

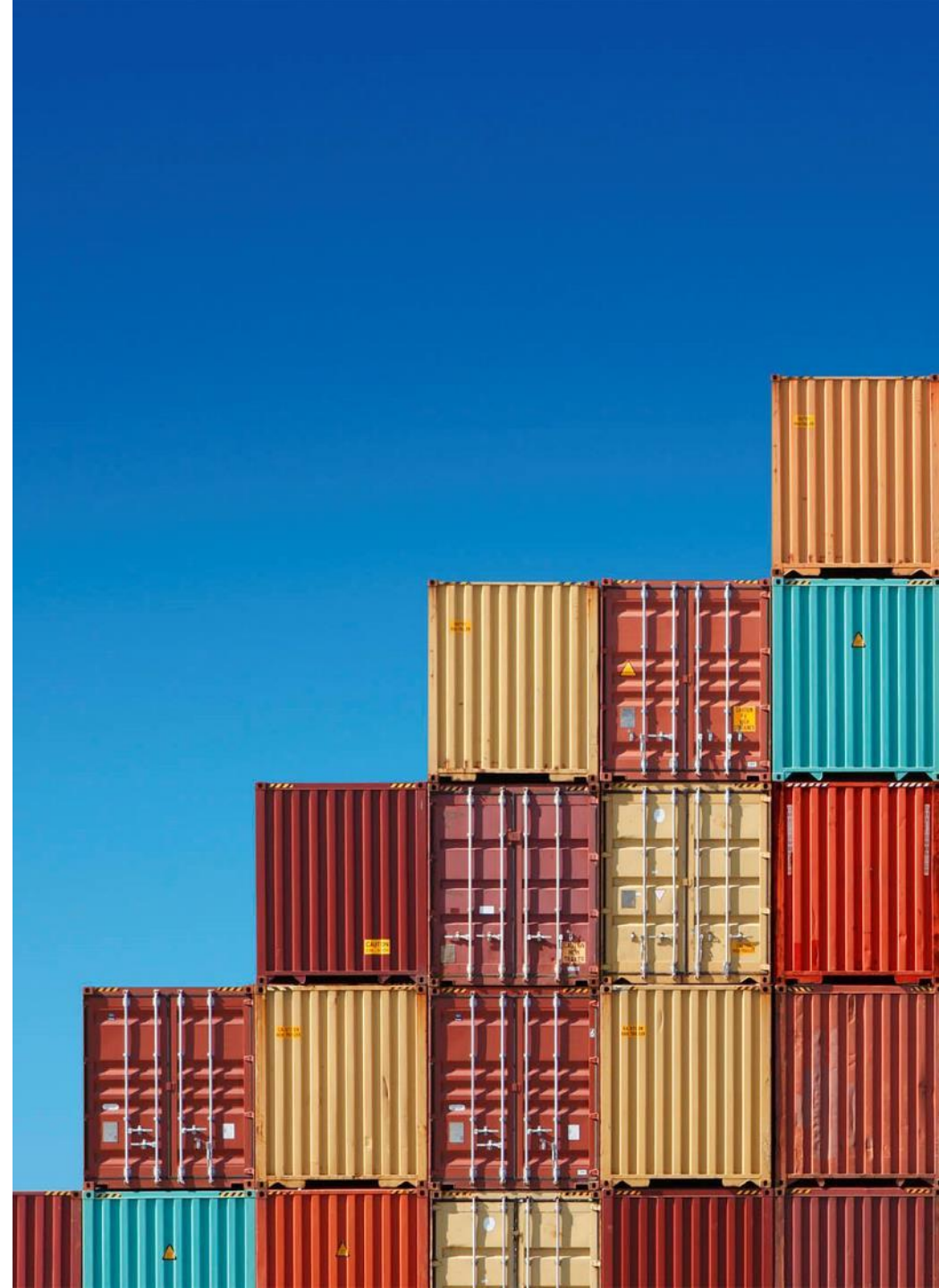
Transforming manufacturing in Kenya: unlocking potential and barriers

Agro-processing

March 2021



This study has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK government's official policies



Agenda



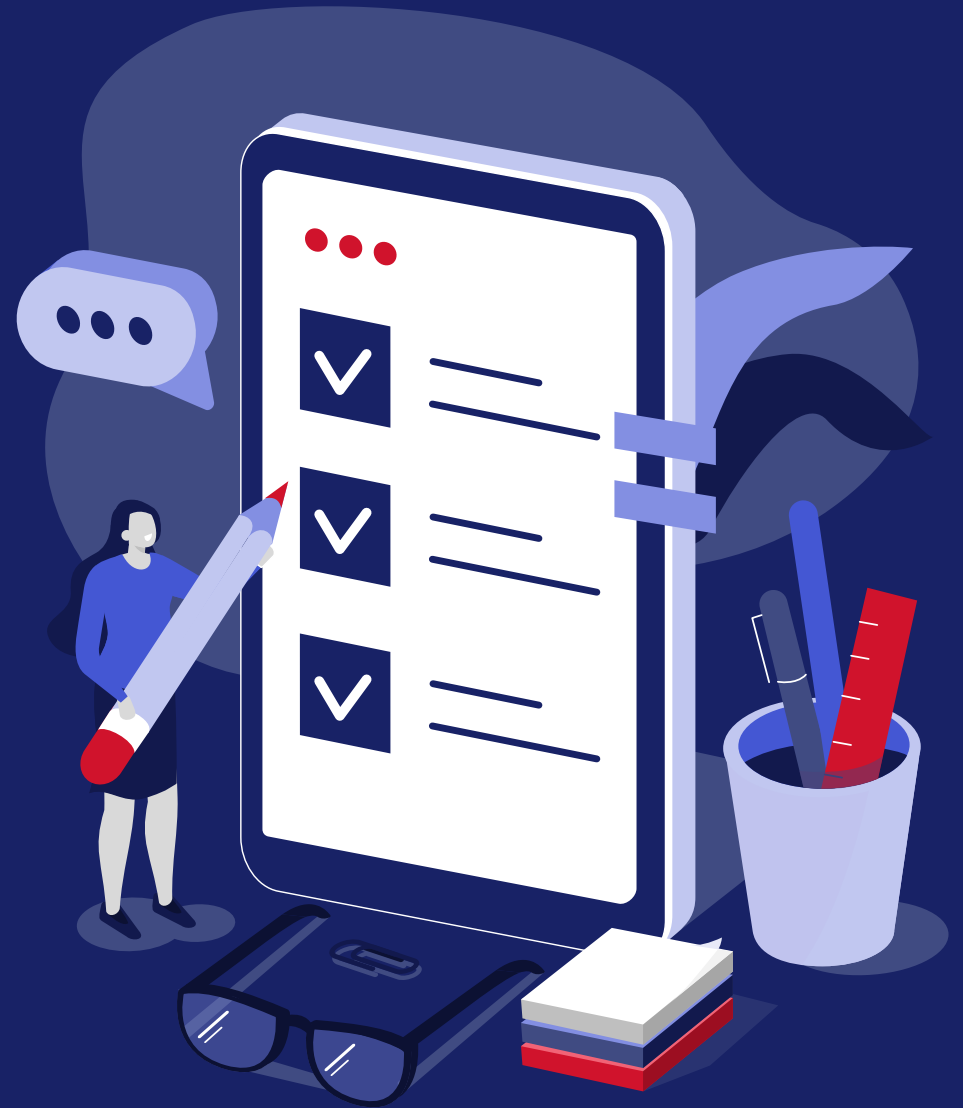
Introduction to Manufacturing Africa



Overview of agro-processing potential in Kenya



Interactive discussion and closing



Manufacturing Africa programme overview



Programme goal

Reduce poverty by attracting £1.2 billion of foreign direct investment and create 90,000 jobs



Funding

UK Aid



Duration

7 years (2019-2026)



