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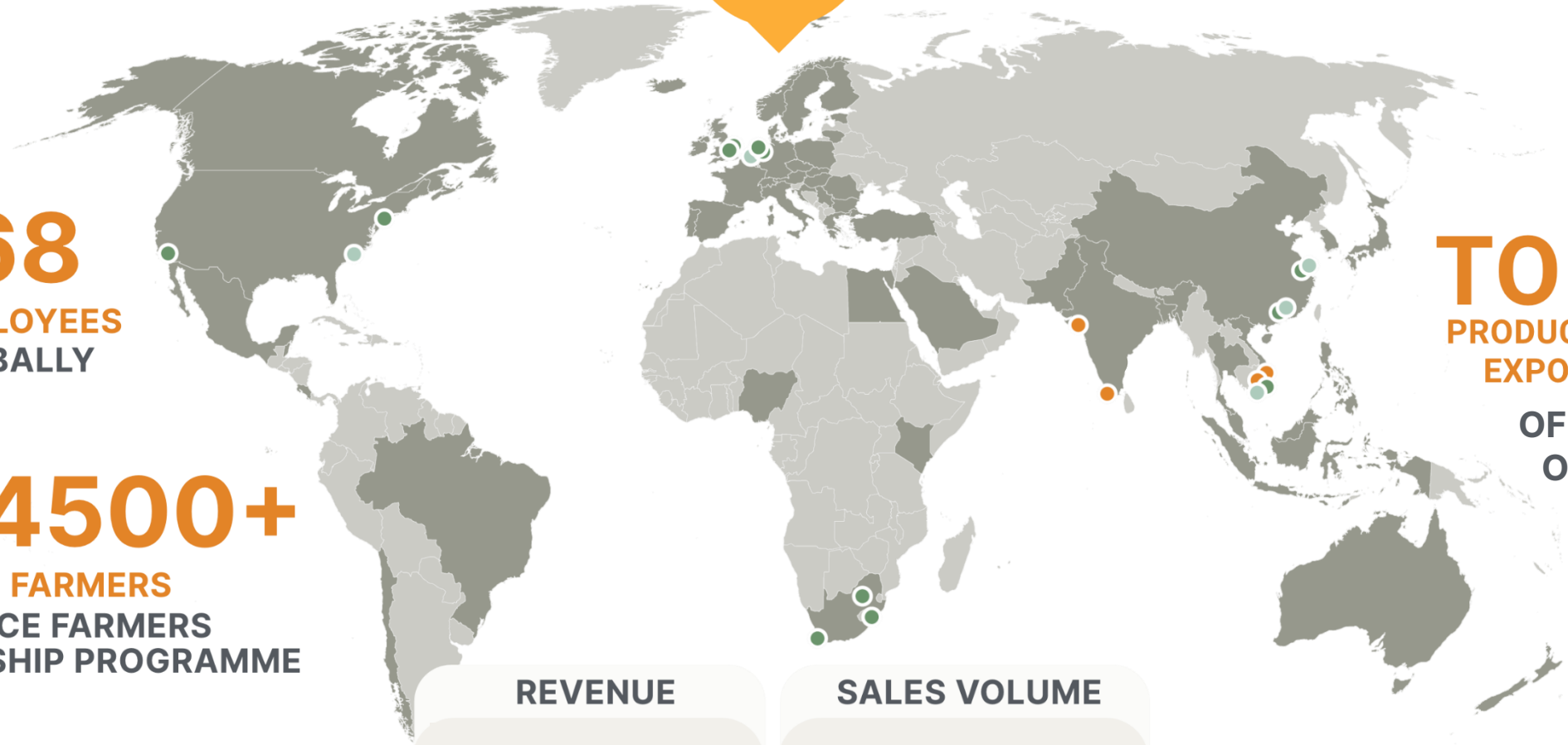
A long-term perspective on the global Cinnamon/Cassia trade

Vietnam International Pepper & Spice Outlook – VIPO 2024

Hanoi, 2024

Jos van Gulick

WE HAVE CUSTOMERS IN 60 DIFFERENT COUNTRIES



868
EMPLOYEES GLOBALLY

4500+
FARMERS
IN NEDSPICE FARMERS PARTNERSHIP PROGRAMME

TOP 1
PRODUCER & EXPORTER
OF SPICES OUT OF VIETNAM IN 2023

REVENUE	SALES VOLUME
US$178 MILLION IN 2023	34,280 MT IN 2023

Factory
Warehouse
Sales office
Customer countries

There are 262 species of cinnamon. 4 species are relevant for the spice trade, of which 3 are considered 'Cassia' in some markets

Considered Cassia in some markets

Cinnamomum (C.) Verum	*C. Burmannii*	*C. Cassia*	*C. Loureiroi*
			
• Also known as *C. zeylanicum*, Ceylon cinnamon and true cinnamon; • Gained popularity after the Portuguese sailed to Ceylon, which may explain the preference in Europe and South America; • Coppiced and harvested every year.	• Also known as Indonesian cassia or korintje; • A variety with red leaves, grown at higher altitudes around mount Kerinci (Korintji), is considered to have the best quality; • Trees are not coppiced.	• Also known as Chinese cassia or C. aromaticum; • Historically reported to be coppiced and harvested every ~4 years, but today most seem harvested after 7 / 15 years in China; • Important for oil extraction.	• Likely a different variety of Cinnamomum Cassia, or different growing practice/ condition. However, the taste is distinct, and markets are used to this name for Vietnamese Cassia. • Trees are not coppiced as this lowers VO.
VO%	0.5-1.5%	1-3.5%	2-4%	3-5.5%
Coumarin	<50ppm	1500-4000ppm	500-1500ppm	3500-6000ppm
Lead	0.1-0.7	0.02-0.4	0.6-2.0	0.5-1.5
Gumminess	++	+++	+	+
Woodiness	+	+	+	-
Sweet	+	-	++	+++
Spicy	-	-	+	++

