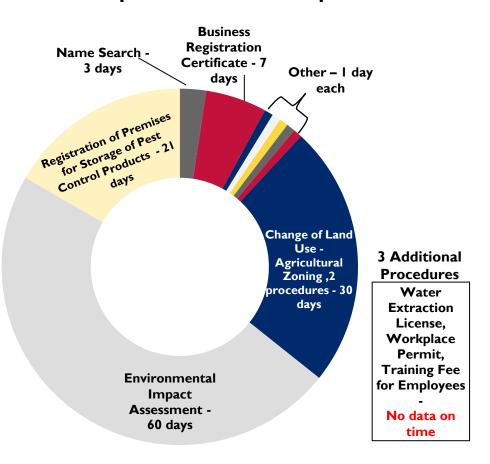
## GCI quality of port infrastructure (Global rank)



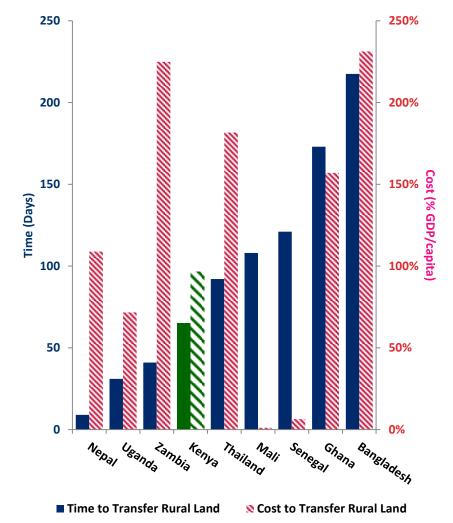
Source: The Global Competitiveness Report 2012–20013

The cost of regulatory compliance is of significant concern to the Kenyan private sector – for example, starting and operating a farm takes an average of 129 days, 14 procedures and seven different government agencies.

## Procedures required to start and operate a farm



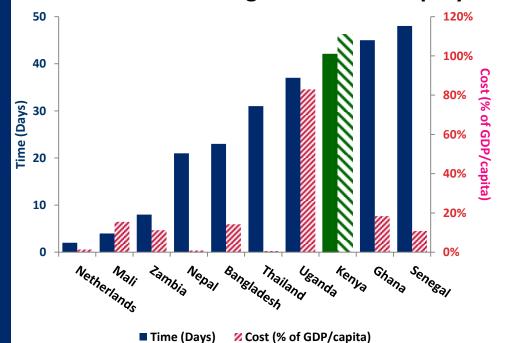
## Time and cost to transfer title to rural land



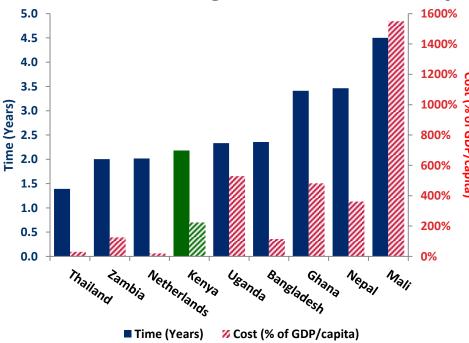
# While generally recognized as the most dynamic seed sector in the region, the time and cost of regulatory formalities are still significant for businesses in the sector.

- ☐ Kenya has the third largest seed industry in Africa, after South Africa and Nigeria, with an annual domestic seed market of \$60 million.
- To register a new seed company costs \$1,509 for Kenyan seed companies, ten times the cost of the same process in Zambia. Variety registration costs and time, on the other hand, are generally on par with global competitors.

## Time and cost to register a seed company



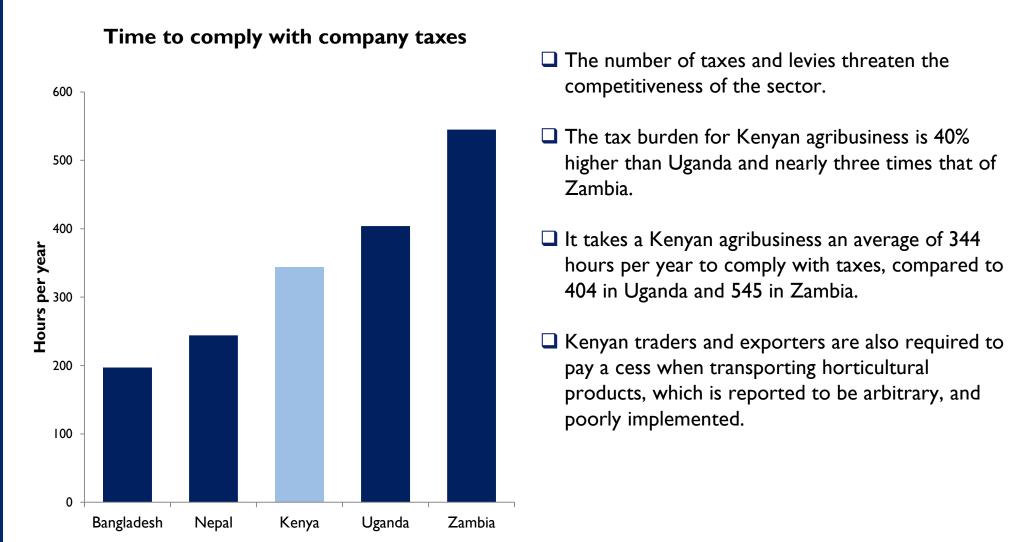
## Time and cost to register a new seed variety\*



<sup>\*</sup> Note that the time and cost of registering a seed variety compares each country's "most widely traded staple grain". While this is not a direct measure of the horticulture seed system, it is a worthwhile comparison for purposes of benchmarking.

Source: USAID/AGRI Index

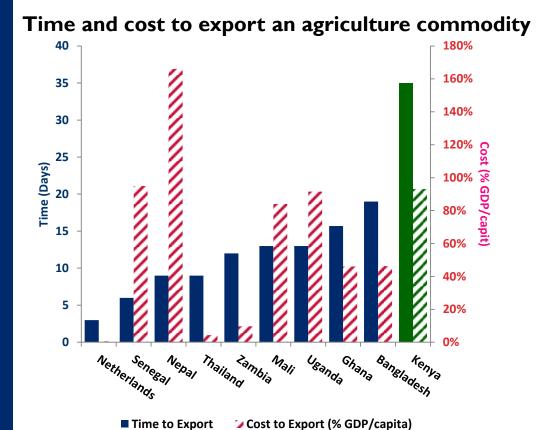
# The tax burden for Kenyan businesses is exacerbated by the number of required payments per year and the time it takes to comply with existing regulations.