Focus sector

Manufacturing



Implementing consortium









McKinsey & Company, BDO, TechnoServe, Reformatics, Steward Redqueen



Support provided

Transaction facilitation for investors/ manufacturers; technical assistance to governments/ investment promotion agencies

Transaction facilitation support – overview








What we do	Who we work with	What support we provide	NON-EXHAUSTIVE
Transaction facilitation (TF) <ul style="list-style-type: none">  Offer neutral investment advisory services to reduce the risk, cost and deal time of manufacturing transactions  Introduce potential strategic partners and provide market linkage support to current investment plans  Conduct technical, commercial and financial due diligence and strengthen existing business cases 	<ul style="list-style-type: none">  Manufacturers To secure funding for expansion and working capital  Investors To de-risk investments in the manufacturing sector  Industrial parks To attract investment 	<ul style="list-style-type: none"> Feasibility <ul style="list-style-type: none">  Assess markets  Review business cases Permits <ul style="list-style-type: none">  Clarify regulation Financing <ul style="list-style-type: none">  Develop investment memos  Identify investors  Develop strategies to attract tenants Operations <ul style="list-style-type: none">  Create market linkages, e.g., identify suppliers and off-takers 	<ul style="list-style-type: none">  Technical due diligence  Commercial due diligence  Capital structuring

In Kenya, 4 transactions worth ~USD 65Mn reached financial close, with 25 more actively being supported

NON-EXHAUSTIVE | FIGURES AS AT 17 MARCH 2021

Sector distribution

% of total potential transactions

	Agro-processing 31%
	Consumer electronics 30%
	Textiles 9%
	Iron and steel 4%
	Vehicles and transport equipment 4%
	Pharmaceuticals 3%
	Others¹ 19%

Details on transactions which have reached financial close

Company	Business description	Transaction size, USD Mn
Organic waste composter looking to build a new facility to produce animal feed and fertiliser	Waste management company which applies the circular economy principle of turning organic waste (incl. human waste) into new products (e.g., fertilizer, animal feed), and drives social impact by reducing urban waste	7
Steel company looking to expand its operations	Established steel manufacturer in Kenya specialising in the production of hot-rolled steel products	17 Financed by IFC
Dairy manufacturer looking to expand	Dairy manufacturer aiming to roll out new product category and cold chain logistics	35
Cleaning chemicals company looking to expand production line	Contract manufacture of soaps, detergents, chemicals and cleaning solutions aiming to expand production of key ingredients for sanitisers	5.5
		Total = 64.5

1. Includes sectors such as rubber and plastics, building materials, chemicals, other electronics and waste management

4

Transactions reached financial close

25

Transactions actively being supported

~\$965Mn

Total value of transactions Currently supported

20,000+

Potential jobs created or protected

Technical assistance support – overview

What we do

Who we work with

What support we provide

NON-EXHAUSTIVE



Provide **COVID-19 response and recovery support** to the manufacturing sector



Provide **assistance and training to investment promotion agencies**, strengthening governments' capacity to profile investment opportunities and facilitate deals



Support **policy changes at the sector level** to remove obstacles to investment and attract investors



Run **sector-wide strategic initiatives to help groups of manufacturers** improve project feasibility



Governments



Investment promotion agencies



Donors

Capacity building

- Build HR and skill capabilities at investment promotion agencies (IPAs)
- Enhance investment processes at IPAs (e.g. design digital marketing tools)
- Improve relationships between government stakeholders in investment ecosystem

Policy reform

- Support policy changes sector-level to remove recurrent barriers to investment and attract investors
- Engage IPAs, EPZs, customs and tax authorities, and industrial parks to co-develop policy reform frameworks

Strategic investment promotion

- Undertake sector-wide strategic initiatives to help groups of manufacturers improve project feasibility
- Design RFP processes to grow existing sectors or stimulate new ones
- Support value chain development

Agenda



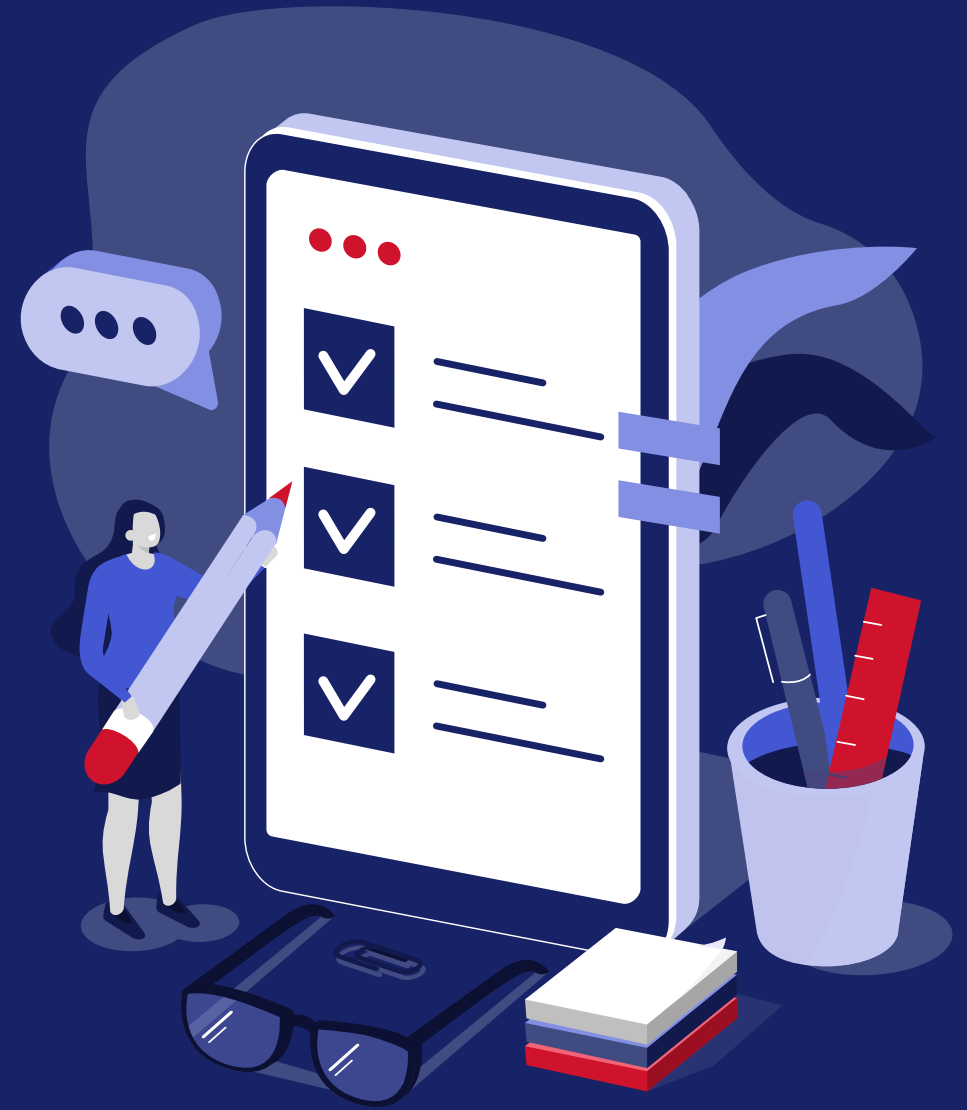
Introduction to Manufacturing Africa



Overview of agro-processing potential in Kenya



Interactive discussion and closing



Unlocking potential and barriers in

Agro-processing: Pasta



Key messages in pasta



Pasta is a fast growing consumer good with favourable margins



There is potential for Kenya to substitute imports in the medium term (as >90% of pasta is imported)



