



Cocoa Fundamentals Outlook for Asia: Supply and Demand

Presentation for CAA International Cocoa Conference
1 September 2022

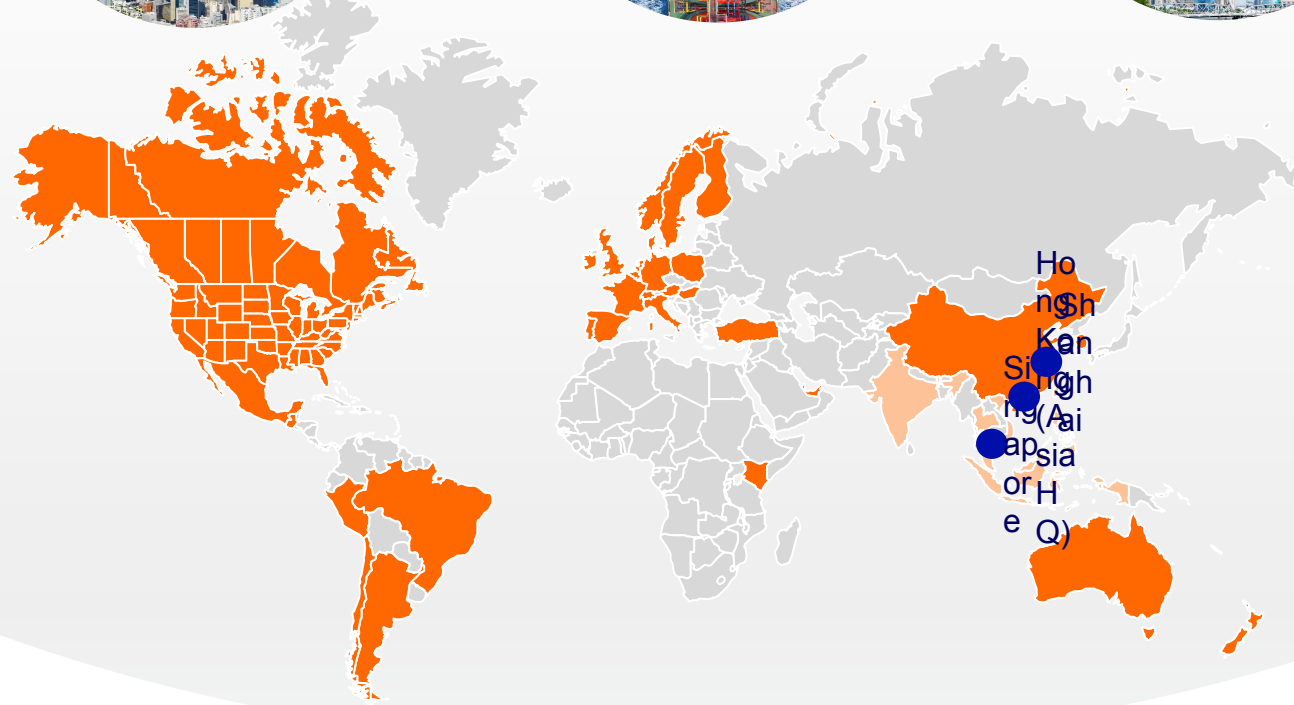
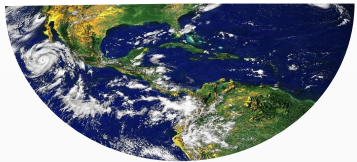
Content Page:

1. Introduction to Rabobank
2. Asian cocoa & cocoa ingredients supply
3. Asian cocoa ingredients and chocolate confectionary demand
4. Global cocoa prices development

1. Introduction to Rabobank

Connecting you to our global network

Presence in 35 countries and in the top global F&A regions, serving all players in F&A value chain. Through our offices in Asia, we cover two key axes of growth – Greater China and Southeast Asia.



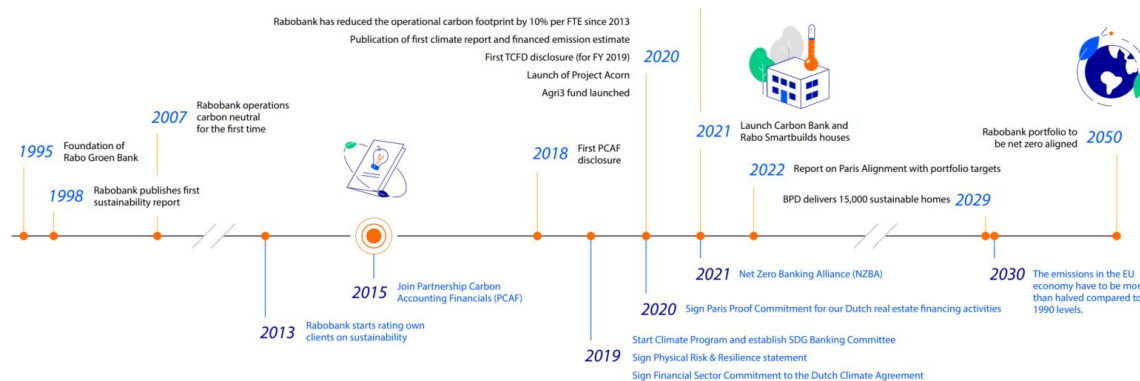
Ra
bo
ba
nk
of
the
Netherlands
presence

Sustainability and Climate Change are high on our agenda

- Rabobank first reported on sustainability in 1998.
- In 2020, Rabobank published its first climate report highlighting our approach, progress and goals for the future.
- ‘Our Impact in 2021’ report gives a preview of ‘Our Road to Paris’ approach.



Our Road to Paris



We have chosen to focus on these 8 SDGs, which we believe we can make meaningful contributions to, also taking into account our mission of growing a better world together.



Leading in Sustainability Scores

SUSTAINALYTICS ESG risk rating
4th
out of 417 diversified banks

SUSTAINABLE BRAND INDEX
#1
Most sustainable bank in the Netherlands

MSCI
A

ISS
Prime

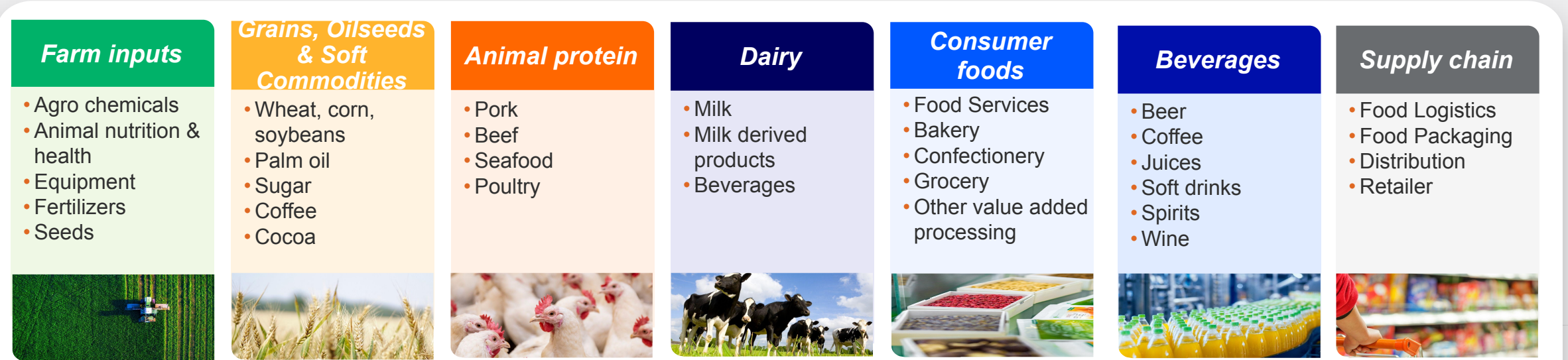
as per Feb 2022

Our Capabilities: a comprehensive product suite supporting our client's ambition



Leveraging our extensive Food & Agri knowledge providing sector-based financing solutions

Rabobank offers sector based finance solutions by bringing together our global sector knowledge, our client insights and seamless execution



Specific F&A sector knowledge brought by 90+ dedicated research professionals globally

Dedicated Global Sector teams bringing forward global, regional and local knowledge and expertise



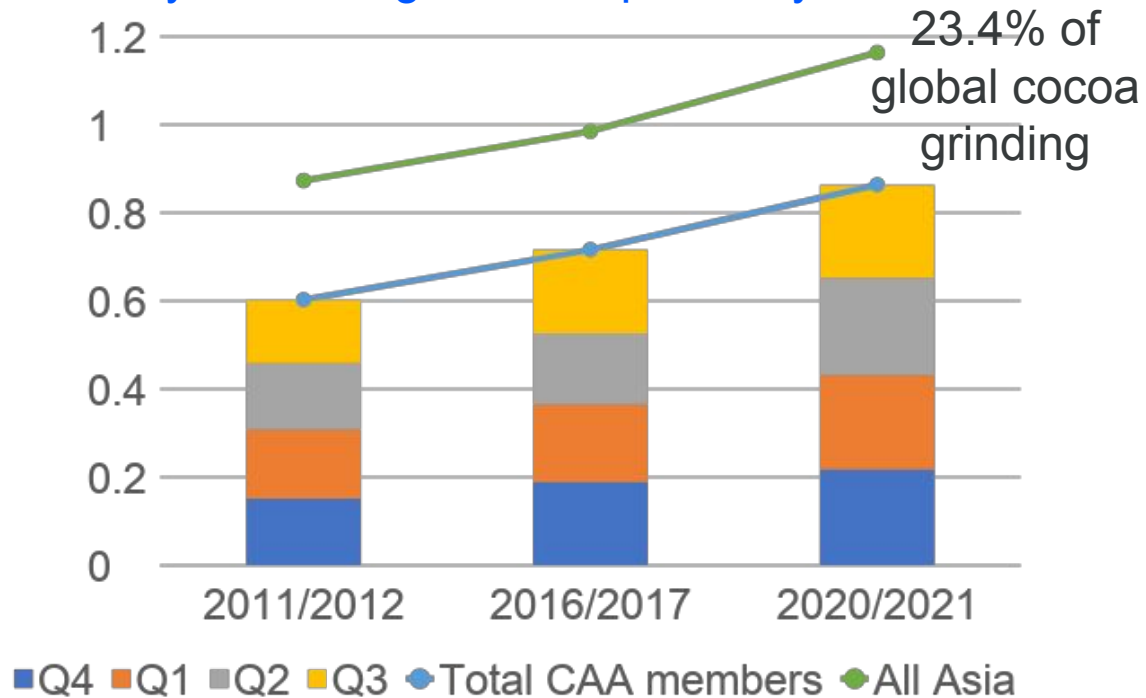
Exclusive client insights, deals and solutions, driven by our knowledge of clients and F&A sectors

Global network of bankers and product specialists to support clients and providing seamless execution

