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INSIGHT

Levers of change to shape the future of the South African citrus industry

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CGA Summit

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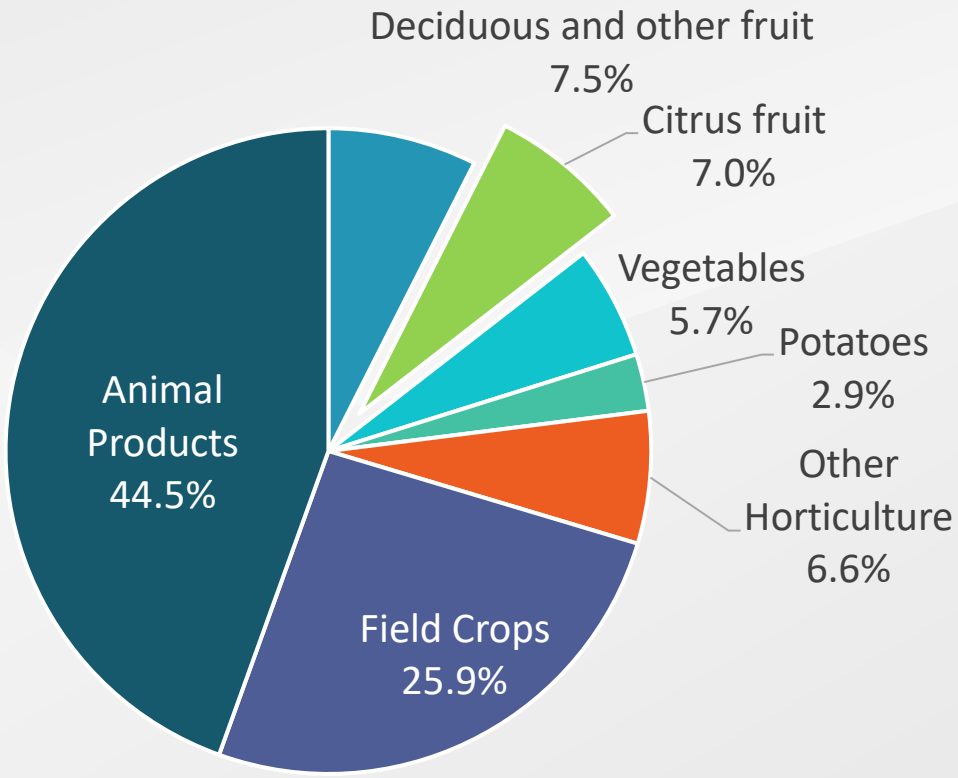
Citrus is a major contributor to SA Agriculture

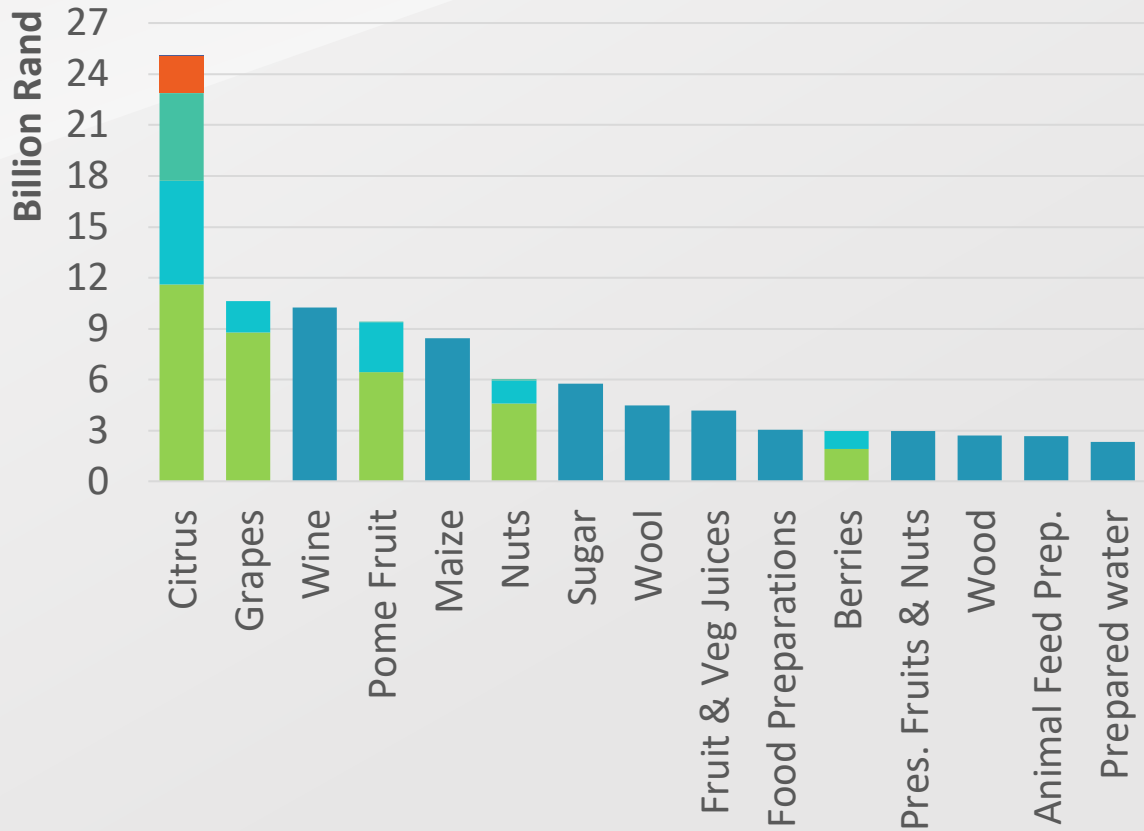
Contribution to GPV, Export Revenue & Employment

Gross Value of Agricultural Production



Source: Compiled from DALRRD, 2022

SA's largest agriculture & food export products: 2019-2021

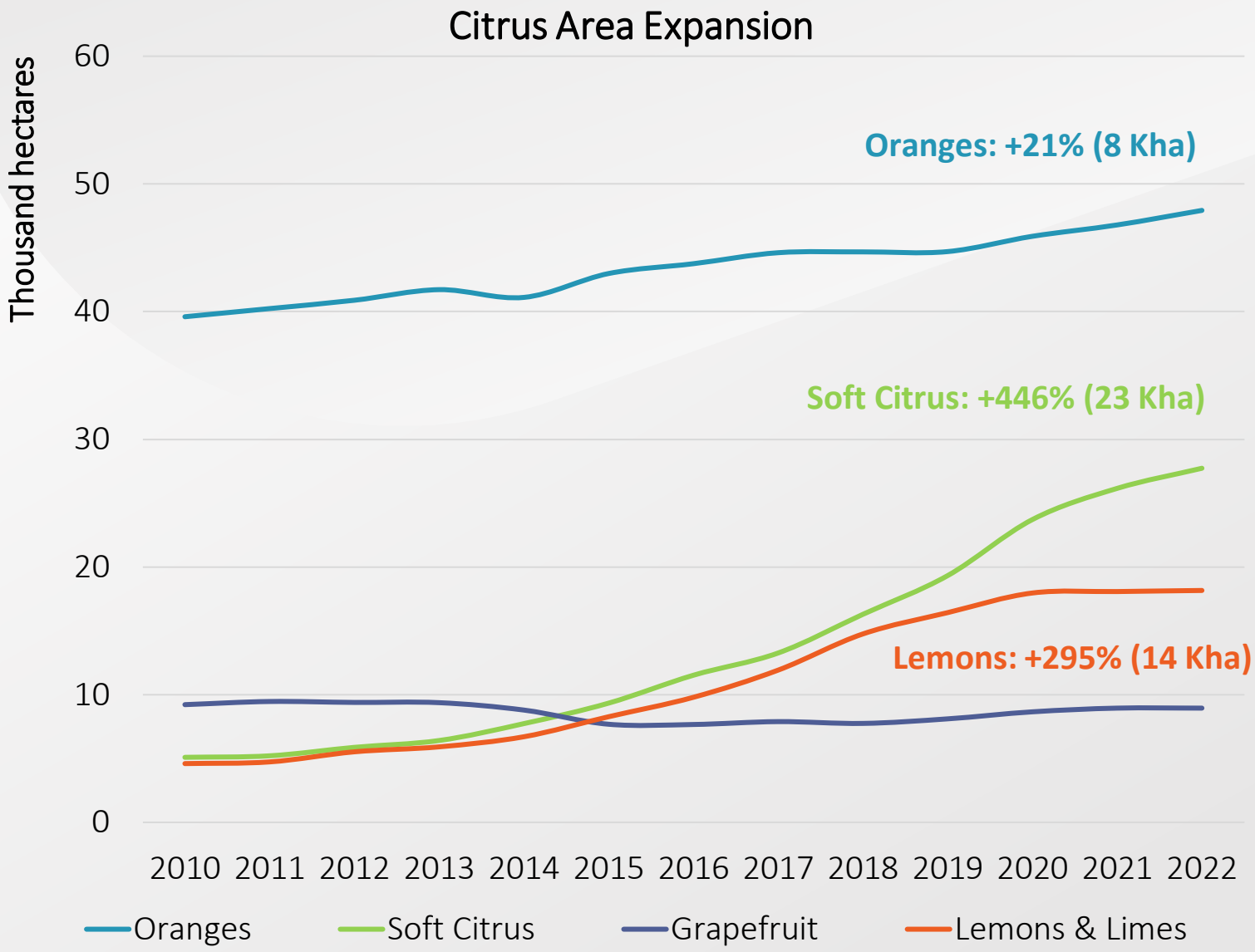


Gross production value grew by almost 9% per annum over past 5 years

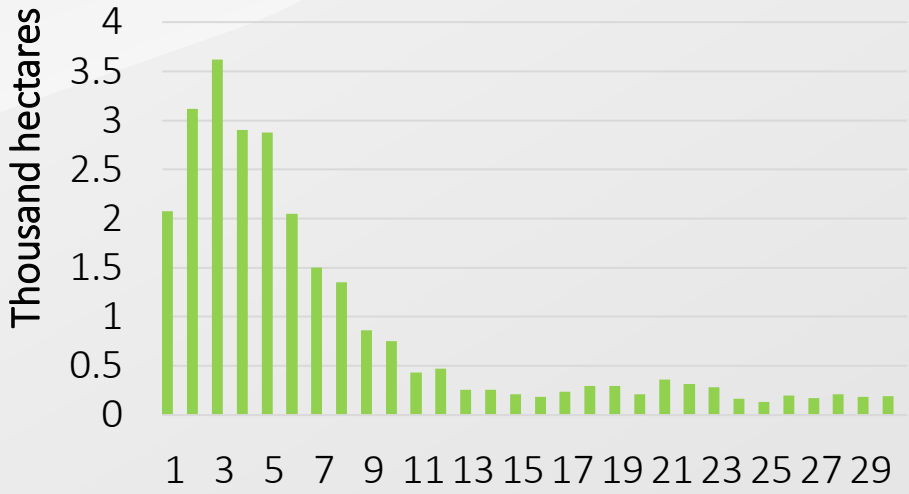
Employs 140 000 people

Citrus area has expanded rapidly

Significant share not yet in full production



Soft Citrus age distribution



	Oranges	Soft citrus	Lemons	Grapefruit
Avg. age	20	9	12	15
Area %	47%	26%	18%	9%
Volume %	49%	19%	20%	11%
GPV %	44%	28%	20%	9%