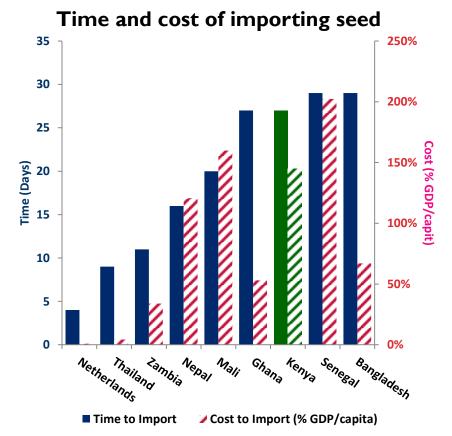


Source: USAID/AGRI Index

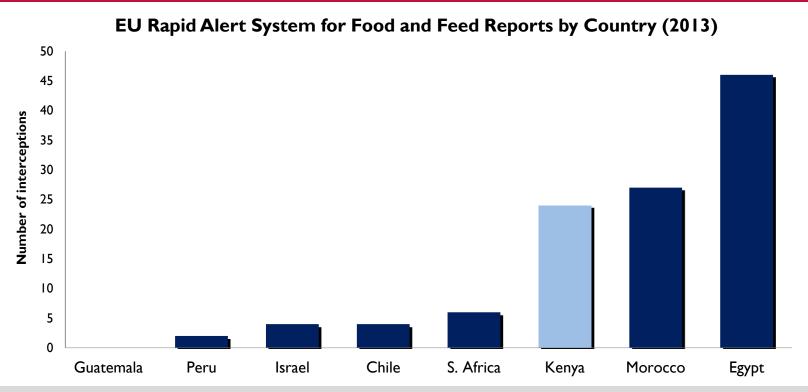
# Limited institutional capacity and cooperation at border points continues to create significant drag on Kenyan exports.

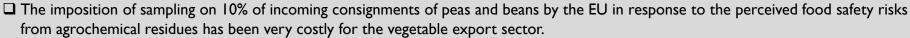
- Out of ten countries surveyed under the USAID AGRI initiative, goods leaving Kenya faced the longest border delays and the third highest administrative costs. Imports of seed consignments took the second longest and were the third most costly.
- Exporters and importers widely report inefficiencies and duplication in responsibilities within and between KRA and other border agencies that cause consignments to be delayed at the border.





Due to a lack of robust control, Kenya's exports rank poorly against other competing countries on their record of compliance with international standards, damaging the reputation of all Kenyan exporters in the process.





<sup>□</sup> Conservative estimates for the combined cost of sampling, dumping of shipments that exceed the MRL's, additional farm-based compliance costs, and reduced customer confidence runs into several million Euros for 2013.

Note (\*): RASFF: Rapid Alert System for Food and Feed. When a RASFF member has any information about a serious health risk deriving from food or feed, it must immediately notify the European Commission using RASFF; NB only fruit and vegetables included in these data

Source: RASFF

Despite a vigorous campaign of awareness, supplementary training, and increased regulatory surveillance, the level of interceptions remains unacceptable and exceeds the threshold to encourage the EU to reduce the level of sampling.

# **Summary of Benchmarking Results**

	Input Cost			Pı	Production Business Environment													
	Water cost	Labor cost	Finance cost	Land cost	Field prep. cost	Seed cost	Fertilizer cost	Crop chemical cost	Fuel cost	Electricity cost	Yield	Transport cost	Infrastructure	Land	Seed	Тах	Trade	Food Safety
Kenya			<u> </u>	<u> </u>		•				<u> </u>								
Lagging	0		<b>→</b> L	eading														

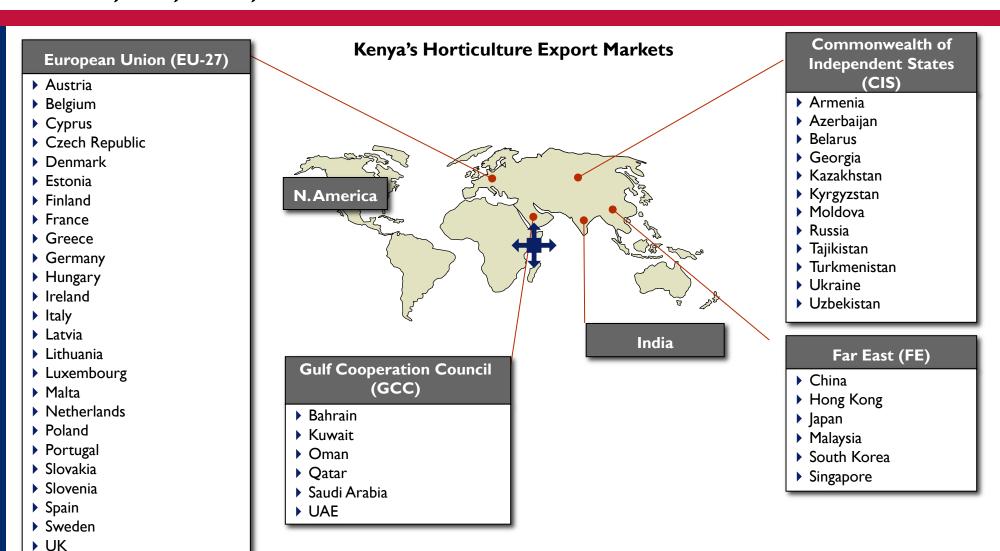
### The results of the benchmarking suggest that priority reforms may be focused on six areas in particular:

- ☐ **Transport**: Empty reefer container capacity being repositioned because of a lack of export products. Excessive maritime transportation delays to key destination markets. Capacity issues for air cargo during peak export seasons. Poor internal road infrastructure.
- ☐ Infrastructure: Prioritize road infrastructure within horticulture advocacy efforts. Increase road maintenance budgets.
- □ Land: Regional land administration offices should be established in targeted horticulture producing areas of the country to facilitate time and cost savings for land registration by Kenya's agribusinesses.
- □ **Seed:** Streamline process of registering a seed company and lower costs in line with global benchmarks.
- ☐ **Trade**: Provide necessary resources to guarantee access to SIMBA system, clarify roles of border agencies to avoid overlap, and clarify valuation process.
- ☐ Food Safety: Increase traceability along entire supply chain while increasing export controls to guard against reputational risk.

# **Report Outline**

- I. Methodology
- II. Baseline Analysis
- III. International Benchmarking
- IV. Export Market Potential
- V. Competitiveness Action Plan

IV. Export Market Potential: We also assessed demand for agricultural commodities in 50 major countries across five key export markets: Europe, N. America, CIS, GCC, and the Far East.

