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ESA GENERAL ASSEMBLY, 2026
GHENT, BELGIUM

CROP REPORT

Pepper

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Current cycle: pepper prices remained relatively stable after a steep price increase in 2024

Average ASTA quality Vietnam, Brazil and Lampung

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Agenda

This report includes an analysis of supply, demand in the pepper market and challenges regarding sustainability

Global production declined by 28% over the past 7 years

- Vietnam
- Brazil
- India
- Indonesia
- China

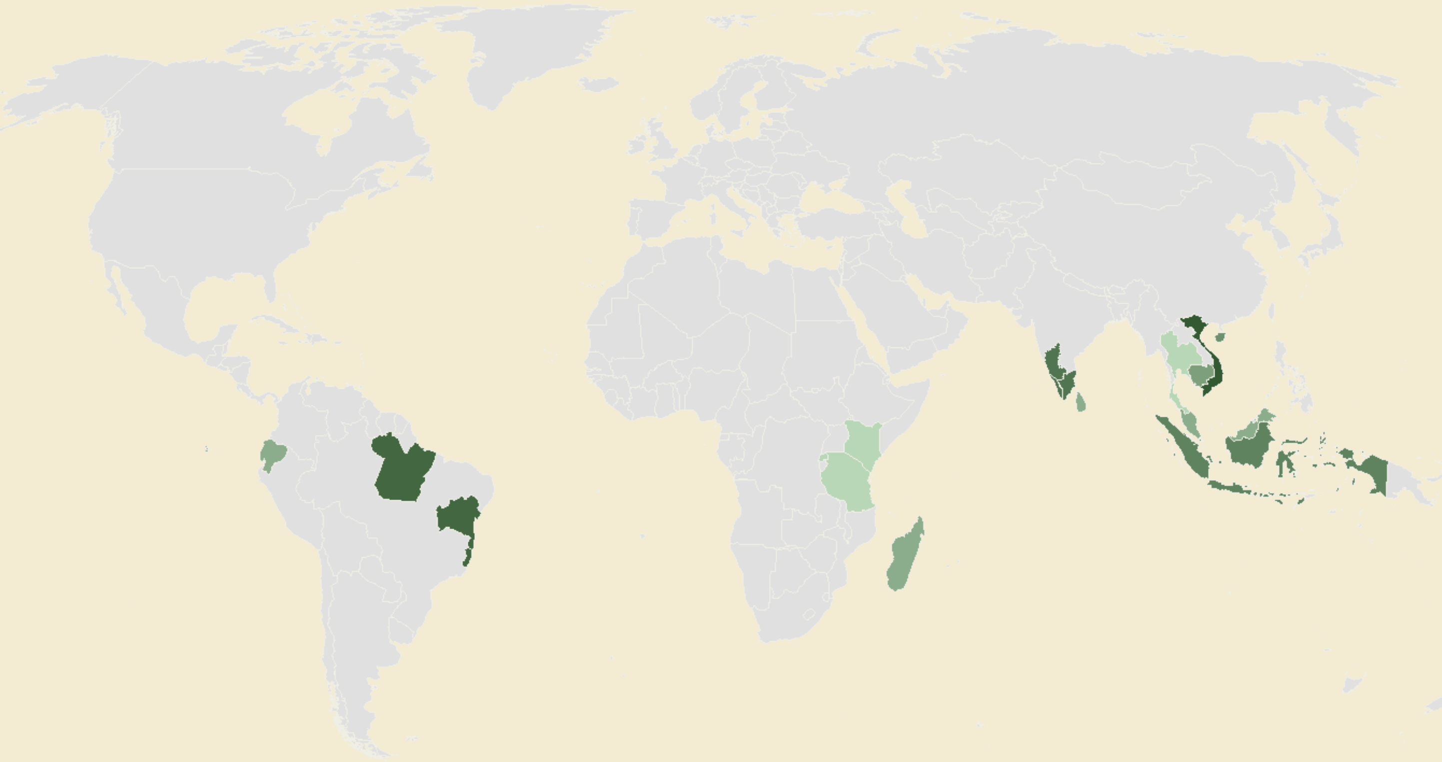
Global demand is steadily growing; global stocks are under pressure

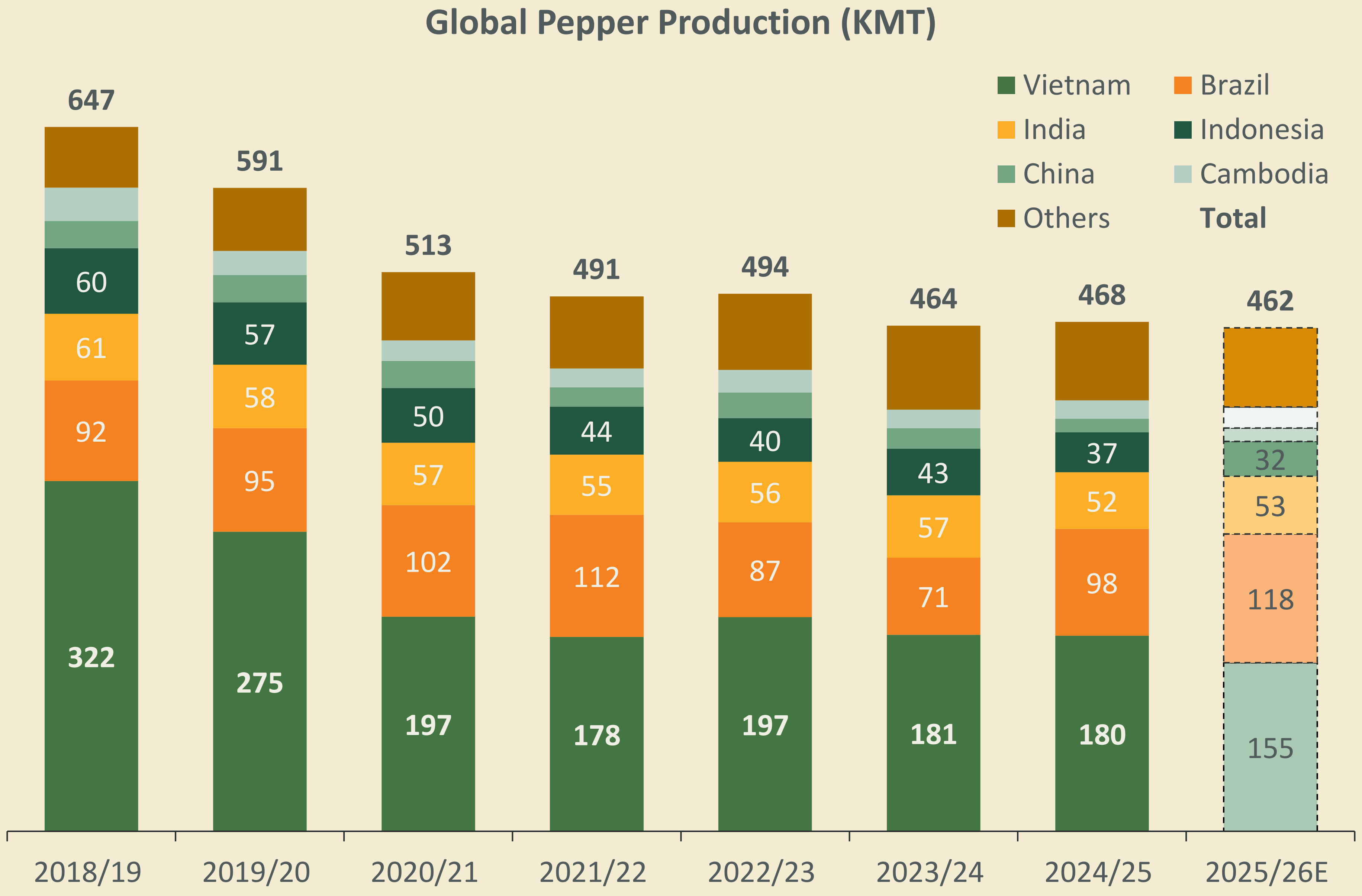
Global stock ratio continues trending downward, dropping below 100% this year

