Approach to prioritizing agricultural value chains

Overview

2025

Content

A 3-step approach could help evaluate and compare multiple agricultural value chains for an investor

Step	1 Long list of value chains	2 Shortlist of value chains	3 Prioritized value chains (final output)
Analysis conducted	Identify the **long list of existing agriculture value chains** (crops) **in East Africa**	Filter the long list of crops using **directional estimates** on • Market potential (current production, imports, and exports for the 5 countries) • Impact potential (climate resilience and income generation potential)	**Analyze the 5-10 value chains** (from **crops to products**) through 4 criteria • Level of government focus • Fragmentation • Deal execution potential • Products' value addition potential
Output (number of value chains)	**>60**	**5-10**	**2-3**

For these analyses, leveraged sources include initial desk research (including reports and databases such as FAOSTAT, UN Comtrade, etc.), refined through interviews with Africa agriculture and East Africa country specialists

1. *Long list:* 60+ crops were identified through multiple sources

Multiple sources were leveraged to **identify the long list of value chains**

- Desk research
- 5+ local practitioners' interviews

Herbs, spices and natural extracts

- Herbs
- Honey
- Seaweed
- Spices[1]
- Vanilla

Oilseeds and nuts

- Cashew
- Chia
- Coconut
- Cotton (seed)
- Macadamia
- Sesame
- Soya bean
- Sunflower (seed)

Beverage crops

- Cocoa
- Coffee (Arabica/ Robusta)
- Tea

Fruits

- Avocado
- Banana
- Mango
- Pineapple
- Plantain
- Strawberries
- Tomato

Cereals and tubers

- Barley
- Cassava
- Maize
- Millet
- Potato
- Rice
- Sorghum
- Sweet Potato
- Teff
- Wheat

Vegetables and legumes

- Baby corn
- Broccoli
- Cabbage
- Cactus fruit
- Carrot
- Chickpea
- Common bean (haricot)
- Cowpea
- French bean
- Green gram (mung bean)
- Garlic
- Lentil
- Onions
- Pigeon pea
- Snow pea
- Spinach

Livestock and aquaculture

- Beef meat
- Camel milk
- Chicken meat
- Cow milk
- Crustaceans
- Eggs
- Finfish (e.g., tilapia)
- Goat and sheep meat
- Goat milk
- Hides and skins
- Pork meat
- Shellfish

1. Include ginger, black pepper, cardamom, coriander, chili, and turmeric

2. *Shortlist*: The 60+ crops were prioritized according to their market potential across the 5 countries and impact potential

x Weight

Dimension	Criteria		Scoring rationale 1	2	3	4	5	Source
Market potential 50%	**Domestic market** *Produced across the 5 countries*	50%	<Int$ 100 M	Int$ 100-350 M	Int$ 350 M-1 B	Int$ 1-5 M	>Int$ 5 M	FAOSTAT
	Current imports *Imported across the 5 countries*	30%	<USD 1 M	USD 1-10 M	USD 10-100 M	USD 100 M-1 B	>USD 1 B	ITC Trade Map, UN Comtrade
	Current exports *Exported across the 5 countries*	20%	<USD 5 M	USD 5-100 M	USD 100-500 M	USD 500 M-1 B	>USD 1 B	ITC Trade Map, UN Comtrade
Impact potential 50%	**Climate resilience**[1]	50%	Very low	Low	Medium	High	Very high	Press search, local practitioners' interviews
	Income generation potential[2]	50%	Very low	Low	Medium	High	Very high	Press search, local practitioners' interviews

Specific value chains could also be excluded at this point e.g., if they are already established

1. Crop's ability to sustain production and recover from climate-related stresses – such as drought, heat, floods, or pests – through inherent tolerance or effective management practices
2. Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

3. *Final prioritization*: The shortlisted value chains were analyzed from crop to products, through 4 criteria for prioritization (1/2)

Criteria	Key questions	Metrics	Source
1 Level of government support	**Is this value chain a priority** for local, regional, or national **government development plans** or policies?	Yes/No	Press search, local practitioners' interviews
2 Fragmentation	Are there **multiple similar SMEs within the value chain**, with no player holding a large market share?	Qualitative scoring from 1 to 3	
	What is the **average size of SMEs** operating within this value chain?	Qualitative scoring from 1 to 3	
3 Deal execution potential	**How many transactions** have happened in the value chain in the past 10 years?	Number of transactions	PitchBook, Capital IQ
	What have been the **ticket sizes and instruments used** (debt/equity)?	Average ticket size	
4 Products' value addition potential	How many **value addition steps** are there for the products in this value chain?	Number of steps in the value chain	Press search, local practitioners' interviews
	Do the products derived from this value chain generate **relatively high margins** compared to others?	Qualitative scoring from 1 to 5	