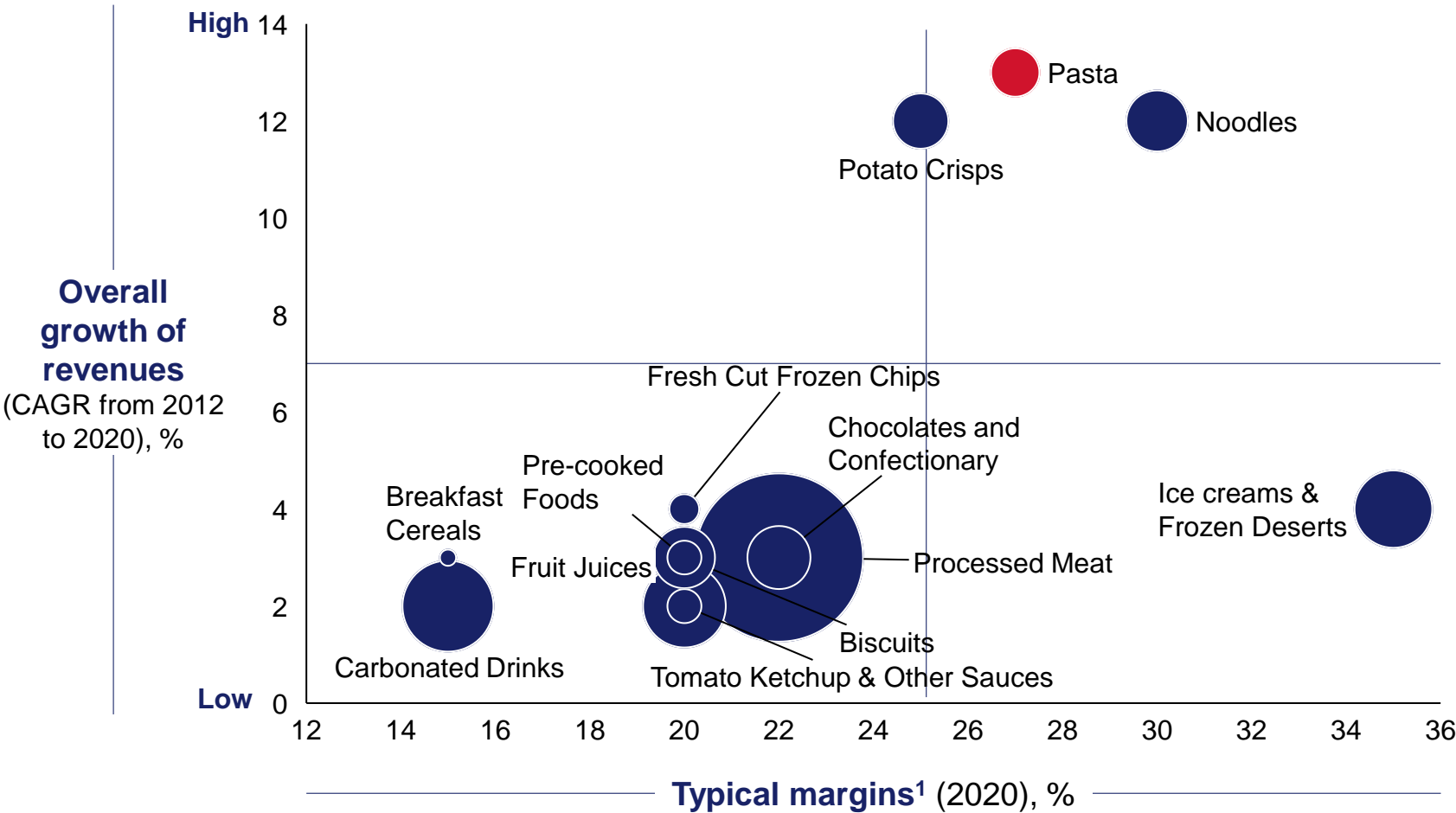
Sector players would have to tackle barriers limiting cost competitiveness to unlock potential

Pasta is the CPG with highest potential for manufacturing scaleup in Kenya

Assessment of scaleup potential in consumer packaged goods

● Details follow

● Bubble size = Market size USD Mn



Key insights

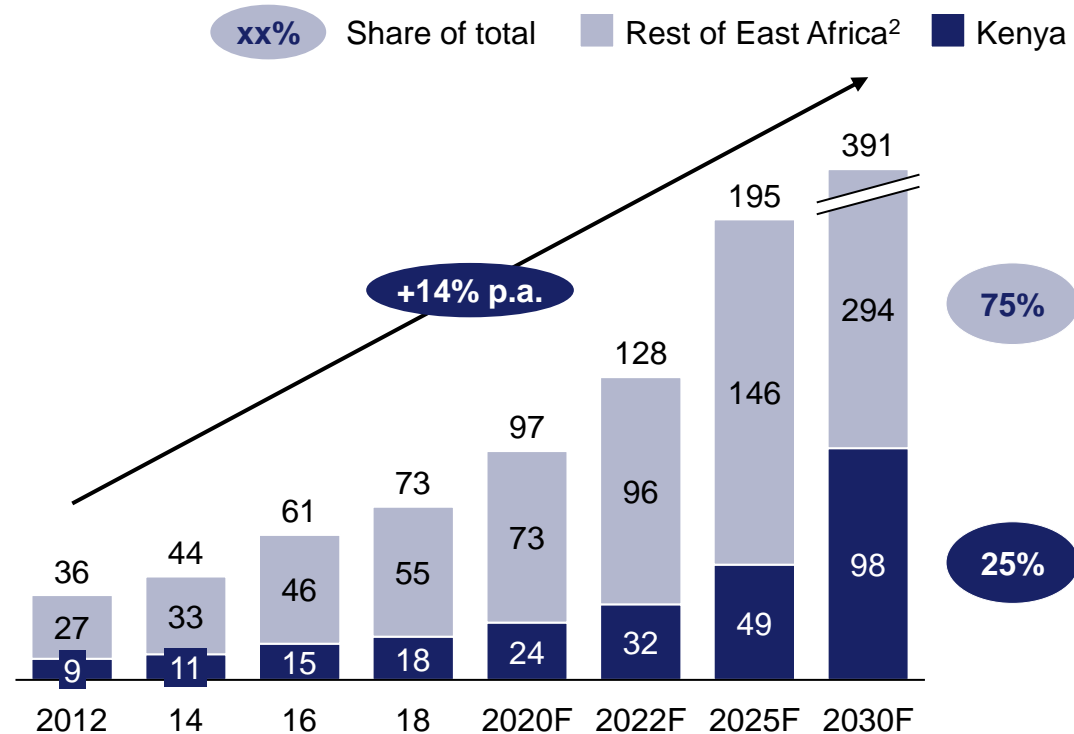
Pasta is the consumer packaged good with highest potential for manufacturing scaleup: pasta has the fastest growing revenues (13% CAGR from '12- '20) and high retail and manufacturing margins² (~25-30%)

1. Retailer margin 2. Manufacturing margins are highly correlated with retail margins
Source: UN Comtrade data, expert interviews

Strong growth in pasta spend in Kenya and the region is expected to continue

The East Africa market is expected to be worth USD ~400Mn by 2030, with Kenya's market at USD 98Mn

Pasta market size¹ growth in Kenya, Mn USD



1. Represents final sales value based on pasta import data (as the market is dominated by imports)
2. Rest of East Africa includes Ethiopia, Uganda, Rwanda, Burundi and Tanzania
3. Qualitative factors of pasta include the origin of the durum wheat from which the flour is produced, the characteristics of the flour, the manufacturing processes of kneading, drawing & drying, possible added ingredients and the hygiene of preservation

Source: ITC trade data, World Bank; Kenya National Bureau of Statistics, IMF GDP projections, UN population projections, Source: Euromonitor, World Bank, Oxfam

Growing incomes and increasingly urbanised, middle-class lifestyles are driving preferences for pasta



Kenya's population is growing...

- **Fast-growing population at ~ 3% p.a.**
- **Middle and upper classes are widening as** East Africa has doubled its income per capita in the past decade, and GDP per capita is rising by 7% CAGR since 2010
- **Kenyans will become increasingly urbanised** as half of Africa's population expected to reside in urban areas by 2030



Driving preference for convenience and taste...