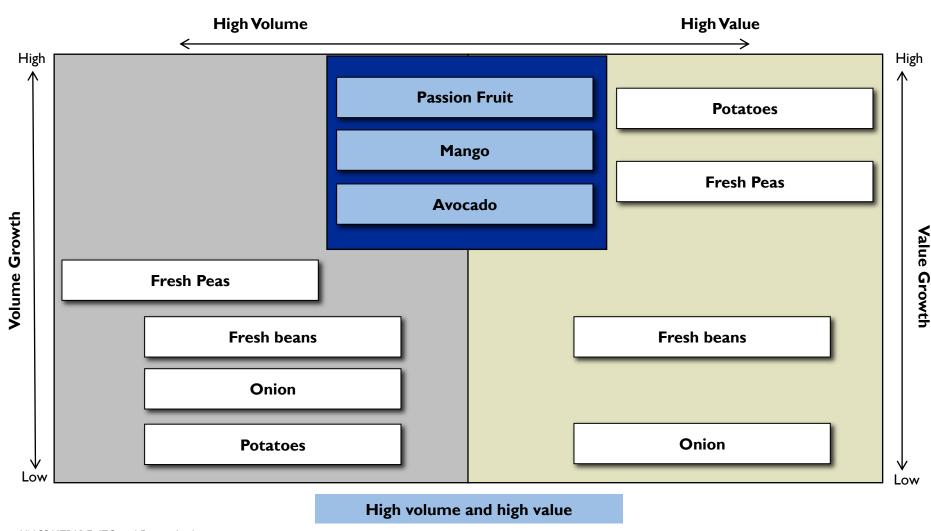


# ...additionally, we assessed demand for agricultural commodities in each of four regions of Africa.

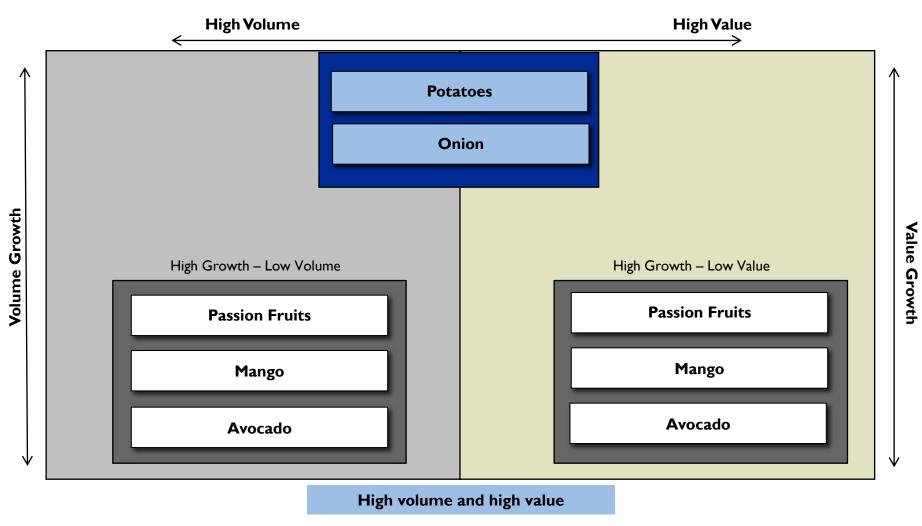
#### **Kenya's Horticulture Export Markets** Tehran **East Africa North Africa** Casablanca Mediterranean Sea Isfahan Burundi Libya Alexandria Tripoli طرابلس Morocco Kenya > Algeria Cairo Rwanda Morocco Algeria Libya Egypt **Tanzania** Tunisia Western Saudi Arabia Uganda Mauritania Nouakchott Mauritania Egypt Mali Niger Sudan Eritrea Sana'a Dakar Chad Burkina Southern Africa Gulf of Aden Faso Conakry Guinea Nigeria > Angola Ethiopi Central South Sudan **West Africa** Botswana African Cameroon Republic Abidjan DRC Benin Somal Equatorial Uganda Lesotho ➤ Burkina Faso Congo Madagascar Cape Verde **DR** Congo Malawi ➤ Gambia o Zanzibar Mauritius Luanda Guinea Mozambique ➤ Guinea-Bissau Angola Namibia Zambia Cote d'Ivoire Seychelles Liberia Mozambique South Africa Zimbabwe Mali Swaziland Madagascar Niger Namibia Botswana Tanzania Nigeria Pretoria Zambia Swaziland Senegal Atlantic Zimbabwe Sierra Leone South Africa > Togo

Cape Town

Based on a demand analysis across the five geographic areas of interest we were able to segment each of the crops into growth categories.

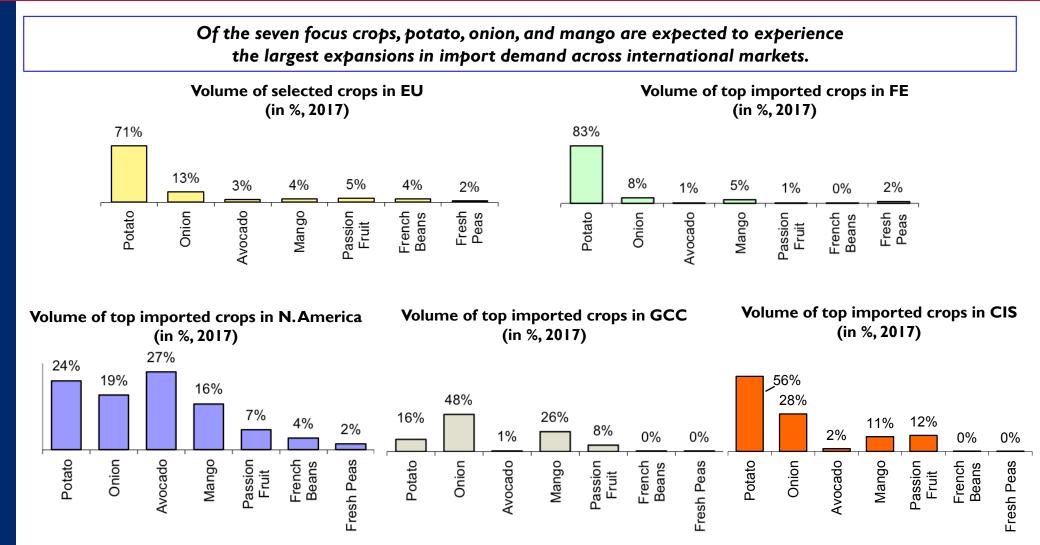


# The demand analysis for African markets provides a very different view in terms of growth potential.



Peas and beans are excluded as they did not meet the criteria for regional growth in volume or value. Source: UNCOMTRADE, ITC

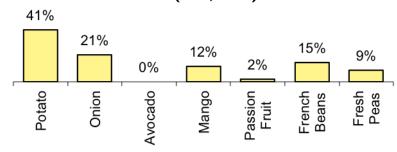
In addition to historical rates of growth, we developed import volume growth projections through 2017 to help shape the focus of future public and private investments in the sector.