Regional differentiation important to consider

Area and age distribution plays a significant role in the risk and opportunity

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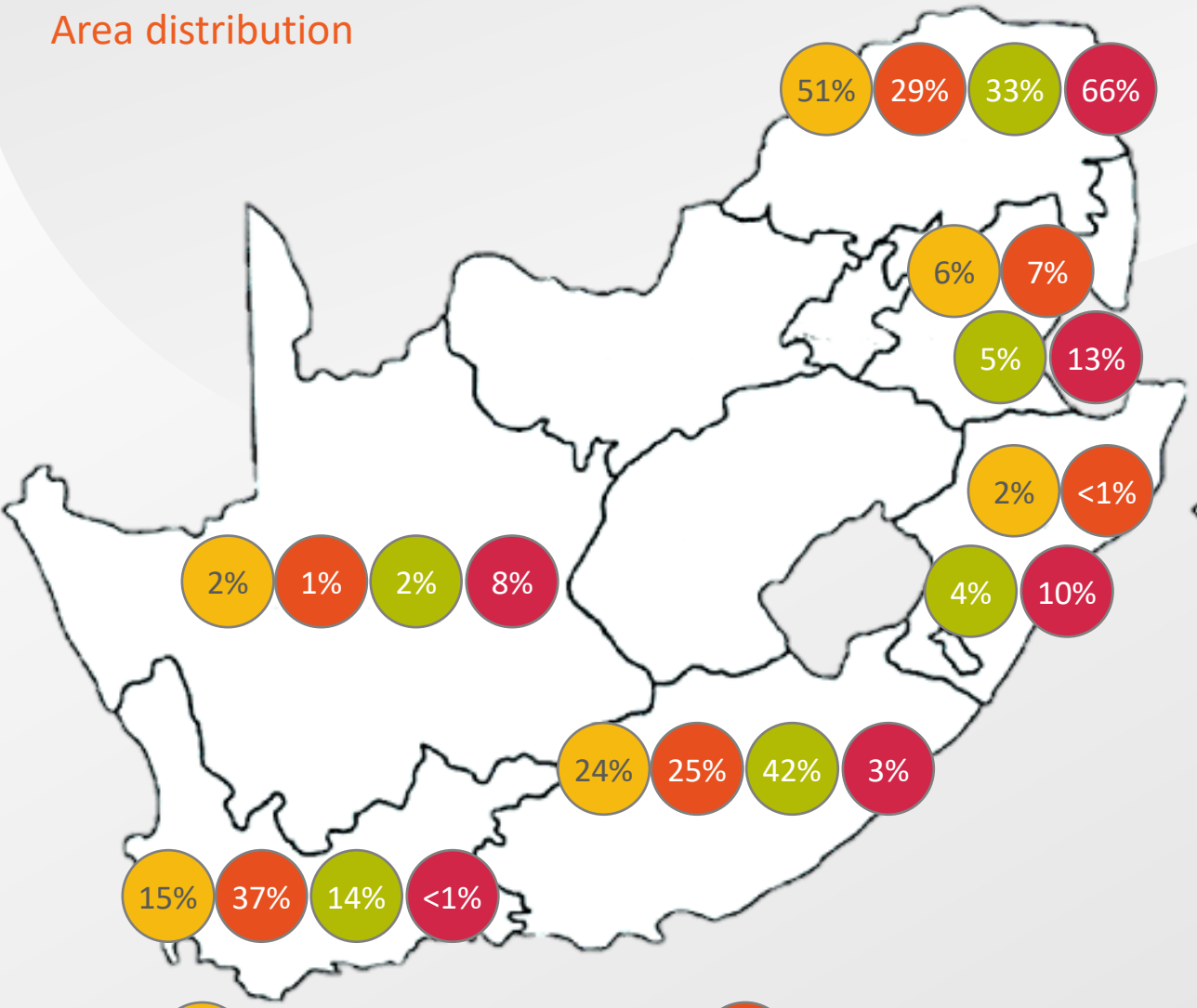
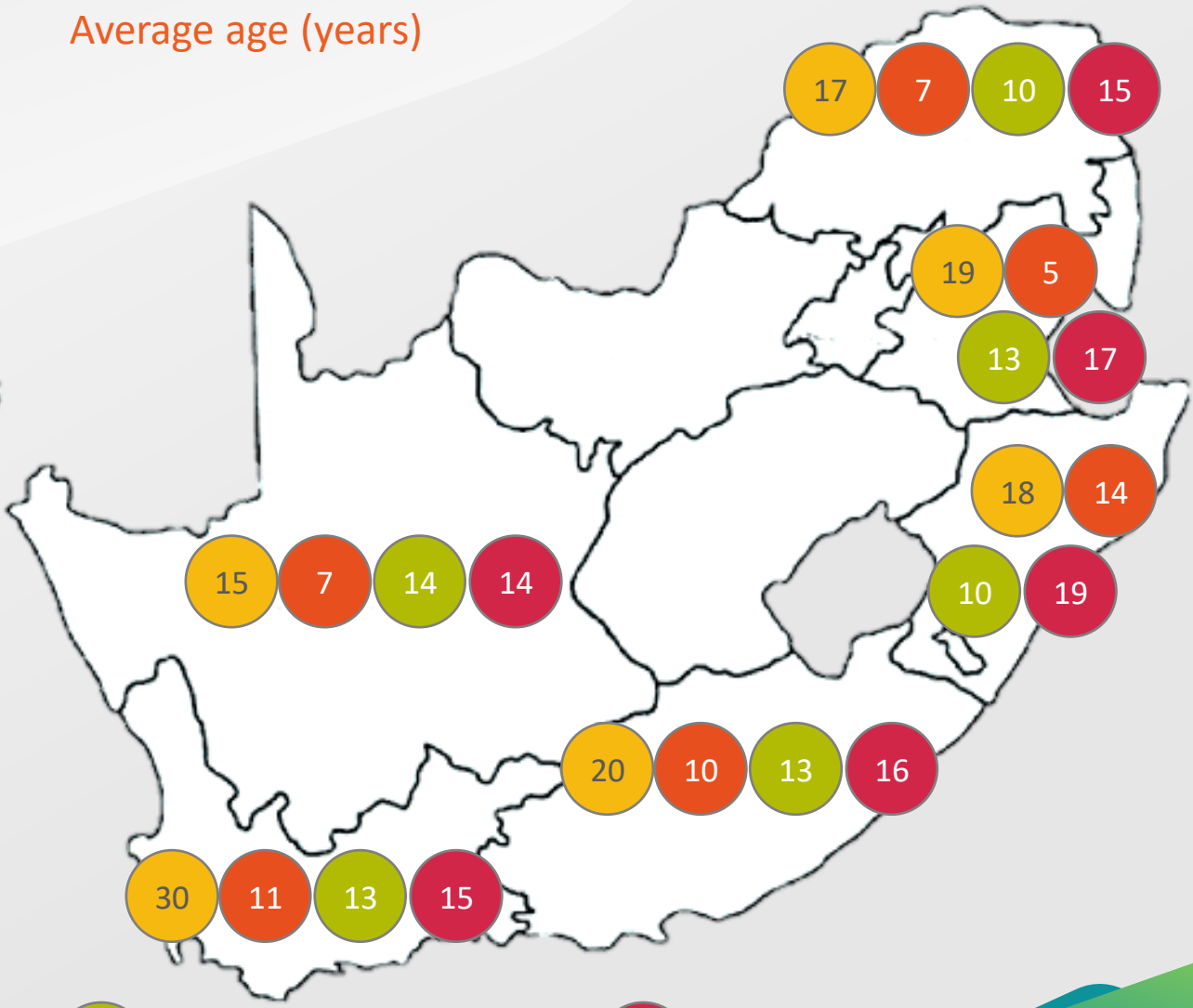
Area distribution



Average age (years)