Sustainable farming encounters bottlenecks towards an aligned chain

Global production declined by 28% over the past 7 years

Large scale new planting in Southeast Asia is not observed yet





- **Total global production fell to 462 KMT** after a record 647 KMT in 2018/19
- Price fall between 2016 and 2018 caused farmers to abandon pepper in Vietnam and other origins
- Vietnam sees competition with crops such as coffee, durian and cashew
- Brazilian continuously expanded its pepper cultivation area and the yield holds a potential for a further increase
- India saw its production decline last year due to adverse weather effects, but yields normalized in the current crop
- Indonesia has seen a decrease in acreage, similar to Vietnam
- For next year, a super El-Niño is predicted; though magnitude and effects remain early to predict, this is expected to negatively impact pepper production

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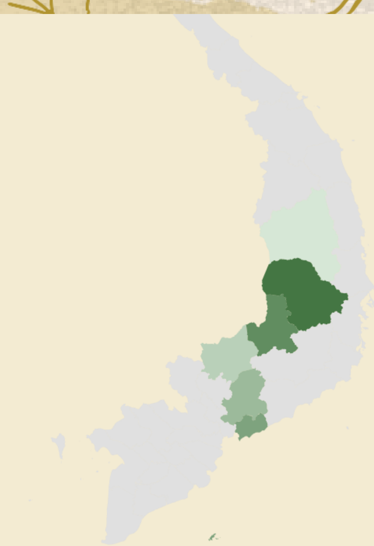
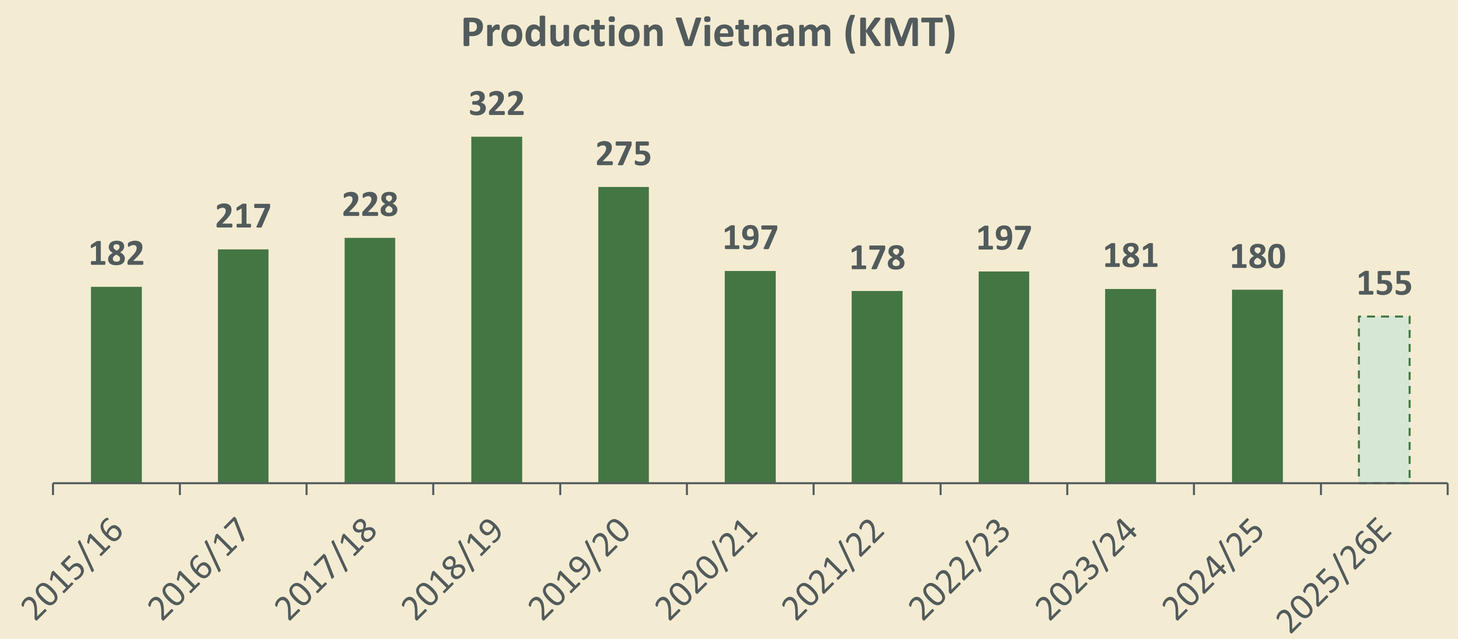
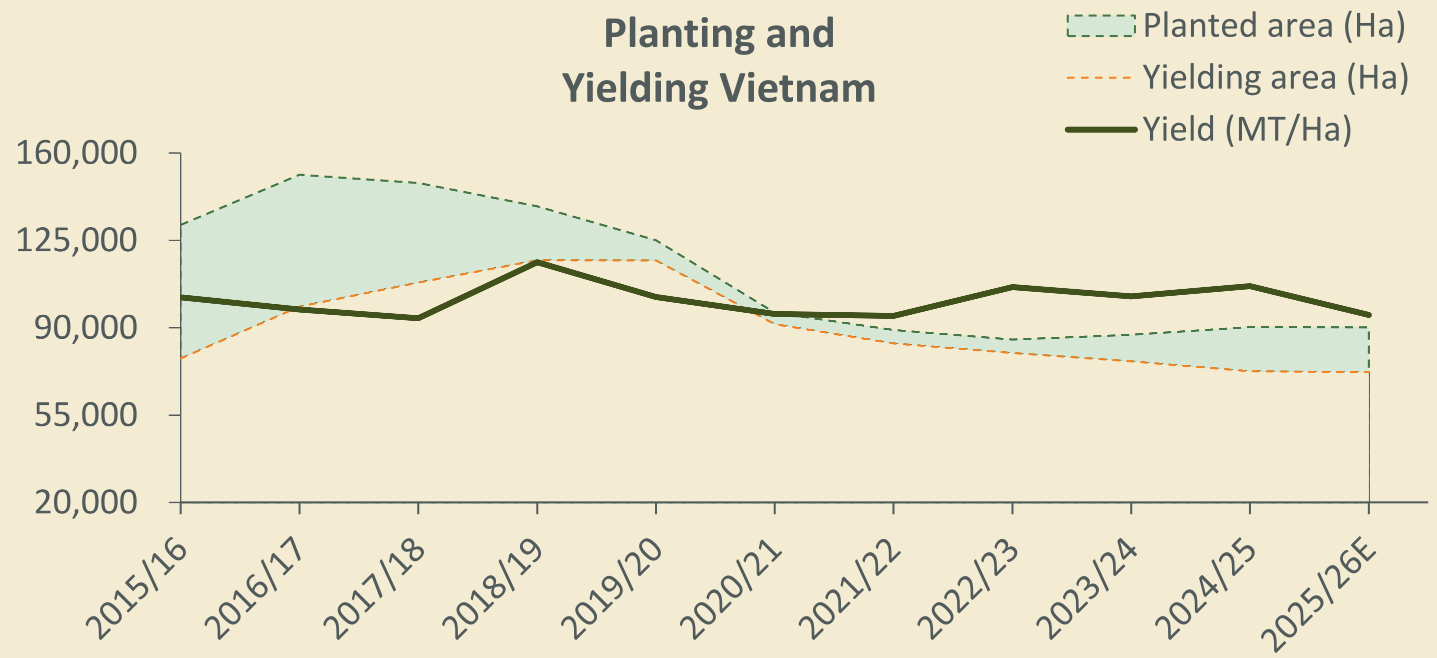
Vietnam Production shows a declined acreage and lower yields due to rainfall