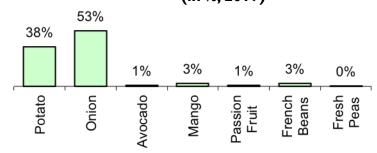
# We project African import demand to largely mirror the trends of global import demand, heavily focused on potato and onion.

Of the seven focus crops, potato, onion, and passion fruit are expected to experience the largest expansions in import demand across regional markets.

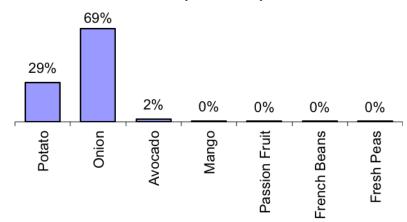
# Volume of Selected Crops in E. Africa (in %, 2017)



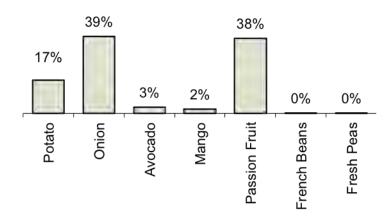
# Volume of Top Imported Crops in S. Africa (in %, 2017)



# Volume of Selected Crops in W. Africa (in %, 2017)

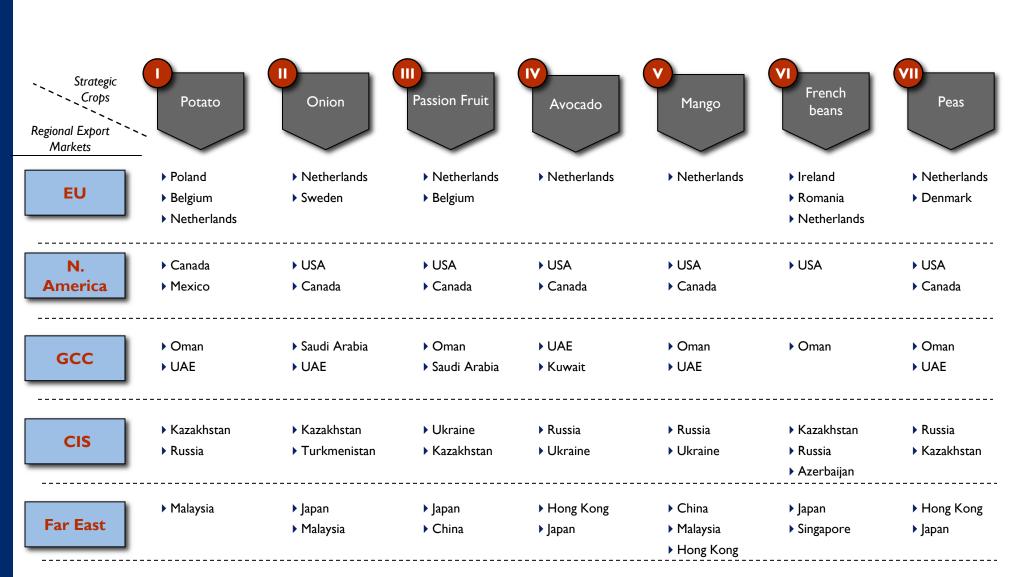


# Volume of Selected Crops in N. Africa (in %, 2017)

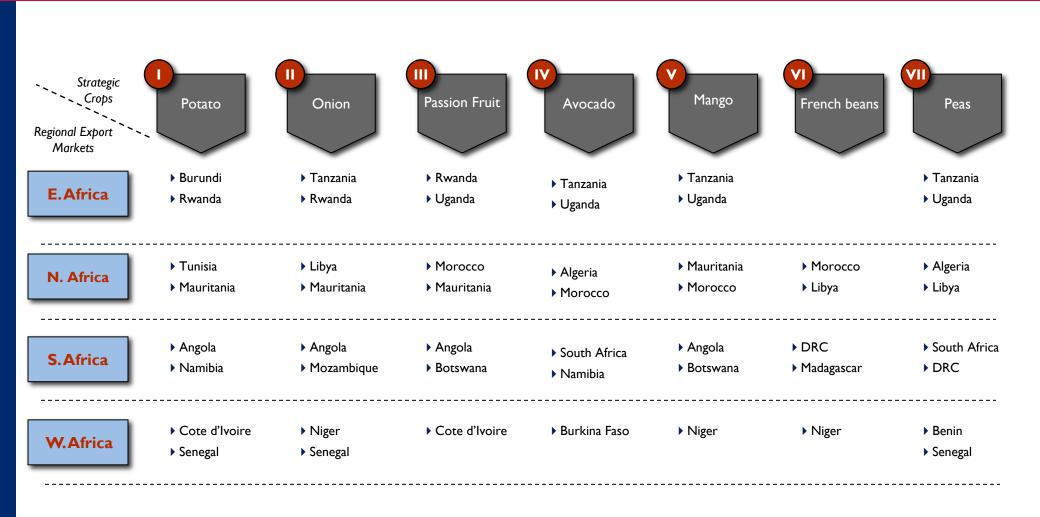


Source: UN COMTRADE; FAOSTAT; Ministry of Agriculture statistics, Fintrac Analysis

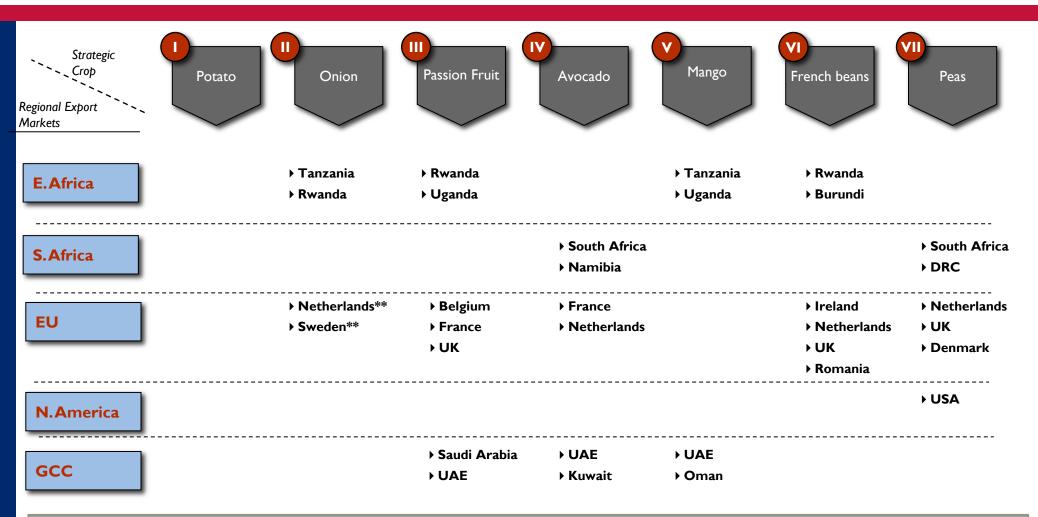
Following a review of import performance across five regions and seven crops, 70 crop/market combinations emerged as viable candidates for further review, based solely on their high rates of import growth and volumes in the market.