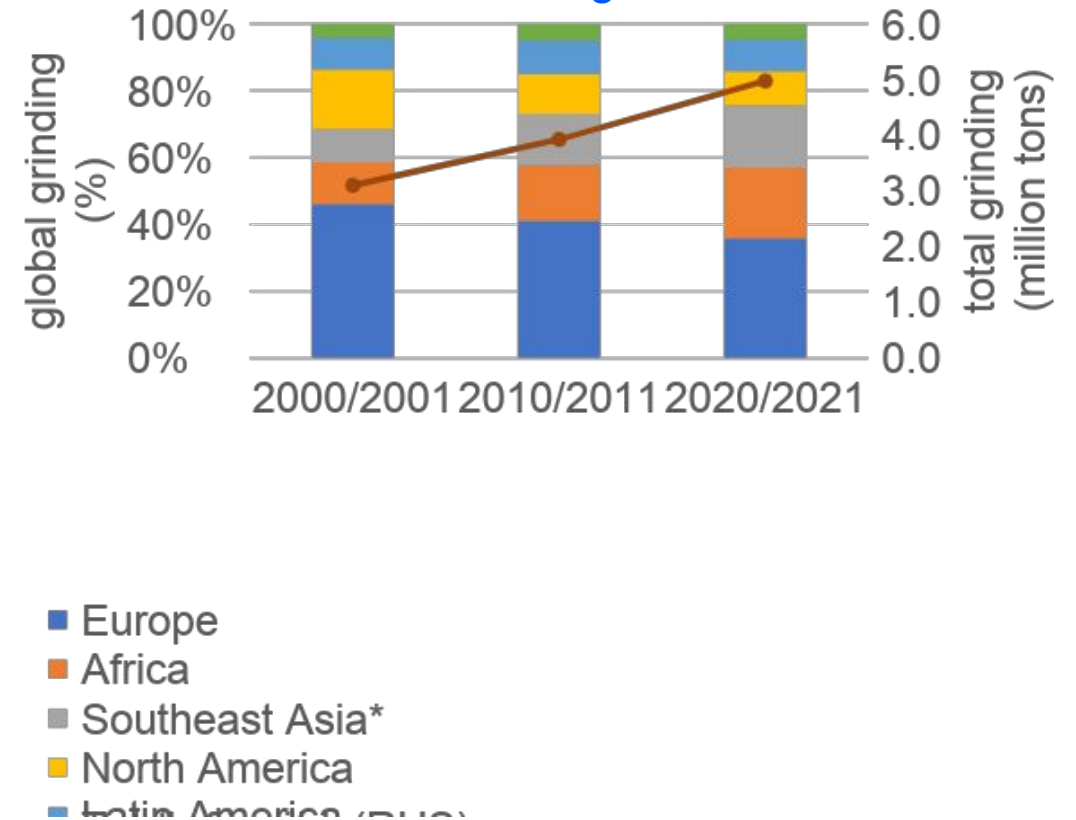
2. Asian cocoa & cocoa ingredients supply

Asia is a significant player in global cocoa processing industry

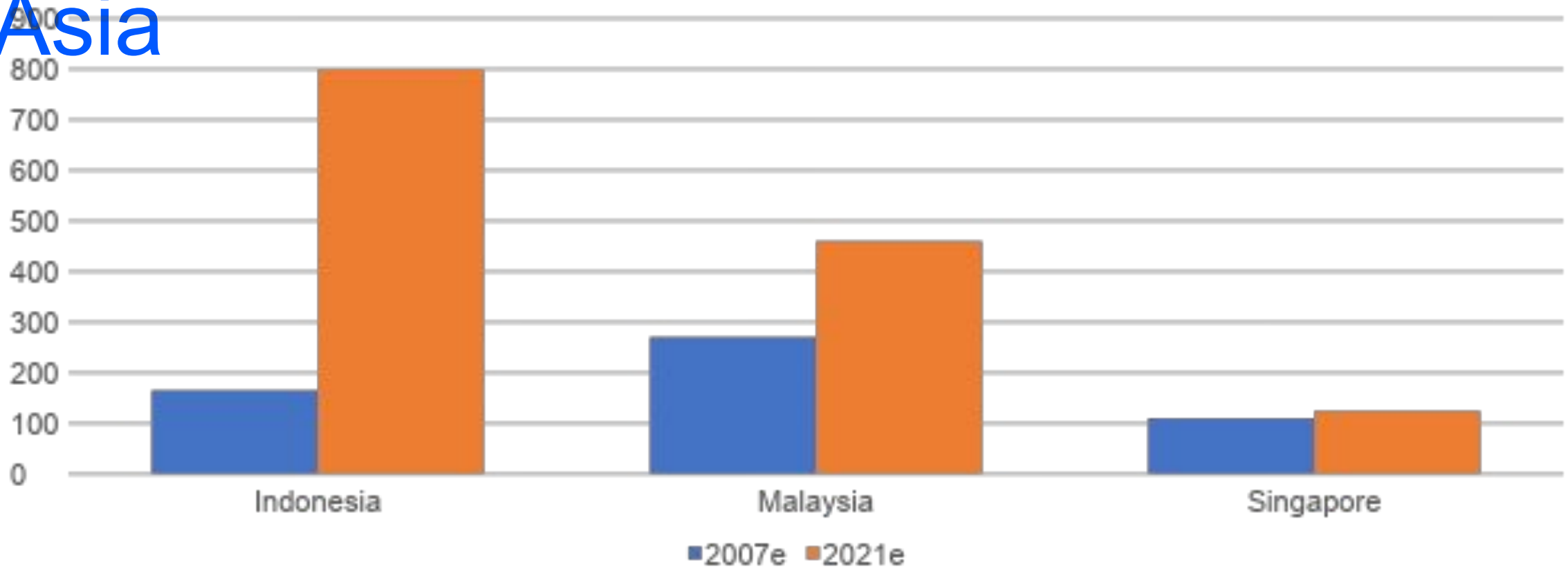
Cocoa processing activities in Asia have been constantly increasing over the past 10 years



Asia's market share of global cocoa grinding activities has been increasing



Indonesia, Malaysia and Singapore are major cocoa processing locations in SE Asia



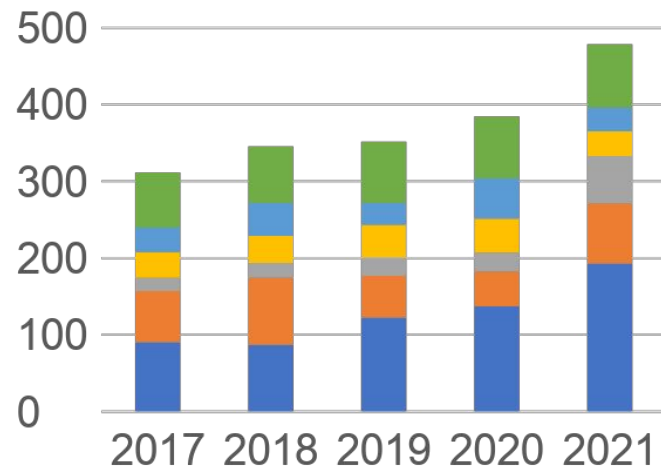
SE Asian cocoa processors need to import cocoa beans due to lack of local production

Indonesian cocoa beans imports



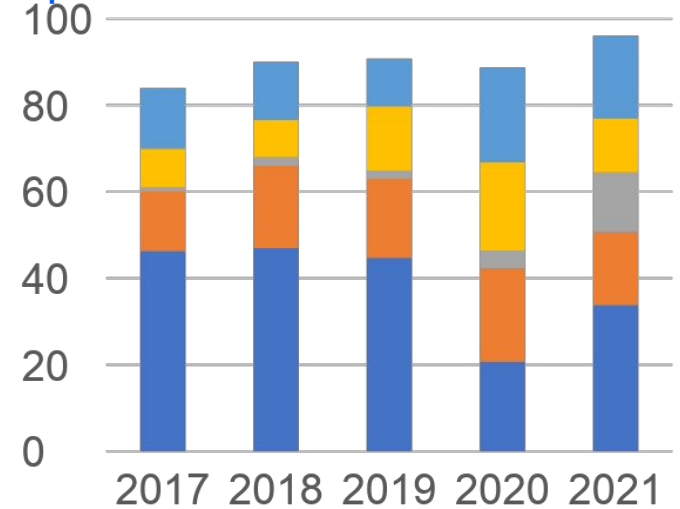
- Côte d'Ivoire
- Ecuador
- Nigeria
- Ghana
- Cameroon
- Rest of world

Malaysian cocoa beans imports



- Côte d'Ivoire
- Ghana
- Nigeria
- Cameroon
- Ecuador
- Rest of world

Singaporean cocoa beans imports

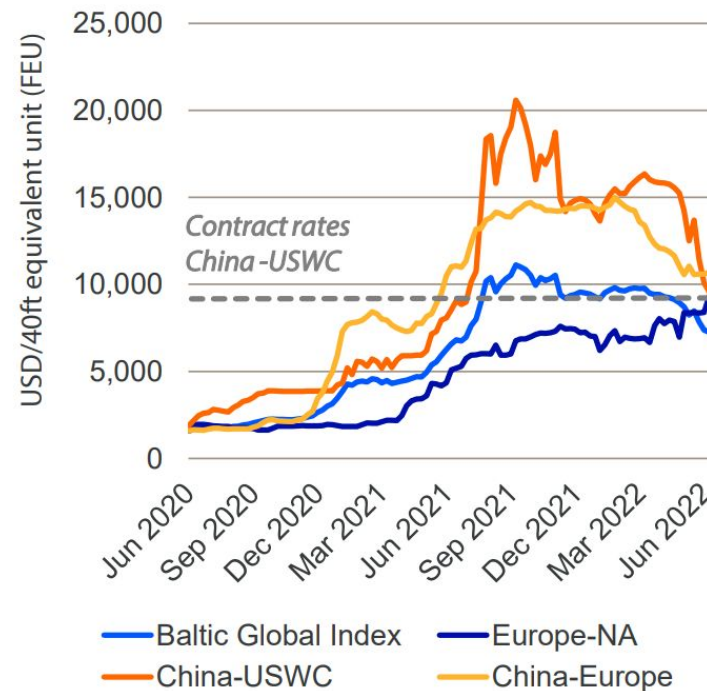


- Ghana
- Indonesia
- Côte d'Ivoire
- Cameroon
- Rest of world

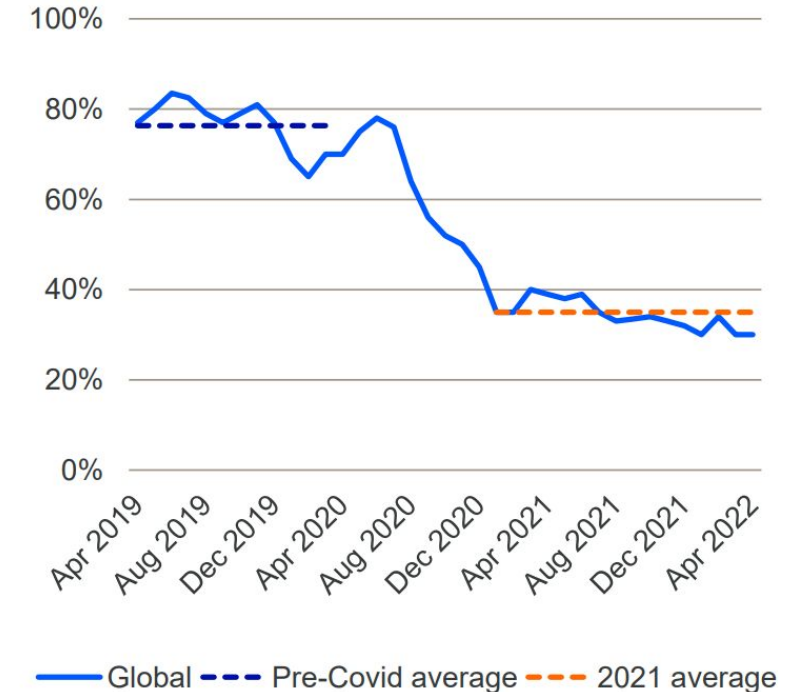
Challenging container freight conditions to stay

Container spot rates have subsided significantly from 2021 peaks, except the trans-Atlantic lane from Europe to North America due to strong market demand on that lane and port congestion. We do not expect rates to fall back to 2020 levels. Schedule reliability will recover, but slowly. Congestions are expected to remain at key ports until 1H 2023.