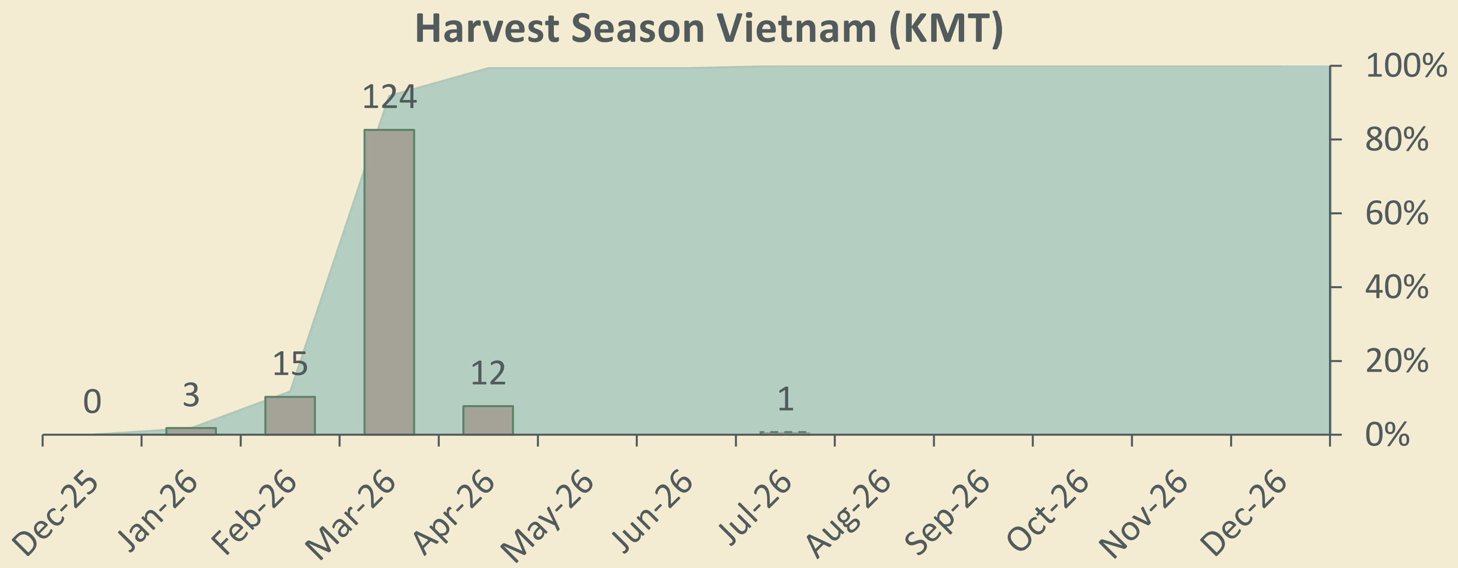
No increased planting is observed yet; new plants would take 3 years to start yielding







- Production estimated to have fallen to 155 KMT for 25/26 crop, down from 322 KMT in peak year 2018/19; price collapse between 2016 and 2018 caused farmers to abandon pepper
- Yield declined this year from 2.5 to 2.1 MT/Ha, mainly because of excessive rainfall in November 2025 and early rains in March and April
- Although supply tightened, farmers experience selling pressure as costs for harvesting and fertilizer increased and they prefer holding coffee
- Limited signs of supply recovery; new planting is highly dependent on competitiveness with other crops such as coffee and durian; the latter showed an acreage increase from 32 KHa in 2015 to nearly 180 KHa by 2024 –nearly 6 times[1]



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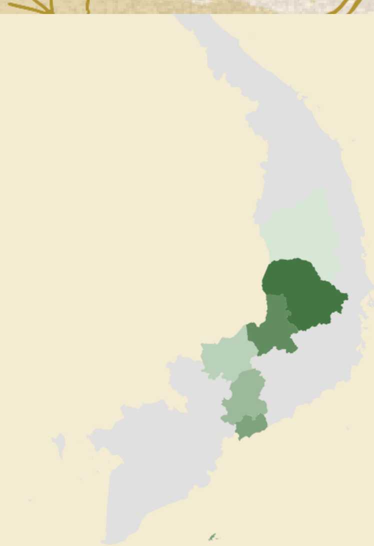
1. *Vietnam government data. Comprehensive monitoring of durian production and export chain*