African opportunities were narrowed down to 52 crop/market combinations based on the same growth rate and value criteria described on the previous slide.



We further refined the global list of 122 strategic market/crop combinations down to 34, based on price competitiveness and logistic capabilities. Each of these market/crop combinations is discussed on the following slides.



Kenya should continue to focus on developing the EAC market where initial sales have already been developed. Non-African export promotion efforts should focus relatively narrowly on EU and GCC countries, with limited exceptions in the US.

NB: Potatoes were not selected for lack of exportable product and competitiveness.

\*\* Spring onion only

# Global avocado demand offers Kenya substantial opportunity with France and the Netherlands being the key EU importers.

	Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/ MT)	Market Entry Success Factors
•		France 95 MT 1%	<ul> <li>Peru 18% \$1,998</li> <li>South Africa 10% \$1,938</li> <li>Kenya 8.4% \$1,972</li> </ul>	<ul> <li>Increase marketing and promotional activities for Kenyan Avocado.</li> <li>Attack all competitors' market share with aggressive pricing and increased distribution.</li> </ul>
	Avocado	Netherlands 95 MT 17%	<ul> <li>South Africa 21% \$2,010</li> <li>Peru 18% \$2,012</li> <li>Kenya 3.3% \$2,010</li> </ul>	<ul> <li>Increase marketing and promotional activities for Kenyan Avocado.</li> <li>Attack all competitors' market share with aggressive pricing and increased distribution.</li> </ul>
	Avocado	UAE 7 MT 15%	➤ South Africa 4%\$1283 ➤ Kenya 84% \$1,232	<ul> <li>Expand on existing market dominance in UAE for entire Gulf Region.</li> <li>Marketing and promotion campaigns</li> </ul>
		Kuwait 0.6 MT 19%	<ul> <li>► USA 71% \$3,840</li> <li>► Kenya 0%</li> <li>► Australia 14%</li> <li>\$2,561</li> <li>► Kenya 5% \$1,700</li> </ul>	<ul> <li>Expand on existing market dominance in UAE for entire Gulf Region.</li> <li>Marketing and promotion campaigns</li> </ul>

Kenya, the market leader, is facing increasing competition from African and Central American countries. Kenya must reign in production and logistics costs while developing marketing and promotional campaigns to educate the market on why Kenyan beans are the best.

Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors:  Market Share,  CIF (\$/MT)	Market Entry Success Factors
		<ul> <li>Kenya 73% \$4,192</li> <li>UK 18% \$4,824</li> <li>Central Africa Republic 5.7% \$5,618</li> </ul>	<ul> <li>Immediate marketing and promotion to consumers</li> <li>Improved competitiveness in pricing</li> <li>Enhancement of quality control</li> </ul>
French beans	Netherlands 57 MT 12%	<ul> <li>Kenya 10% \$3,789</li> <li>Guatemala 1% \$5,961</li> <li>Egypt 9% \$2,477</li> <li>Maroc 27% \$1,436</li> </ul>	<ul> <li>Immediate marketing and promotion to consumers</li> <li>Improved competitiveness in pricing</li> <li>Enhancement of quality control</li> </ul>
	UK 36 MT I%	<ul> <li>Kenya 60% \$3,955</li> <li>Egypt 14% \$3,198</li> <li>Guatemala 7% \$4,593</li> <li>Tanzania 1.3% \$4,356</li> <li>Zimbabwe 0.2% \$3,329</li> </ul>	<ul> <li>Immediate marketing and promotion to consumers</li> <li>Kenya must differentiate Kenyan beans from competitors</li> <li>Improved competitiveness in pricing</li> <li>Enhancement of quality control</li> </ul>

Kenya remains the 4<sup>th</sup> largest exporter of peas in the world; however export growth to the EU is beginning to see significant decrease. Improved production and logistics cost supported by marketing and promotional campaigns require immediate action.

Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/MT)	Market Entry Success Factors
	Netherlands 49 MT 31%	<ul> <li>Guatemala 6.7% \$3,779</li> <li>Zimbabwe 3.6% \$3,427</li> <li>Kenya 2.3% \$4,7631</li> </ul>	<ul> <li>Marketing and promotion campaign</li> <li>Quality control enhancements</li> <li>Improvements in MRL's</li> <li>Cost containment</li> </ul>
	UK 10 MT -9%	<ul> <li>Guatemala 31% \$4,548</li> <li>Kenya 19% \$5,173<sup>2</sup></li> <li>Peru 13% \$4,468</li> <li>Zim 8% \$4,025</li> </ul>	<ul> <li>Marketing and promotion campaign</li> <li>Quality control enhancements</li> <li>Improvements in MRL's</li> <li>Cost containment</li> </ul>
Fresh Peas	Denmark 4 MT 30%	<ul> <li>Netherlands 9% \$6,048</li> <li>Kenya 0.3% \$3,894</li> <li>Germany 0.4% \$4,889</li> </ul>	<ul> <li>Marketing and promotion campaign</li> <li>Quality control enhancements</li> <li>Improvements in MRL's.</li> <li>Cost containment</li> </ul>
	USA 39 MT 6%	<ul> <li>Guatemala 49%</li> <li>\$1,432</li> <li>Peru 17% \$3,889</li> <li>Kenya 0%</li> </ul>	<ul> <li>Logistics</li> <li>Quality control</li> <li>Packaging variations</li> <li>Price competitiveness</li> <li>Marketing and promotion campaign</li> </ul>

<sup>\*</sup> Kenya losing market share at 1-31%, 2-21%, 3-7% CAGR 2008-2012

# Kenyan growth in SADC and West Africa will hinge on improved logistics, coldchain, and marketing and promotional activities.

Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/MT)	Market Entry Success Factors
Europh Book	South Africa 0.523 MT -11%	<ul> <li>Kenya 70% \$3,042</li> <li>Zambia 13% \$5,175</li> <li>Zimbabwe 10% \$1,828</li> </ul>	<ul> <li>Increase packaging and affordability options</li> <li>Marketing and promotion with supermarkets</li> </ul>
Fresh Peas	DRC 0.4 MT 218%	<ul> <li>Uganda 51% \$489</li> <li>USA 47% \$598</li> <li>South Africa 2% \$2,500</li> <li>Kenya 0%</li> </ul>	<ul> <li>Logistics – coordinate deliveries with other produce to increase affordability through smaller more frequent shipments.</li> <li>Marketing and promotion</li> </ul>

# The UAE remains Kenya's primary market but will be faced with strong competition from Pakistan and India.

	Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/MT)	Market Entry Success Factors
I		Oman 21 MT 7%	<ul> <li>Pakistan 43% \$303</li> <li>UAE 32% \$690</li> <li>Kenya 0.6% \$1,020</li> </ul>	<ul> <li>Logistics</li> <li>Price competitiveness with Pakistan</li> <li>Must differentiate by varieties in the market place</li> <li>Marketing and promotion</li> </ul>
	Monzo	UAE 97 MT 8%	<ul> <li>India 58% \$697</li> <li>Pakistan 26% \$360</li> <li>Kenya 6% \$1,568</li> </ul>	<ul> <li>Logistics</li> <li>Price competitiveness with Pakistan</li> <li>Must differentiate by varieties in the market place</li> <li>Marketing and promotion</li> </ul>
	Mango	Uganda 1.3 MT 75%	► Kenya 90% \$69 ► India 10% \$2,000	<ul> <li>Marketing and promotion</li> <li>Improved packaging options</li> <li>Regional export coordination</li> </ul>
		Tanzania 4 MT 23%	► Kenya 98% \$29 ► India 1% \$500	<ul> <li>Marketing and promotion</li> <li>Improved packaging options</li> <li>Regional export coordination</li> </ul>

# Kenya's continued focus on spring onions provides the niche and the value to justify the market investment and differentiation.

	Strategic Crop	Total Imports and Growth Rate ( K MTs)	Target Country Import Volumes & Growth within Kenya Window (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/MT)	Market Entry Success Factors		
V		198 MT		<ul><li>Egypt 11% \$688</li><li>Chile 2% \$863</li><li>Morocco 1% \$2389</li><li>Kenya 0%</li></ul>	<ul> <li>Develop Kenyan produce hub through Netherlands leveraging flower transport</li> <li>Target value-added market with high specialized quality of Spring Onion</li> </ul>		
	Onion*	EU 1504 MT (0% CAGR)	34 MT EU 9%		<ul> <li>Netherlands 57% \$590</li> <li>Egypt 0.4% \$622</li> <li>Chile 0.3% \$776</li> <li>Kenya 0%</li> </ul>	<ul> <li>Coordinated direct sales of Kenyan produce to key markets (Spring Onions)</li> <li>Consolidated air freight of a variety of produce products</li> <li>Marketing and promotion for Spring Onion</li> </ul>	
	Omon*		Tanzania 0.363 MT 39%	<ul><li>India 64% \$446</li><li>UAE 16% \$472</li><li>Kenya 0% \$490</li></ul>	<ul> <li>Market differentiation of value-added products</li> <li>Introduce new bulb onion varieties that meet demand</li> <li>Marketing and promotion.</li> </ul>		
			Rwanda 3 MT 95%	<ul><li>Tanzania 75% \$318</li><li>Uganda 17% \$182</li><li>Kenya 0.4% \$150</li></ul>	<ul> <li>Market differentiation of value-added products</li> <li>Introduce new bulb onion varieties that meet demand</li> <li>Marketing and promotion.</li> </ul>		

Passion fruit remains a real challenge. The specialized niche which Kenya must pursue is varietal differentiation. The more ethnically diverse markets of the UK and Belgium will remain key to growth.

	Strategic Crop	Target Country Import Volumes & Growth Rate (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/ MT)	Market Entry Success Factors		
\ <u>\</u>		France 13 MT 31%	<ul> <li>Madagascar 5% \$6,318</li> <li>Colombia 1% \$8,928</li> <li>Kenya 0% \$5,400</li> </ul>	<ul> <li>Focus on Purple Passion Fruit</li> <li>Adhere to Global-GAP standards</li> <li>Coordinate logistics with other flowers and other produce</li> <li>Initiate a marketing and promotional campaign</li> </ul>		
		UK	<ul> <li>Thailand 10% \$3,873</li> <li>Viet Nam 2% \$3337</li> <li>Kenya 2.72% \$3,871</li> </ul>	<ul> <li>Focus on Purple Passion Fruit</li> <li>Adhere to Global-GAP standards</li> <li>Coordinate logistics with other flowers and other produce</li> <li>Initiate a marketing and promotional campaign</li> </ul>		
	Passion Fruit	Belgium	<ul> <li>Madagascar 81% \$2,198</li> <li>Colombia 0.18% \$5,545</li> <li>Kenya 0.16% \$4,421</li> </ul>	<ul> <li>Focus on Purple Passion Fruit</li> <li>Adhere to Global-GAP standards</li> <li>Coordinate logistics with other flowers and other produce</li> <li>Initiate a marketing and promotional campaign</li> </ul>		
		UAE 35 MT 5%	Colombia 0.06% \$7152 Kenya 0% \$1,346	<ul> <li>Logistics hub in UAE to enhance product availability and distribution</li> <li>Marketing and promotion to HORECA sector to enhance perceived value</li> </ul>		
		Saudi Arabia 32 MT 22%	▶ Kenya 0% \$3,047	<ul> <li>Sea logistics into Jeddah to improve competitiveness</li> <li>Marketing and promotion to HORECA sector to enhance perceived value</li> </ul>		

Passion fruit remains a niche product in the African market. Primary demand is for juice. Fresh trade will be enhanced through varietal differentiation and increased marketing and promotion.

	Strategic Crop	Total Imports and Growth Rate ( K MTs)	Target Country Import Volumes & Growth within Kenya Window (K MTs; %)	Kenya and Main Competitors: Market Share, CIF (\$/MT)	Market Entry Success Factors
V		EAC			<ul> <li>Logistics – coordinate deliveries with other produce items</li> <li>Marketing and promotion</li> <li>Offer packaging variations for convenience</li> </ul>
	Passion Fruit	2.7 MT 8% CAGR	Uganda I MT I I%	<ul><li>South Africa 80% \$474</li><li>Kenya 18% \$166</li></ul>	<ul> <li>Logistics – coordinate deliveries with other produce items</li> <li>Marketing and promotion</li> <li>Offer packaging variations for convenience</li> </ul>

# **Report Outline**

- I. Methodology
- II. Baseline Analysis
- III. Competitive Benchmarking
- IV. Export Market Potential
- V. Competitiveness Action Plan

# V. Competitiveness Action Plan

Based on the preceding analysis, we compiled an action plan focused on eight competitiveness reform priorities flowing out of this report. Each priority specifically targets improvements in the areas where Kenya either scored poorly vis-a-vis benchmark countries or where the private sector has identified specific barriers to their growth.