Container rates price evolution in major global lines, June 2020-June 2022

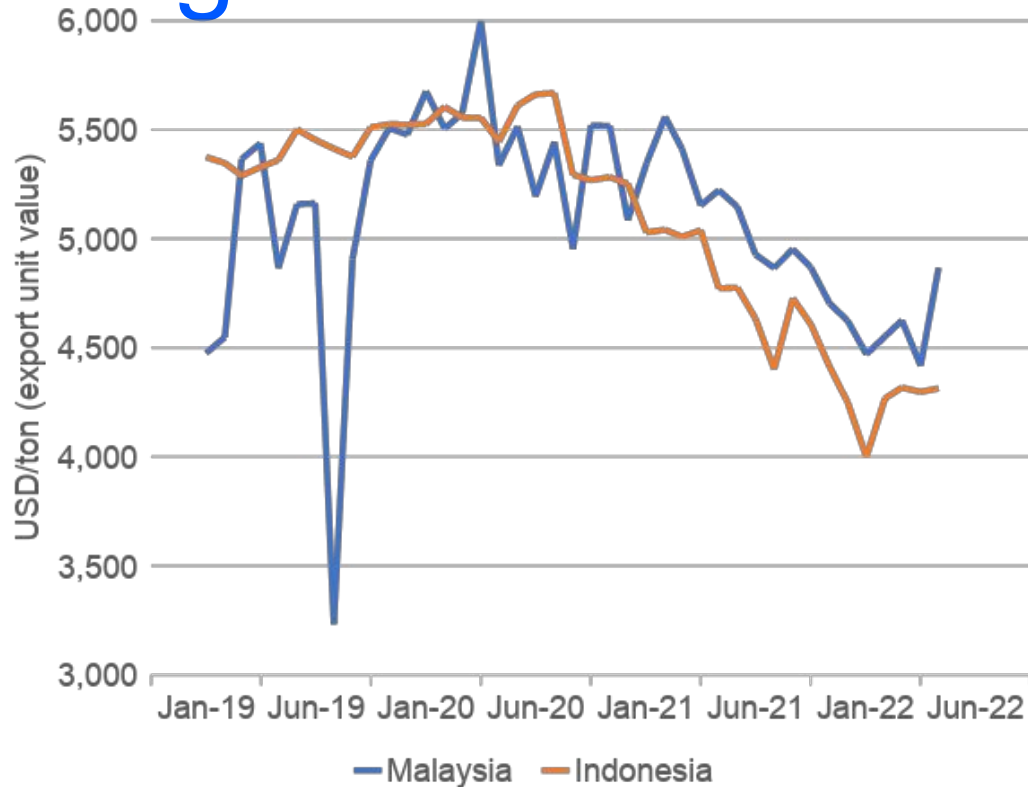


Percentage of on-time arrivals of container ships, April 2019-April 2022

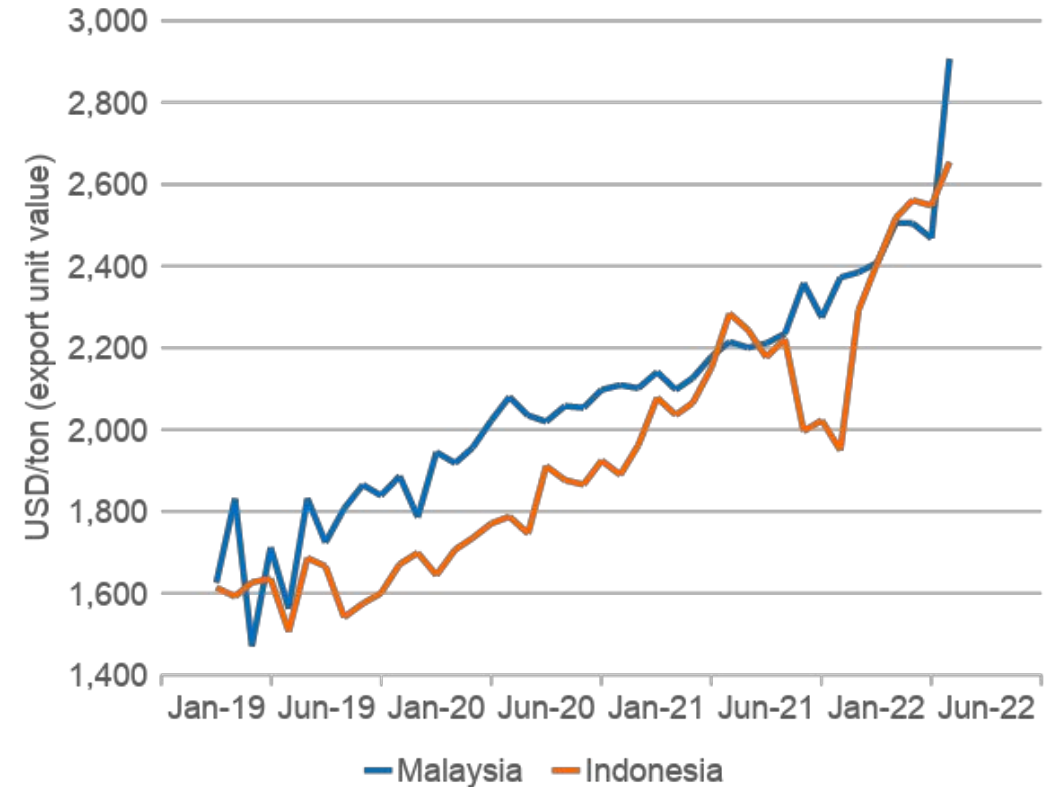


High freight costs and declining cocoa butter prices environment affected processing

Cocoa butter price, Jan 19 – May 22

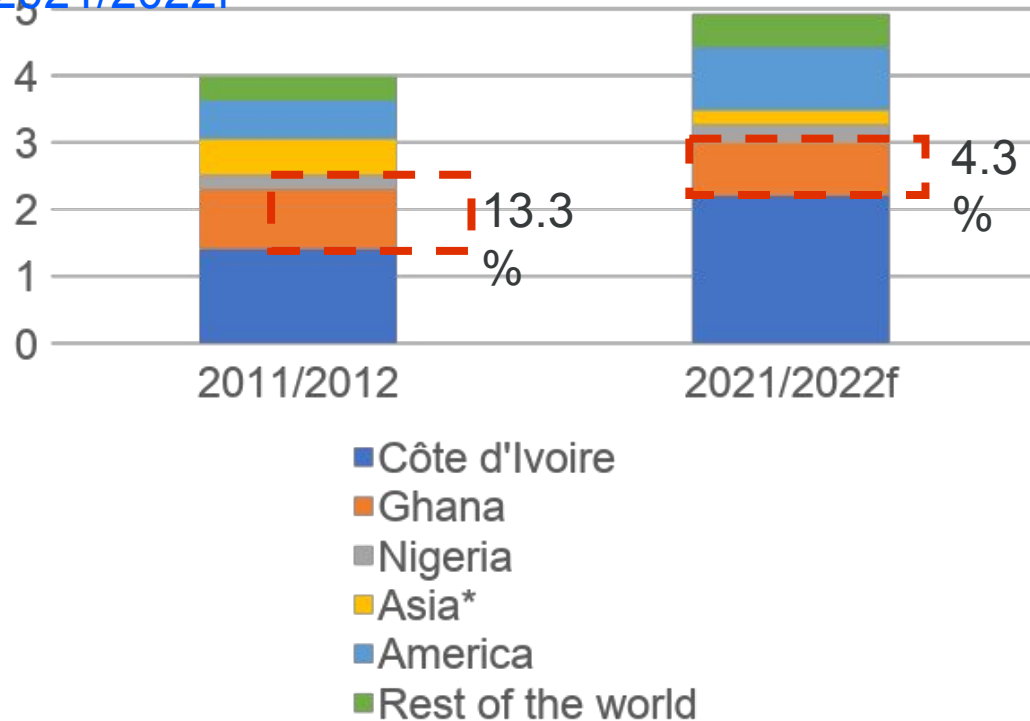


Cocoa powder price, Jan 19 – May 22

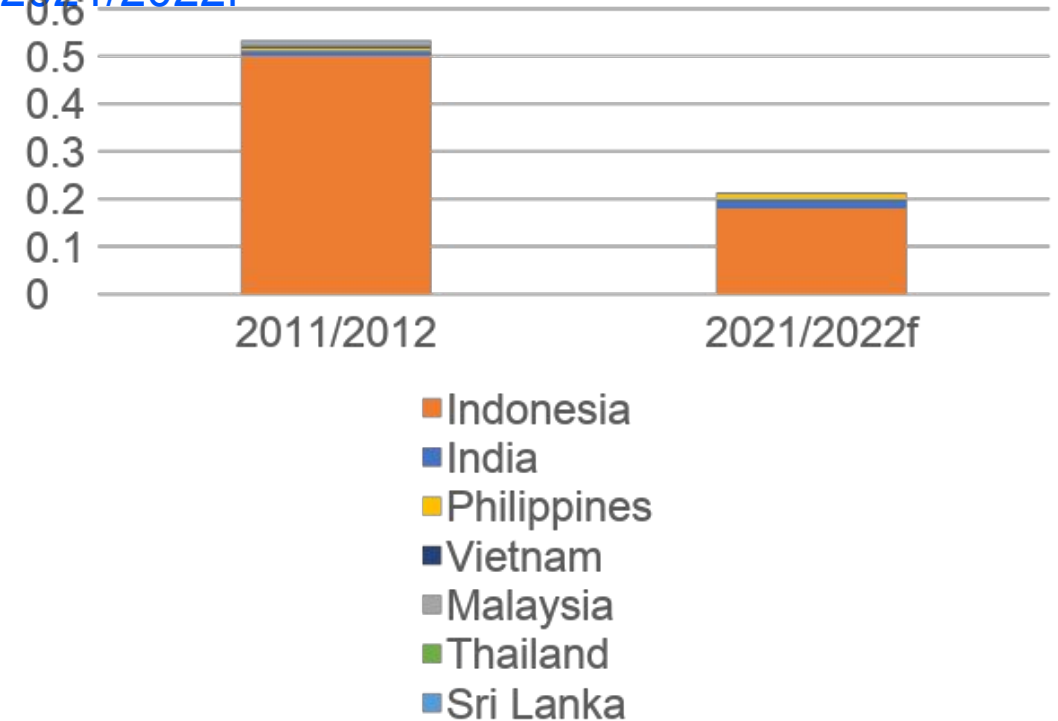


Cocoa beans production in Asia has been in declining trend

Global cocoa beans production 2011/2012 vs 2021/2022f



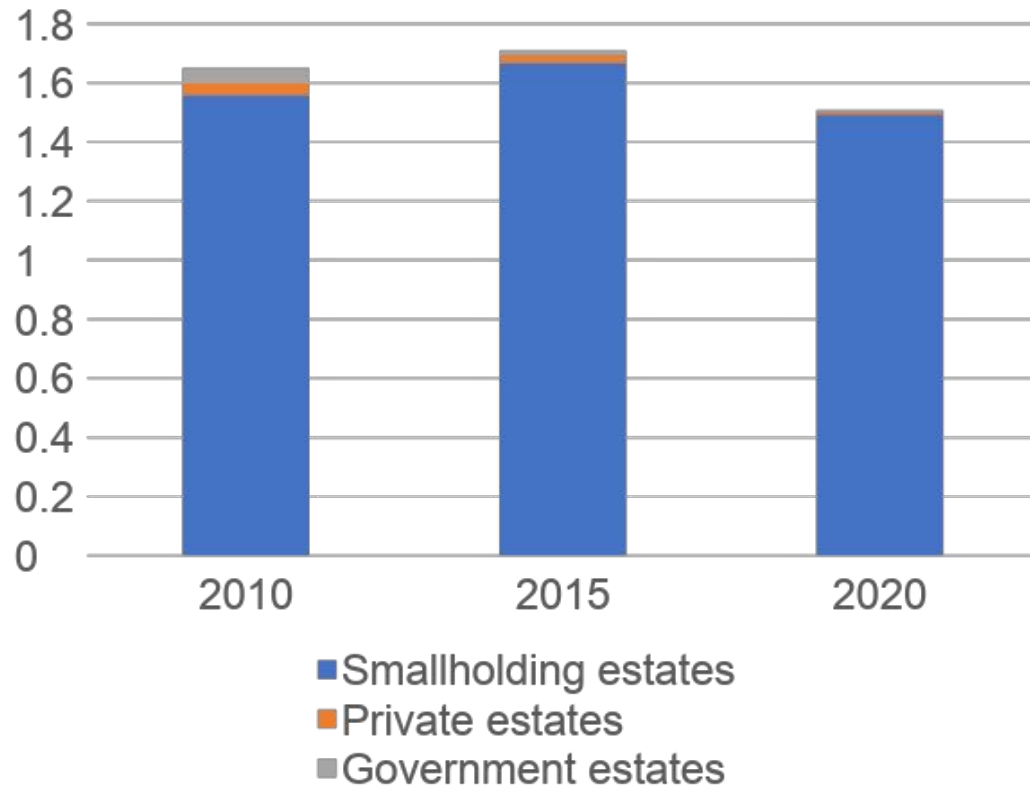
Asian* cocoa beans production 2011/2012 vs 2021/2022f