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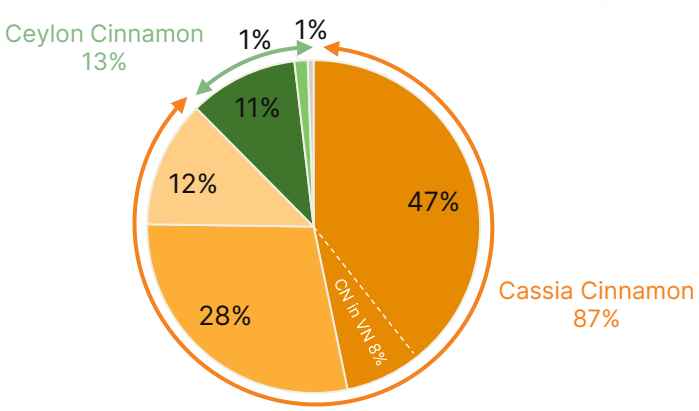
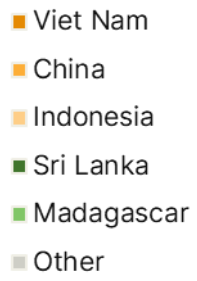
Note: Some species are also found in other countries, however not in meaningful quantities.
1) https://wfoplantlist.org/taxon/wfo-4000008342-2023-12?page=1

Four origin countries make up 98% of a 175 KMT or US$687m market

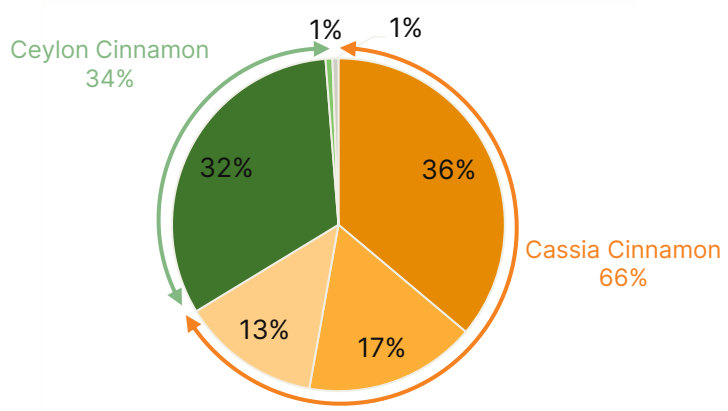
Export volume (2023)[1]



175 KMT



Export value (2023)[1]



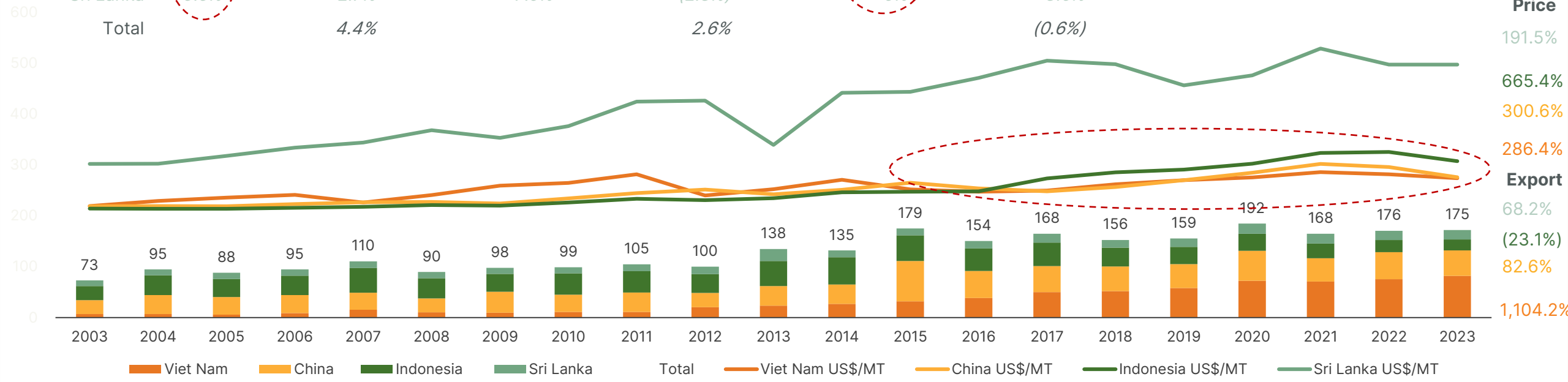
US$ 687m

	US$m	KMT	US$/MT
Viet Nam	248	82	3,020
China	115	50	2,930
Indonesia	93	22	4,230
Sri Lanka	223	19	11,740

1) Represents the exports from producing countries to non-producing countries.
Source: ITC

Price levels increased steadily over the last decades, but took a turn last year; Overall market growth at 2.6%, with Vietnam doing better

	Last 20 year CAGR		Last 10 year CAGR		2023 YoY change	
	Price	Exports	Price	Exports	Price	Exports
Viet Nam	7.0%	13.5%	3.5%	13.4%	(9.3%)	10.1%
China	5.7%	4.2%	3.0%	4.7%	(21.0%)	(13.0%)
Indonesia	10.7%	(0.9)%	11.9%	(7.7%)	(14.5%)	(10.1%)
Sri Lanka	5.5%	2.7%	7.9%	(2.3%)	0%	3.0%
Total		4.4%		2.6%		(0.6%)