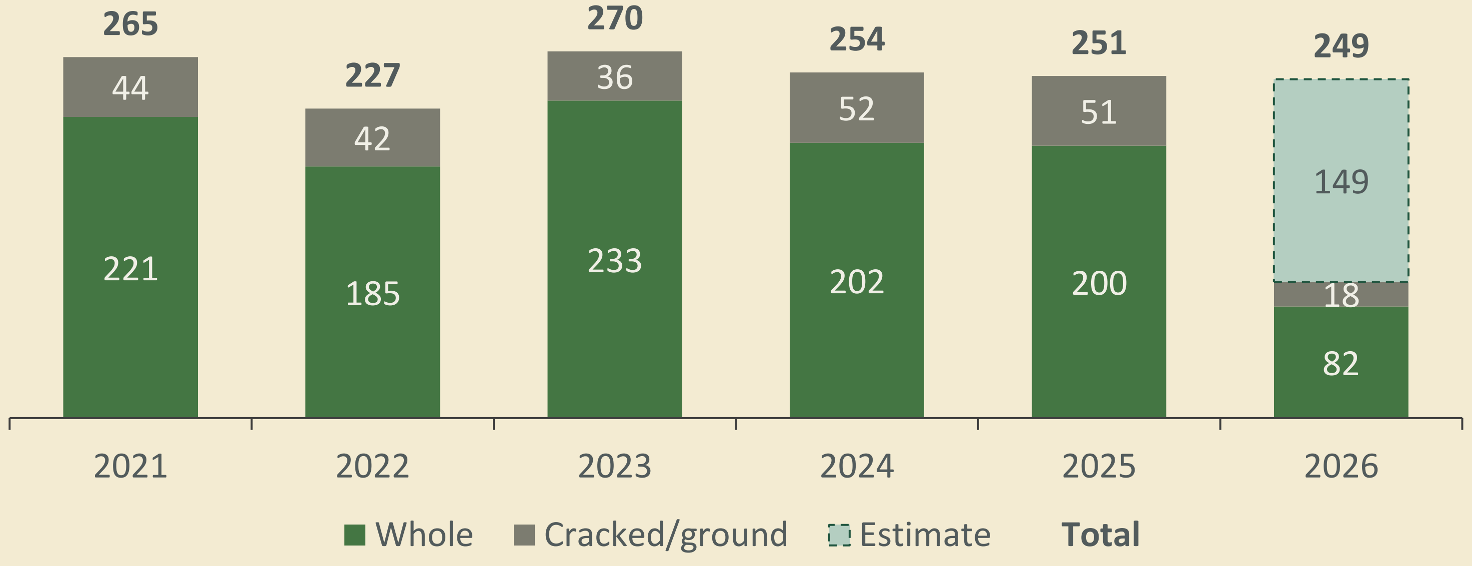
Vietnamese imports increase to maintain exports of around 250 KMT

Brazil increases shipments to Vietnam and countries like Indonesia and Cambodia sell their stocks

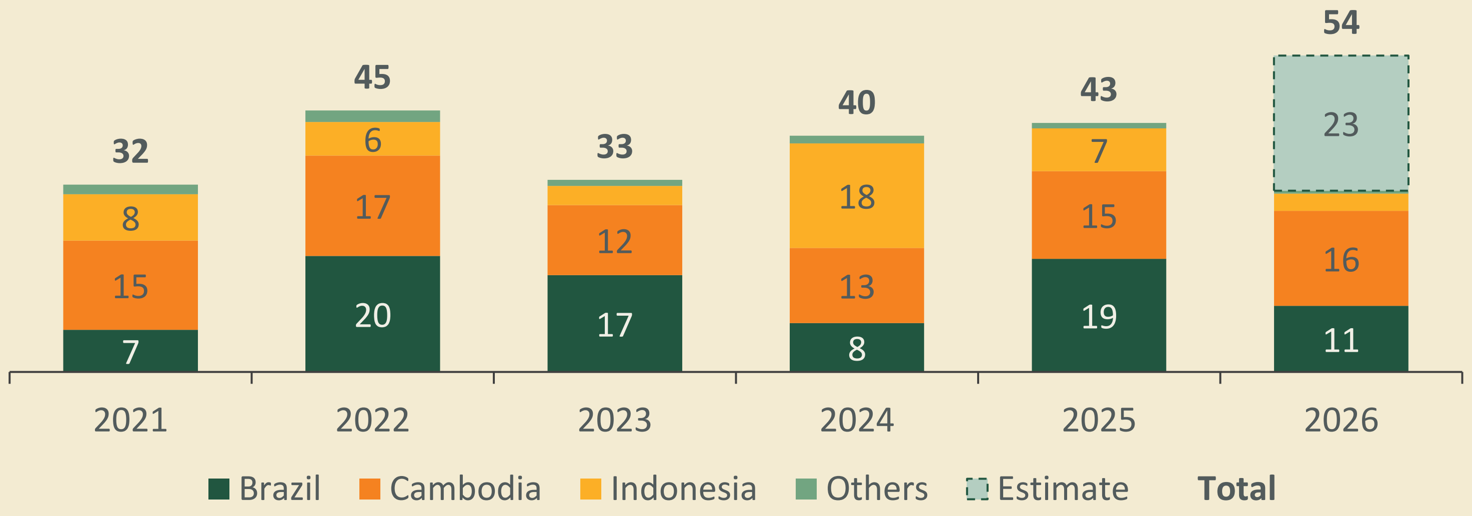


- Exports remain around 250 KMT, well above production 180 – 155 KMT; Vietnam shows four years of increased imports to maintain exports
- At 100 KMT, January to April exports are 33% higher than in 2025
- The largest export destination USA imported 19 KMT Jan-Apr, an increase of 41% compared to the same period in 2025, after a year of tariff uncertainty[1]
- Exports to China (2nd largest importer) grew to 12 KMT in Jan-Apr, a near threefold increase after years of limited buying[1]
- Indonesia exported stocks to Vietnam in 2024; Cambodia currently ships large volumes, while Brazil continues to increase exports as well