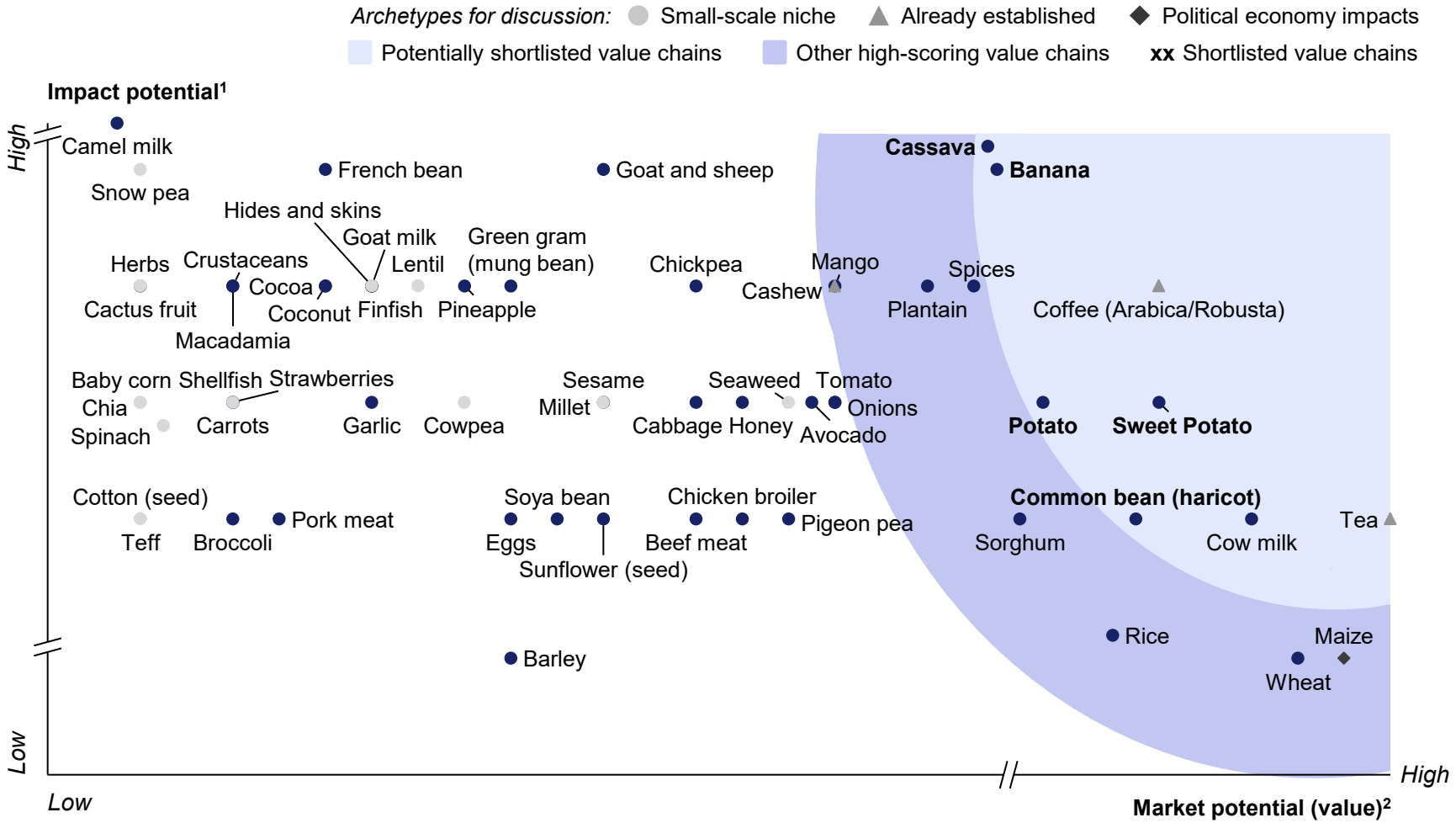
3. *Final prioritization:* The shortlisted value chains were analyzed from crop to products, through 4 criteria for prioritization (2/2)

			Scoring rationale				
Criteria	**Weight**	**Key question**	**1**	**2**	**3**	**4**	**5**
Level of government support	15%	**Is this value chain a priority** for national **government development plans** or policies?	Yes for 1/5 country	Yes for 2/5 countries	Yes for 3/5 countries	Yes for 4/5 countries	Yes for 5/5 countries
Fragmentation	30%	Are there **multiple similar SMEs within the value chain**, with no player holding a large market share?	← Only smallholders or 1 big player		Multiple SMEs in the value chain for some countries		Multiple SMEs in the value chain for most countries →
		What is the **average size of SMEs** operating within this value chain?	← Large		Small		Medium →
Deal execution potential	20%	**How many transactions** have happened in the value chain in the past 15 years?	<2 transactions	2-5 transactions	5-10 transactions	10-30 transactions	>30 transactions
		What have been the average **ticket sizes and instruments used** (debt/equity)?	<USD 200k or >USD 5 M	USD 200-300k or USD 3-5 M	USD 300k-400k or USD 2-3 M	USD 400-500k or USD 1.5-2 M	USD 500k-1.5 M
Products' value addition potential	35%	How many **value addition steps** are there for the products in this value chain?	Average of top products <3 steps	Average of top products 3-3.5 steps	Average of top products 3.5-4 steps	Average of top products 4-4.5 steps	Average of top products >4.5 steps
		Do the products derived from this value chain generate **relatively high margins** compared to others?	Average of top products very low	Average of top products low	Average of top products medium	Average of top products high	Average of top products very high

Content

Shortlist: 6 crops can be shortlisted for value chain analysis based on impact and market potential

Proposed prioritization matrix for value chain shortlist (crop only)



1. Composite indicator qualitatively looking at (1) labor intensity and (2) high-paid jobs – both metrics are equally weighted
2. Accounting for both domestic and export market, equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

Key insights

Based on market and impact potential, 6 crops can be prioritized for value chain analysis: **cassava, banana, potato, sweet potato, cow milk,** and **common beans**

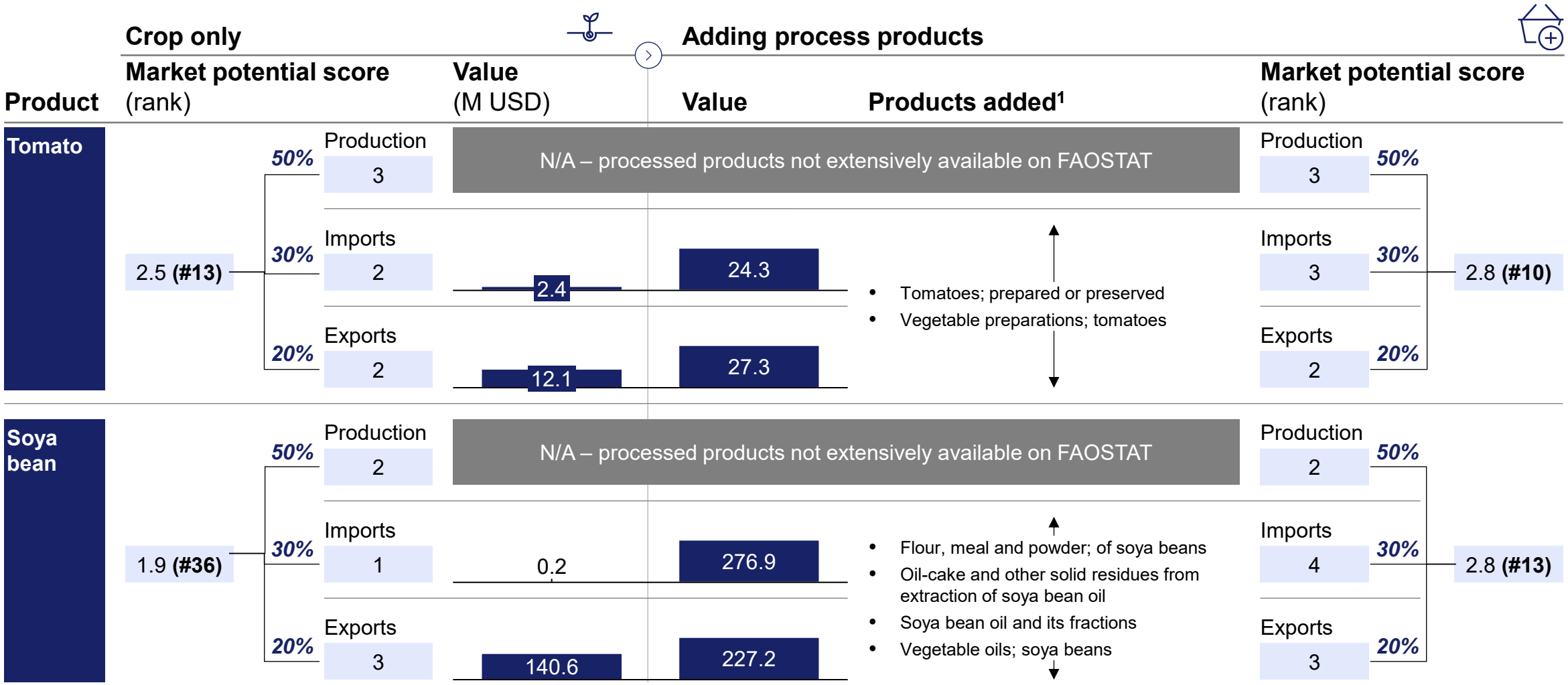
Although ranking high, there could be further questions around tea and coffee due to the already advanced development of the value chain (and therefore