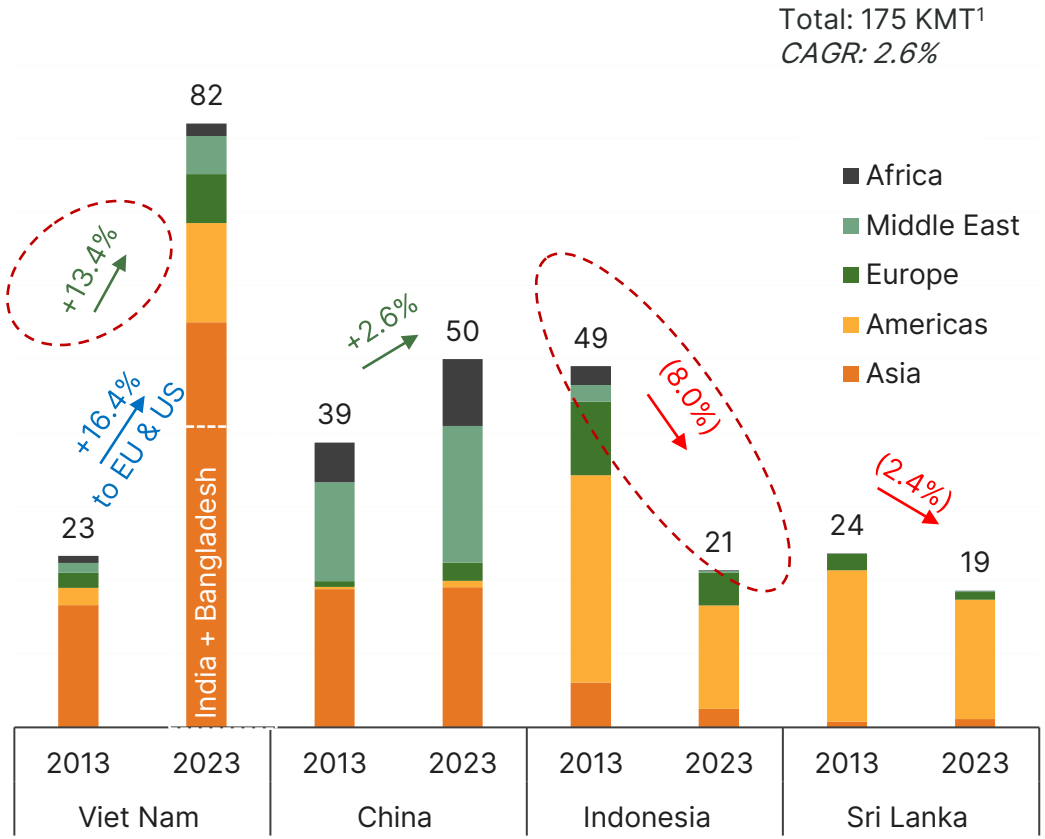


Source: Nedspice research, ITC, customs statistics.

Over the last decade, Vietnam saw and annual growth rate of 13.4% versus an overall market growth of some 2.6% per annum

Exports to consuming countries – By destination (KMT)

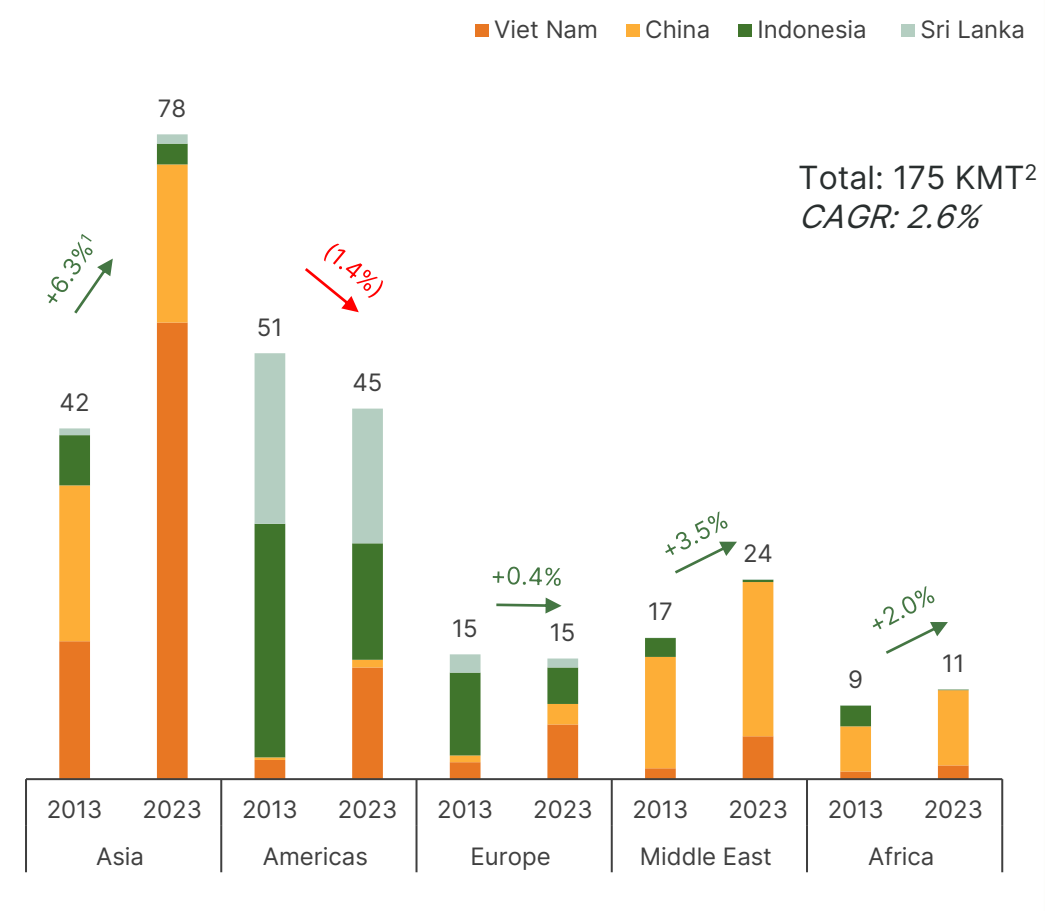
2023, L10Y CAGR	Viet Nam		China		Indonesia		Sri Lanka	
	US$/MT	CAGR	US$/MT	CAGR	US$/MT	CAGR	US$/MT	CAGR
Asia	3,183	12.7%	2.312	0.1%	4,122	(6.7%)	7,061	3.3%
Americas	3,260	19.2%	3,402	11.3%	4,352	(7.1%)	12,313	(2.3%)
Europe	2,983	12.3%	3,730	11.3%	4,178	(7.1%)	11,583	(2.3%)
Middle East	3,419	14.6%	2,145	12.1%	7,685	(6.9%)	14,354	(7.1%)
Africa	2,979	6.1%	2,056	0.1%	4,788	(6.7%)	6,031	3.3%