- **Busy people and families tend to prefer easy-to-prepare foods.** As pasta is quick to prepare, it is appealing to parents and other urban groups with time-poor, busy lifestyles
- **Willingness to buy premium pasta is increasing:** people with higher household income are aware of better quality³ options and can afford them



...and better access to pasta

- 45%** Of households incomes are spent on average on food & beverages in Kenya
- 40%** Of pasta is distributed through modern formats, i.e. markets and supermarkets

>90% of pasta is imported from Egypt and Turkey, indicating significant potential to substitute imports

XX Size, Mn USD X% Share of total market



Key insights

Nearly all of Kenya's pasta is currently imported, indicating significant potential to substitute imports

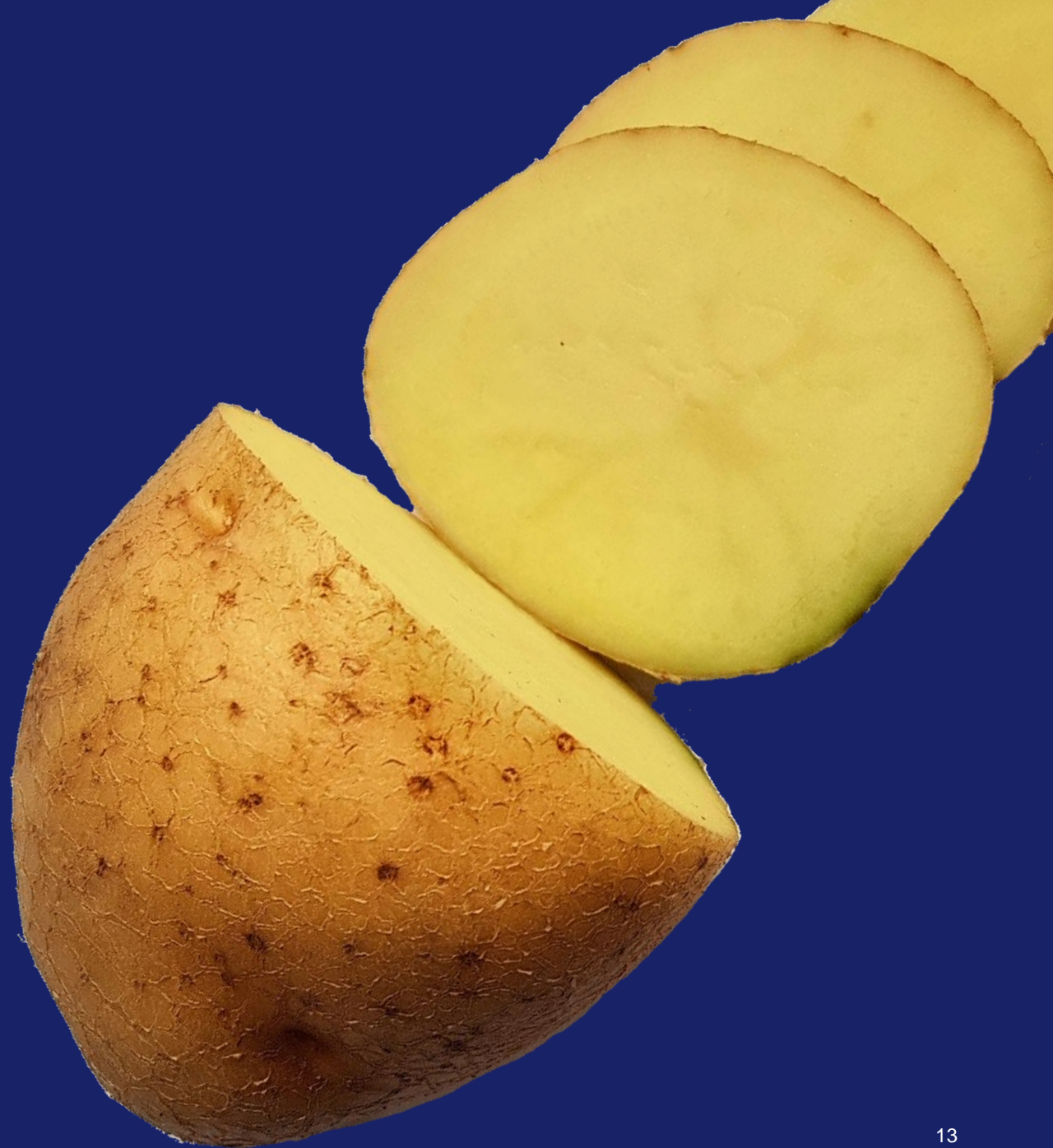
~2/3 of the total market is standard pasta which is mostly imported from Egypt

~1/3 of the market is premium pasta primarily imported from Turkey

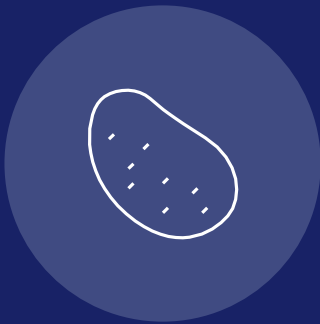
1. Includes Oman, Italy, United Arab Emirates and 20 other countries with <1% share of imports
2. Some brands manufacture pasta in multiple countries
3. End user price in the supermarket, fluctuate based on exchange rate and import quantities
4. Includes "mixed" products, which contain whole wheat and some durum wheat. Some brands only use whole wheat to produce their pasta

Unlocking potential and barriers in

Agro-processing: processed potatoes



Key messages in processed potatoes



80-90% of chips are informally processed. Fresh-cut chips (used for French fries) accounts for ~10% of formally processed potatoes




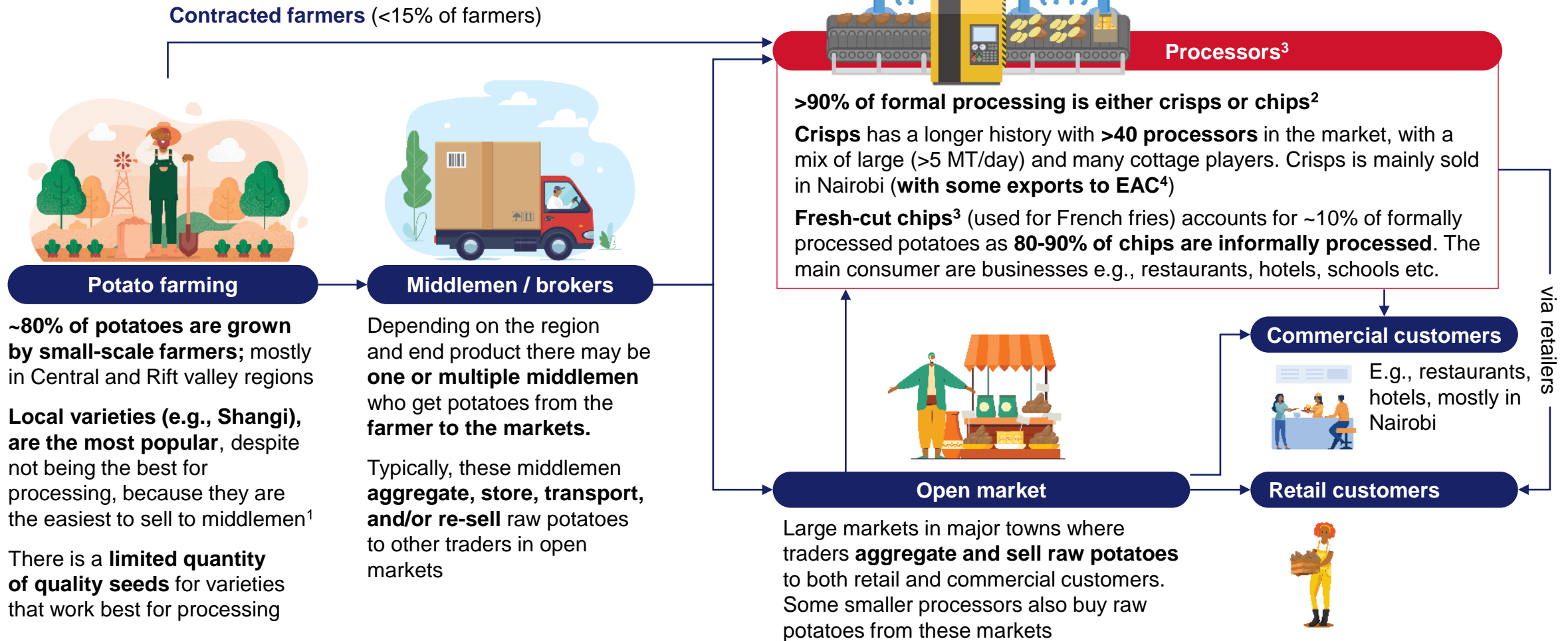
Overall demand for processed potatoes is growing rapidly at ~18% ('19-'25). While crisps are the dominant segment, fresh cut chips are expected to grow twice as fast in the short-term