Other crops could be included if they show a particularly high value addition potential (e.g., hides and skins for leather)

Shortlist: Including processed products increases the score of some value chains, but may not significantly alter the shortlist (1/2)

Examples of tomato and soya bean

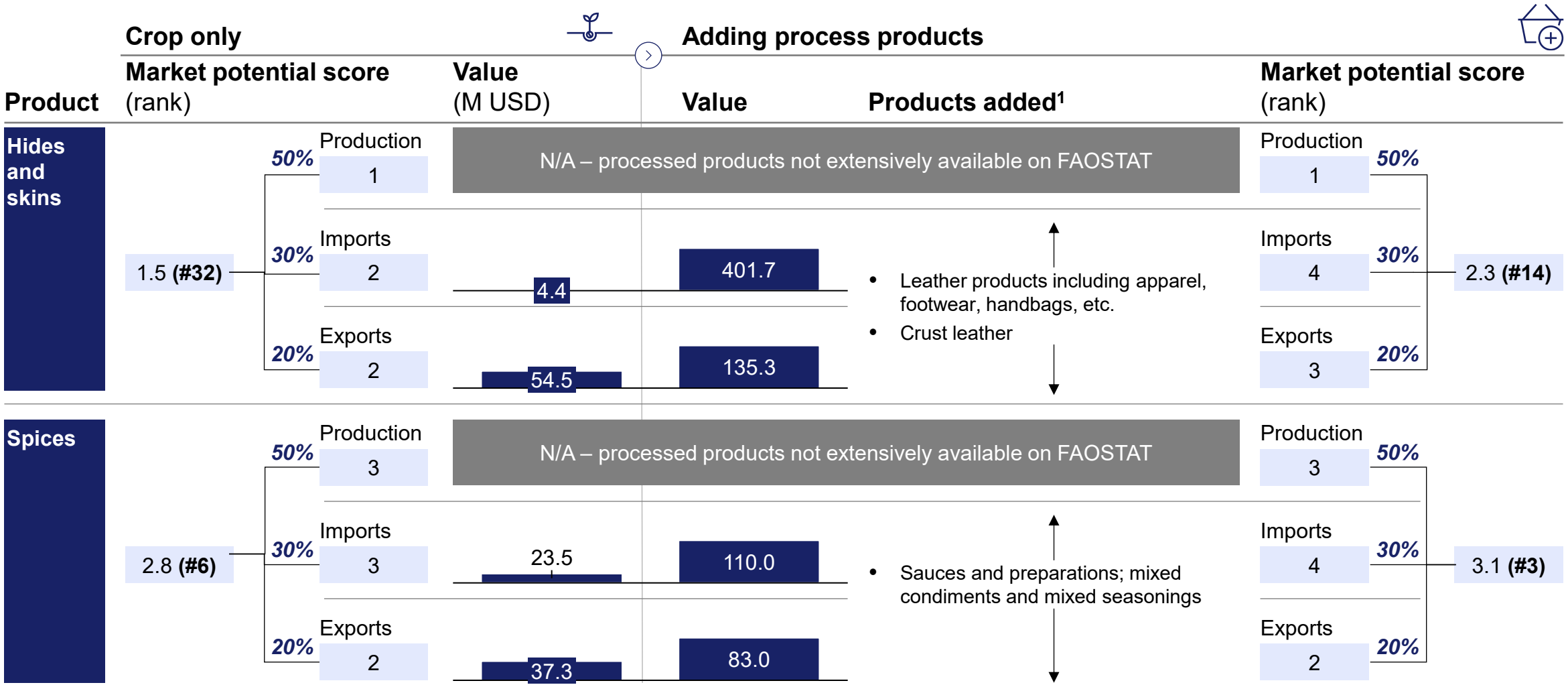
★ Addition to the shortlist



1. Only where there is a clear link between the crop and the end product – most UN Comtrade data include groups of products and cannot be quickly attributed to a specific crop

Shortlist: Including processed products increases the score of some value chains, but may not significantly alter the shortlist (2/2)

Examples of hides and skins, and spices



1. Only where there is a clear link between the crop and the end product – most UN Comtrade data include groups of products and cannot be quickly attributed to a specific crop

Final prioritization: Avocado, cassava and cow milk rank higher across 4 criteria

Low High

Criteria (weight, %)	A Government support	B Fragmen-tation	C Deal execution	D Value addition	Total
	15	*30*	*20*	*35*	*100*
Shortlisted value chains					
Avocado[1]					
Banana					
Cassava[2]					
Common bean					
Cow milk					
Potato[2]					
Spices					
Sweet potato					

1. While the avocado value chain ranks highest across the 4 criteria, it was not initially shortlisted due to lower domestic/import/export markets and impact potential compared to the other value chains
2. While potato and cassava have similar rankings, cassava was prioritized due to its higher climate resilience

Source: Press search, Local practitioners' interviews, PitchBook

Key insights

Among the 8 shortlisted value chains, **avocado**, **cow milk** and **cassava** rank the highest

The **avocado value chain** concentrates **multiple SMEs** especially in Kenya and Tanzania, a history of **small-scale previous investments** and **strong value addition potential** with avocado oil

The **cassava value chain** is a **national priority** across most countries, presents some **fragmentation with multiple SMEs**, and value addition potential with **flour** or **starch**

The **cow milk value chain** presents high fragmentation with **multiple SMEs** along with some large players, a history of **previous investments**, and **value addition potential** with UHT, powdered milk or yoghurt