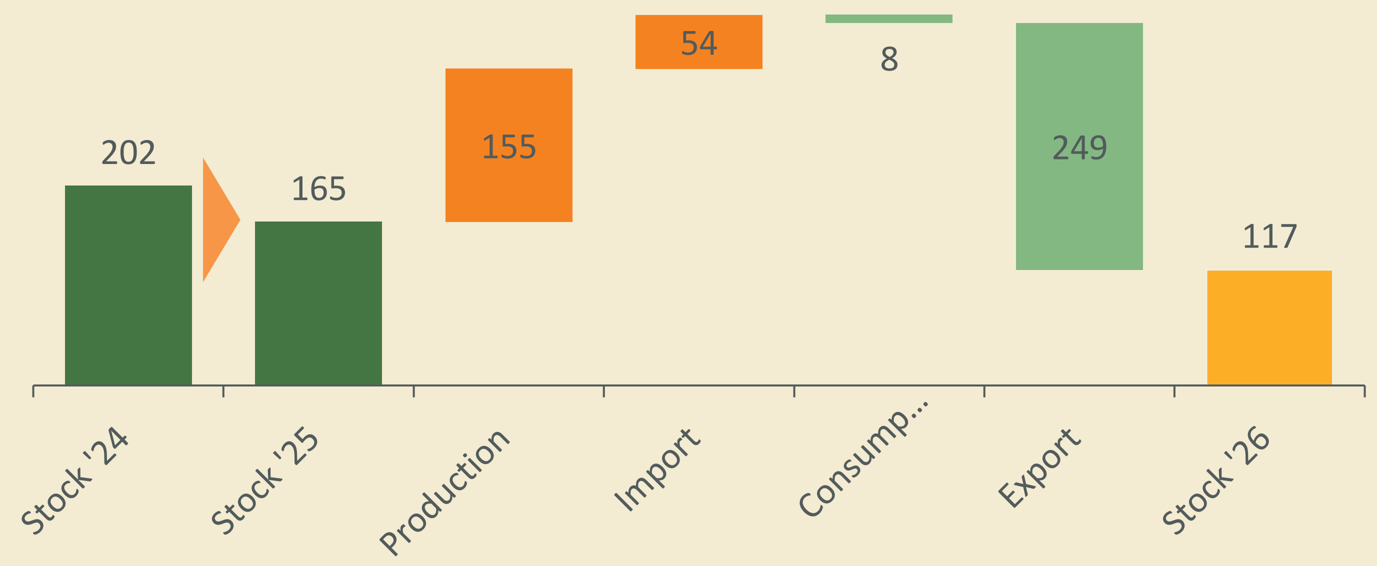
Exports Vietnam (KMT)[1]



Imports Vietnam (KMT)



Stock Development 2026 Vietnam (KMT)



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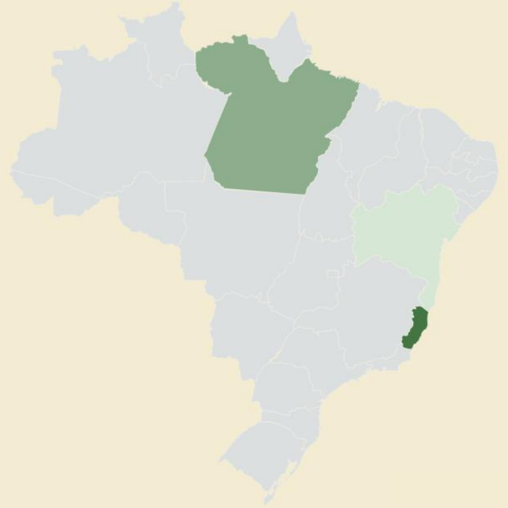
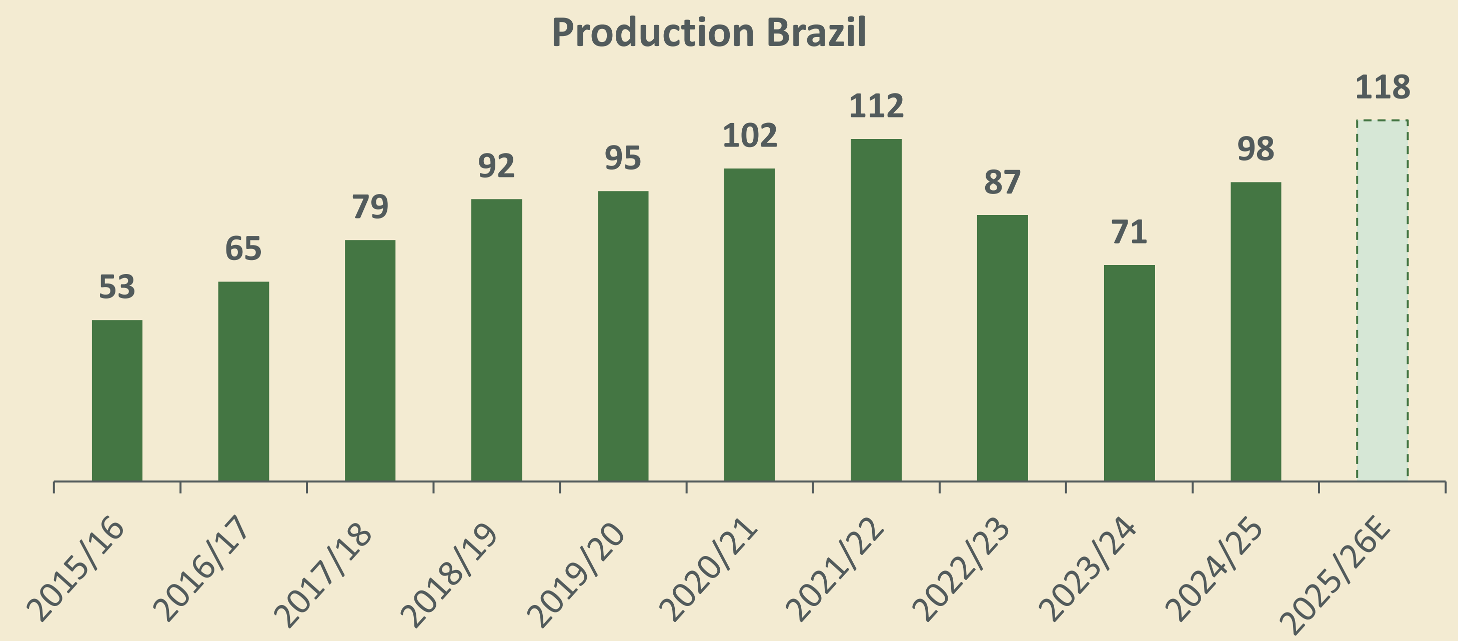
1. *Eximpedia*. Export data May 2026