Growing demand could lead to a 3-10 ha deficit for new factory space, indicating expansion potential for processors

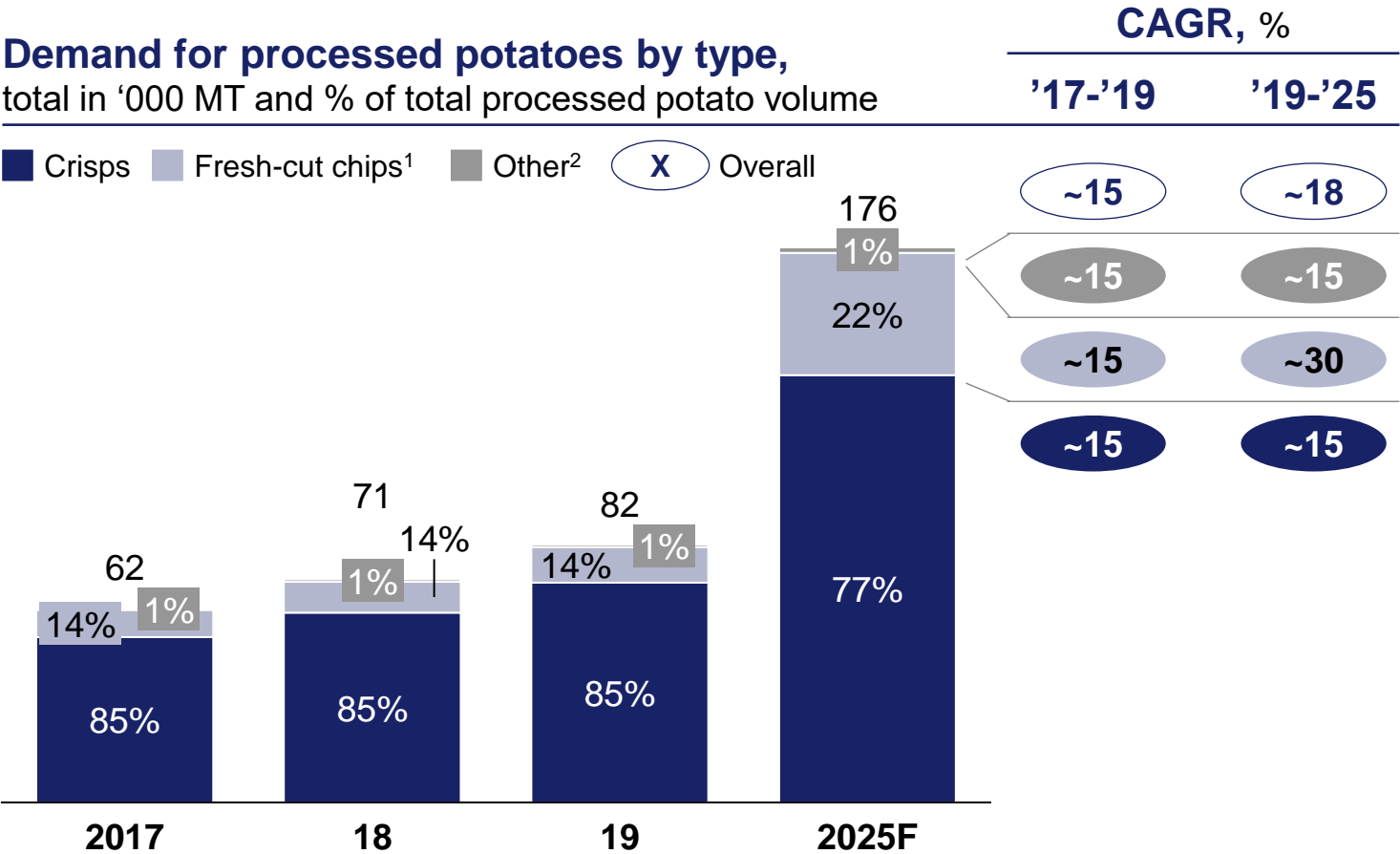
Processors can source potatoes from brokers, the open market or directly from contracted farmers

 Focus of this section



1. Middlemen prefer the local varieties (e.g., Shangi and Markies) as it has been historically grown in Kenya and most customers are familiar with it (even if it is sub-par for processing). As such, farmers will rarely grow potatoes specialised for processing (e.g., Destiny and Rudolf for crisps) unless they have guaranteed offtake | 2. Only ~10% of potatoes produced in Kenya are formally processed | 3. For potato chips, the major processors are Deepa Industries (Tropical Heat), Propack (Krackles) and Norda industries (Urban Bites). For potato chips, the main suppliers are Sereni Fries, Gaea foods, and Panagro. Most processors are located in Nairobi (closer to main market) | 4. East African Community. Exports of processed potatoes to EAC in 2018 were ~90 MT (less than 5% of the total production)

While potato crisps are by far the largest formal market segment today, ready-cut chips are expected to grow twice as fast



1. ~150,000 MT of potatoes is used in for chips but only 5-10% of that is processed. Only showing the amount that is formally processed
2. Includes potato flour, dried / dehydrated potatoes, frozen potatoes
3. In 1995, there were at least 22 processors with an average production of 61 tons per month while in 2003, the number of crisp processors was estimated at 40 with the highest concentration of potato processors being in Nairobi city and consuming about 2% of the total potato production in Kenya
4. Potential proposed regulation limiting self-processing in certain locations e.g. Nairobi CBD

Key insights

Crisps constitute >80% of the market³ and are expected to grow ~15% p.a., driven by continuing urbanisation, increasing incomes and moves towards convenience

Overall processed potato growth in the **next 5 years is stimulated by ~30% growth in fresh-cut chips driven by commercial demand,** mostly restaurants / hotels. This is due to increasing regulation in the food sector⁴, a need for traceability and consistency, and cost effectiveness

Significant demand growth could lead to a 3-10 ha deficit for factory space

Demand for processed potatoes by supply source ‘000 MT/ year

			Assumptions
2025 demand	<div><div></div><div>176</div></div>	>2x 2019 demand	Based on projected growth (18% from ‘19 – ‘25), demand shifts from ~81K MT/year to 176K MT / year
Existing supply, 2019	<div><div>81</div></div>	~65% Average utilisation	Assumes ~60% utilisation for crisps and 70% utilisation for fresh cut chips processors
Expansion due to existing excess capacity	<div><div>41-61</div></div>	20-30% Additional production	Assumes all processors operating below full capacity will reach 80% utilisation before expansion
Estimated unsupplied demand in 2025	<div><div>34-54</div></div>	3-10 ha Factory space needed by 2025	Takes into account partial local production ²⁾

Insights

Estimated unserved demand¹ in 2025 is ~50-60% of current demand and will require 3-10 ha of factory land to address, ~80% of which is estimated to be for fresh cut chips