14 Sources: ICCO, Rabobank 2022. *Asia includes India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand and Vietnam

Indonesia: lack of investment in the sector regarding replanting

Indonesian cocoa plantation area, 2010 - 2020

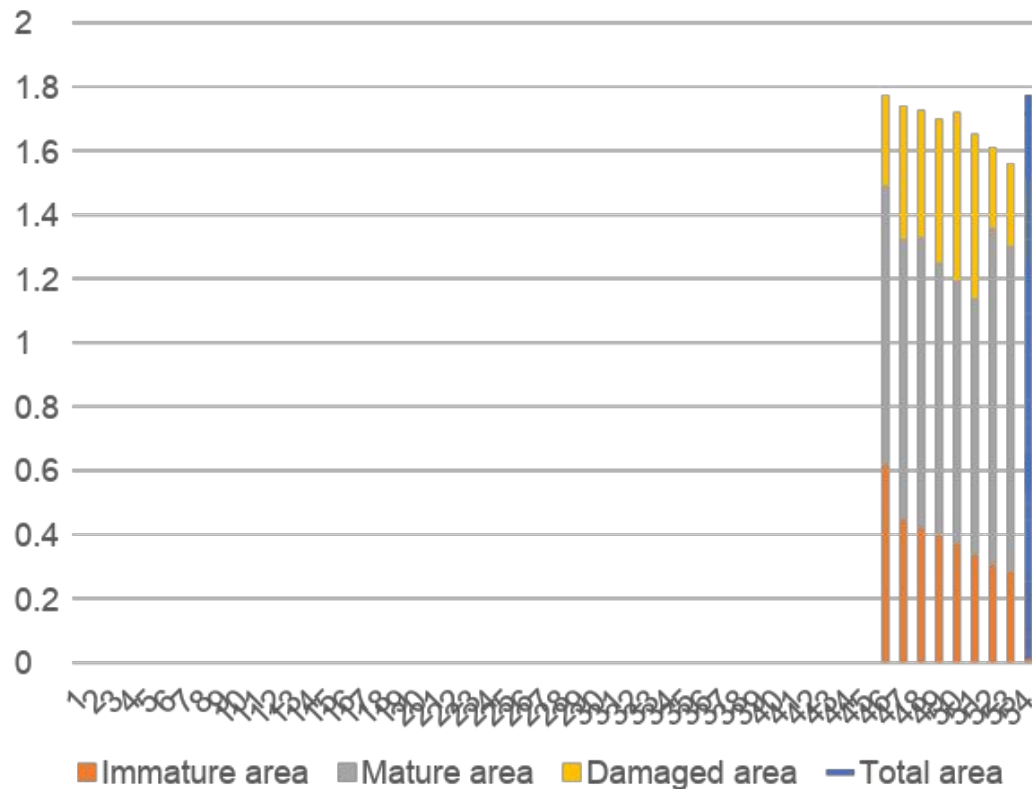


Challenges of Indonesian cocoa production

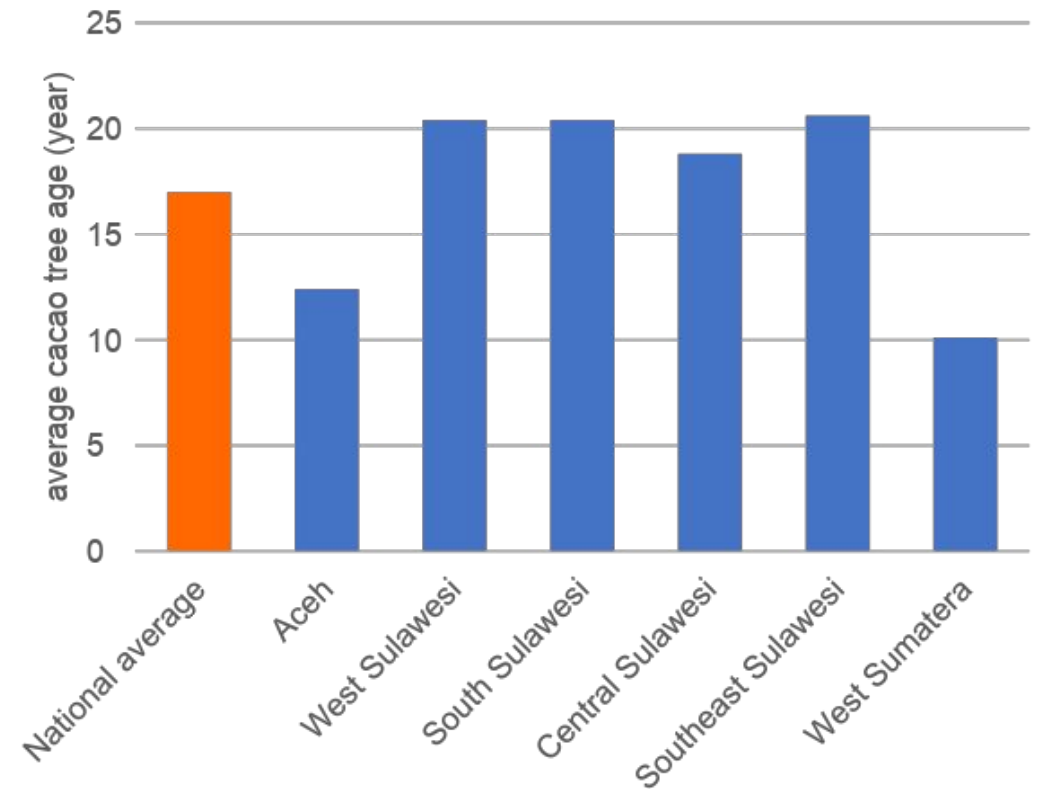
- One of the biggest bottleneck in Indonesian cocoa sector is low yield, which is triggered due to:
 - Lack of knowledge/ technical expertise (including pest and disease management) in smallholder farmers (>95% of Indonesian cocoa plantations)
 - Lack of investment in the sector regarding replanting (to replace aging trees).
- Smallholders have limited access to financing (to buy farm inputs, i.e. seeds, fertilizer, etc.) and access to market.
- Low and varying quality of fermented cocoa beans produced by smallholder farmers due to farmer's lack of knowledge and skills in carrying out the fermentation process, apart from the insufficient fermentation facilities.