1) Total of all origin countries.
Source: Nedspice research, ITC, customs statistics.

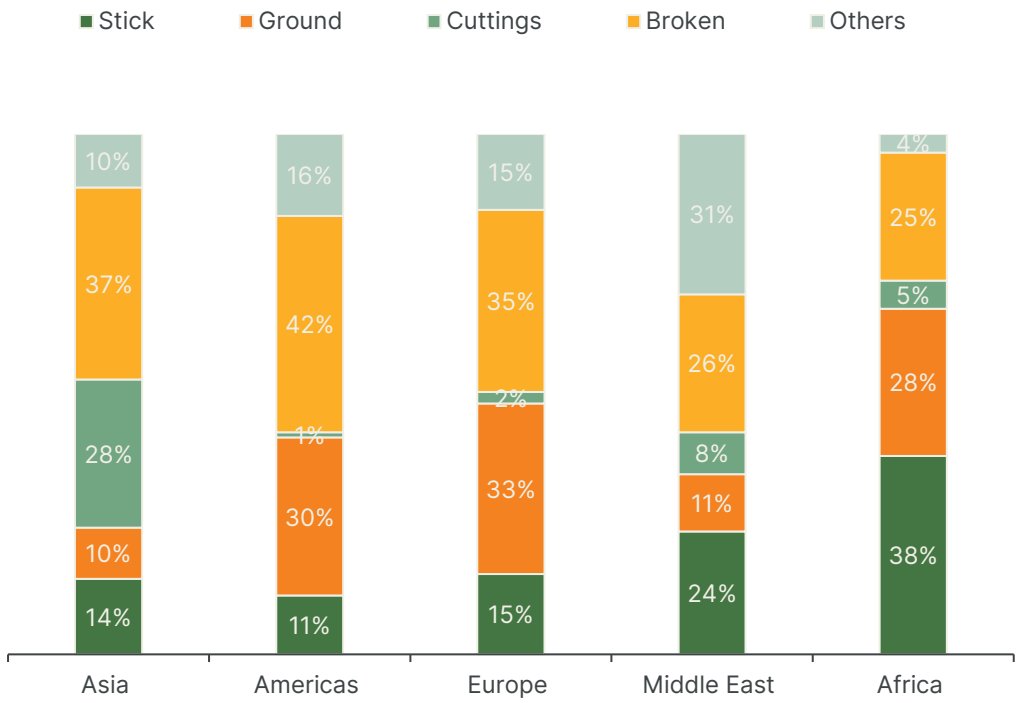
Growth in the category has mainly come from Asia, and more specifically India, while developed markets saw minimal growth

Imports by consuming countries – By origin (KMT)



Breakdown per product type

Vietnam & Indonesia



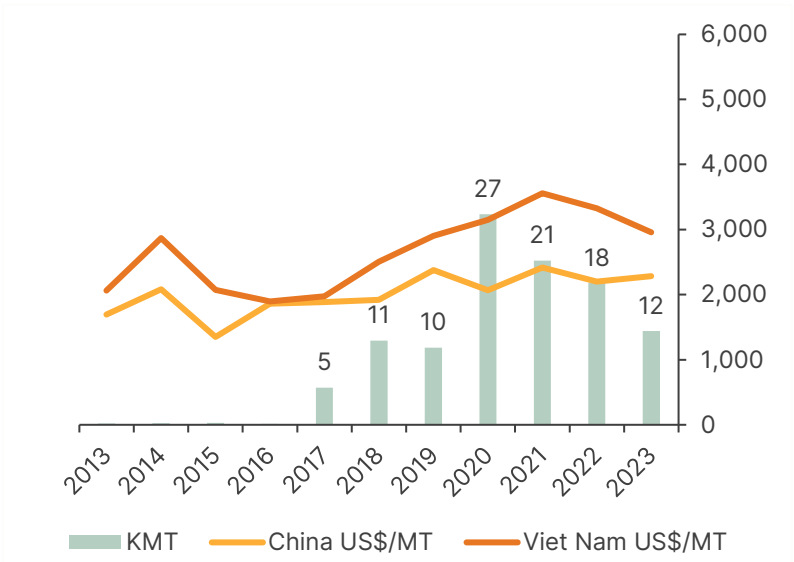
1) *Historically unregistered trade between China and India may impact this growth rate.*
2) *Total of all origin countries*

Source: Nedspice research, ITC, customs statistics.