1. For chips, assumes ~0.3 ha for 150kg/hour capacity plant for the plant. Assumes the chips plant is operating 12 hours a day, 6 days a week and 80% utilisation that would allow for maintenance and sustainable production (based on one of the major frozen cut chips players). This equates to ~0.5 ha needed for 1000 MT per year. For crisps, assumes ~0.2 ha / 1000 MT for a typical crisps manufacturer based on a recent expansion for a major player

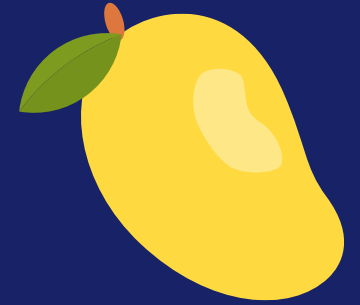
2. A proportion (10-50%) of potato chips will likely be supplied via imports as certain varieties demanded by hotels and pre-existing contracts. Currently ~30% of fresh-cut processed chips is imported

Unlocking potential and barriers in

Agro-processing: Mango pulp



Key messages in mango pulp



Mango pulp processors could service Kenya's 4% p.a. fruit juice demand growth in the medium term with existing facilities



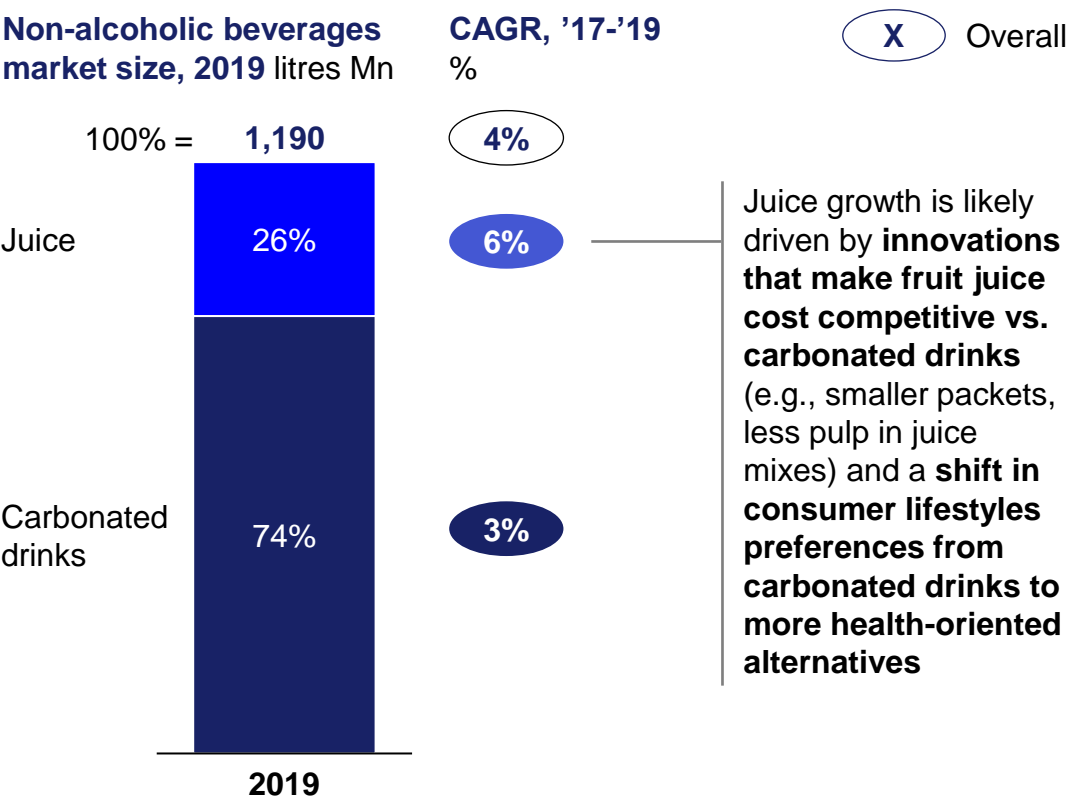
Players could consider serving Europe as a potential export market



To be successful, processors could strengthen local value chains and improve quality to compete

Fruit juice is the fastest growing non-alcoholic beverage segment in EAC¹

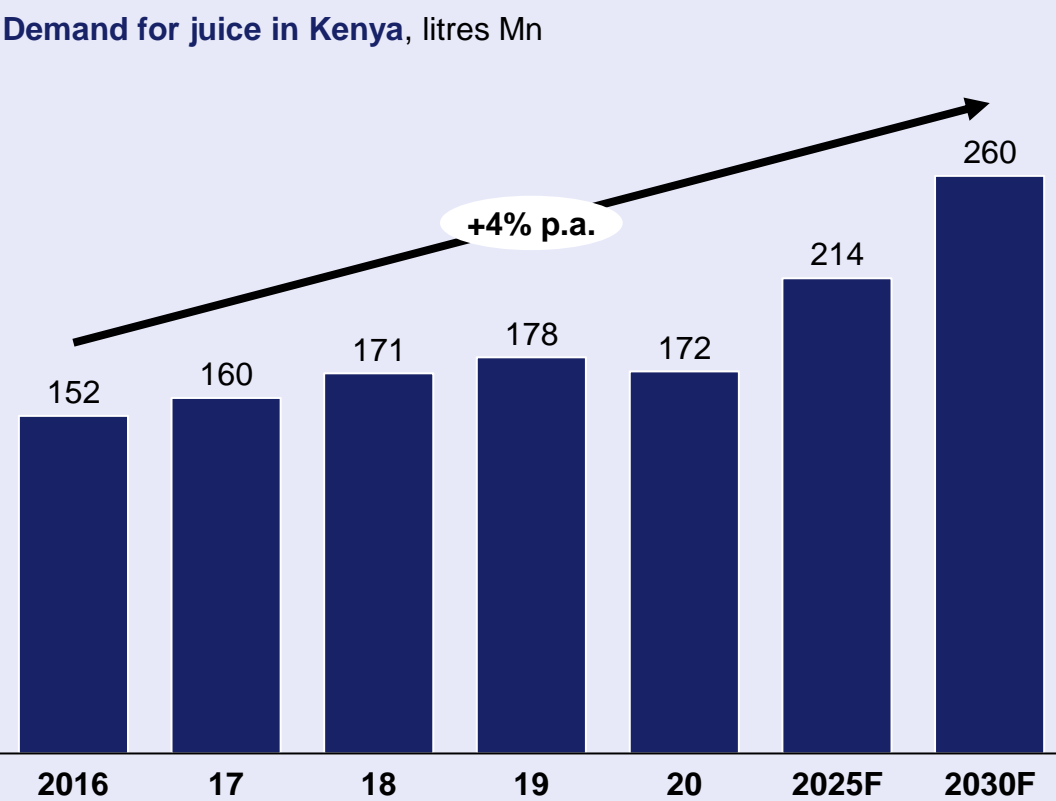
The overall non-alcoholic beverages market is growing at ~4%, with fruit juice growth at 6%, twice the rate of carbonated drinks



1. East African Community i.e., Kenya, Uganda, Tanzania, Rwanda and Burundi
2. Total estimated fruit pulp demand for all tropical and non-tropical fruits, for all types of pulp (i.e., including concentrates and not-from-concentrates)