Indonesia: plenty of aging cocoa trees

Indonesian cocoa production area, 1967-2020

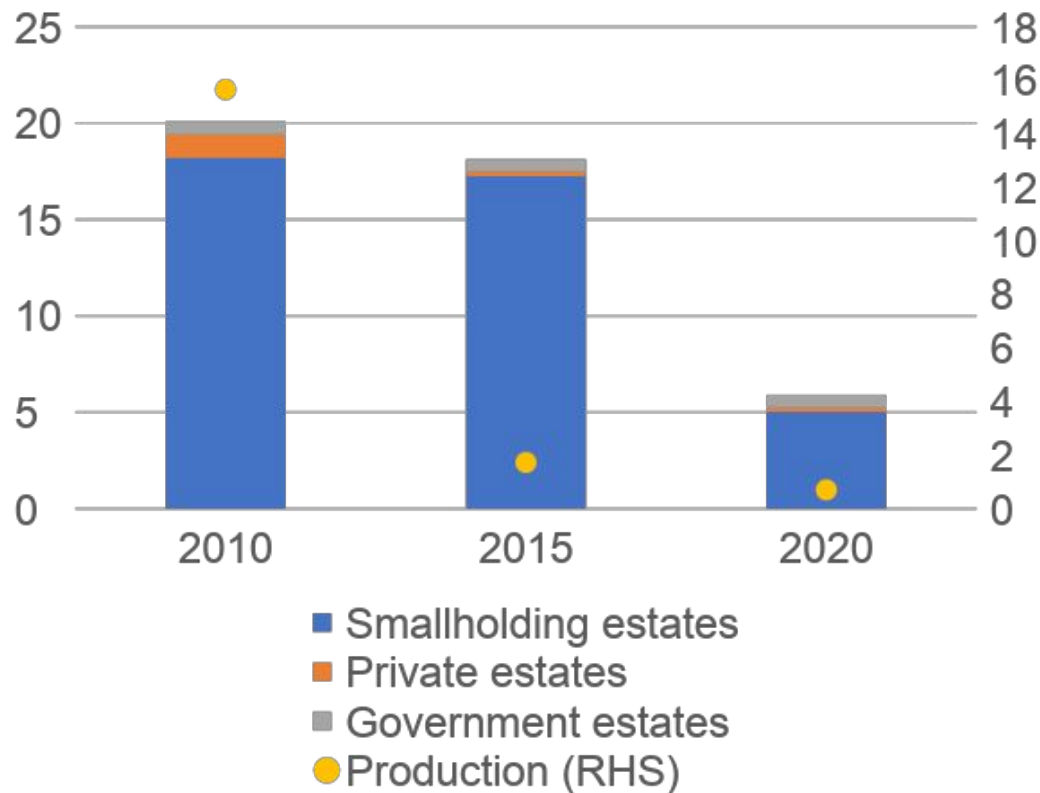


Indonesian average cocoa tree age in 2017

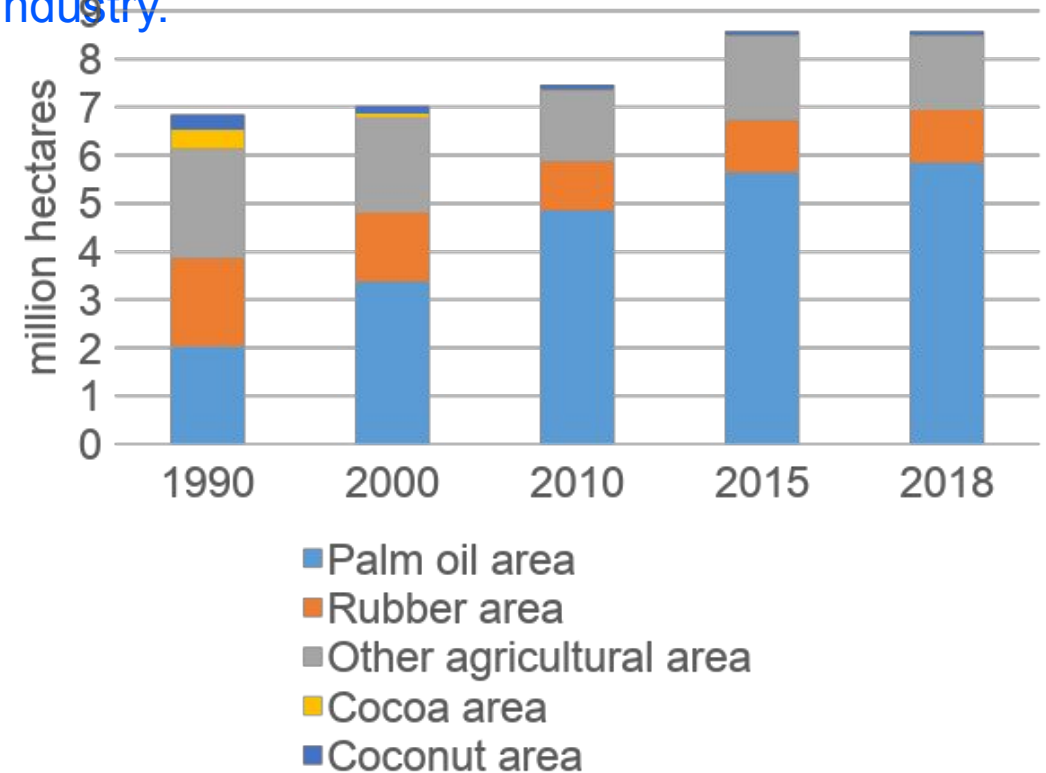


Malaysia: Substantial shrinkage in cocoa cultivation area

Malaysian cocoa plantation area, 2010 - 2020

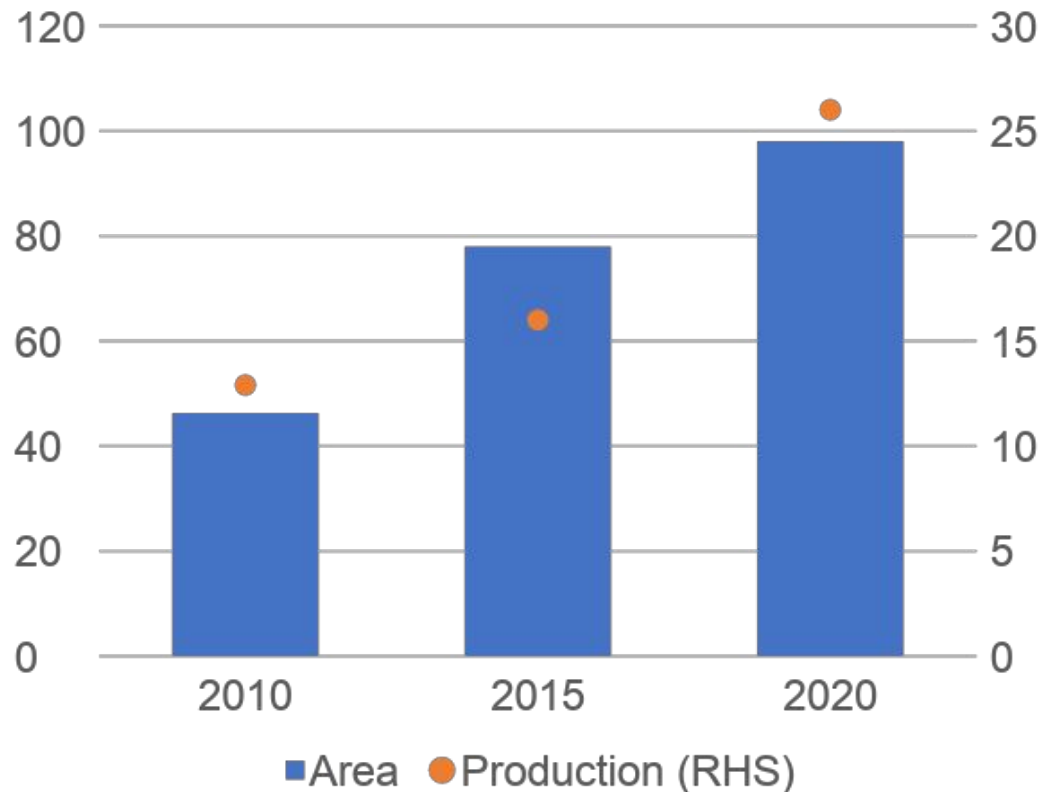


Expansion of oil palm plantation area in Malaysia has led to the exit of cocoa producers from the industry.

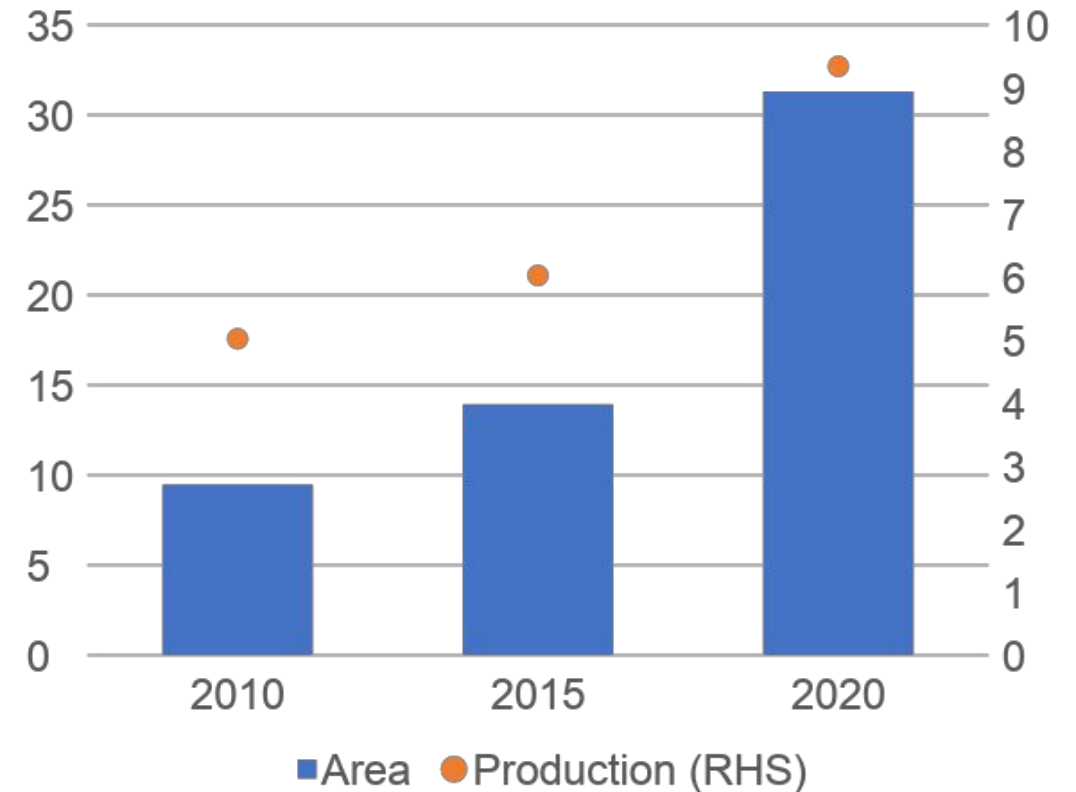


India and Philippines: Cocoa production yield could still be increased

India's cocoa plantation area, 2010 - 2020



Philippines' cocoa plantation area, 2010 - 2020

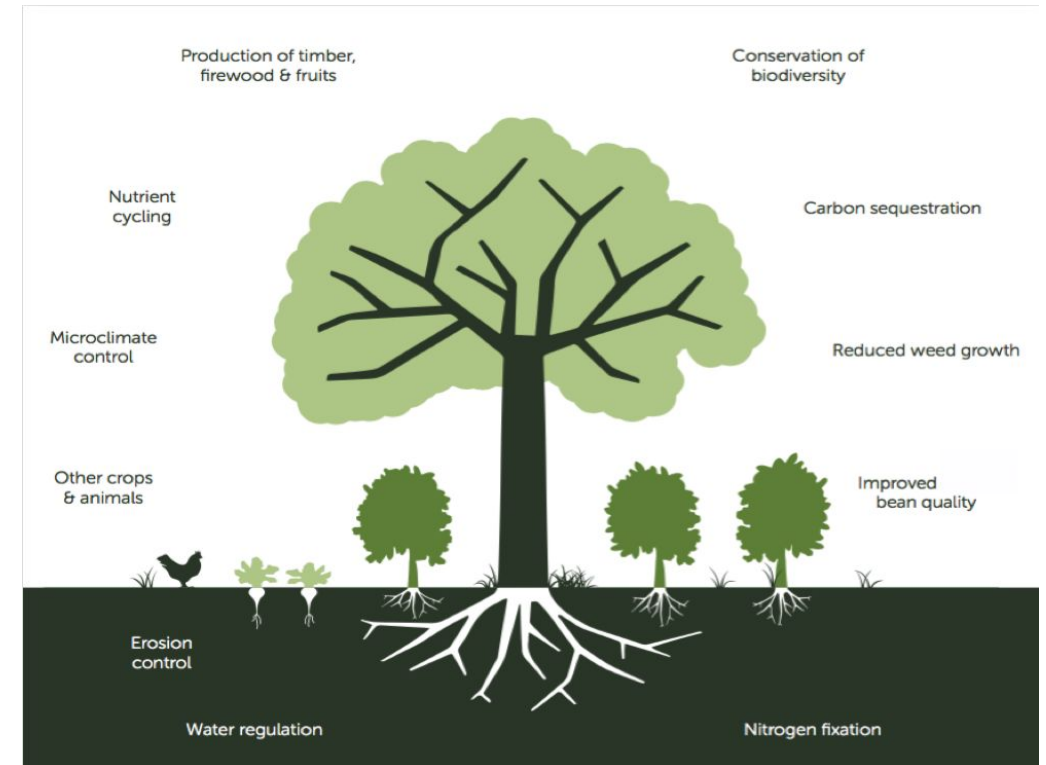


The need to increase cocoa production yield in Asia in sustainable ways

Three pillars of sustainability

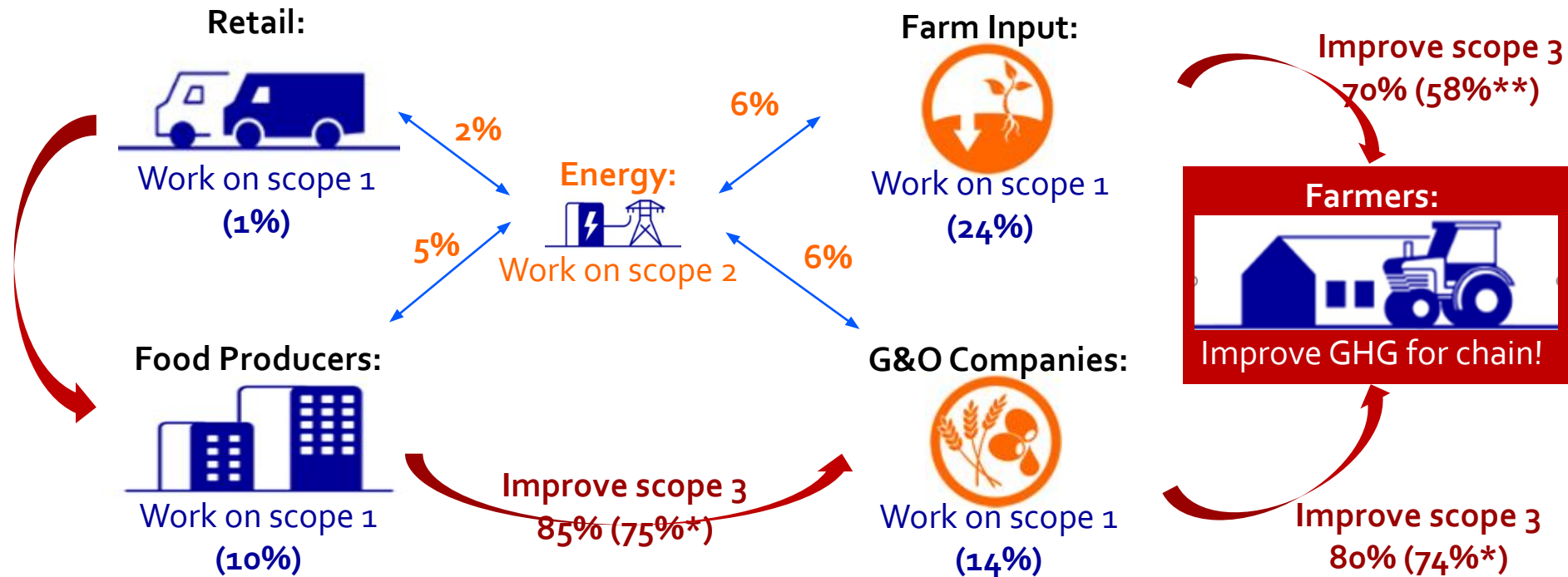


Climate resilience: Benefits examples of agroforestry in coffee



Supply Chain Expects Farms to improve emissions for the Whole Chain

Example from Grains and Oilseeds supply chain: Each player improves their scope 1 & 2 emissions, but all eyes are on farmers for scope 3