Oranges

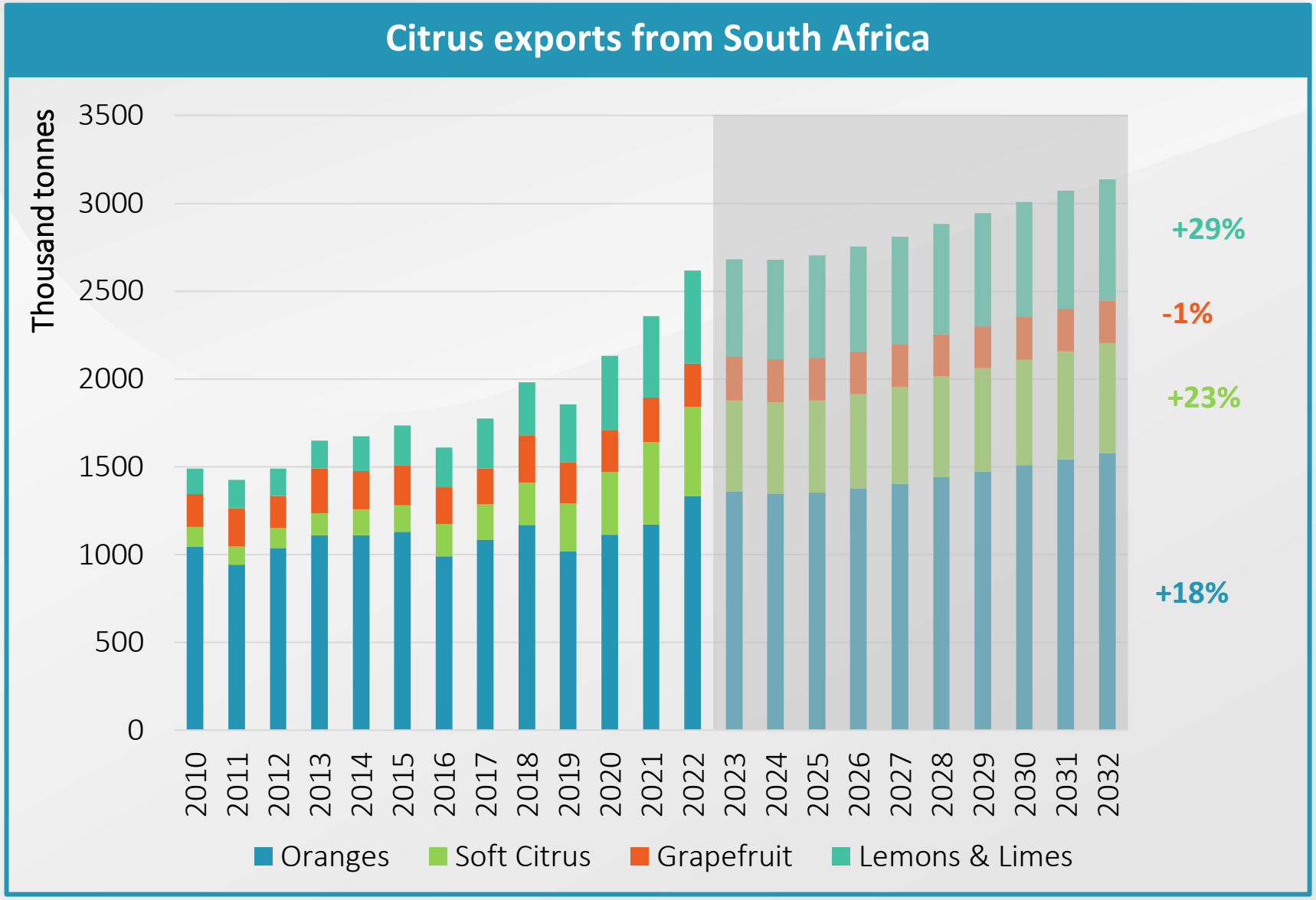
Soft citrus

Lemons

Grapefruit

Export volumes still expected to grow

Young trees reaching full bearing age



From 2019 to 2022:

- Exports
  - Orange +31%
  - Soft Citrus +86%
  - Lemons & Lime +62%
- Export Prices
  - Orange: +16%
  - Soft Citrus: +12%
  - Lemon & Lime: -11%
- Costs
  - Average 26%

Number of major challenges have created a perfect storm threatening the sustainability of investments

Major challenges to navigate

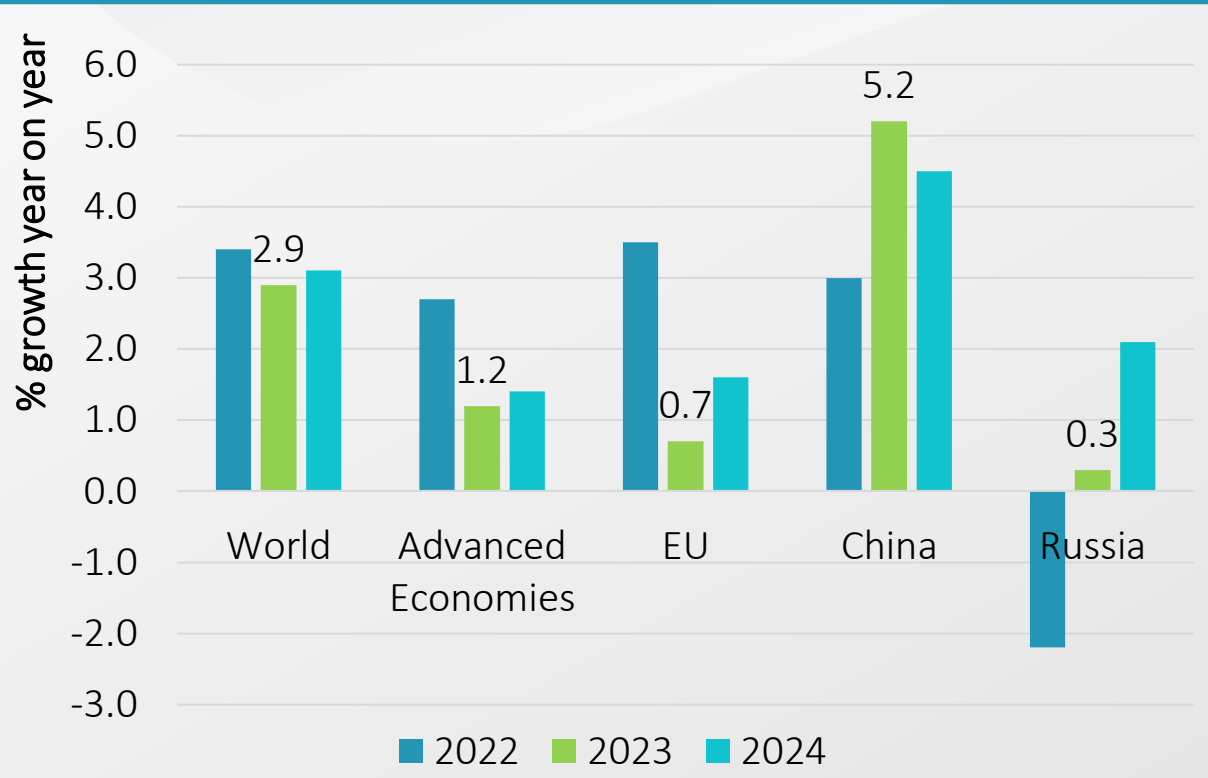
Global and local factors combining to create a perfect storm

Headwinds in global economy

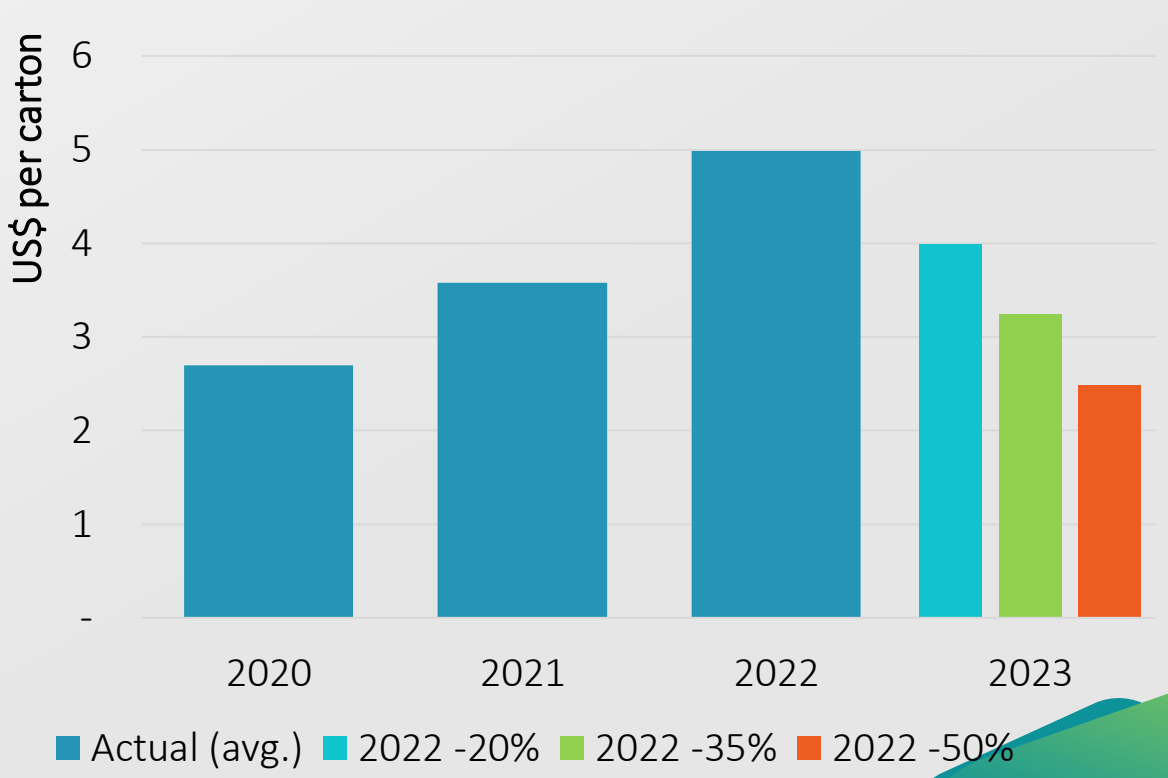
Costs of logistics – particularly reefer containers