Substantial volume is traded between producing countries

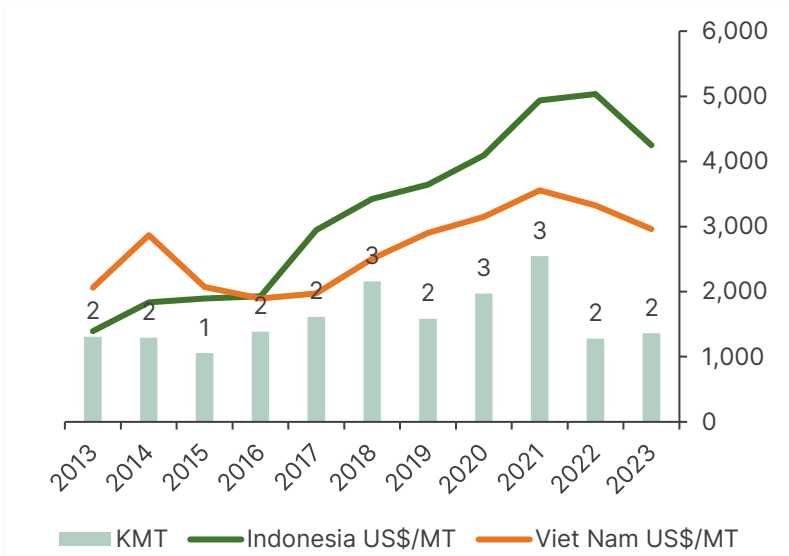
China → Viet Nam

- Quantity increased significantly, especially since '20, potentially because border trade became more difficult (Covid). Also, the conflict between India and China may have caused a re-routing.



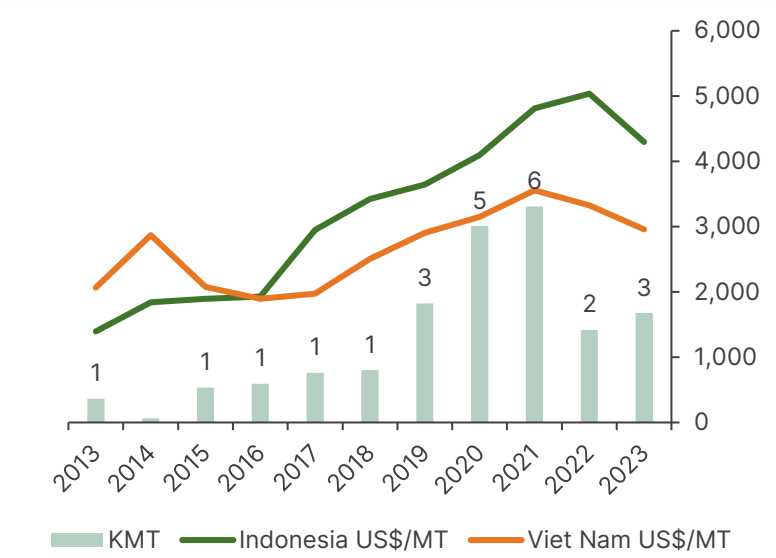
Indonesia → Viet Nam

- Stable supply of Indonesia cassia for processors in Vietnam, with a bit of a peak during Covid and slower demand in last 2 years.



Vietnam → Indonesia

- Some mixing of Vietnamese cassia takes place, especially during 2019-2021, while prices of Indonesia were also above Vietnam levels