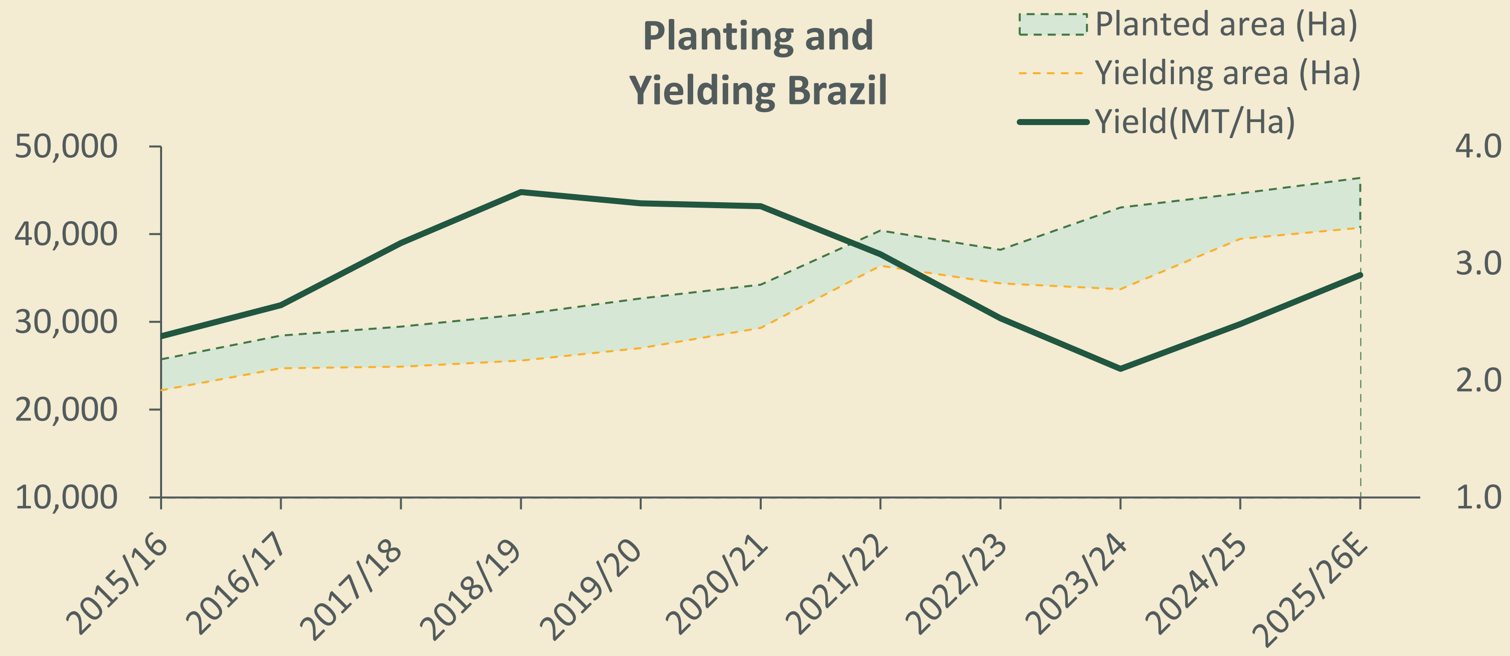
Brazil shows a continuous increase in area while yields improved in last two crops

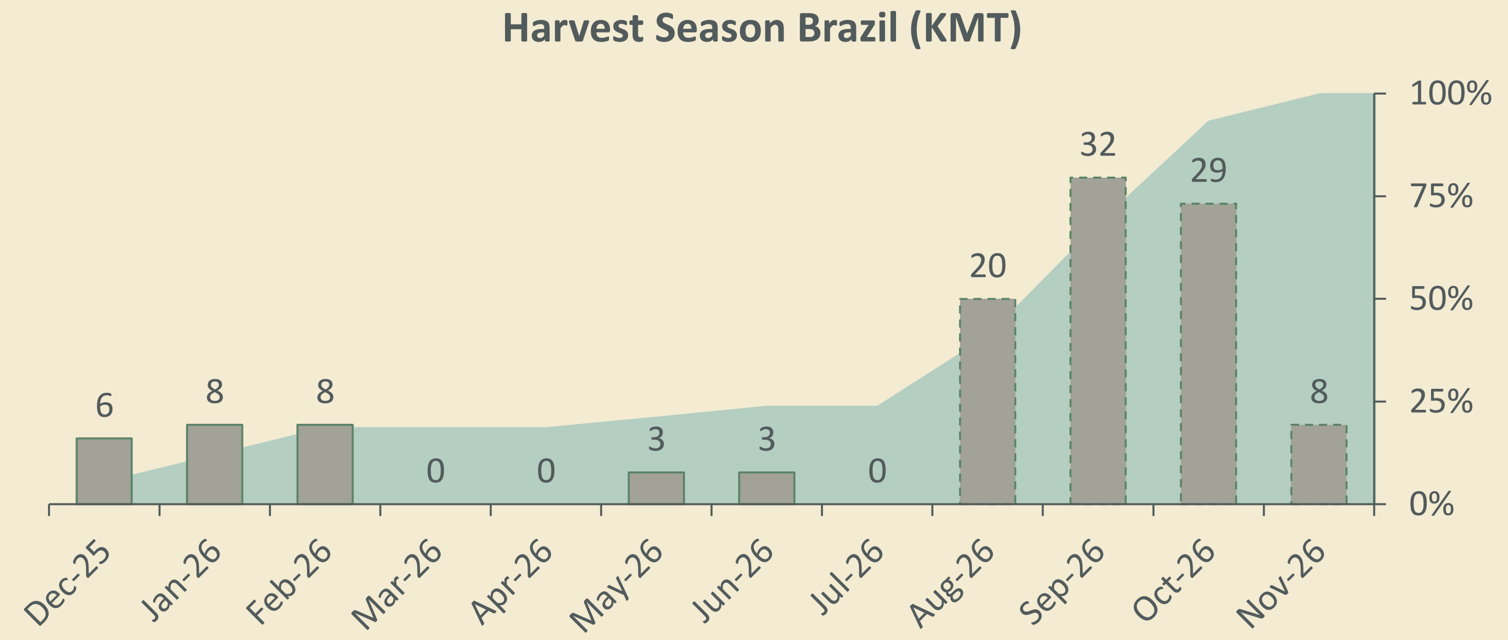
If historical yields return, Brazil could further increase production





- Production estimated at 118KMT this year, a new peak after a production of 112 KMT in 2021/22
- Unfavorable weather conditions have pressed yields in the past years, while acreage keeps increasing
- Current year's production may be affected by a shortage of available workers for harvesting; part of the crop potentially could go uncollected
- New planting could continue, particularly in the south of Brazil
- There is potential for a further increase in production, if historical yields of 3.5 MT/Ha return