Port congestion, interruptions in port & general deterioration of infrastructure

GDP prospects declining and inflation still a challenge



Reefer container rates increased rapidly



Major challenges to navigate

Progress on market access is slow despite industry efforts

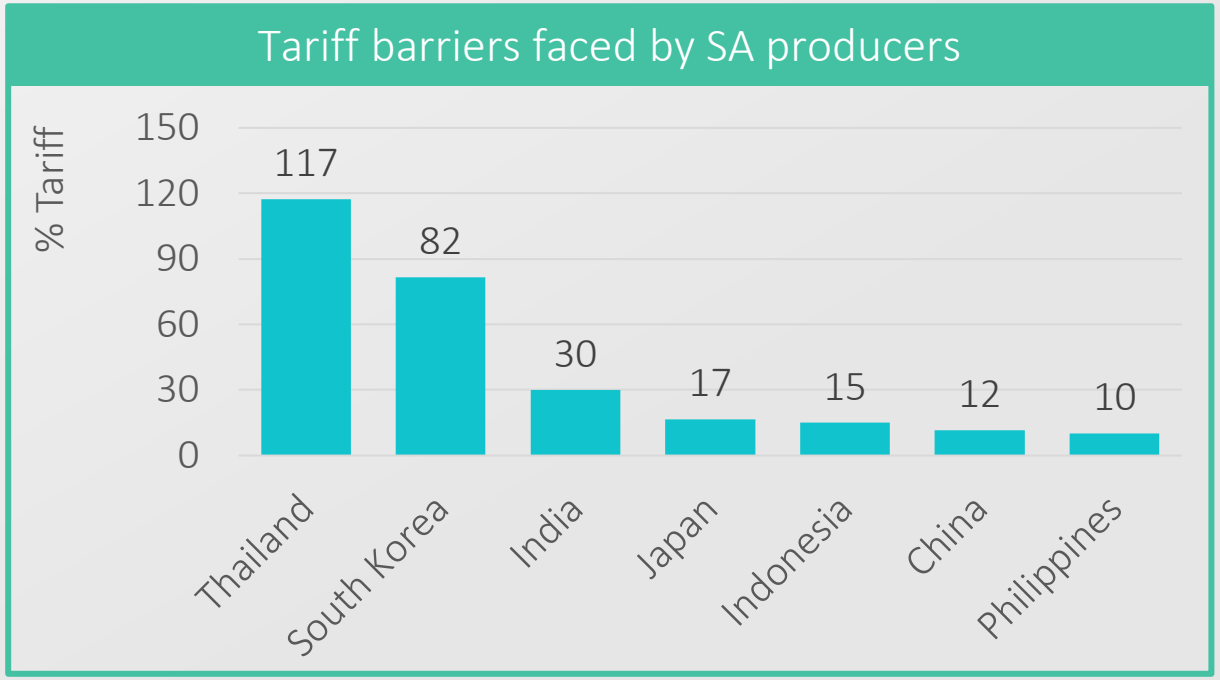
Increasing severity of loadshedding

Slow pace of new market access

Competitiveness of market access in Asia

High-level overview of preferential trade agreements with strategic eastern markets

Strategic markets	RSA's competitors: South Africa	Australia	New Zealand	Peru	Chile	Argentina	Uruguay
China							
Hong Kong							
India							
Indonesia							
Japan							
South Korea							
Malaysia							
Philippines							
Thailand							
Vietnam							



NTMs	Restrictions
USA	Only CBS-free area
Vietnam	Lost access in 2013

Major challenges to navigate

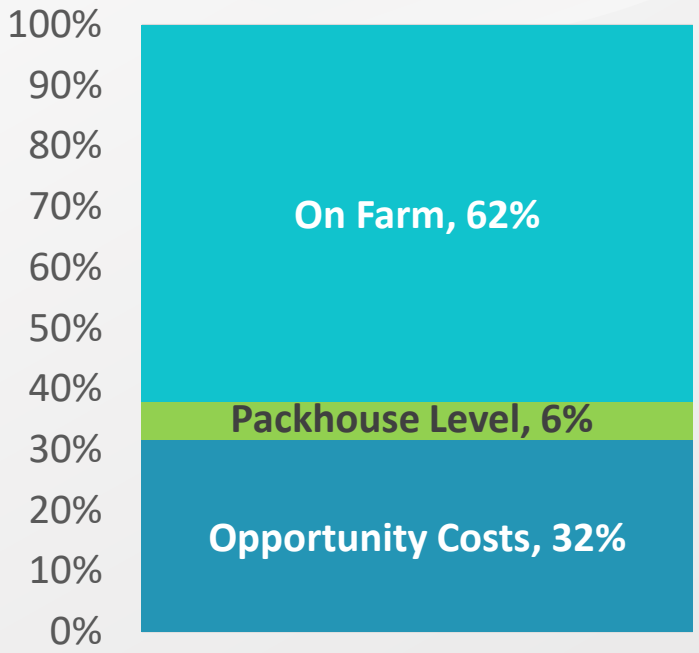
Production costs rising rapidly

Cost of SPS protocols

Change in EU cooling protocol for oranges

Substantial increase in input costs

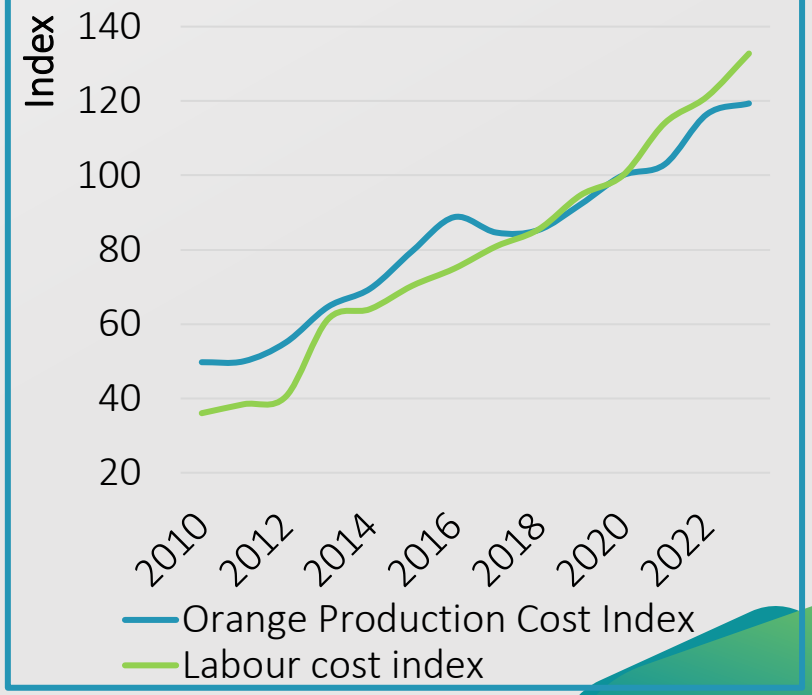
Combined cost of FCM & CBS protocols in 2020 = R3.28 billion



Protocol	Infrastructure investment	Cost & income loss
Precooling to 0^0C to 2^0C and treatment in transit at -1^0C to 2^0C for 2o days	Up to R 1,37 bn.	Up to R 0,51 bn.
Precooling to -0.5^0C and treatment in transit at -1.5^0 C for 16 days	Up to R 1,37 bn.	Up to R 2,93 bn.

R6,50—R8/carton

Orange production costs increased 26% in last 3 years



Profitability of citrus exports to various world regions: Apr-Aug 2022

Average returns for the period Apr-Aug 2022	Europe	Far East	Middle East	North America	Russia	United Kingdom	Industry average
CIF	**$14,04**	**$15,64**	**$12,93**	**$19,09**	**$14,45**	**$15,32**	**$14,81**
Freight	$4,90	$4,08	$3,61	$6,81	$6,14	$4,85	$4,99
Cost & Insurance	$1,54	$1,56	$1,54	$1,56	$1,54	$1,55	$1,52
FOB	**$7,61**	**$10,00**	**$7,78**	**$10,71**	**$6,77**	**$8,91**	**$8,30**
Cost: Farm, Packhouse, Transport, Commission, Local port cost	$7,69	$7,69	$7,69	$7,69	$7,69	$7,69	$7,69
EBITDA	**-$0,09**	**$2,31**	**$0,08**	**$3,02**	**-$0,92**	**$1,22**	**$0,61**

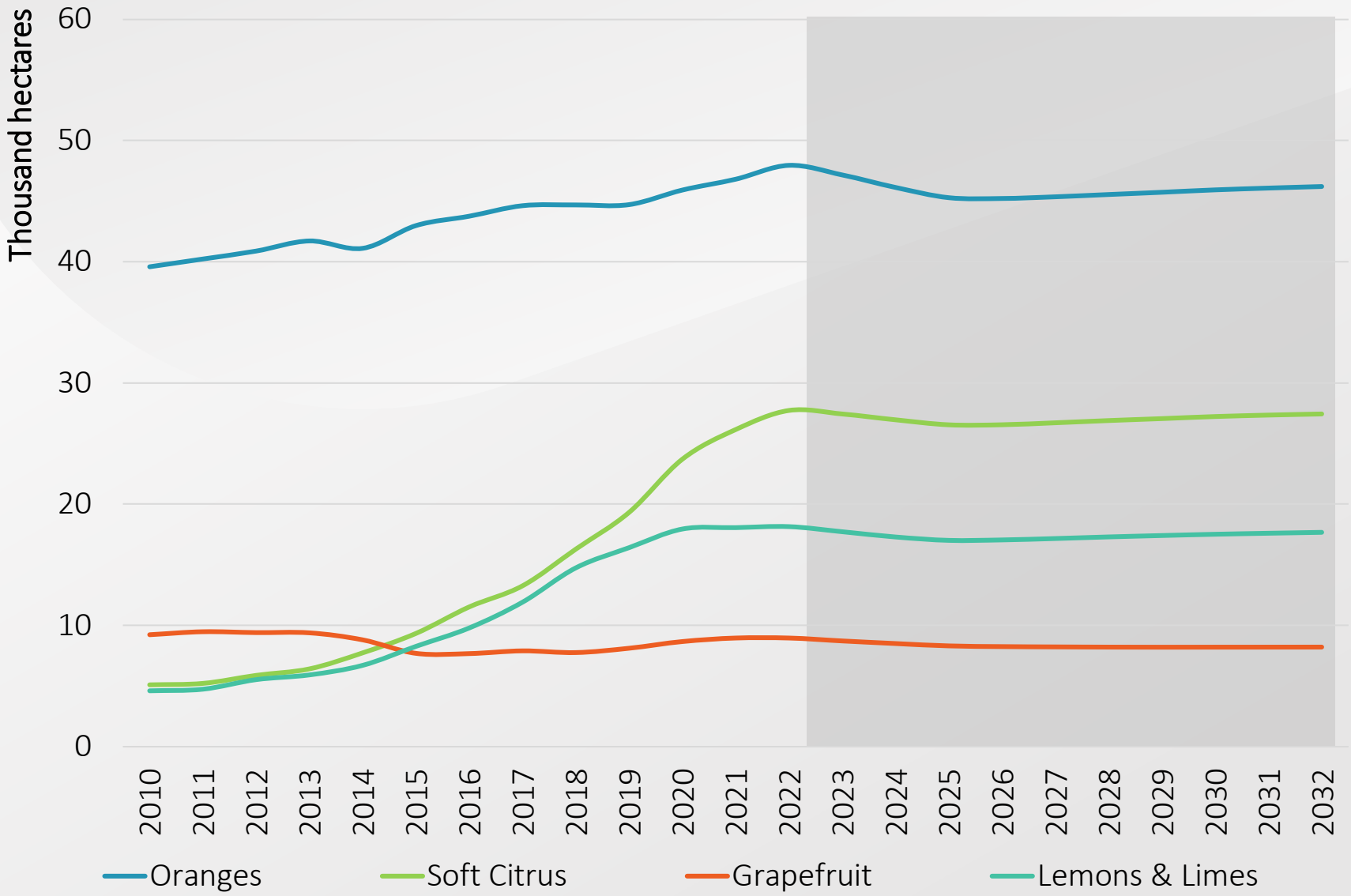
BFAP, 2022, compiled from various sources