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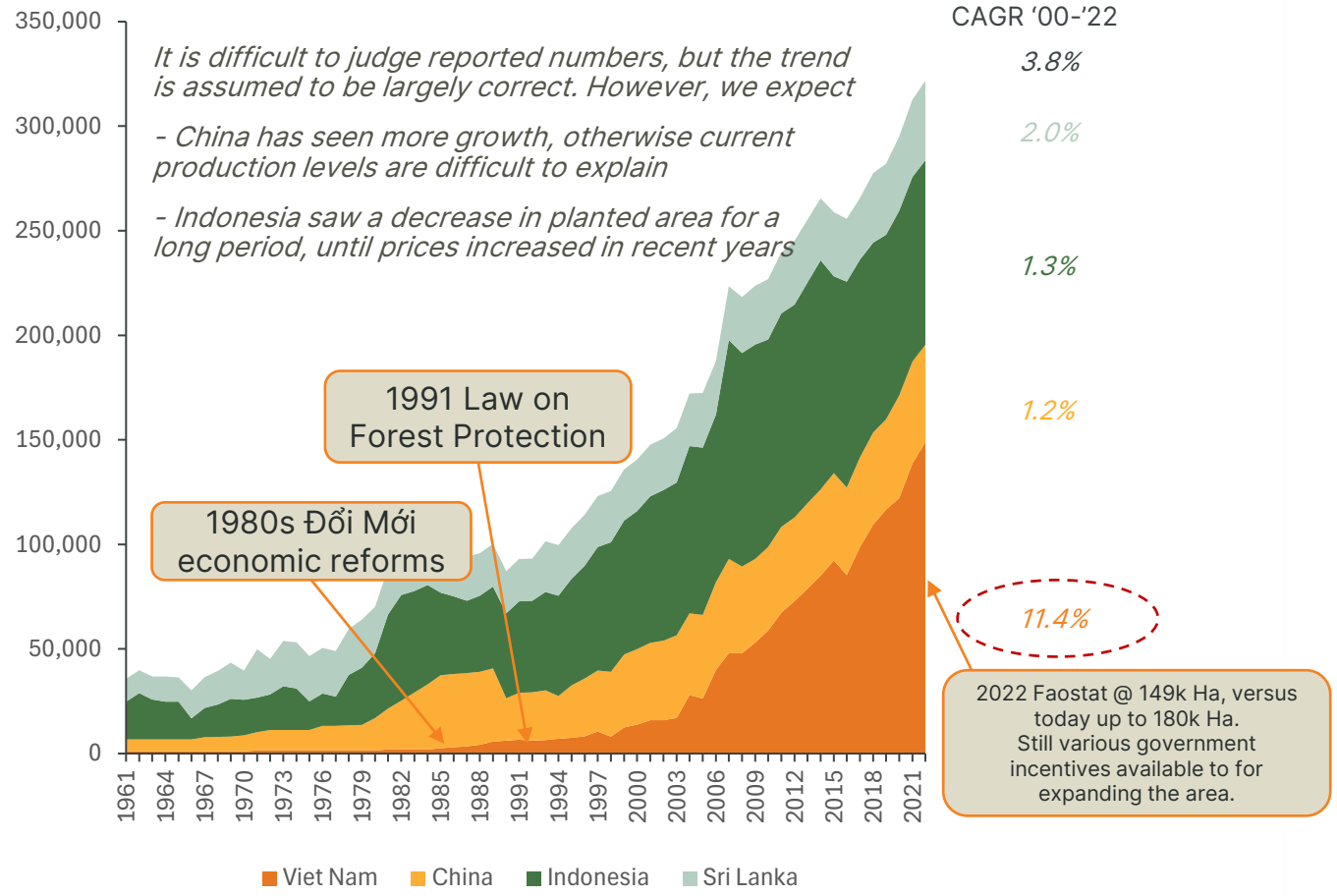
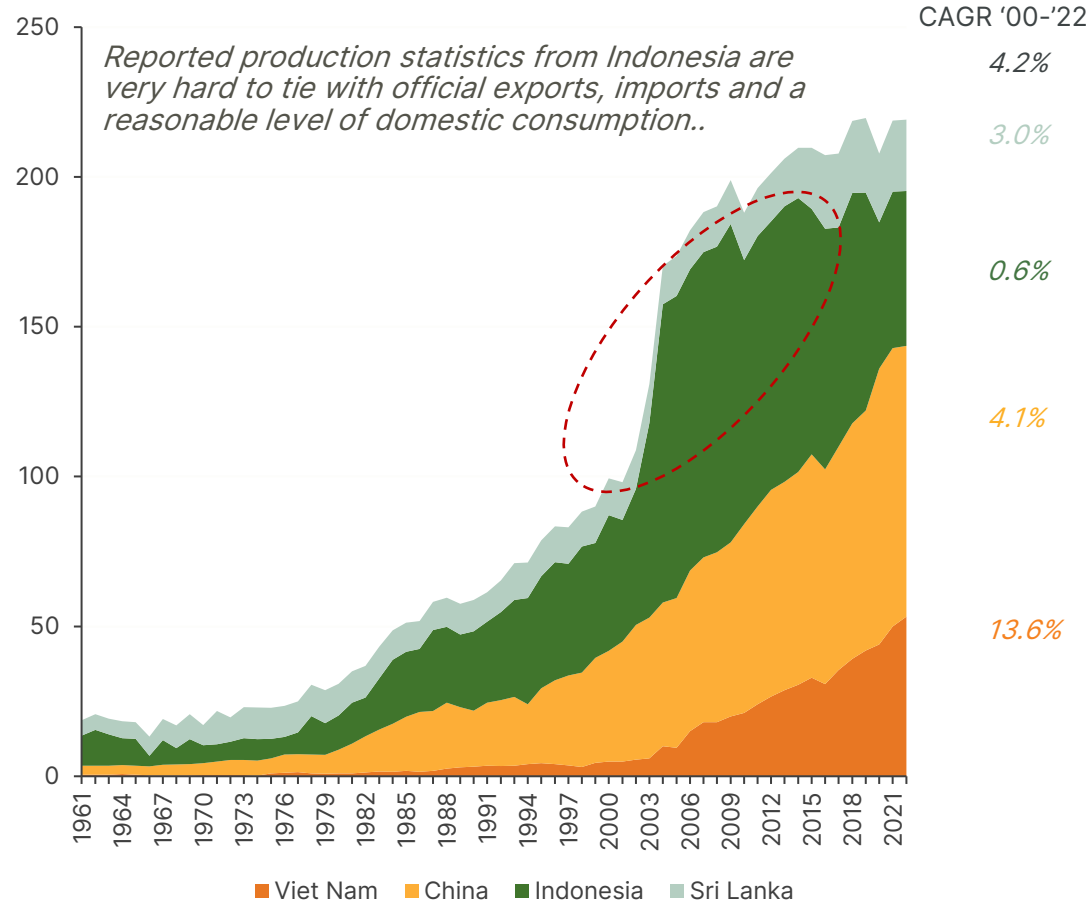
Source: Nedspice research, ITC, customs statistics.

Vietnam expanded its area substantially over the past two decades, while also Indonesia is believed to have increased plantings recently

Production area (1961-2022, Ha)



Production (1961-2022, kmt)



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Source: Faostat

The analysis of supply for this category is more complex, while also the availability of data is limited and often conflicting

What makes this category difficult to analyse?

- Not a yearly crop like e.g. pepper; harvest volumes depend on farmer interest/price levels to some extent;
- Long harvest cycles of up to 20 years or more;
- Many different cultivation styles and associated yields;
- Large domestic consumption by some producing countries;
- Seemingly unreliable or outdated data in some public records.

Solution

Focus on :

Exportable production
=
Production destined for export

2024 exportable production capacity is estimated at ~195KMT; This is expected to increase substantially on account of Vietnam

Exportable production (kmt)[1]