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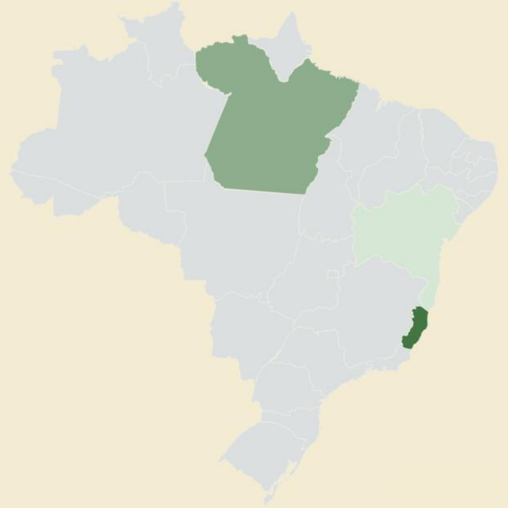
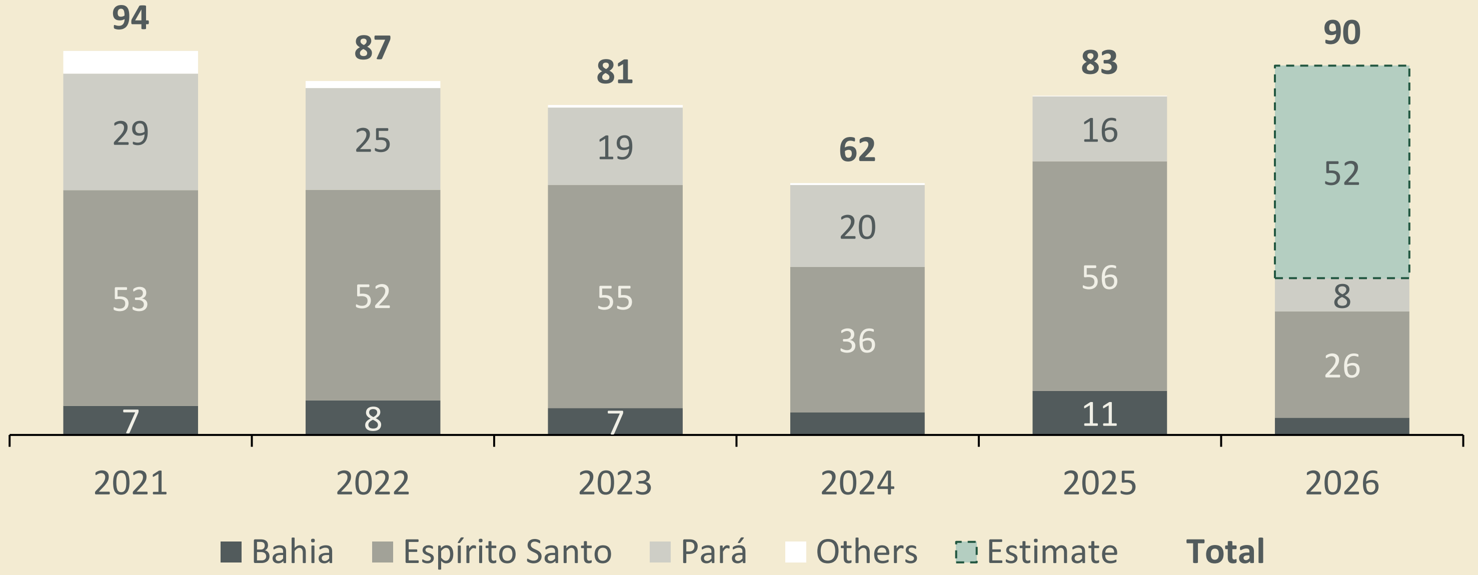
Brazil exports increase as production increases Especially to Southeast Asia



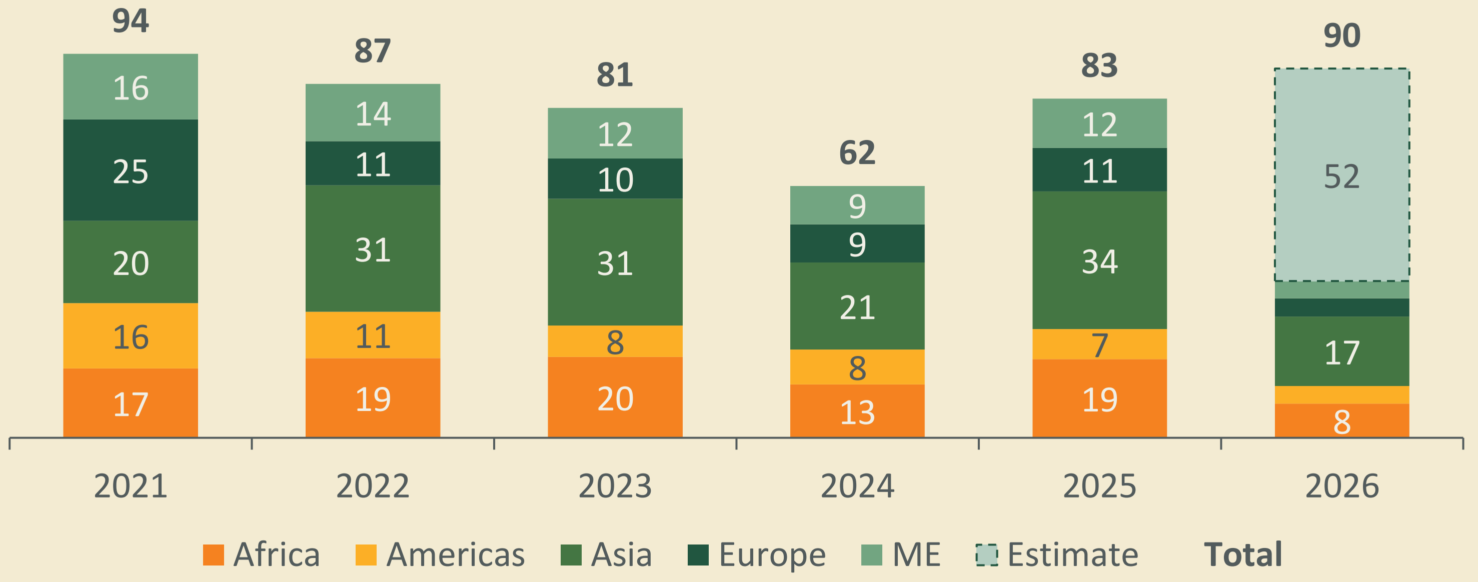
Primary destination for Brazilian pepper is Vietnam, limited volumes to EU and USA

Export Origins Brazil (KMT)[1]