Producers are operating in an increasingly risky environment

Biggest drivers of domestic risks for the citrus industry	Biggest drivers of global risks for the citrus industry
Port and logistical challenges leading to delays and quality claims	Supply growth from South Hemisphere competitors, especially **Peru** (smaller risk than own production expansion)
Downward **price risk** as more products come into the market	**Freight rates** – although rates are trending downwards, is still much higher than pre-pandemic rates
Cold-chain interruptions caused by loadshedding affect both **quality** of fresh produce and raise the **cost** to store chilled products	Large and deep **recession in developed economies** leading to lower demand for imported goods
Cost price inflation, particularly labour, eroding farming margin further	**More stringent market access** requirements from the EU leading to technical barriers to trade
Some citrus farms will likely come under strain with the **potential of forced sales**, eroding the capital base	**Conflict in Ukraine** and its extensive impact
Exchange rate (long term trend & in-season movements)	
Weather conditions (rain, hail, drought)	
Conflict / Social **Unrest** (strikes, theft, unrest)	

Area response projected due to current challenges

Coming decade will be more turbulent



Area growth over past decade:

- Oranges +17% (+7 000 Ha)
- Soft Citrus +373% (+22 000 Ha)
- Grapefruit -5% (-500 Ha)
- Lemons +229% (+13 000 Ha)

- TOTAL: +41 108 ha

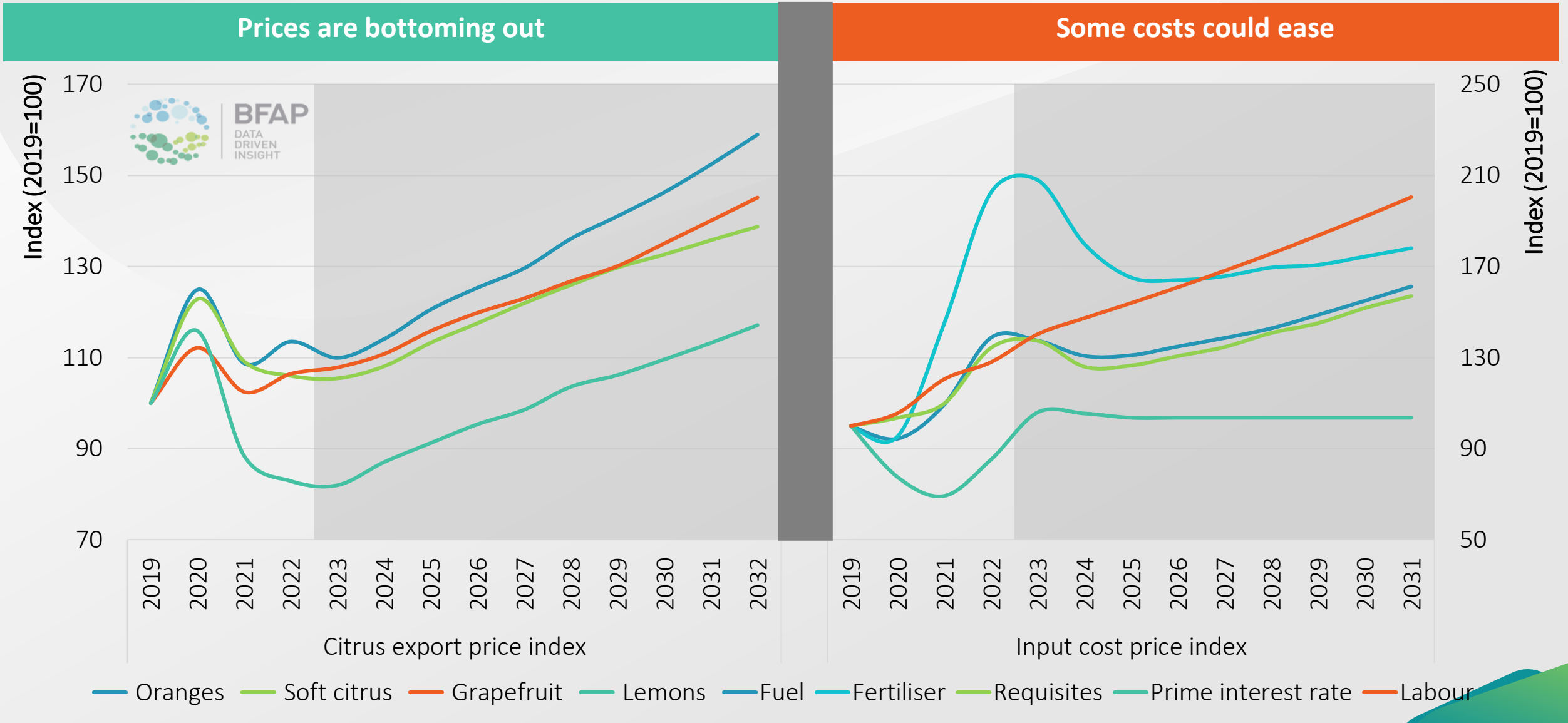
Projections for coming decade under baseline assumptions:

- Oranges -3% (-1 600 Ha)
- Soft Citrus -3% (-900 Ha)
- Grapefruit -10% (-900 Ha)
- Lemons -3% (-600 Ha)

- TOTAL: -4 000 ha

Have we reached the peak of the squeeze?

Labour costs continue to rise, some others could improve



Producer level profitability under baseline

2022 is considered as the base year in the projection model

Yield curve	Oranges	Soft Citrus	Lemons	Grapefruit
Total commodity area prototype farm (ha.)	50,99	24,68	18,70	5,62
Full bearing yield (ton/ha)	47,78	49,32	61,34	62,00
Export cartons per ha (15 kg eq.)	2 262	2 406	2 744	3 008
Export (%)	71%	73%	67%	67%
Local (%)	7%	9%	4%	1%
Processing (%)	22%	18%	29%	32%
PRICE (Rand/15 kg carton eq.): Exports	137	206	141	124
PRICE (Rand/15 kg carton eq.): Local	49	83	77	84
PRICE (Rand/ton): Processing	619	255	607	1480
Direct production cost (R/ha)	135 895	181 237	160 301	118 054
Packaging & Marketing (R/ha)	160 639	236 951	208 989	196 614
Overheads (R/ha)	32 943	32 943	32 943	32 943
Depreciation (R/ha)	23 987	23 987	23 987	23 987

- Asset structure vary significantly – depreciation is indicative
- Financing structures are very different across producers – included in model, but reporting done pre-interest payments
- The model is focused on informing strategic decision-making in terms of production and not necessarily asset acquisition.

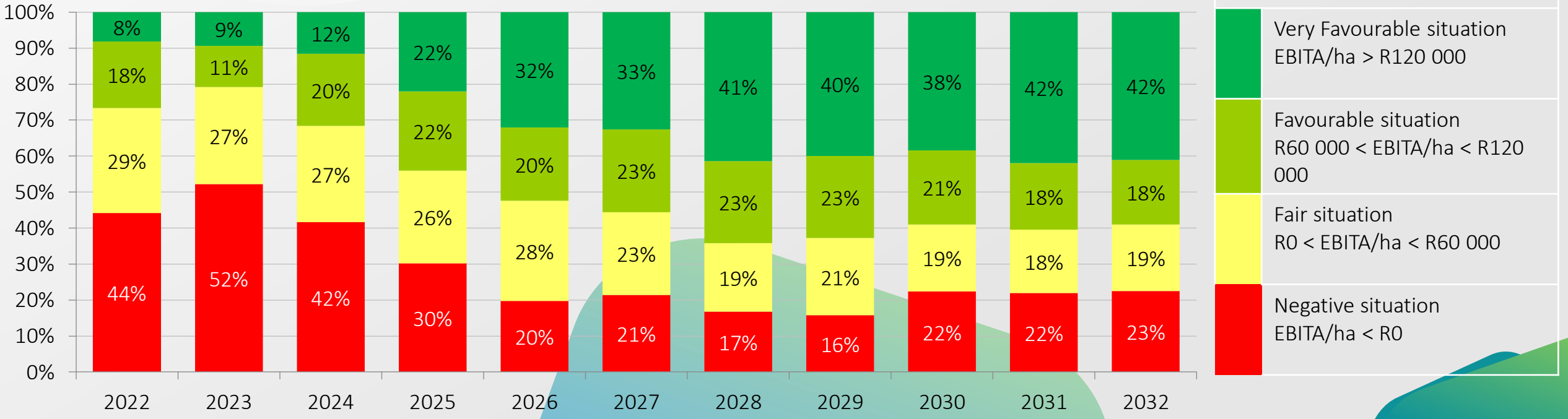
Node	Item
EBITA	
	Production cost
	Overheads & Depreciation
Farm gate	
	Transport
Post farm gate	
	Degreening
	Tipping cost
	Packing material - carton
	Packing material - pallet
Ex-works	
	PPECB inspection
	Transport to port
	CGA levy
Delivered in port (DIP)	
	Local cost
	Exporter commission
Free on board (FOB)	