Content

Value chain prioritization

Appendix

- **Details for the shortlist**
- Details for the final prioritization

>50 value chains could be ranked across 4 criteria for shortlisting (1/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	Value chain	Domestic	Imports	Exports	Climate resilience	Income generation potential[1]
Cereals & tubers (1/2)	Barley	<100 M Int$ produced	10-100 M USD imported, driven by Ethiopia/Uganda	5-100 M USD exported, driven by Kenya	Cool highlands crop, limited resistance to heat/drought	Often mechanized, decent margins with brewers
	Cassava	1-5 B Int$ produced across the 5 countries	<1 M USD imported	5-100 M USD exported, driven by Uganda/Tanzania	High tolerance to drought and poor soil, flexible harvest	Limited mechanization, low prices with little processing
	Maize	>5 B Int$ produced across the 5 countries	10-100 M USD imported, driven by Uganda	100-500 M USD exported, driven by Tanzania/Uganda	High sensitivity to rainfall timing and heat	Some mechanization, staple with low margins
	Millet	350 M-1 B Int$ produced across the 5 countries	<1 M USD imported	<5 M USD exported	High tolerance to drought/heat and variable rains	Manual wedding/harvest, low margins
	Potato	1-5 B Int$ produced across the 5 countries	10-100 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	Cooler climate crop, moderate drought sensitivity	Multiple hand tasks, moderate margins
	Rice	1-5 B Int$ produced, driven by Tanzania	10-100 M USD imported, driven by Uganda	100-500 M USD exported across the 5 countries	High water needs, limited tolerance to drought/floods	Multiple hand tasks, limited margins from the farm
	Sorghum	1-5 B Int$ produced, driven by Ethiopia	10-100 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	High tolerance to heat/low rainfall, and poor soil	Multiple hand tasks, limited premium channels
	Sweet Potato	1-5 B Int$ produced across the 5 countries	100 M-1 B USD imported across the 5 countries	5-100 M USD exported across the 5 countries	High tolerance to poor soils/ variable rain, flexible harvest	Manual tasks, limited processing

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (2/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	**Value chain**	**Domestic**	**Imports**	**Exports**	**Climate resilience**	**Income generation potential[1]**
Cereals & tubers (2/2)	Teff	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Moderate resilience; sensitive to heavy rains	Manual tasks, sustained prices in Ethiopia
	Wheat	1-5 B Int$ produced, driven by Ethiopia	>1 B USD imported across the 5 countries	5-100 M USD exported, driven by Kenya	Yield sensitive to heat/ drought	More mechanized, moderate margins
Vegetables & legumes (1/3)	Baby corn	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Moderate resilience with irrigation	Frequent small size harvests, relatively high prices
	Broccoli	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported, driven by Kenya	Cool-season crop, sensitive to heat and water stress	Multiple handling tasks, high-end demand
	Cabbage	350 M-1 B Int$ produced, across the 5 countries	<1 M USD imported	5-100 M USD exported, driven by Kenya	Moderate resilience with irrigation	High labor needs, high loss risk and price variability
	Cactus fruit	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Highly drought and heat tolerant	Low input and labor needs, mostly informal
	Carrot	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported, driven by Ethiopia/Kenya	Thrives under moderate conditions	Multiple handling tasks, moderate income
	Chickpea	100-350 M Int$ produced, driven by Ethiopia	1-10 M USD imported, driven by Uganda	100-500 M USD exported, driven by Tanzania	High tolerance to heat and rains	Manual tasks, higher prices than staples
	Common bean (haricot)	1-5 B Int$ produced across the 5 countries	10-100 M USD imported, driven by Kenya	100-500 M USD exported, driven by Ethiopia	Sensitive to rain variability, drought tolerance	Manual tasks, fair margins as staple with regional trade

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (3/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	Value chain	Domestic	Imports	Exports	Climate resilience	Income generation potential[1]
Vegetables & legumes (2/3)	Cowpea	100-350 M Int$ produced, driven by Kenya/Tanzania	<1 M USD imported	5-100 M USD exported across the 5 countries	Highly drought-/heat-tolerant, stress-resilient	Low operation frequency, primarily for local markets
	French bean	<100 M Int$ produced	<1 M USD imported	100-500 M USD exported across the 5 countries	Managed under irrigation, heat-/rain-sensitive bloom	High labor intensity, export potential
	Garlic	100-350 M Int$ produced, driven by Ethiopia	<1 M USD imported	<5 M USD exported	Grows in multiple climates but prefers cool, dry seasons	Multiple handling tasks, strong demand
	Green gram (mung bean)	<100 M Int$ produced	10-100 M USD imported, driven by Rwanda/Uganda	5-100 M USD exported across the 5 countries	Drought- and heat-tolerant	Moderate labor, sustained prices with regional demand
	Lentil	<100 M Int$ produced	10-100 M USD imported, driven by Ethiopia	<5 M USD exported	Cool/dry-season crop, tolerates water stress	Manual tasks, moderate price premiums
	Onions	350 M-1 B Int$ produced across the 5 countries	1-10 M USD imported, driven by Kenya	5-100 M USD exported across the 5 countries	Moderate resilience with irrigation	Multiple hand tasks, price variability but decent
	Pigeon pea	350 M-1 B Int$ produced, driven by Kenya/Tanzania	<1 M USD imported	100-500 M USD exported across the 5 countries	Deeply rooted, drought-tolerant	Low operations frequency, modest prices
	Snow pea	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Cool-season crop, weather-sensitive bloom	Multiple hands harvests, potential high unit value

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (4/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	**Value chain**	**Domestic**	**Imports**	**Exports**	**Climate resilience**	**Income generation potential[1]**
Vegetables & legumes (3/3)	Spinach	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Managed with irrigation/ shade but heat-sensitive	Frequent harvest, fair margins but spoilage risk
Oilseeds and nuts (1/2)	Cashew	100-350 M Int$ produced, driven by Tanzania	10-100 M USD imported, driven by Rwanda/Uganda	100-500 M USD exported, driven by Tanzania	Suited to dry coastal zones, tolerates poor soil	Labor for collection and processing, moderate value
	Chia	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Tolerates drought and moderate heat	Few field operations, niche markets support prices
	Coconut	<100 M Int$ produced	<1 M USD imported	100-500 M USD exported, driven by Tanzania	Tolerant to drought and coastal conditions	Manual tasks, stable revenue from multiple products
	Cotton (seed)	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Rain variability sensitivity but drought tolerance	Labor-intensive picking, steady markets
	Macadamia	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported, driven by Kenya	Sensitive to long drought/ heat during nut set	Manual tasks, potential high prices with formal contracts
	Sesame	350 M-1 B Int$ produced across the 5 countries	<1 M USD imported	<5 M USD exported	Suited to hot/dry areas, low water needs	Low operations, exportable oilseed with decent prices
	Soya bean	100-350 M Int$ produced across the 5 countries	<1 M USD imported	100-500 M USD exported, driven by Ethiopia	Moderate resilience, heat-sensitive bloom	Mechanizable, contracts offer moderate income