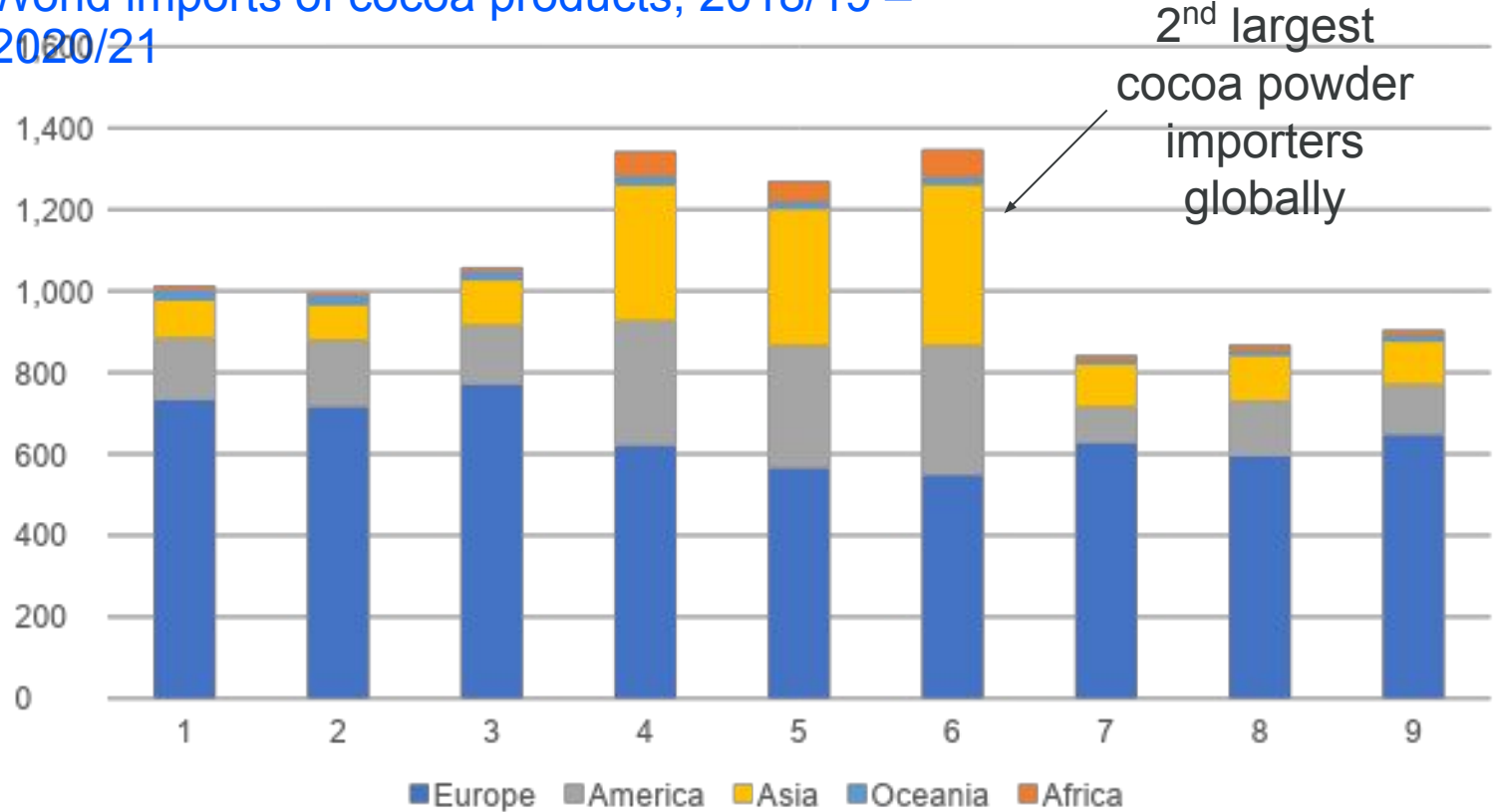


*) % in brackets are scope 3 emissions related to 'Purchased Goods' **) to 'Use of Sold Products'

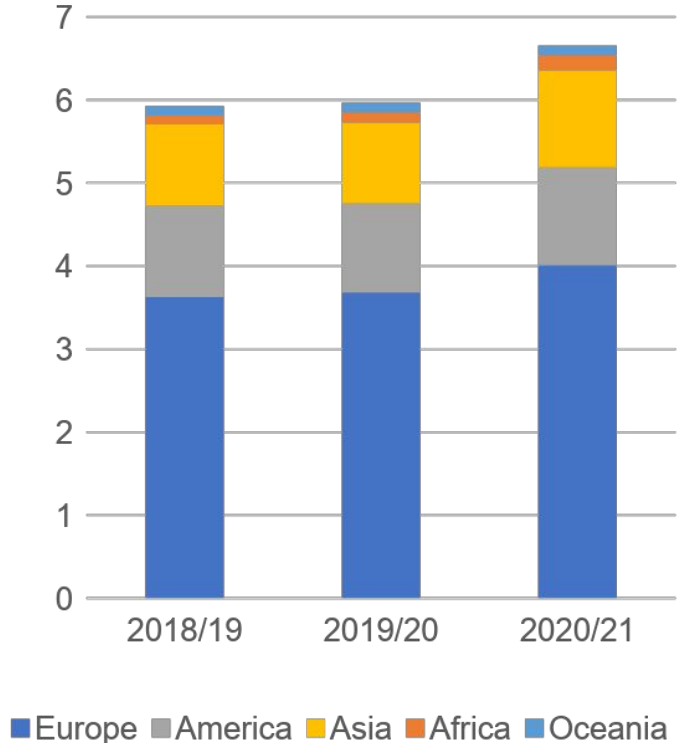
3. Asian cocoa ingredients and chocolate confectionary demand