2023 will be challenging – improvements thereafter

Full bearing equivalent – not accounting for replacement

Median EBITA R/ha	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Bottom 3rd	-50 687	-67 281	-55 261	-30 854	-7 403	-12 253	-1 007	2 398	-25 713	-16 623	-17 195
Middle 3rd	11 689	-4 502	19 572	46 052	68 697	77 931	97 375	97 056	84 327	93 454	85 362
Top 3rd	86 382	77 750	106 557	139 542	174 257	180 228	199 821	212 373	204 649	207 965	230 534

Risk profile: Probability of an Earnings Before Interest, Tax and Amortization per Hectare (EBITA/ha) within a certain band



2023 will be challenging – improvements thereafter

Constant replacement cycle accounted for

Median EBITA R/ha	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Bottom 3rd	-69 558	-86 514	-75 912	-53 198	-32 137	-38 203	-29 026	-26 723	-55 096	-46 624	-47 126
Middle 3rd	-7 183	-23 735	-1 079	23 708	43 963	51 981	69 356	67 935	54 944	63 453	55 431
Top 3rd	67 510	58 517	85 906	117 198	149 523	154 278	171 802	183 252	175 265	177 963	200 602

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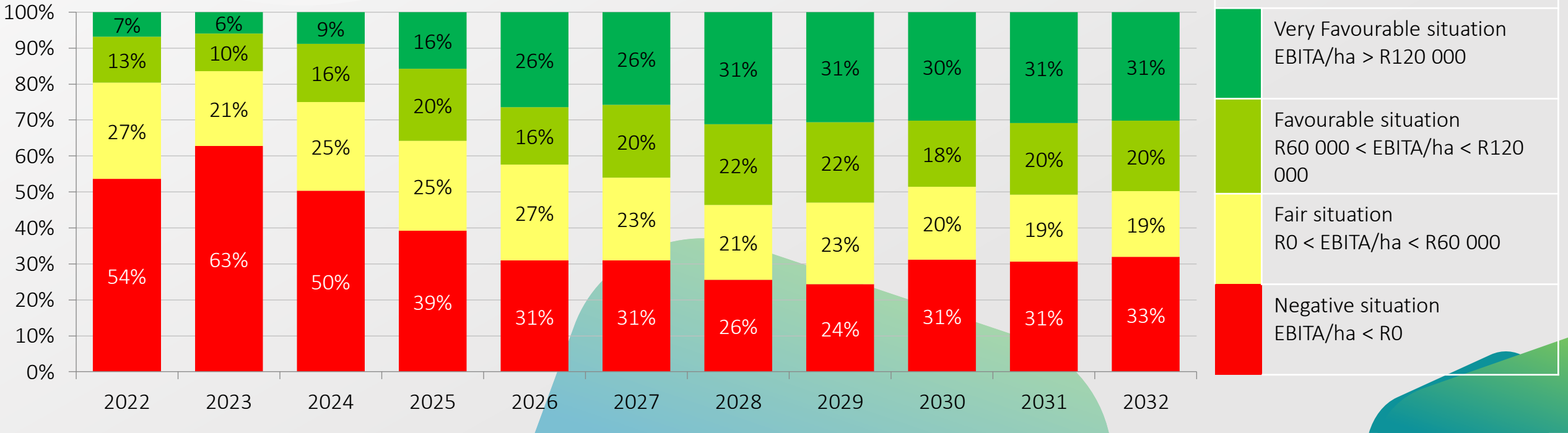

Changing the baseline will require VC wide contribution

Collaboration & Coordination required to navigate the storm

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Harvest | Transport | Receiving | Drenching | Degreening | Tipping | Pre-sorting | Sorting | Packing | Palletising | Inspection

Role-players:

Input suppliers	Exporters	DALRRD	CRI
Consultants	Freight forwarders	PPECB	Transnet
Producers	Cold storage	CGA	Importers
Packhouses	Shipping lines	DTI	Consumers

Shipper | Export haulage | Origin cold storage | Origin handling | Origin port | Ocean freight | Destination port | Destination handling | Destination warehouse | Import haulage | Consignee

Shaping South Africa’s citrus future

The culminating impact of cost increases and exogenous and endogenous pressure on prices is at its peak (2022-2024)

Planted area expected to pull back and plateau as marginal orchards are removed and carefully selected expansion of area is executed

A collective approach by all role-players is required to weather the storm and to reduce the risk at farm level, which is the pivotal part of sustainability of an industry

Alternative scenario 1: Getting the counts right

Individual producer action: Drive towards more marketable fruit size

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Description of scenario:

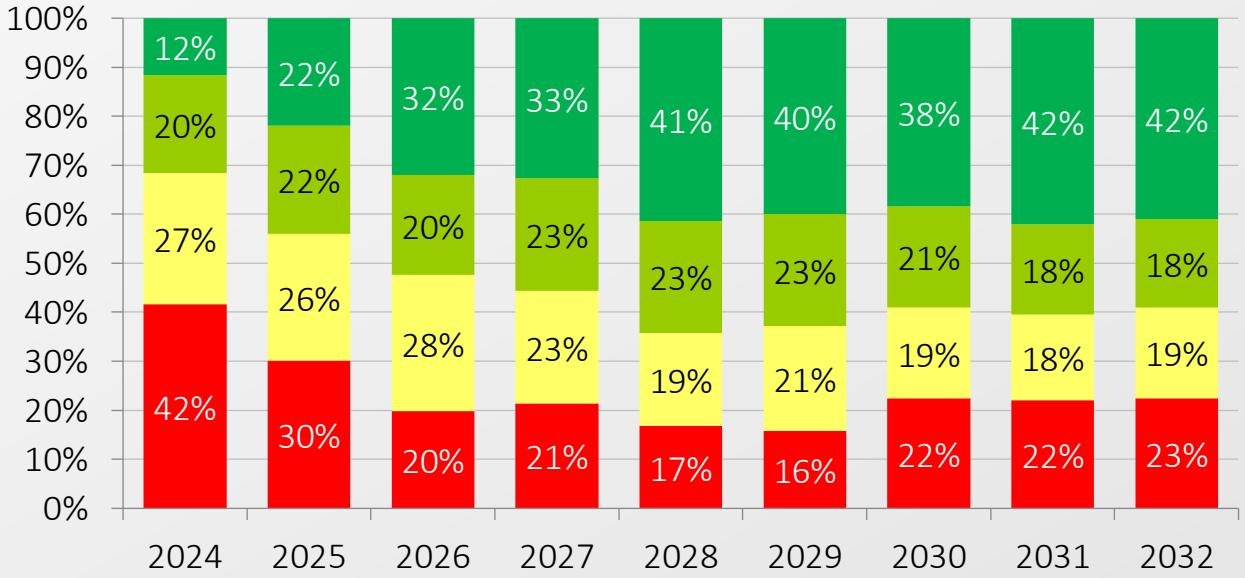
- Change production practices to improve size of fruit supplied to the packhouse
- Reduce fruit supplied into processing marketing channel
- Improve exports:
  - Increase the share of export fruit
  - Relative shift towards more class 1
  - More desirable (profitable) count distribution
- Improve the relative ability of export cartons to contribute to profitability and carry cost

Levers of change:

- Additional R14 000/ha production cost:
  - R2 500 labour – additional pruning & thinning out
  - R6 000 fertiliser – additional calcium and potassium nitrate
  - R4 500 sprays – chemical reduction of fruit on tree
  - R1 000 labour – additional sorting during harvest
- 10% higher class 1 pack out
- 10% reduction in fruit to processing
- 15% increase in average export prices

Impact: R40 000/ha improvement in 2024 on full bearing equivalent

BASELINE Risk profile: Probability of an Earnings Before Interest, Tax and Amortization per Hectare (EBITA/ha) within a certain band



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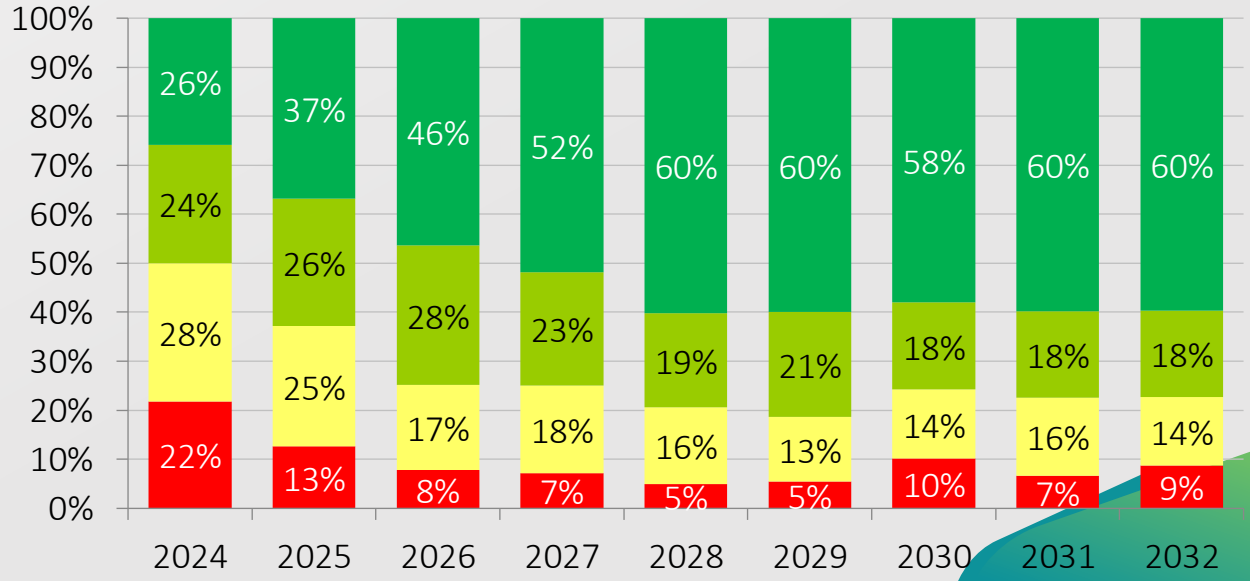