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (5/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	**Value chain**	**Domestic**	**Imports**	**Exports**	**Climate resilience**	**Income generation potential[1]**
Oilseeds and nuts (2/2)	Sunflower (seed)	350 M-1 B Int$ produced, driven by Tanzania/ Uganda	<1 M USD imported	<5 M USD exported	Moderate drought tolerance, heat-sensitive bloom	Moderate labor, potential added value from crushing
Beverage crops	Cocoa	<100 M Int$ produced	<1 M USD imported	100-500 M USD exported, driven by Uganda	Managed with shade, sensitive to humidity	Laborious and skill-based, relatively high income
	Coffee (Arabica/ Robusta)	1-5 B Int$ produced across the 5 countries	1-10 M USD imported, driven by Kenya and Rwanda	>1 B USD exported across the 5 countries	Arabica sensitive to heat, Robusta more tolerant	High labor needs, high-value exports with premiums
	Tea	>5 B Int$ produced, driven by Kenya	1-10 M USD imported across the 5 countries	>1 B USD exported, driven by Kenya	Sensitive to heat/drought, requires regular rainfall	High labor needs, relatively high income
Fruits (1/2)	Avocado	350 M-1 B Int$ produced, driven by Kenya/Ethiopia	<1 M USD imported	100-500 M USD exported, driven by Kenya	Moderate drought tolerance, high-heat sensitivity	Moderate labor needs, strong prices driven by export boom
	Banana	1-5 B Int$ produced across the 5 countries	<1 M USD imported	5-100 M USD exported across the 5 countries	Tolerates variable rainfall	Multiple handling tasks, reliable but moderate prices
	Mango	350 M-1 B Int$ produced across the 5 countries	1-10 M USD imported, driven by Rwanda and Uganda	5-100 M USD exported, driven by Kenya	Deep roots and drought tolerance	Moderate labor, potential export premiums
	Pineapple	100-350 M Int$ produced across the 5 countries	<1 M USD imported	5-100 M USD exported, driven by Kenya	Sensitive to extreme heat/ drought	High labor needs, higher income from export/processing

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (6/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	Value chain	Domestic	Imports	Exports	Climate resilience	Income generation potential[1]
Fruits (2/2)	Plantain	1-5 B Int$ produced, driven by Uganda	<1 M USD imported	5-100 M USD exported, driven by Uganda/ Ethiopia	Resilient to drought	Manual tasks with moderate labor, moderate income
	Strawberries	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported, driven by Ethiopia/Kenya	Sensitive to heat and water stress	High labor needs, niche with high income potential
	Tomato	100-350 M Int$ produced across the 5 countries	1-10 M USD imported, driven by Uganda and Rwanda	5-100 M USD exported across the 5 countries	Manageable with irrigation	High labor needs, processing can raise value
Livestock and aqua-culture (1/2)	Beef meat	100-350 M Int$ produced across the 5 countries	<1 M USD imported	5-100 M USD exported, driven by Kenya/ Tanzania	Moderate heat tolerance of cattle	Little labor for extensive herding, moderate income
	Camel milk	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	High drought and heat tolerance	Daily herding and milking, niche high-value product
	Chicken broiler	100-350 M Int$ produced, driven by Kenya	10-100 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	Heat- and feed-sensitive	Intensive short cycles, generally profitable
	Cow milk	>5 B Int$ produced across the 5 countries	10-100 M USD imported, driven by Kenya	5-100 M USD exported driven by Uganda	High sensitivity to heat, feed, and water	Continuous manual effort, stable income
	Crustaceans	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported driven by Tanzania/ Kenya	Moderate resilience to climate conditions	Continuous labor needs, high value exports

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (7/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	**Value chain**	**Domestic**	**Imports**	**Exports**	**Climate resilience**	**Income generation potential[1]**
Livestock and aqua-culture (2/2)	Eggs	<100 M Int$ produced	10-100 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	Sensitive to heat	High labor needs, consistent income
	Finfish	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Heat tolerance but sensitive to reduced water levels	High supervision need, decent income
	Goat and sheep	100-350 M Int$ produced across the 5 countries	1-10 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	High tolerance to drought and heat	Extensive herding, reliable income but mostly informal
	Goat milk	100-350 M Int$ produced across the 5 countries	<1 M USD imported	<5 M USD exported	Tolerant to heat and poor feed, produces in dry periods	Manual efforts, niche market with moderate income
	Hides and skins	<100 M Int$ produced	1-10 M USD imported across the 5 countries	5-100 M USD exported across the 5 countries	By-product not directly affected by climate	Moderate manual work, decent processing income
	Pork meat	<100 M Int$ produced	1-10 M USD imported, driven by Kenya	<5 M USD exported	Heat-sensitive, dependency on feed	Intensive handling, potentially profitable
	Shellfish	<100 M Int$ produced	<1 M USD imported	5-100 M USD exported driven by Kenya/ Tanzania	Vulnerable to warming and acidification	Moderate labor needs, often high-value export niche

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted
2 Includes basil, mint, rosemary, thyme, etc.
3 Includes black pepper, cardamom, chili, clove, coriander, ginger, turmeric

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

>50 value chains could be ranked across 4 criteria for shortlisting (8/8)

DIRECTIONAL

Low High

		Market potential			Impact potential	
Category	**Value chain**	**Domestic**	**Imports**	**Exports**	**Climate resilience**	**Income generation potential[1]**
Herbs, spices & natural extracts	Herbs[2]	<100 M Int$ produced	<1 M USD imported	<5 M USD exported	Generally strong resilience with drought tolerance	Moderate labor, small markets but steady income
	Honey	100-350 M Int$ produced across the 5 countries	1-10 M USD imported, driven by Rwanda	<5 M USD exported	Reduced risk due to forage diversity	Limited labor, higher income from branding/processing
	Seaweed	<100 M Int$ produced	>1 B USD imported across the 5 countries	5-100 M USD exported, driven by Tanzania	Unaffected by terrestrial droughts	Manual coastal work, potential high income
	Spices[3]	100-350 M Int$ produced across the 5 countries	10-100 M USD imported across the 5 countries	5-100 M USD exported, across the 5 countries	Mixed resilience, generally moderate	Multiple manual tasks, high export potential
	Vanilla	<100 M Int$ produced	1-10 M USD imported, driven by Kenya	5-100 M USD exported, driven by Uganda	Sensitive to humidity/ temperature	High labor intensity and export value

1 Composite indicator qualitatively looking at (1) labor intensity and (2) quality/high-paid jobs – both metrics are equally weighted
2 Includes basil, mint, rosemary, thyme, etc.
3 Includes black pepper, cardamom, chili, clove, coriander, ginger, turmeric