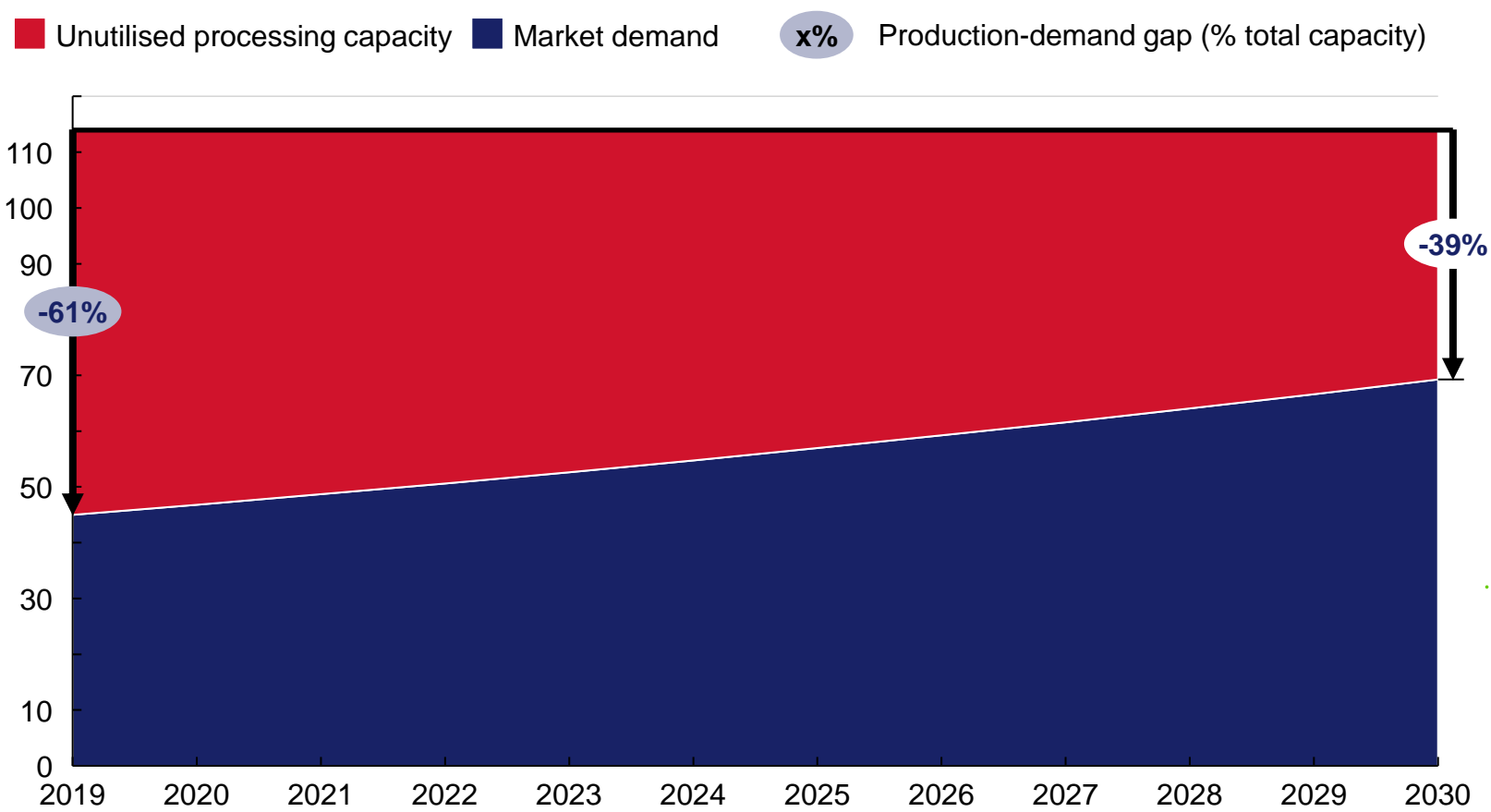
Similarly, Kenya's fruit juice market is growing at ~4%² p.a.

Total volume of juice consumed is expected to reach ~260mn litres by 2030



Local mango juice demand growth could be addressed by existing pulp processing capacity

Projected processing capacity and market demand for mango pulp, MT 1000'



Insights Details follow

Processors could serve local mango juice demand in the near term without significant expansion: There is ~60%¹ excess capacity among Kenya’s processors.

Growth in external markets could necessitate expansion of processing capacity

Source: Expert interviews, TechnoServe

Africa is the fastest growing fruit pulp exporter to Europe but is relatively small at only ~2% of imports

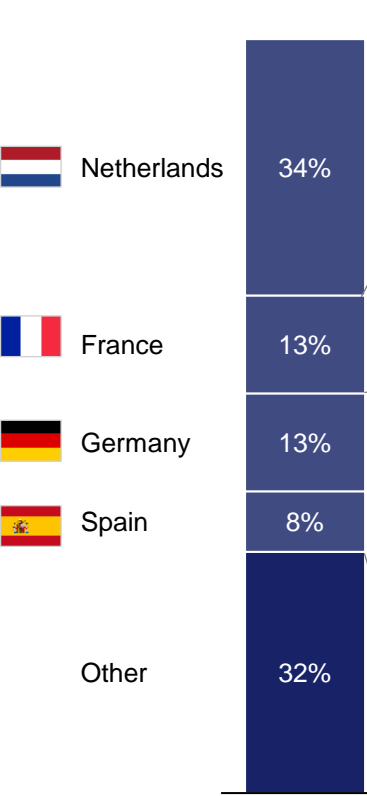
■ Developing countries (excl.Africa) ■ Africa ■ All other countries

Tropical fruit pulp import size, 2019,
total MT '000 and % of total imports

Growth in imports, 2018 to 2019 %

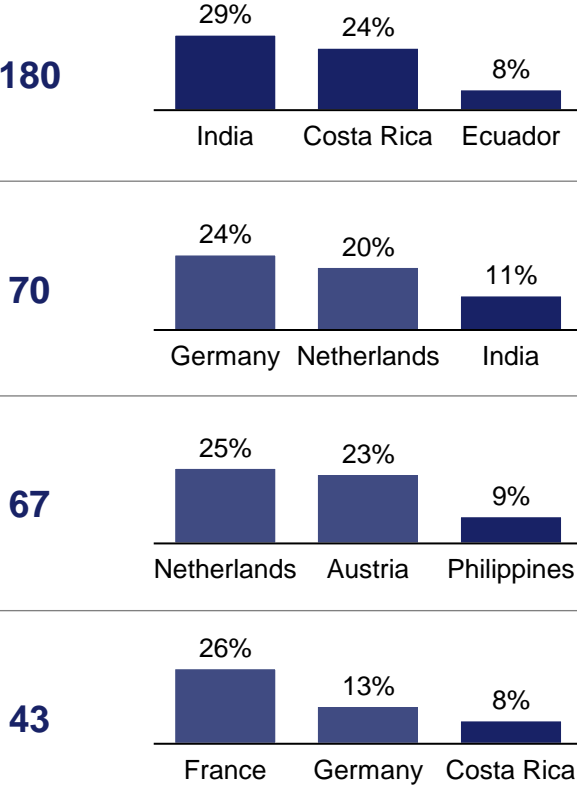


Top EU fruit pulp importers, 2019, % of total EU imports by weight



Size of fruit pulp imports, 2019, MT '000

Top 3 fruit pulp suppliers, % of total imports



Insights

Africa currently exports ~10 000 MT (2% of total imports) to Europe

Other key developing country exporters are India, Costa Rica, Ecuador and the Philippines

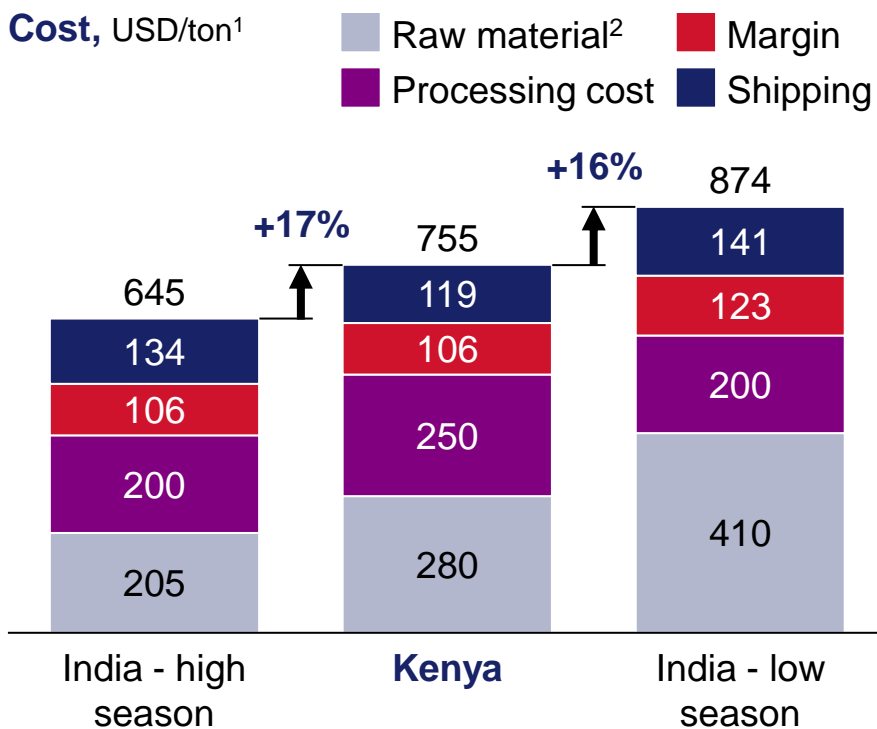
Predominant preferences are for banana and mango purées which are concentrated, and those which have additional sugar