Alternative scenario 2: Early warning system

Industry as a collective: Reduce risk of market oversupply by commodity and week

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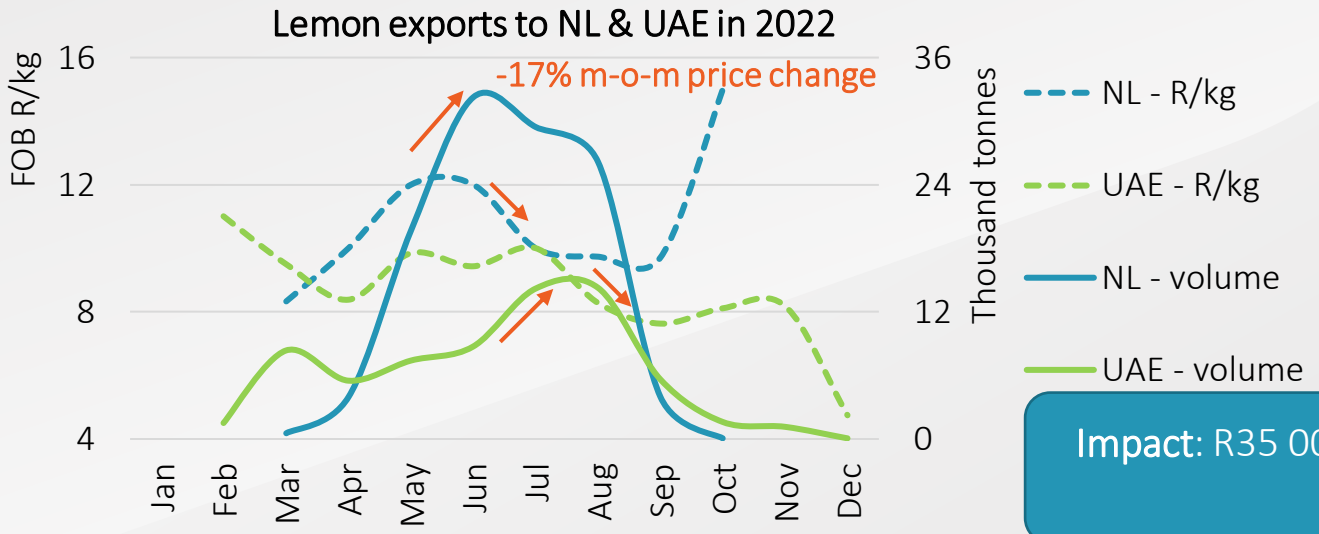
Description of scenario:

- Determine the market absorption tipping point for all major markets
- Identify and communicate aggregated planned volumes by market (vessel/container bookings by commodity/cultivar)
- Improve producer returns

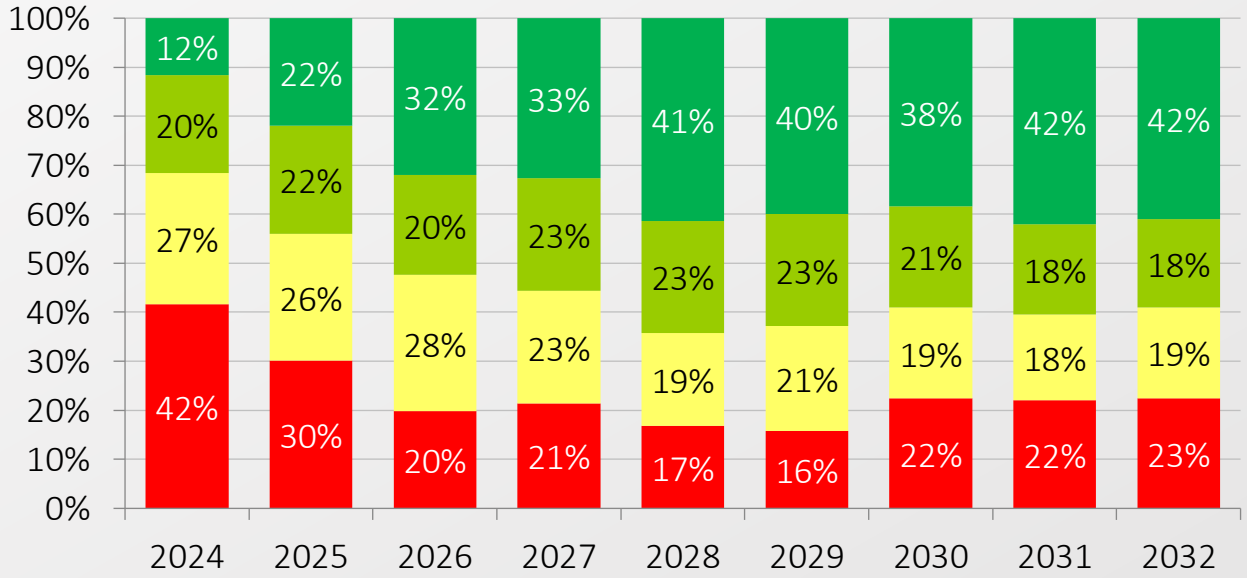


Levers of change:

- Improvement of export prices by 10% due to a reduction in the frequency and severity of market oversupply
- 50c per export carton additional levy to fund system

Impact: R35 000/ha improvement in 2024 on full bearing equivalent

BASELINE Risk profile: Probability of an Earnings Before Interest, Tax and Amortization per Hectare (EBITA/ha) within a certain band



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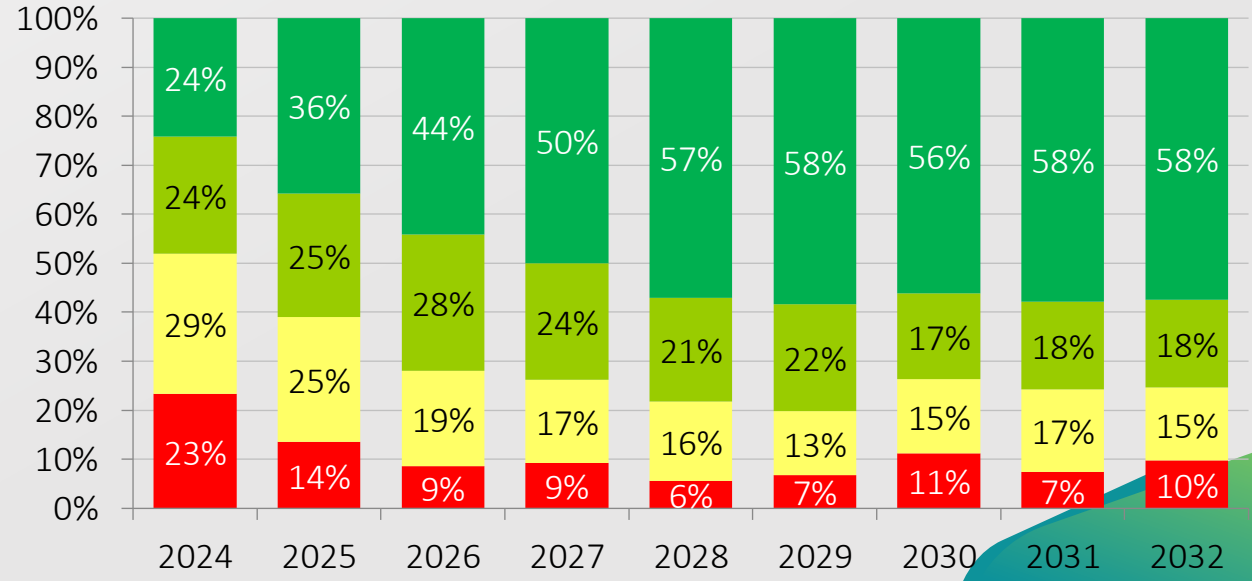

Alternative scenario 3: Breaking down trade measures

Government to government negotiations: Improve market access & preferential trade

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Description of scenario:

- India's citrus imports are growing at a considerable rate, albeit from a low base
- Average annual growth in imports of citrus (2017-2021):
  - Oranges 16%
  - Lemons 11%
  - Soft citrus 39%
  - Grapefruit -11%
- Negotiation of tariff free access (average tariff is currently 30%)