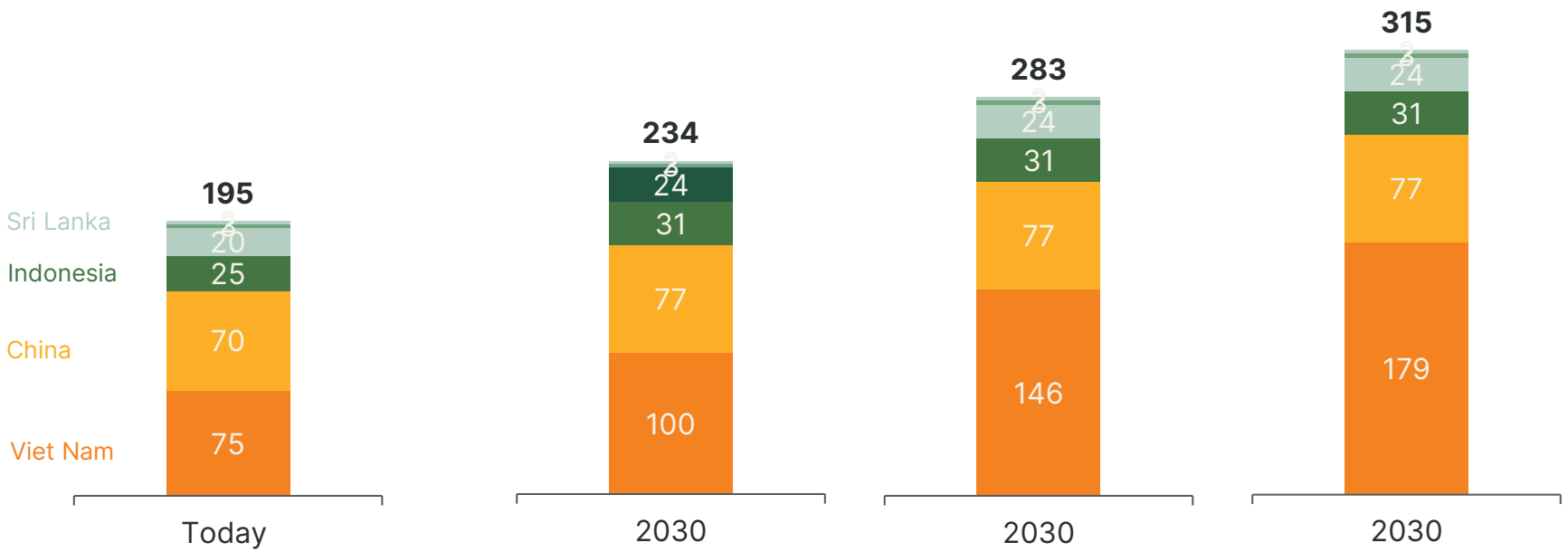
	Viet Nam	China	Indonesia	Sri Lanka
2012	20	28	39	14
2013	23	39	51	24
2014	26	38	57	14
2015	32	79	53	14
2016	38	54	47	15
2017	45	57	50	17
2018	40	60	40	15
2019	48	56	33	17
2020	49	85	33	20
2021	52	66	26	20
2022	59	71	24	18
2023	73	61	20	19
Today	**75**	**70**	**25**	**20**