1. Excludes UK (~30k MT in 2019) in fruit pulp imports

Kenya's landed cost per ton of mango pulp is ~15% greater than India during its high season, but ~15% lower than India during its low season

ILLUSTRATIVE

Landed costs comparison, Kenya vs India (Netherlands example)



1. Assumptions; Kenya - mango prices - \$0.1/kg; recovery rate (% of pulp per kg of mango) - 50%, variable costs - 30% of FOB price, shipping cost to Rotterdam - \$1,600/ 20 ft container (~16MT); margin --20% , India - mango prices - \$0.06/kg (low season), \$0.12/kg (high season); recovery rate - 50%; shipping cost to Rotterdam - ~\$1,900/ 20 ft container (~16 MT); margin - ~20%

2. Raw material price differences between India's high season and low season are due to differences on rainfall, temperature, agronomic practices and cycle of alternate bearing

Source: TechnoServe, Expert Interviews, CBI, FSD Kenya

In addition to price, there are other actors that influence purchasing decisions by juice producers

Reliability

“ ” Customers are willing to pay a slightly higher price if they can trust the supplier will deliver on time

Quality

“ ” Juice producers are not willing to take a risk on the quality of pulp they procure. You need to be able to prove that you meet international standards

Customer loyalty

“ ” If I have supplied to a customer before, and we have a good relationship, they are likely to make follow up orders from me

- Local fruit pulp exporter

Insights

Sourcing and efficiency improvements could make Kenya cost competitive with India. Kenya could potentially reduce its cost by ~13% (\$100/ton)

Kenya has lower mango prices at the farm than India but **inefficient and fragmented aggregation system nearly doubles the price at the processor**

Strategic use of aggregation could potentially drive raw material cost optimization and match the raw material price of India, **a reduction of \$75/ton**

Higher cost of processing in Kenya is driven by higher cost fixed base, lower effective utilization and inefficient equipment. **Efficiency improvements could potentially reduce processing cost by 10% (\$25/ton)**

Agenda



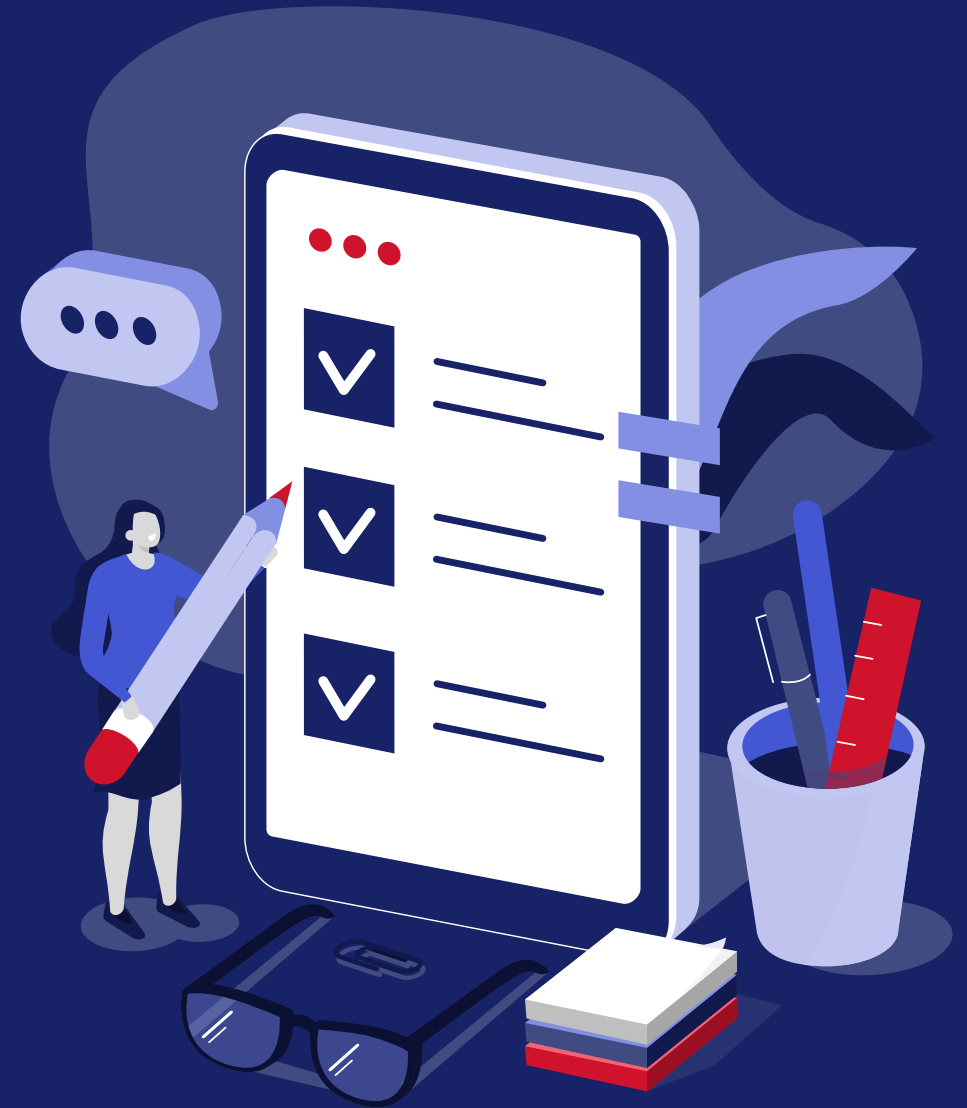
Introduction to Manufacturing Africa



Overview of agro-processing potential in Kenya



Interactive discussion and closing



Key enabling initiatives could help unlock scaleup potential in Kenya's agro-processing sectors



Pasta



Raw material import duty

Review currently **10% wheat import duty** for local manufacturers



Port building

Position Mombasa Port as a destination for durum wheat commodities (better storage facilities, additional berths for wheat, waiver in port charges for wheat imports)



Processing hubs

Encourage **hubs of processing units to be set up close to the port** to reduce cost of transportation and create hub effect

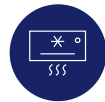


Processed potatoes



Commercialization of seed varieties

Scale up seed varieties availability by encouraging seed companies to take up production



Cold storage units

Support cold storage infrastructure set up in potato growing areas to hold the seed material and reduce the post harvest losses



Flavors R&D

Support investment in sensory and tasting labs and R&D to substitute currently imported flavors and spices used in crisps



Mango pulp



Marketing campaign

Promote **Kenya's varieties to new markets**, through coherent outreach policy co-ordinated by BrandKe, Ministry of Industry, KenyaVision2030, etc.



Efficiency improvement

Ramp up **efficiency**, e.g., shorten the farm-to-factory value chain to reduce waste



Quality insurance

Drive technical strengthening strategy for the broader sector to address **quality, compliance and food safety**

The Ministry of Industrialization, Trade and Enterprise Development has set up a Business Situation Room to unlock investments and evaluate enabling initiatives in priority sectors including pasta manufacturing

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