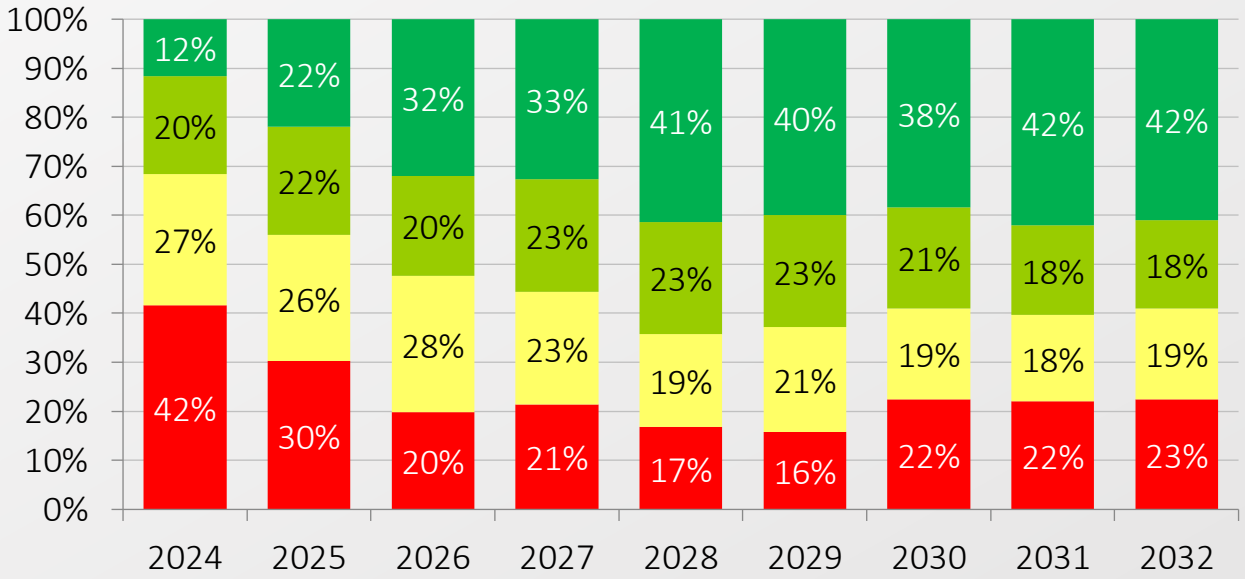
Levers of change:

- Sector model scenario shock impact
- Double the export volume of oranges and soft citrus to India by 2024, with a further, more gradual expansion of shipments to India aligned with demand growth

Impact: While little impact at individual producer level (risk profile remain stable), it creates an opportunity for expansion of hectares and export volumes with a slight increase in export prices as well

2032	Baseline	Scenario
Hectares	99 510	101 286
Export cartons	209,1m	216,6m
Avg. carton price	R 217	R 219

BASELINE Risk profile: Probability of an Earnings Before Interest, Tax and Amortization per Hectare (EBITA/ha) within a certain band



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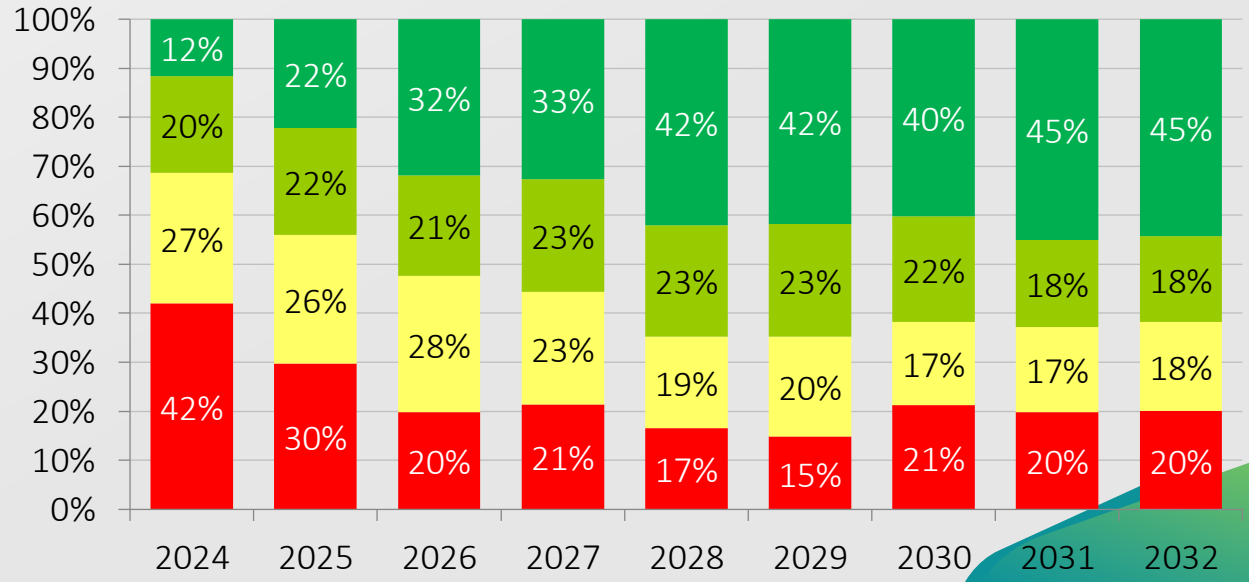

Alternative scenario 4: Collective effort

Impact on farm level profitability if role-players collectively approach industry sustainability

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Description of scenario:

- Change driven at:
  - Individual producer level: count peak
  - Industry level: early warning market system
  - Government level: negotiation of more favourable trade measures

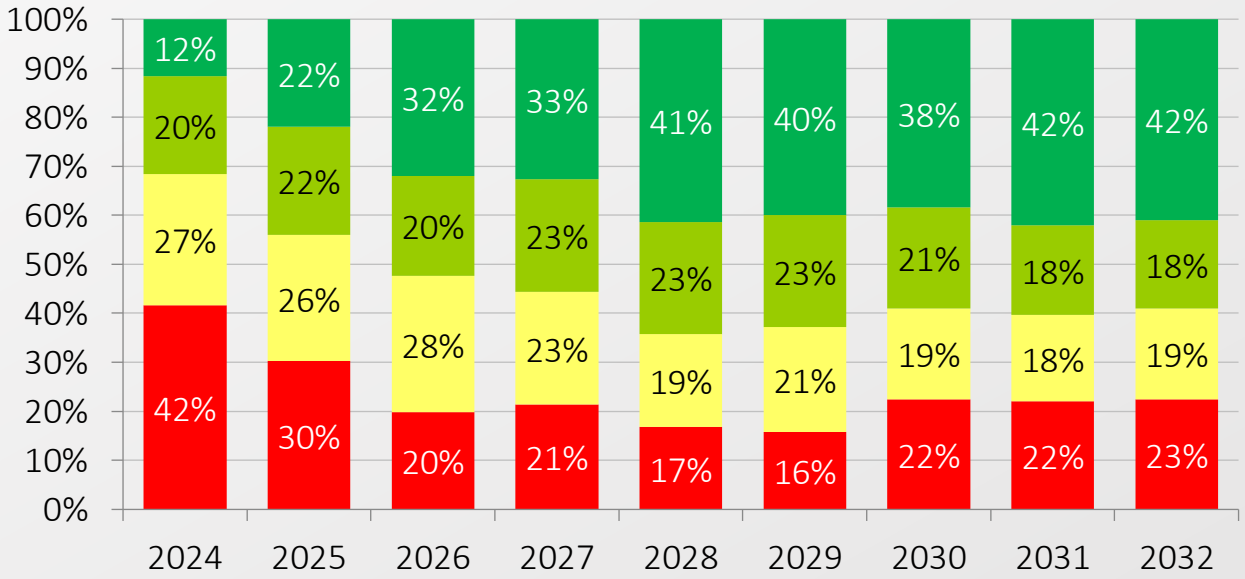
Levers of change:

- The combined impact of:
  - Change in carton count peak by changing production practices that positively influence pack outs and average prices
  - Determining the tipping point volume each market can absorb before having a detrimental impact on price
  - Improved market access

Many ways to peel an orange…

Collective effort across different spheres required to improve industry sustainability

BASELINE Risk profile: Probability of an Earnings Before Interest, Tax and Amortization per Hectare (EBITA/ha) within a certain band



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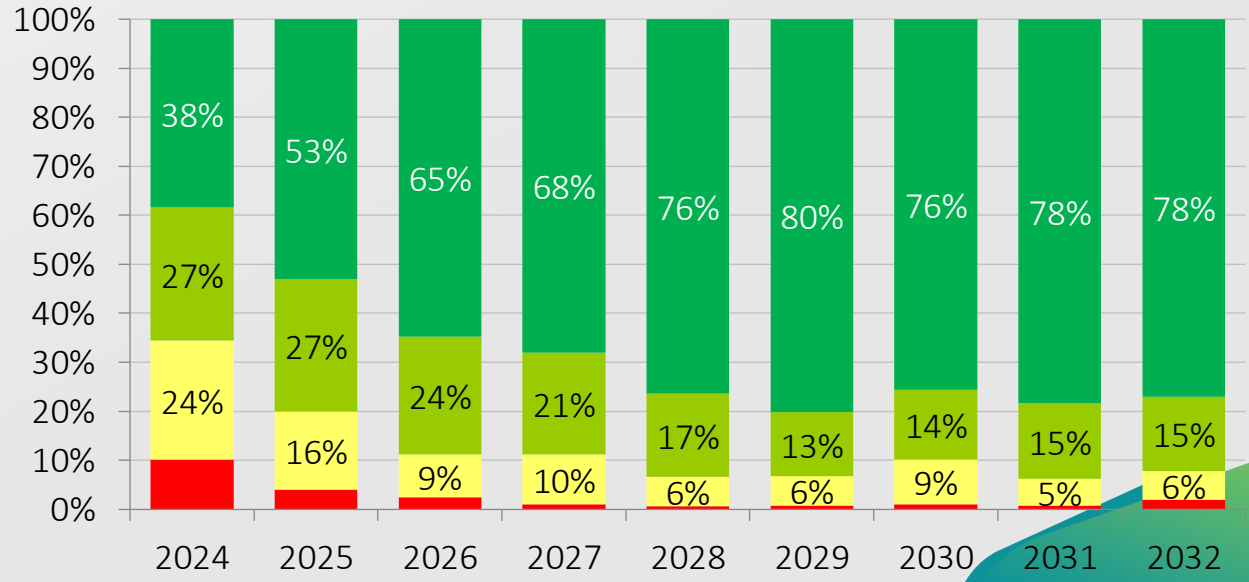

Concluding remarks

There are opportunities across the different spheres to reduce the risk profile at farm level and improve the sustainability of the industry for all role-players

No silver bullet, but a combination of actions can have a significant impact to ensure sustainability on an expansionary path

The management of the next two seasons (2023-2034) are critical to minimize endogenous risks, manage cash flow and mitigate around or through exogenous risks

Flow of information and appropriate response to the communicated information is necessary to collectively work towards improving the industry's sustainability

Thank you

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