Source: ITC Trade Map, UN Comtrade, FAOSTAT, Press search, Expert interviews

Content

Value chain prioritization

Appendix

- Details for the shortlist
- **Details for the final prioritization**

The shortlisted value chains can be assessed relatively to each other across 4 criteria (1/2)

DIRECTIONAL

x Details follow

Value chain	① Government support	② Fragmentation	③ Deal execution potential	④ Value addition potential
Banana 	Highlighted as national priority crop for 4 countries out of 5 (all except Kenya)	Largely **smallholder-driven**, with few SME processors such as Mazao Agro in Uganda or ZEAN in Rwanda	**1 transaction** recorded in the past 5 years with a ticket size of USD 1 M	Products include **banana chips**, **flour**, or **puree**, involving multiple value addition steps and moderate margins
Cassava 	Highlighted as priority crop for 4 out of the 5 countries (all except Ethiopia)	Varies according to the country with **few SMEs in Kenya** (e.g., Yuka Africa), **Tanzania** (e.g., GIPA Foods), and **Rwanda** (e.g., Kinazi) Dominated by Pura Organic in Uganda and smallholder-driven in Ethiopia	**2 transactions** recorded in the past 5 years, with an average ticket size of USD 1.4 M	Moderate potential for value addition with products such as **cassava flour** or **starch**
Common beans 	Highlighted as national priority crop for Tanzania, Uganda, and Rwanda	Few **processors and exporters** (e.g., Kamili Packers in Kenya, Shri Salasar in Tanzania) Other traders are not bean-focused (e.g., Upendo Ventures in Uganda, Hajuta in Ethiopia)	**1 transaction recorded** in the past 5 years	Limited value addition potential with key products including **canned/ cooked beans** and **bean flour**
Cow milk 	Highlighted as national priority in Kenya and Rwanda	Large players along with multiple processors across the 5 countries (e.g., Pearl Dairy in Uganda, Bio Foods in Kenya)	**7 transactions recorded** in the past 5 years, with an average ticket size of USD >15 M	**High-value products** such as **yoghurt**, **cheese** or **butter**, with limited value addition steps

Source: Press search, PitchBook, Kenya National Root and Tuber Crops Development Strategy, Tanzania Agricultural Sector Development Programme Phase II, Uganda Agriculture Sector Strategic Plan, Ethiopia National Potato and Sweet potato Development Strategy, Rwanda Crop Intensification Program, Local practitioners' interviews

The shortlisted value chains can be assessed relatively to each other across 4 criteria (2/2)

DIRECTIONAL

x Details follow

Value chain	① Government support	② Fragmentation	③ Deal execution potential	④ Value addition potential
Potato 	Highlighted as a national priority crop for each of the 5 countries	Multiple players in **chips production** across the 5 countries with few SMEs players in Tanzania, Uganda, Ethiopia, Rwanda Kenya driven by larger players, e.g., Propack	**4 transactions** recorded in the past 5 years, with an average ticket size of USD <100k	Limited steps of value addition with final products such as **potato fries**, **chips**, or **starch** but high **potential margins**
Spices 	No record found of spices being a national priority in any of the countries	**Multiple SMEs registered in Kenya** (e.g., Simba Mbili, MACE foods) Few players in Tanzania (e.g., Trianon Spices) or Uganda (e.g., Africa Spices) Large players also present (e.g., Chirag, Royco)	**4 transactions** recorded in the past 5 years, with an average ticket size of USD 1.1 M	Moderate value addition potential with products including **powder** or **sauces/pastes**; essential oil possible but very limited development in East Africa
Sweet potato 	Highlighted as national priority crop for Kenya, Tanzania, and Ethiopia	Largely **smallholder-driven** in Tanzania, Uganda, and Ethiopia Few **SME processors** in Kenya (e.g., Organi) and Rwanda (e.g., Ikijumba One Stop Shop)	**1 transaction** recorded in the past 5 years	Moderate value addition potential with products including **sweet potato fries, chips, and flour**
Avocado 	Highlighted as national priority crop for all countries except Uganda	**Multiple producing and processing SMEs** in Kenya and Tanzania Few SMEs in Uganda, Ethiopia and Rwanda	**3 transactions** recorded in the past 5 years, with an average ticket size of USD 1 M	High value addition potential with **avocado oil** both for food and cosmetics uses

Source: Press search, PitchBook, Kenya National Root and Tuber Crops Development Strategy, Tanzania Agricultural Sector Development Programme Phase II, Uganda Agriculture Sector Strategic Plan, Ethiopia National Potato and Sweet potato Development Strategy, Rwanda Crop Intensification Program, Local practitioners' interviews

2. Fragmentation: Supply is fragmented across all value chains, with majority of SMEs in the processing space (1/2)

DIRECTIONAL

Value chain	Inputs	Supply	Aggregation	Processing	Retail/distribution
Avocado	Commercial, public, and cooperative-led nurseries	Smallholder farmers	Small traders	Multiple SMEs	Street vendors
		SME for exports	Farmers' cooperatives	Avodemia, AVOMERU, Origen Fresh	Local markets/ supermarkets
	KALRO		Processors		B2B sales
Banana	Tissue culture labs (public and private)	Smallholder farmers	Small traders	Few SMEs	Some exporters – primary retail source for avocados
	Saved from farms		Farmers' cooperatives	BOKA EATS, Rohi	
Cassava	Saved from farms		Small traders	Multiple SMEs	
				Renman Africa, GIRAFFE BIOENERGY, Kinazi Cassava PLANT	
Common bean	Seeds from farm/ markets		Rural collectors/small traders	Few SMEs, primarily local consumption	
	Some certified suppliers			FarmFresh	
	dryland seed				

Source: Press search, Local practitioners' interviews

2. Fragmentation: Supply is fragmented across all value chains, with majority of SMEs in the processing space (2/2)

DIRECTIONAL

Value chain	Inputs	Supply	Aggregation	Processing	Retail/distribution
Cow milk	Cows from farms or markets Public institutions Large feed companies	Smallholder farmers Dairy cooperatives Some large processors	Multiple processors and cooperatives		
Potato	Seeds from farm/ markets Some certified suppliers Public institutions	Smallholder farmers	Small traders Farmers' cooperatives	Multiple SMEs	
Spices	Saved from previous harvest Local markets/other farmers Specialized nurseries	Smallholder farmers Some medium farms for export-oriented spices (e.g., chili, paprika)	Multiple processors and cooperatives		
Sweet potato	Seeds from farm/ markets	Smallholder farmers	Small traders	Few SMEs	

Retail/distribution:
- Street vendors
- Local markets/ supermarkets
- B2B sales
- Some exporters – primary retail source for avocados