To facilitate the success of the reform process, the action plan includes a general description of the competitiveness constraint, likely duration of the activity, a logical champion for the activity, key performance indicators, potential risks, and a detailed list of priority actions.

The action plan has been reviewed by a small group of industry experts. A larger group of experts will be consulted to vet the ideas and dive deeper into funding streams, partnerships, and initial milestones.









Strategic Objective: Improve farm-level competitiveness				
Owner: County Ministers of Agriculture, FPEAK and Exporters Technical Staff	Number:			

**Duration:** On-going

### **Description**

- Kenyan export crop yields lag far behind benchmark countries; a sizeable part of this is a lack of Good Agricultural Practices (GAPs). The sector needs to start by closing this yield gap between small and large farming operations.
- To increase share in the regional market, the sector needs to diversify export operations and adopt sufficient inputs for high productivity cropping specifically intended for the regional market, with focus on potato and onion.

Key Performance Indicators	Key Risks	Key Milestones		
Reduce gap between leading benchmark country, for each crop, by 50%.	<ul> <li>More of the same from all actors in the horticulture sector</li> </ul>			
Reduce gap between smallholder bean producers and large farms by 50%	Trading off near term gains for long term soil health			
<ul> <li>Significant expansion of the fruit nursery industry to supply an additional 2 million disease-free certified plantlets over five years.</li> </ul>	▶ A lack of government extension support			
Action Plan				
Improving the effectiveness of GAP training to farmers monitored against technology adoption rates and levels of fruit/vegetable quality.	Increase the use of precision fertilizer application using appropriate blends to reduce costs			
<ul> <li>Concentrating premium production sources (own farms) to supply</li> </ul>	Invest in low-cost tunnels for pea production			
premium customers (UK Supermarkets) and procuring cheaper product from outgrowers for wholesale or trading customers.	<ul> <li>Invest in irrigation capacity and small scale mechanisation for beans, potatoes and onions</li> </ul>			
	<ul> <li>Widespread education on soil fertility management in order to change perception towards investment instead of cost</li> </ul>			

Strategic O	<b>bjective</b> : Improve	e farm-level com	petitiveness
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Owner: County Ministers of Agriculture, FPEAK and Exporters Technical Staff | Number: 2

**Duration:** On-going

## **Description**

• Reducing postharvest losses remains one of the most achievable means of improving the horticulture sector's competitiveness. In particular, the industry needs to implement action plans to combat fruit fly.

Key Performance Indicators	Key Risks	Key Milestones
<ul> <li>Reducing the level of postharvest losses (especially fruit) 20% over the next five years through improved control of pest and disease</li> <li>Increased returns on investment for farmer and exporter</li> </ul>	<ul> <li>Low technical capacity at farm level</li> <li>A lack of government extension support</li> </ul>	<ul> <li>Increased marketable quantities</li> <li>Improved shelf life</li> <li>Improved product quality</li> </ul>
Action Plan		
Improve harvesting controls and collection centers to quantify and react to pest and disease losses	<ul> <li>Facilitate investments in small/medium grading, packing and cold storage facilities in producing areas</li> </ul>	
<ul> <li>Enhance county government support to sensitize farmers over quality of harvesting, packaging, storing, and transportation.</li> </ul>	Facilitate access to practical skills training on postharvest management	
Provide incentives for industry to share innovations in harvesting, packing, storing, and shipping.	Invest in capacity building activities supportive of low cost on-farm storage facilities	

Strategic Objective: Streamline and expand Kenya's maritime transport	
Owner: Kenya Shipping Council, FPEAK, Kenya Flower Council	Number: 3
Duration: 36 months	

## **Description**

- ▶ Streamlining Kenya's maritime logistics through:
  - Coordinated efforts to merge volumes
  - Increased utilization of reefer container service
  - Improved direct liner service to key distribution hubs in the EU
  - Creation of a designated reefer vessel fleet and maritime distribution terminal in Jebel Ali

Key Performance Indicators	Key Risks	Key Milestones
<ul> <li>Improved sea freight transportation options (improved export volumes, increased utilization of reefer containers, etc)</li> <li>Year-on-year reduction of average unit cost (per ton, per km) faced by Kenyan exporters</li> </ul>	<ul> <li>Exporters fail to unite</li> <li>No buy-in from shipping companies</li> <li>No financing for reefer vessel</li> </ul>	<ul> <li>Establishment of Horticulture Logistics Export Committee</li> <li>Establishment of Reefer Vessel</li> </ul>
Action Plan		
<ul> <li>Establish Horticulture Logistics Export Committee to identify common opportunities for expansion of service availability on reefer container service (e.g., greater coordination)</li> <li>Identify key bottlenecks to improve speed of service and reliability for reefer containers.</li> </ul>	<ul> <li>Conduct a maritime study and assess the cost and benefits for the implementation of a designated reefer vessel (e.g., Flexcon 21)</li> <li>Assess needs and feasibility of maritime distribution hub in Jebel Alterminal</li> </ul>	

T06

	Strategic Objective: Improve public private cooperation towards food safety compliance		
	Owner: Horticulture Competent Authority Structure (HCAS)	Number: 4	
Duration: 36 months			

## **Description**

- ▶ Robust regulatory control from well-coordinated government agencies must work in harmony with a strong private sector commitment towards food safety compliance .
- ▶ Provide support for the enhancement and empowerment of KEPHIS regarding food safety issues related to agricultural exports.
- ▶ Work with Ministry of Agriculture and Ministry of Health to improve coordination with HCAS.
- Develop a competitive, fee based training and service model to be implemented by Practical Training Centre for Quality Assurance systems, HACCP, KenyaGap, and food safety and facilitate process of obtaining pre-clearance of agricultural exports.