Asia accounts for >25% of global cocoa powder imports

World imports of cocoa products, 2018/19 – 2020/21

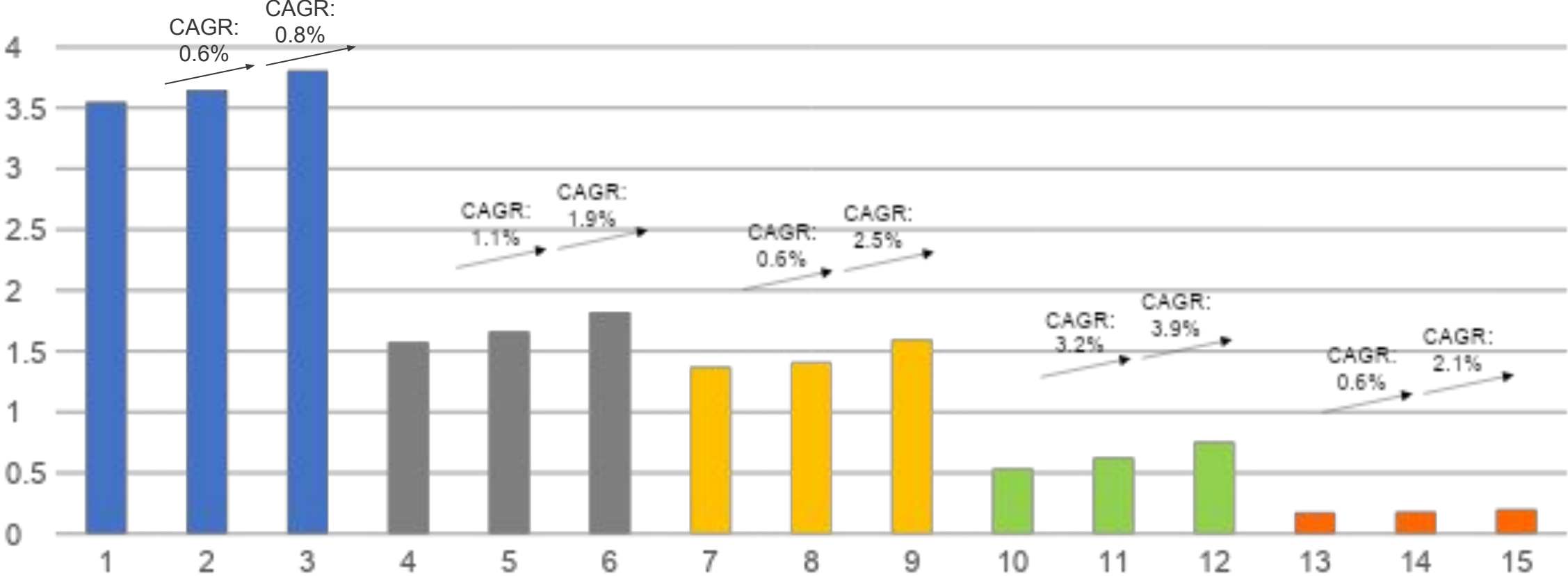


World imports of chocolate products, 2018/19-2020/21



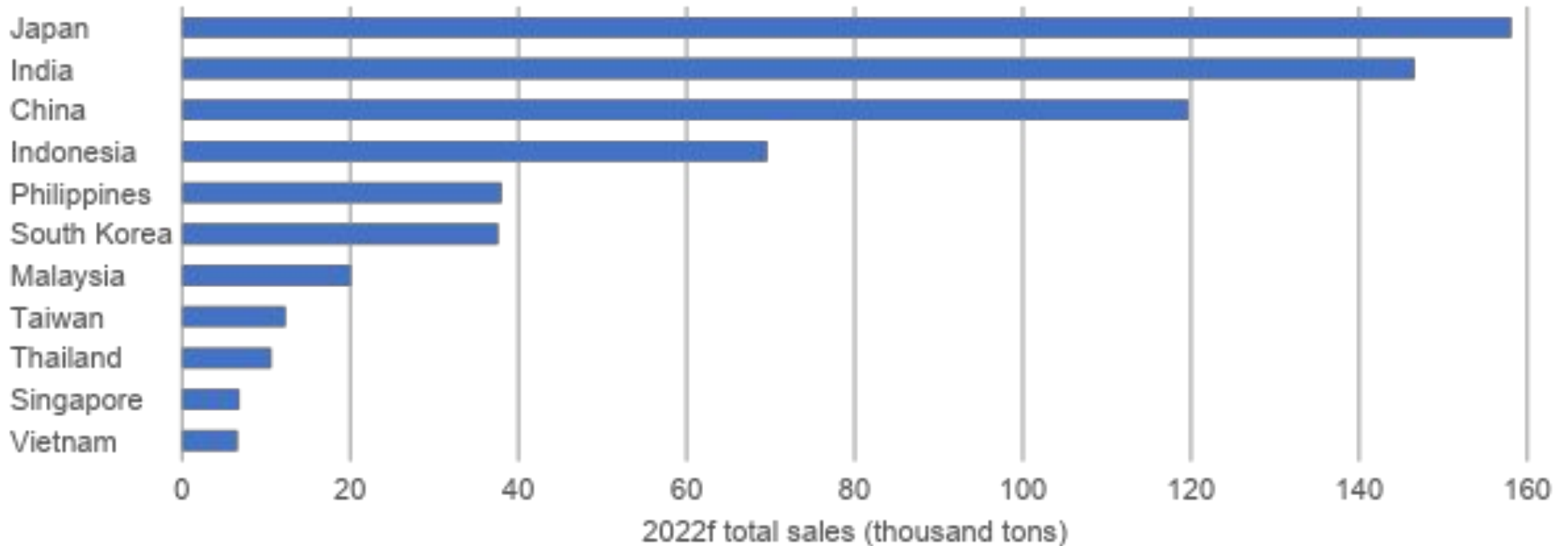
22 Sources: ICCO, Rabobank 2022

Chocolate confectionary consumption in Asia is expected to grow stable



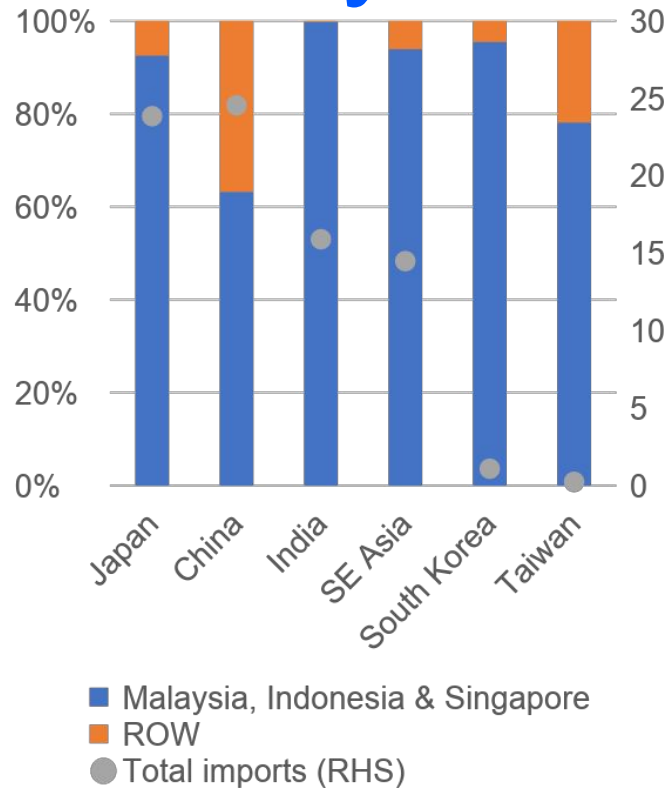
23 Sources: Euromonitor, Rabobank 2022

Chocolate confectionary sales in selected Asian countries

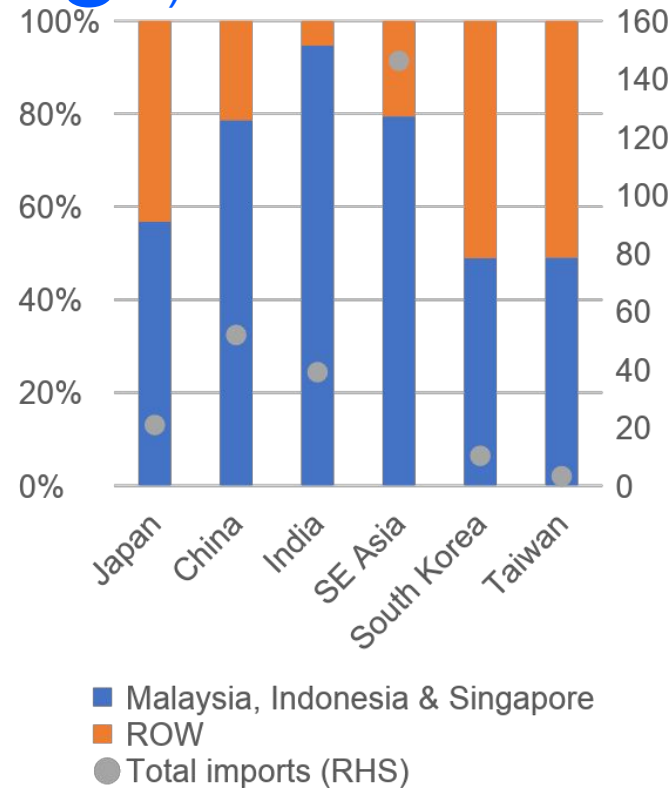


Cocoa processing facilities in SE Asia is important for chocolate confectionary industry in the region

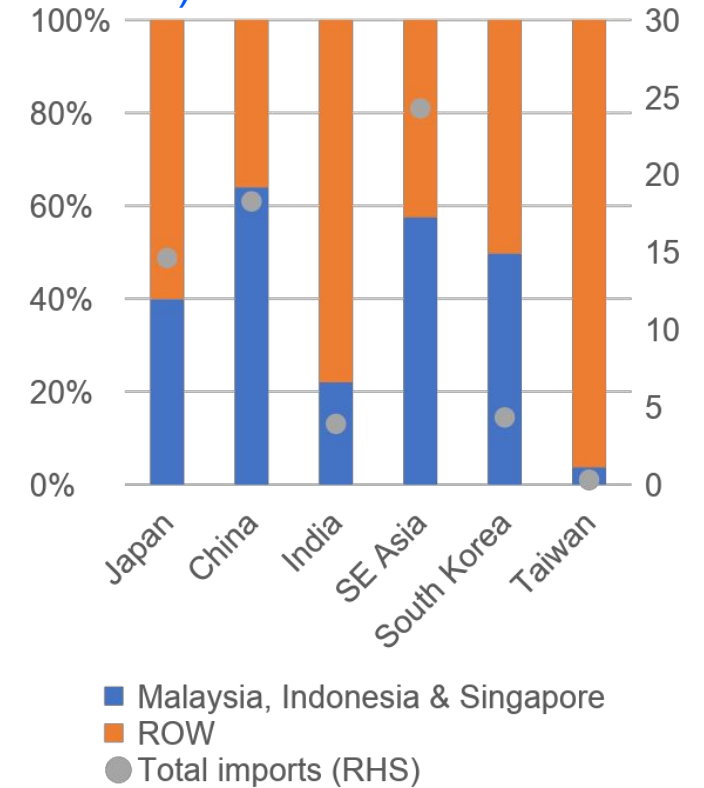
Cocoa butter (HS Code: 1804)



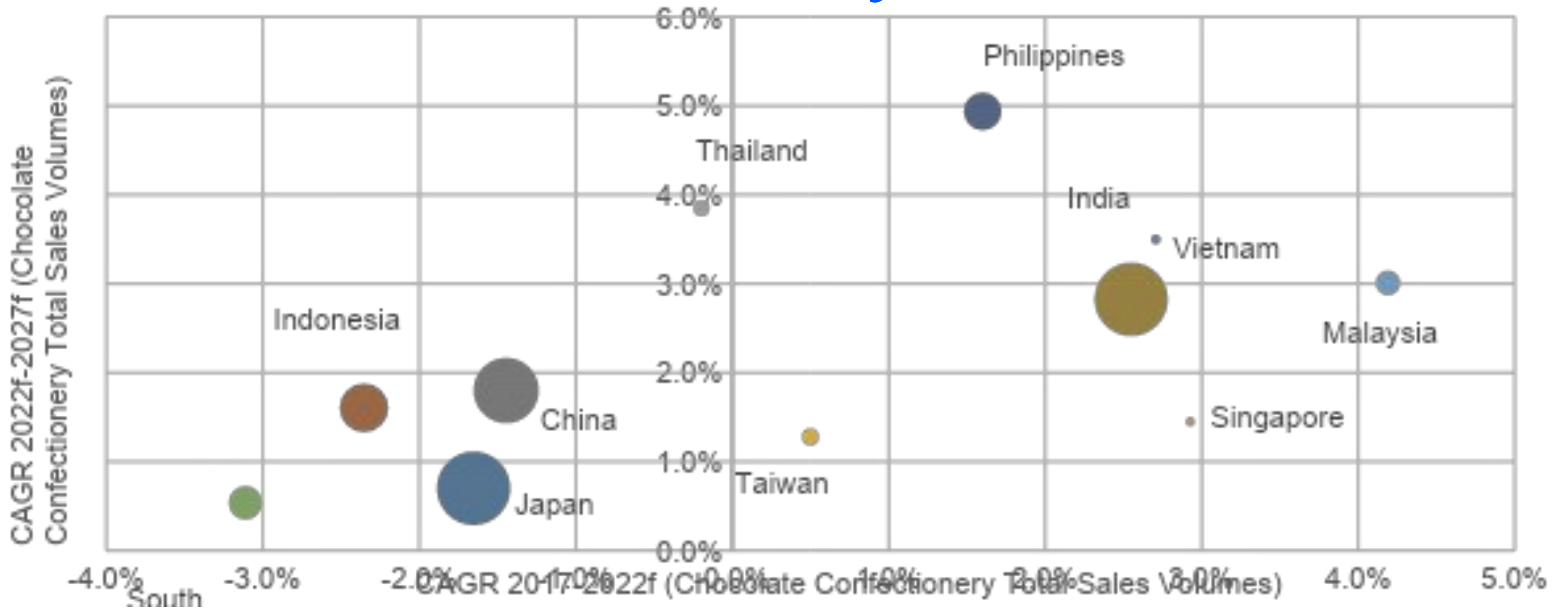
Cocoa powder (HS Code: 1805 & 1809.20)



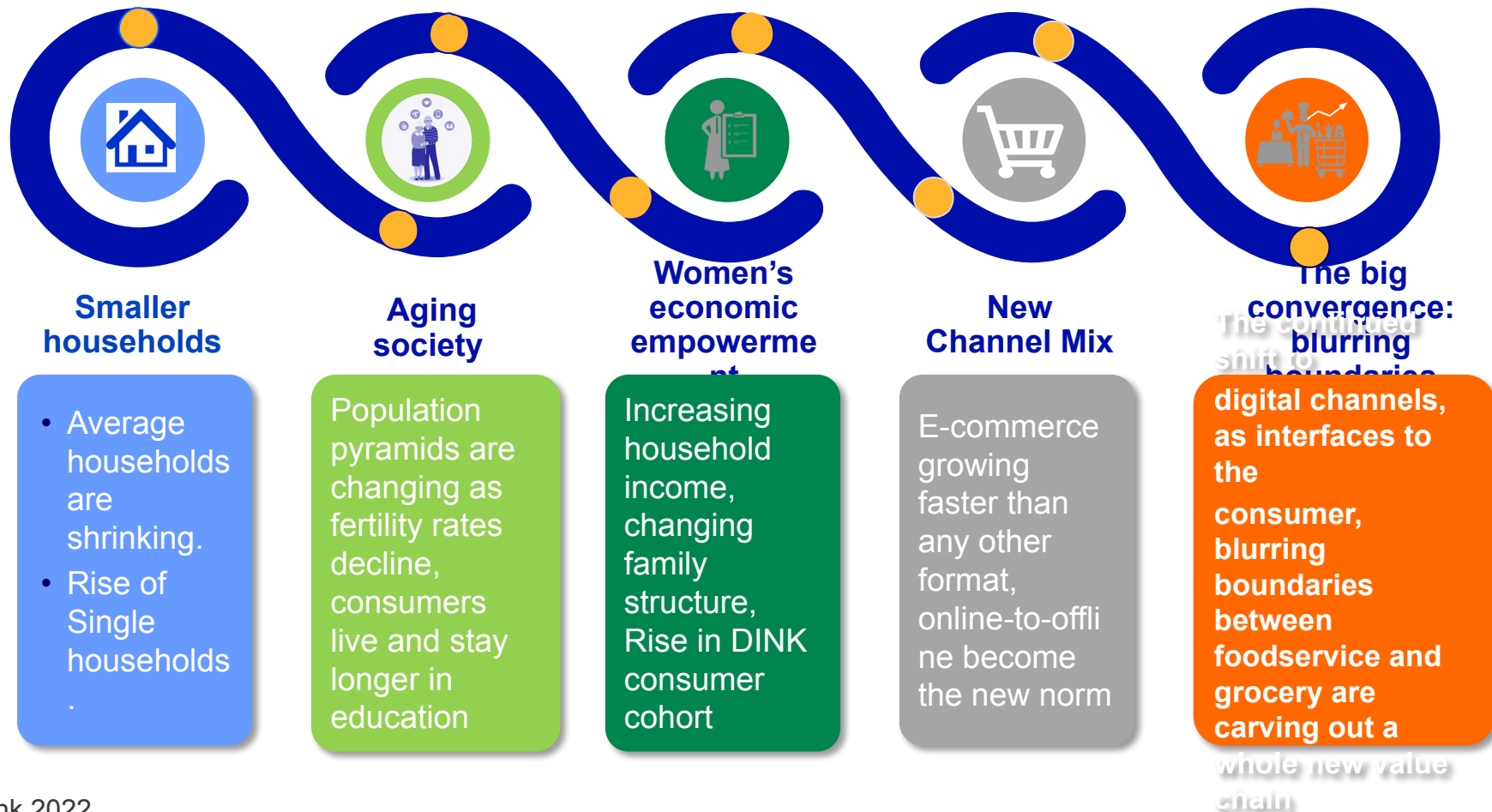
Cocoa liquor (HS Code: 1803.10)