Source: Press search, Local practitioners' interviews

4. Value addition potential: Avocado value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Avocado product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Fresh avocado  ↓	Primarily Hass and Fuerte avocados Seed/rootstock procurements increasingly available with supply of high-yield varieties (e.g., Winfield Africa) Trees are usually grafted with Hass/ Fuerte scions, with 100-200 trees/ha to balance yield and canopy management Grafted trees bear fruits after 2-4 years Avocados that cannot be used in food industry are instead used to make cosmetics oil	Dominated by small-scale farming (>95% of Kenya's total avocado harvesting), with presence of SMEs especially for export A large part of the supply is directly exported as fresh avocados Avocados are generally harvested when still fully firm and left to ripen off the tree Kenya is the main supplier of avocado oil, but other countries are scaling up	Done via traders, cooperatives, exporters and specialized off-takers Proximity to plants is crucial to reduce post-harvest losses, with strong processor involvement in the aggregation	Primarily washing, sanitizing, quality checking for exports, and packing	Exports to Europe, the Middle East and China Domestic retail include local markets and supermarkets	Generally household consumption for both export and domestic market
Avocado oil  ↑				Avocado oil is obtained by pressing and kneading the flesh of cultivated fruit, followed by centrifugation and refining Oil types include refined, virgin, and extra virgin oil, which are primarily used for cooking, cosmetic, and pharmaceutical purposes	The highest share of avocado oil produced is exported (>90% in Kenya, exported to >90 countries) Primarily serving Europe, North America, and the growing demand in the Middle East	Health-driven demand for food uses, incorporated into premium cooking oils and packaged foods Cosmetic-driven demand for skincare or hair treatment (e.g., L'Oreal)
Avocado puree/frozen  →				Limited processing in East Africa (<5% of total processing in Kenya)	Main markets are industrial buyers for the EU and the Middle East	Primarily food manufacturers

Source: Local practitioners' interviews, FAO, World Bank, IITA

4. Value addition potential: Banana value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Banana product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Fresh banana  ↓	Both dessert and cooking bananas are grown	Primarily from smallholder farmers Some larger-scale plantations for dessert banana export, but limited	Highly fragmented, with small traders or farmer cooperatives aggregating and selling to local markets Sometimes, direct farmer sales to processors Highly perishable good, with 30-40% of harvest lost due to rough-handling, poor storage and transport Short to medium distances of fresh fruits for local processing	N/A	Primarily to informal local markets, small portion to formal supermarkets	Household consumption, raw or cooked
Banana chips  →	Uses primarily Cavendish banana, usually grown alongside East Africa Highland banana varieties (EAHB) by smallholder farmers			Done by SMEs (e.g., ZEAN in Rwanda) Slicing sometimes mechanized, followed by frying, cooling, sorting, and packaging in moisture-barrier bags	Primarily for local market, distribution driven by street vendors, local shops and supermarkets	Local consumption, main volumes bought by street vendors and informal retailers
Banana flour  ↓	Made with East African Highland banana varieties, major crops in East Africa; Harvest made when banana is unripe for flour due to higher starch and lower sugar			Done by SMEs (e.g., Nyangorora in Kenya) Drying/dehydration with solar dryers or tunnel dryers, followed by milling/grinding to turn the dried chips into flour	Local domestic market for small food processors, bakeries, households, either through wholesalers or direct farmer sales	Local bakeries and pastry makers Retailers, health food shops for urban/high-income customers
Banana puree/ juice  ↑	Uses primarily Cavendish banana, usually grown alongside East Africa Highland banana varieties (EAHB) by smallholder farmers			By fruit processors, generally not banana-focused Pulping followed by enzymatic or heat treatment to improve quality, and filtration where required	Primarily to local beverage companies	Catering/food service buy ready juices for beverage

Source: Local practitioners' interviews, FAO, World Bank, Evans School Policy Analysis and Research Group, CABI, CGIAR

4. Value addition potential: Cassava value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Banana product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Cassava fresh roots  ↓	Resilient "food security" crop with tolerance to poor soils Roots can be harvested between 6 months to 3 years after planting After harvest, very short usable root lifespan, must be processed within 2-3 days Same varieties for the different products – high-starch cassava tubers are separated at the aggregation/ processing levels	Primarily grown by smallholder farmers for both subsistence and local scale High production in the Eastern Uganda region	Generally direct to local markets or own consumption	N/A	Smallholder farmers selling surplus to local markets	Household consumption (fermentation or boiling)
Cassava flour  ↓			Limited transportation due to rapid deterioration of fresh cassava Processors generally use intermediary traders to aggregate cassava Primary aggregation at the "collection center" level, with primary processing including slicing and sun drying to ensure stable shelf life Cassava for flour vs. starch separation happens at the warehouse level	Multiple SMEs (e.g., Renman in Kenya) Majorly artisanal, involving peeling and washing, rasping, dewatering, drying, then milling and sieving into fine flour; Both manual and mechanized equipment are used	Primarily through small shops or supermarkets, blended with maize or millet	Limited household consumption compared to raw/ dry cassava
Cassava starch  ↑				Similar SMEs to flour Industrial or semi-manual process involving peeling, rasping, pulp dilution, fiber separation and purification, and concentration leading to wet starch, then dried into native starch	B2B sales primarily to food and beverage processors, but also paper and packaging or pharmaceutical industry	Primarily in products such as instant noodles, bakery, sauces Multiple starch applications in food, textiles, paper, biofuel
Cassava ethanol  ↑				From cassava chips/starch, industrial process required for liquefaction, saccharification, fermentation, distillation and blending	Wholesale and B2B retail focus, e.g., for clean-cooking fuel distribution or to industrial users	Used for clean cooking, as industrial alcohol, or blended into transport fuel

Source: Local practitioners' interviews, FAO, World Bank, IITA, Evans School Policy Analysis and Research Group

4. Value addition potential: Common bean (haricot) value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Common bean product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Packaged dry beans  ↓	Multiple types grown in East Africa (e.g., mottled, red, white varieties) Produced at all altitudes, including lowland areas, and grown twice a year Common manual harvesting where farmers uproot or cut the bean plants, thresh them and sundry them	Primarily driven by smallholder farmers across East Africa	Bean trade largely informal Aggregation made through rural collectors/ assemblers or directly from farmers to wholesalers for larger volume	Limited post-aggregation, with mainly post-harvest handling (threshing, drying, cleaning) typically done by cooperatives Branding can be done by SME grain processors	Distributed in the local market, either unbranded to vendors or branded prepacked dry beans in supermarkets Exported and distributed globally, but primarily within Africa	Primarily used for household consumption for high nutrition value, integrated in multiple recipes Supports school and institutional meal programmes
Canned/ cooked beans  ↓				Primarily done by large food processors (e.g., TruFoods and Njoro Canners in Kenya) Involves soaking, precooking, filling into cans, sealing/sterilizing, cooling, labelling, and packaging – requires capital-intensive plants	Primarily for local markets	Primarily consumed by higher-income households