Key Performance Indicators	Key Risks	Key Milestones
<ul> <li>Yearly sanitary interceptions in the EU market</li> <li>Level of food safety issues measured on local market produce</li> <li>Improved market hygiene and infrastructure</li> <li>Systematic sampling data on MRL and pest issues coordinated through HCAS</li> </ul>	<ul><li>Enforcement</li><li>Lack of awareness at farm level</li></ul>	▶ Year I interception levels down

### **Action Plan**

- ▶ Secure financial commitment for funding to support KEPHIS.
- ▶ Review and revise existing quality control legislations and processes
- ▶ Coordinate with HCAS to target sanitary legislation for agricultural export control
- Structure agency on commercial-basis with inspection services provided under government contract (e.g., pesticide residues
- ▶ Start domestic pesticide residues monitoring program
- Launch quality control awareness nationally (e.g., packhouses, transport companies) and internationally (e.g., DG Sanco, APHIS)

- ▶ Move towards name and shame treatment for repeat offenders including cancellation of phytosanitary and/or export licences
- ▶ Increased scrutiny of outgrower schemes for agrochemical management, traceability, and contractual loyalty
- ▶ Comprehensive and cost-effective in-country sampling program and residue testing for export and local crops
- ▶ Destruction of crops that represent a proven food safety risk to consumers under the authority of HCDA Order No.190
- Enhanced monitoring of pesticide registration, formulation and quality, distribution and labelling

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Strategic Objective: Increase coordination amongst exporters		
Owner: National Horticulture Council – FPEAK/KFC/KENAFF/KAM	Number: 5	
Duration: 36 months		

## **Description**

- ▶ The Kenyan horticulture sector will become more competitive globally with increased collaboration between exporters, focusing specifically on GlobalGAP certification, marketing, R&D, and aggregation activities.
- There is substantial need for a single body to act as an umbrella in the coordination of the horticulture industry internationally, regionally and domestically in addressing key issues such as domestic market food safety, export competitiveness and engagement with county governments.

Key Performance Indicators	Key Risks	Key Milestones
<ul> <li>Increase GlobalGAP and KenyaGAP compliance through increased training, technology adoption and monitoring of food safety issues through random sampling</li> </ul>	<ul> <li>Export sector continues to compete more than collaborate</li> <li>Lack of industry involvement</li> <li>Inadequate communication and consensus between FPEAK and members</li> </ul>	<ul> <li>Increased trust and confidence amongst importers— qualitative affirmation of progress</li> </ul>
Action Plan		
<ul> <li>Pool resources through intra-industry collaboration as a means of reducing costs and increasing GlobalGAP compliance</li> <li>Develop country-wide export marketing strategy and materials to lower firm level marketing costs and increase the impact of Brand Kenya</li> <li>Increase horticulture specific R&amp;D based on export market intelligence, using set amount of export cess as a dedicated revenue stream for continuous innovation</li> </ul>	<ul> <li>Improve fruit aggregation through local collection centers that forr part of the logistics upgrade to move into regular sea-freight consignments</li> <li>Increase the amount of communication from FPEAK to the industrial</li> </ul>	

Strategic Objective: Reduce the regulatory burden	
Owner: Agriculture, Fisheries and Food Authority (AFFA); In collaboration with the National Horticulture Council (comprising all key associations—FPEAK/KFC/KENAFF)	Number: 6

**Duration:** 36 months

## **Description**

- ▶ The cost and time of complying with government regulation can be reduced without diminishing the government's regulatory control—where efficiencies can be made, they should be.
- ▶ The cost and time involved in importing and exporting agricultural goods, of acquiring land, and of other government processes can be reduced, saving exporters critical time and money in the process.
- ▶ The horticulture sector needs to broaden its focus beyond horticulture specific regulation to include technical areas including trade, land, transportation and taxation.

Key Performance Indicators	Key Risks	Key Milestones
<ul> <li>Reduction in time, cost and number of procedures associated with regulatory oversight</li> <li>Reduction in number of border agencies responsible for border inspection matched by reduction in import/export paperwork</li> <li>Removal of local cess associated with inter-regional trade</li> </ul>	<ul> <li>Focusing only on short term crises</li> <li>Bureaucratic inertia overwhelming the will to reform</li> </ul>	<ul> <li>Detailed government action plan by topic</li> <li>Reforms begin</li> <li>Indicators show progress</li> </ul>
Action Plan		
<ul> <li>Trade: Industry-wide coordination of strategic regulatory and economic issues through NHC by harmonizing private-sector recommendations on reduction in delays at Mombasa port, high level consultations on VAT refunds, inconsistent functioning of the SIMBA system and the number of border agencies involved in international trade</li> <li>Seed: Reduce the lengthy administrative procedures and delays related to licensing and permitting of seed distributors. Increase varietal protection through enhanced enforcement.</li> </ul>	<ul> <li>Operations: Reduce the amount of time and procedural steps required to legally start a farm.</li> <li>Taxation: Work with local government bodies to remove cess on inter-regional trade in agricultural products.</li> <li>Fertilizer: Increase the level of cooperation between industry and government to stamp out adulterated product.</li> </ul>	

Strategic Objective: Consolidate Kenya's horticulture export promotion capacity

Owner: FPEAK/KFC in collaboration with HCD Number: 7

**Duration:** 5 months

### **Description**

- Current efforts to promote horticulture exports in Kenya are too fragmented to provide sufficient support for private sector growth: lack of market intelligence, cooperation among exporters on mutually-beneficial initiatives or institutionalized export promotion all hamper Kenya's export potential.
- The existing framework for horticulture export promotion in Kenya needs to be revisited to lay out clear and differentiated mandates for key stakeholders across the sector.

Key Performance Indicators	Key Risks / Mitigation Plans	Key Milestones
<ul> <li>Allocation of seed funding for initiation of activity.</li> <li>Establishment of public-private steering committee</li> <li>Gap and overlap analysis completion</li> <li>Number of successfully completed activities</li> <li>Survey results from international importers/retailers/consumers on Kenyan brand awareness and perception</li> </ul>	<ul> <li>Excessive Government management</li> <li>Overlap in responsibilities of existing institutions</li> <li>Overly broad focus</li> <li>Lack of coordination from existing organizations</li> <li>Failure of exporters to adhere to brand reputation</li> </ul>	<ul> <li>Steering committee creation</li> <li>Appointment of steering committee chairman</li> <li>Allocation of seed funding</li> <li>Presentation of proposed governance changes</li> <li>Approval of action plan</li> <li>Brand creation</li> <li>Media campaign launch</li> </ul>

#### **Action Plan**

- ▶ Prepare agenda to kick-start export promotion drive and secure seed funding to start outlining export promotion governance.
- ▶ Create steering committee to monitor progress of export promotion drive. Appoint three to four dedicated staff to support steering committee. Devise governance (e.g., by-laws, defining new membership type, funding mechanisms, etc) and organizational structures.
- Launch brands internationally with on-going press coverage and promotional campaigns linked with quality.
- Monitor on a recurrent basis awareness and perception of Kenyan horticulture produce in international markets. Adjust promotional campaigns accordingly
- ▶ Review scope and mandate of current export promotion programs and organizations within public and private sector. Confirm possible overlaps in various initiatives, programs and organizations.



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