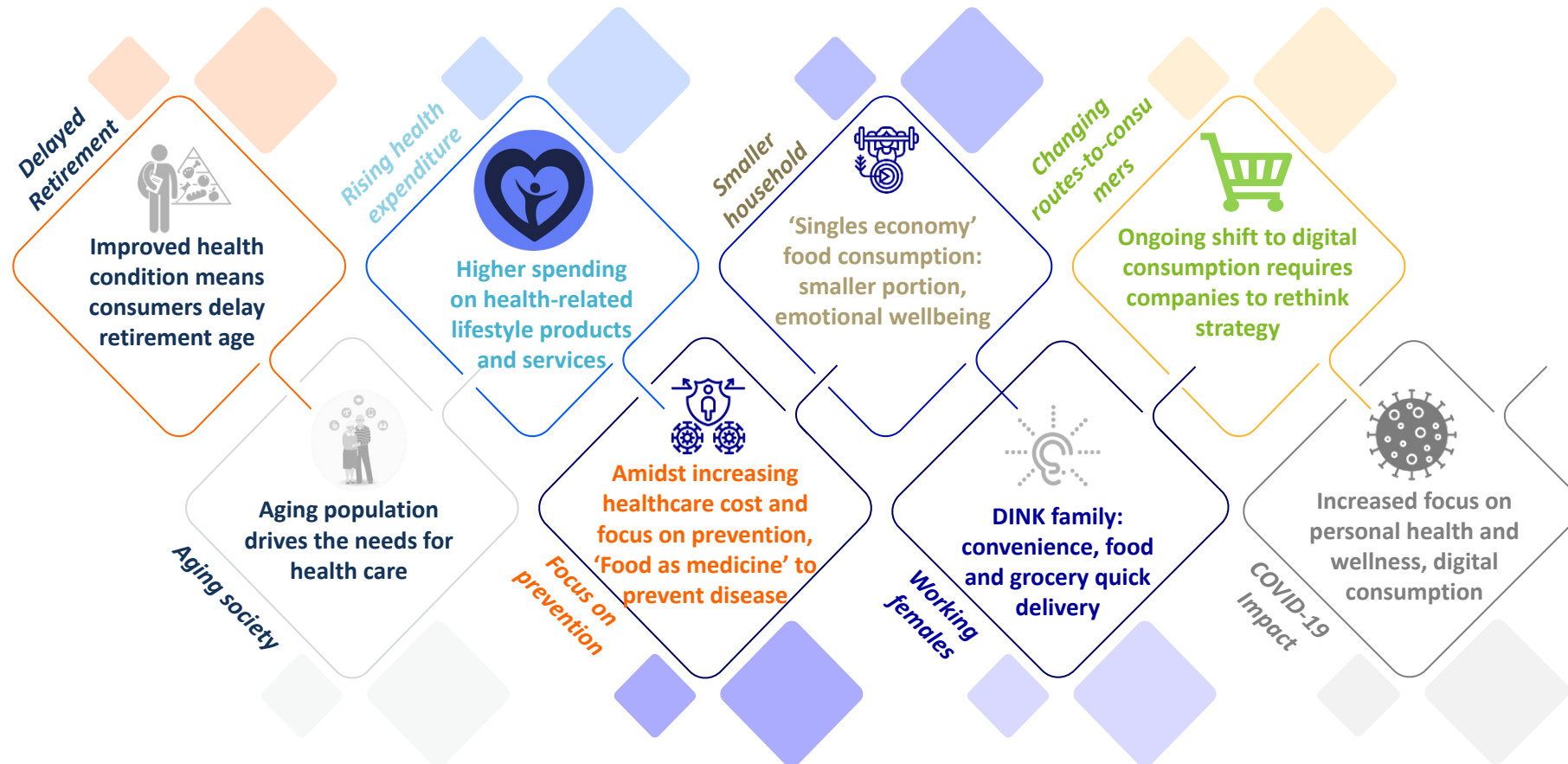
Volume growth opportunities for chocolate confectionery exist in Asia



Key consumers shift that matter across Asian countries



... and fundamentally shifting the consumer landscape



Snacking evolution: purpose-led, offering functional benefits

Past

A snack is a small amount of indulgent food eaten between meals

Present

A snack is food in any category that is convenient, on-the-go, and 'better for you', and increasingly replaces meals

Future

Snacks will be more deliberate with a specific purpose, they will be customizable and offer functional benefits

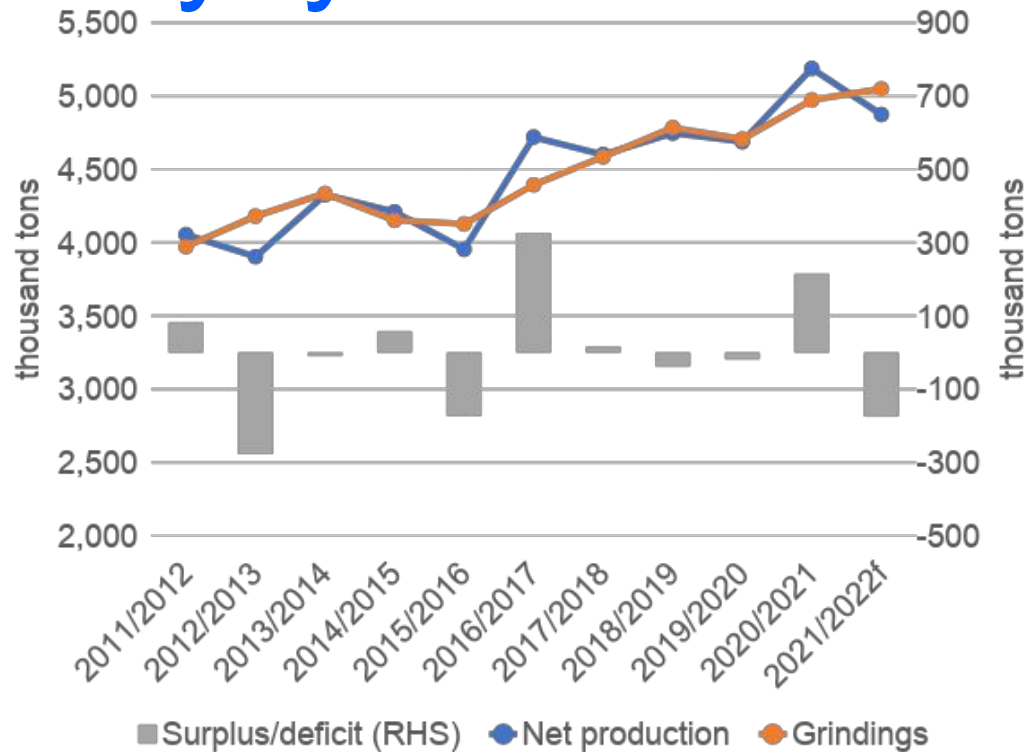
Key Takeaways

- Chocolate confectionary demand in Asia will continue to increase with stable growth.
- Evolving Asian consumer trends will impact Snacks consumption pattern (including chocolate confectionary).
- Cocoa grinding facilities in Asia is important for chocolate confectionary industries in the region.
- Rehabilitation and Renovation is necessary to improve yields of cocoa production in Asia and to avoid deforestation.
- Cocoa farms and farmers play significant roles in improving green gas house emissions of chocolate confectionary industry's supply chain.

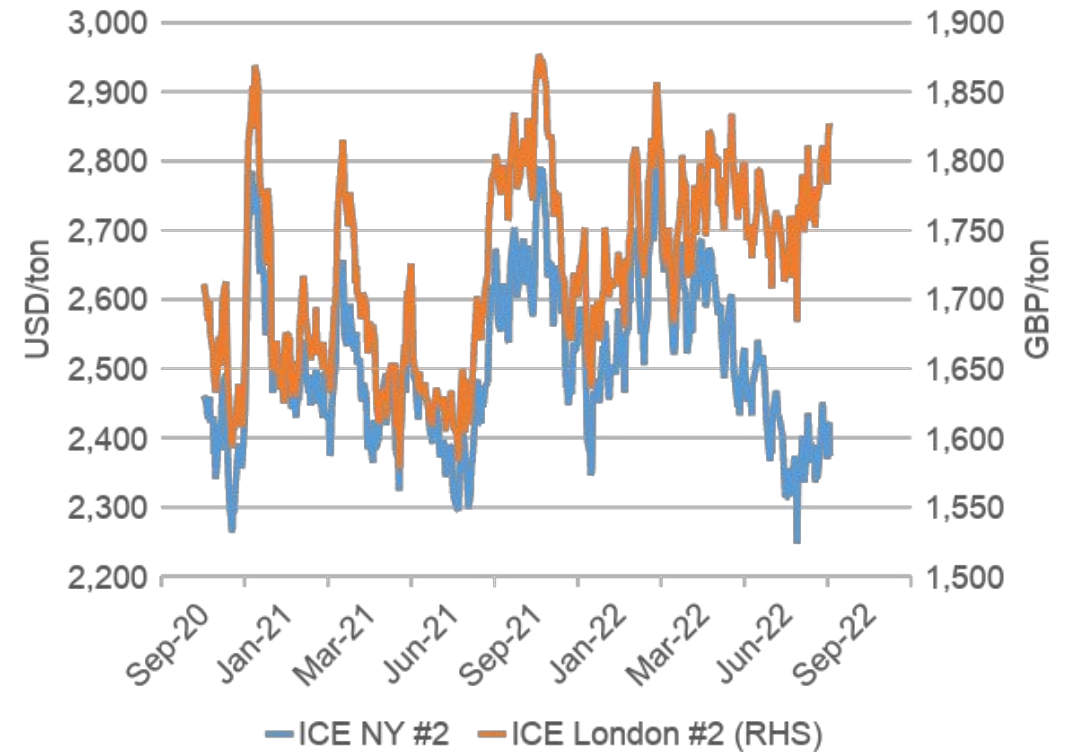
4. Global cocoa prices development

Despite the rise in prices in other Agri commodities, cocoa prices are relatively flat yoy

Global cocoa supply and demand



Cocoa futures prices development



**Rabobank
Singapore**

38 Beach Road
#31-11
South Beach Tower
Singapore 189767



Rabobank

Rabobank Singapore

Oscar Tjakra

Executive Director

RaboResearch Food &

Aqribusiness

E-mail Oscar.Tjakra@rabobank.com

This document is issued by Coöperatieve Rabobank U.A. Singapore Branch ("Rabobank"). The information and opinions contained in this document have been compiled or arrived at from sources believed to be reliable, but no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. This document is for information purposes only and is not, and should not be construed as, an offer or a commitment by Rabobank or any of its affiliates to enter into a transaction. This information is not professional advice and has not been prepared to be used as the basis for, and should not be used as the basis for, any financial or strategic decisions. This information is general in nature only and does not take into account an individual's personal circumstances. All opinions expressed in this document are subject to change without notice. Neither Rabobank, nor other legal entities in the group to which it belongs, accept any liability whatsoever for any direct, indirect, consequential or other loss or damage howsoever arising from any use of this document or its contents or otherwise arising in connection therewith. This document may not be reproduced, distributed or published, in whole or in part, for any purpose, except with the prior written consent of Rabobank. All copyrights are reserved. This presentation, including this notice, is governed by Dutch law. Any disputes relating to this presentation shall be exclusively submitted to the competent courts in Amsterdam, The Netherlands.