Source: Local practitioners' interviews, FAO, World Bank, Taylor & Francis, IITA

4. Value addition potential: Cow milk value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Cow milk product	Inputs	Production	Aggregation	Processing	Retail	Consumption
UHT milk 	Different types of dairy cattle, with predominance of crossbreeds Breeding methods go from natural mating to artificial insemination, with Kenya most advanced Often poor farm management (e.g., hygiene, feed) leading to limited yield vs. world average and fat content used for high-value products	Driven by smallholder farmers with ~80% of the milk going to the informal market Relative level of consolidation through dairy cooperatives, with ~400 cooperatives in Kenya supplying ~80% of the processed volume, including large cooperatives like Githunguri with >350k L of milk produced per day	Milk collection and bulking can be done through 3 major channels • Informal traders, most common, selling unpasteurized milk directly to consumer or kiosks • Cooperatives with milk cooling centers, where farmers bring milk to a collection point, milk is tested and cooled, and sold to dairy processors • Direct delivery to dairy processors for large farms	UHT milk resulting from primary processing, with pasteurization, standardization, and packaging	Local distribution primarily through supermarkets/ mini-marts	Large household consumption, growing in popularity due to long life and ease of conservation
Yoghurt 				Yoghurt resulting from secondary processing to create base yoghurt, to which flavors can be added before it is packaged and sold		Fast-growing dairy products, pushed by demand from the youth
Butter 				Butter resulting from secondary processing through cream separation before being refined and packaged		Almost niche products with limited consumption compared to yoghurt or UHT, not expected to grow quickly
Cheese 				Higher value addition product through coagulation, cooking, draining/pressing and ripening/aging		

Source: Local practitioners' interviews, FAO, World Bank, IITA

4. Value addition potential: Potato value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Potato product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Fresh potato  ↓	Grown in East African highlands, with generally limited productivity Often limited access to quality seeds, most farmers rely on recycled seeds Local varieties for crisps and chips include Unica or 1G-70	Primarily grown by smallholder farmers (>80% in Kenya) Quality variability due to high level of fragmentation	Primarily small-scale farmers and cooperatives through informal channels Processors typically buy either from contracted farmers or from agents bulking potatoes Multiple middlemen/ brokers who aggregate, store, transport, and/or re-sell raw potatoes to other traders Can involve long-distance travels	N/A	Driven by informal markets like roadside stalls and small traders	Primarily household consumption, large processors export intra-Africa
Potato chips  →				Limited players making frozen chips (<2% of potato production in Kenya) Processing involves washing/peeling, frying and freezing	Retailers include franchised hotels and fast-food chains which usually import due to quality standards (KFC recently agreed to source from Kenya)	Rapidly growing demand especially in urban markets, driven by population growth, urbanization, and more fast-food chains
Potato crisps  →				>90% of processing with chips Multiple crisps SMEs or larger players doing the processing (e.g., Hollanda Fair Foods in Rwanda), involving washing/peeling, frying, seasoning and branding	Primarily local retailers including small shops and supermarkets	
Potato starch  ↑	Local and ware varieties are usually planted (e.g., Shangi in Kenya) – high-starch industrial varieties not common			Processing companies or cooperatives transform fresh tubers into starch, involving washing, grating, extracting starch slurry, settling and drying, and packaging	Primarily to food ingredient suppliers, and industrial buyers in food, paper, and textile sectors	Both households for cooking, and manufacturers increasingly seeking alternative to imported starch

Source: Local practitioners' interviews, FAO, World Bank, EAPR (European Association for Potato Research)

4. Value addition potential: Spices value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Spices product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Spice powder 	Multiple spices, primarily procured from other farmers or local markets Major spices include cloves, cinnamon, ginger, turmeric, black pepper, cardamom, chili Quality differs according to the country (e.g., Uganda has lower quality than Tanzania due to cooler climate and more moisture)	Primarily driven by smallholder farmers Few medium farms for chili or paprika	Multiple aggregation points between the farmers and processors, involving small traders before larger aggregators and cooperatives Some markets are more organized (e.g., Tanzania's dried cloves taken to government-run collection centers where they are sifted again and rid from unwanted particles, before being transported to warehouses for local sales or export)	Cleaning, drying, grinding/crushing can be done at the cooperative level (e.g., for chili in Northern Uganda, ginger in Kenya) with mechanical dryers and sieving machines Fine grinding, blending of spices done at the SME level (e.g., Tropical Heat in Kenya)	Primarily for local markets through supermarkets or direct B2B contracts Africa produces 12% of the world spices, with about 75% consumed locally while the rest is mainly exported to Asia	Primarily household consumption, especially curry powder, chili powder/flakes, ginger Businesses ranging from restaurants/ hotels to street food vendors
Sauces and pastes 				Involves initial sorting/ cleaning, cooking (i.e., thermal processing), homogenizing and flavor adjustment Primarily done by SMEs (e.g., Tropical Heat) and larger FMCG companies (e.g., Bidco Africa)		

Source: Press search, Local practitioners' interviews

4. Value addition potential: Sweet potato value chain

DIRECTIONAL

Value added from the crop ↑ High → Medium ↓ Low Multiple SMEs across East Africa

Estimated share of production: High → Low

Sweet potato product	Inputs	Production	Aggregation	Processing	Retail	Consumption
Fresh sweet potato  ↓	Sweet potato thrives across altitudes, usually consistent and reliable yields Reaches maturity in 100 to 150 days Available for multiple months in the year, usually harvested gradually	Fragmented supply primarily from subsistence-oriented smallholder farmers (~95% in Tanzania, 80% in Uganda, with ~50% participating in the market)	Most farmers sell within own village or nearby before products reach larger markets or retailers ~15% of sweet potatoes sold at the farm-gate level in Uganda and ~40% at roadside markets For flour, milling can be done directly at the family level	N/A	Primarily along roadsides or in nearby semi-urban and urban markets	Household consumption mashed, boiled or roasted, often for infants
Sweet potato flour  ↓				Processing involves peeling and drying (most critical step) before milling, converting dried chips into flour Done primarily by small operators and sometimes mixed into wheat flour for composite products	Can be sold to local food manufacturers, bakeries, retailers and informal markets	Primarily by bakeries or snack makers for bread, mandazi or cakes For household use, targeting higher-income consumers, positioned as specialty flour
Sweet potato puree  ↑				Simple processing exists but for longer-lasting purees, more complex processing involves heating puree through a continuous-flow microwave system before rapidly cooling and packaging	Sales primarily conducted at the local level including B2B	Primarily by bakeries or other food processors using puree to replace wheat flour

Source: Local practitioners' interviews, FAO, World Bank, IITA, International Potato Center