Today → Forecast

Method 1
- Cycle length
- Area growth
- VN modelled in detail

Method 2
- Cycle length
- Area growth per annum

Method 3
- Vietnam reported area @1.2mt/ha/year

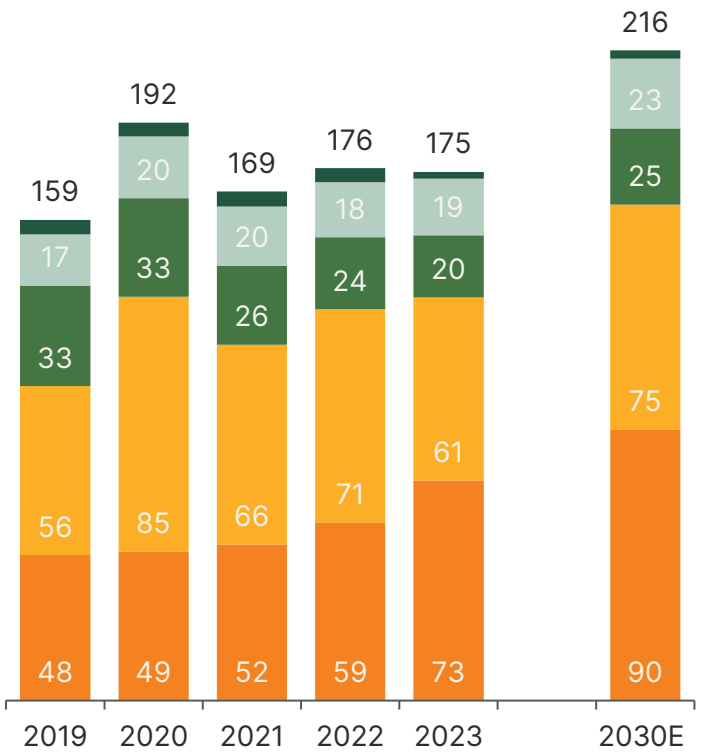


1) Exports - Imports
Source: Nedspice research

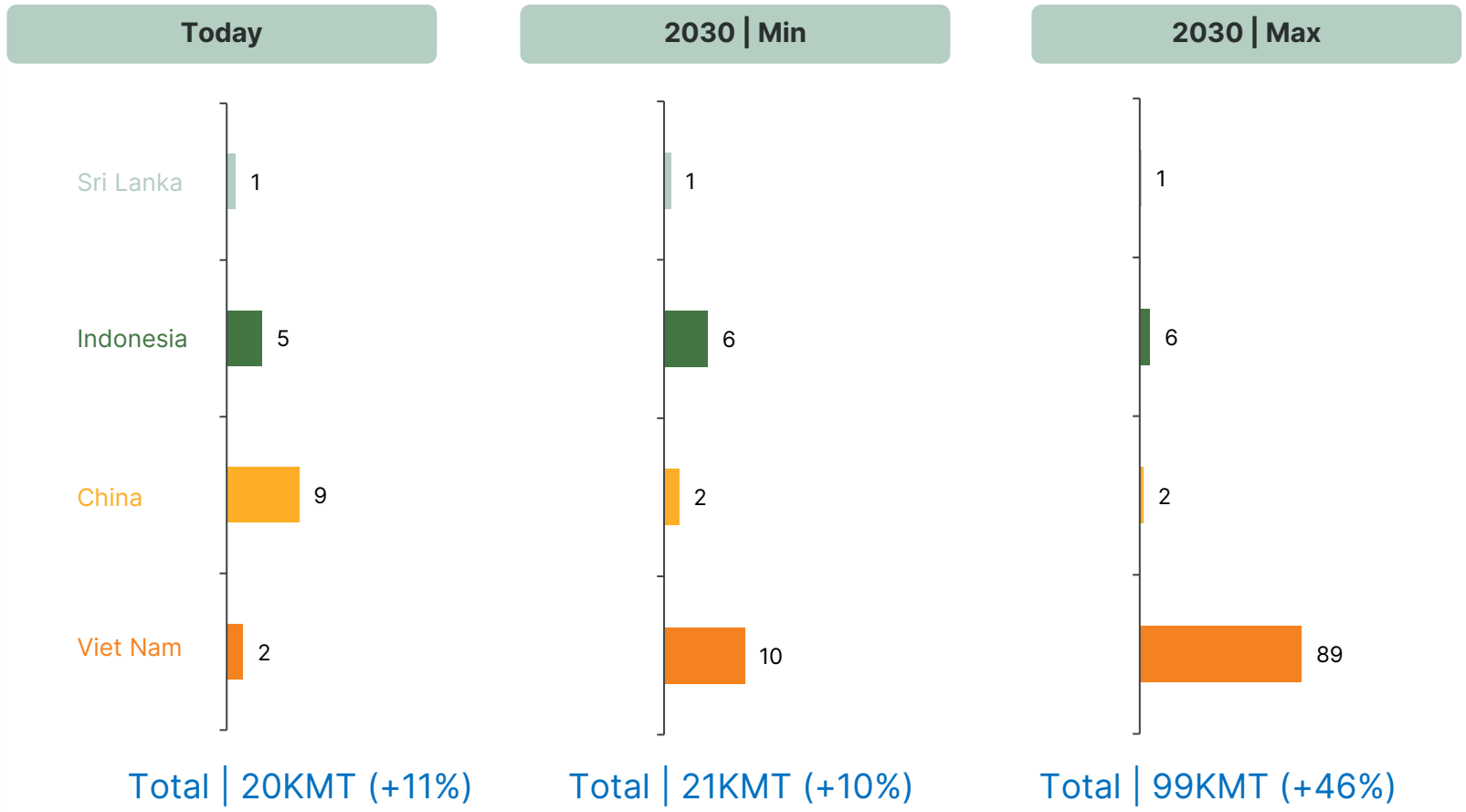
Availability of Cassia is likely to be sufficient, and even at the lowest estimates Vietnam may experience price pressure unless farmers can delay their harvest

Export demand by origin

@ current split
3% growth p.a. across origins



Surplus = Supply (Exportable production) - Demand



Note: Based on 2024 production estimates.
Source: FAO, Nedspice research.

The Washington Post
Democracy Dies in Darkness

WELL+BEING Food Fitness Mind Body Life

Applesauce lead cases in kids surge amid questions on FDA oversight

A Washington Post investigation found that states are examining 118 cases linked to lead-tainted cinnamon applesauce pouches

By Amanda Morris, Teddy Amenabar, Laura Reiley and Jenna Portnoy
December 9, 2023 at 7:00 a.m. EST

Over time, experts say high levels of lead can cause slowed growth, delayed puberty, lower IQ levels and learning disabilities. Parents who are concerned their children may have eaten tainted applesauce or have been exposed to lead should contact their pediatrician for testing. A child with high levels of lead poisoning may be treated with chelators, a prescription medication given orally or intravenously, that helps to remove lead from the blood.

UPDATE: 8 MARCH 2024

Summary and Scope of the Problem

Following the October 2023 recall of cinnamon apple puree and applesauce products due to elevated lead levels linked to the cinnamon in those products and the concern for lead toxicity in children, the FDA initiated a targeted survey of ground cinnamon products from discount retail stores and analyzed the samples for lead and chromium.

Based on results from the survey, the FDA is recommending recalls of ground cinnamon from six distributors whose products had elevated lead levels ranging from 2.03 to 3.4 parts per million (ppm) (see table above for a full list of lead levels in these products). These levels are significantly lower than the levels of lead associated with the ongoing investigation into ground cinnamon from Ecuador supplied by Negasmart to Austrofoods, the manufacturer of the apple puree and applesauce products, which were between 2,270 ppm to 5,110 ppm in the cinnamon.

Thank you

Source: Nedspice Research

www.nedspice.com

Cassia Sustainable Project in Yen Bai, Viet Nam

Nedspice-Farmers Partnership Programme

Commentary

- A project for UEBT cassia started in Yen Bai in Apr-22 to promote sustainable cassia industry development and apply an environmental impact assessment tool in measuring carbon emissions from the supply chain.

- Pilot activities:

- Establish a win-win partnership with cinnamon farmers in Yen Bai province
- Implement production program according to UEBT/RA certification
- Apply tools to reduce CO2 emissions through sustainable forest management and biodiversity conservation
- Share experiences on sustainable value chain development with other localities through series of seminars.

Expected results

300 farmers trained
on sustainable production practices

600 tons
of sustainably produced commodity

1,500 Hectares
under sustainable production practices

Increasing income
from value added sustainable products

Activities

Training workshops toward certifying the traceable and UEBT/Rainforest Alliance certified Cassia

UEBT Certificate

Survey and evaluate to build a biodiversity model


NEDSPICE
We source, process and deliver spices, herbs
and dehydrated vegetables in a sustainable way

Please visit our website for the latest information

Signature products

Sustainable products

Organic products