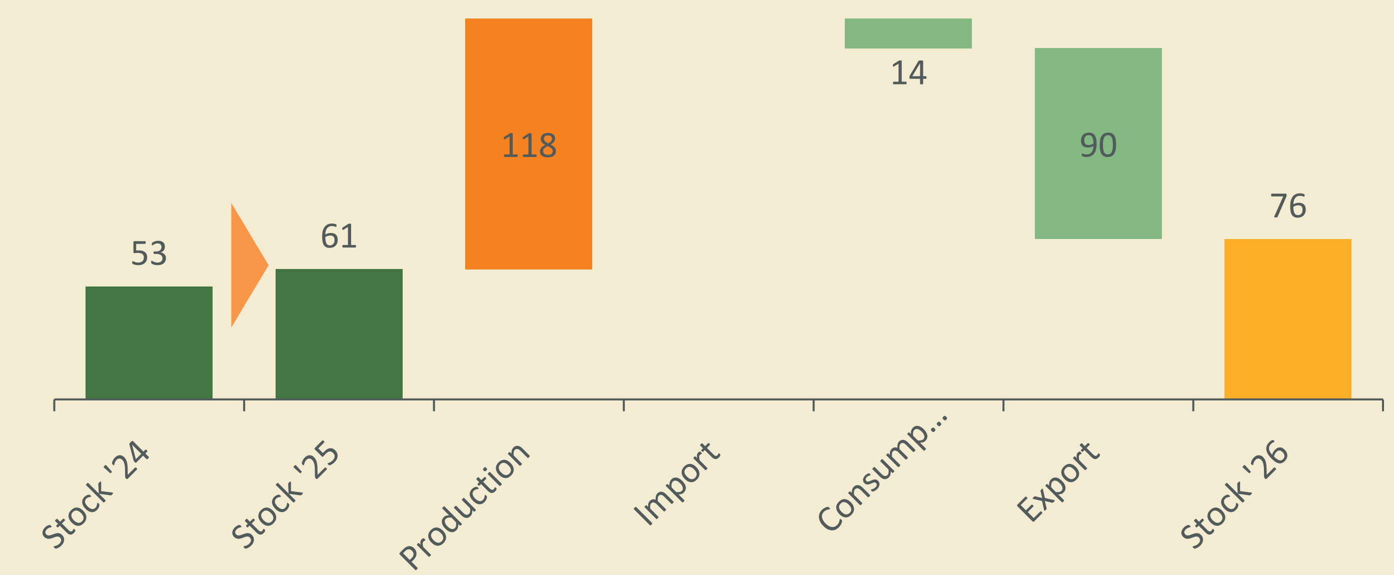


- As production increases, Brazilian exports show an increase as well
- Exports from January to April are currently at 38 KMT, an increase of 14% compared to the same period in 2025
- The largest export destination is Vietnam, to which more than 11 KMT was shipped from January to April 2026
- From 2021 to 2024, exports dropped by 34% from 94 KMT to 62 KMT, following the decline in Brazilian production during this period

Export Destinations Brazil (KMT)[1]



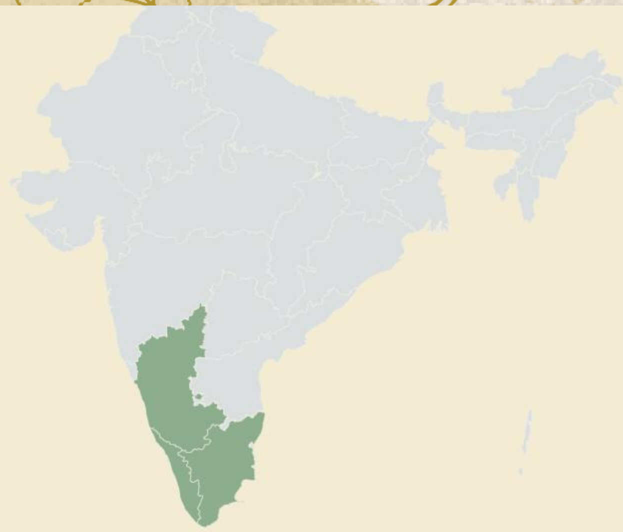
Stock Development 2026 Brazil (KMT)

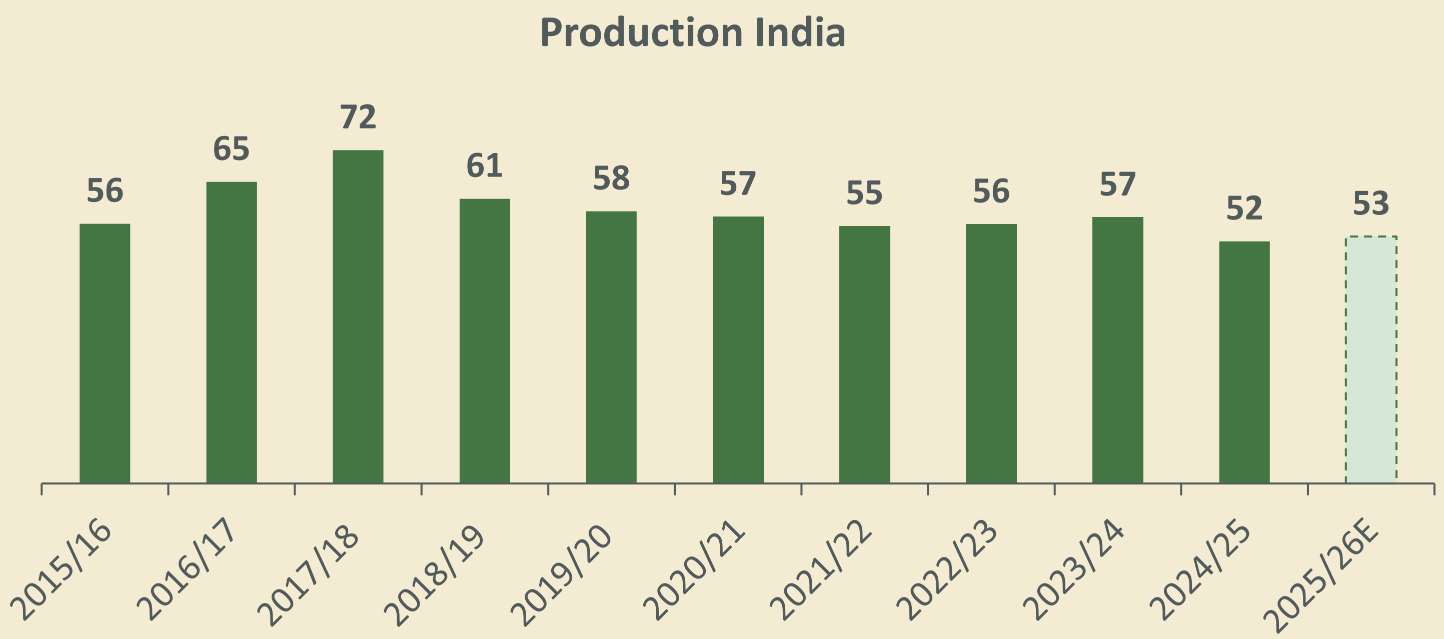


1. *Brazil government. Export data May 2026*

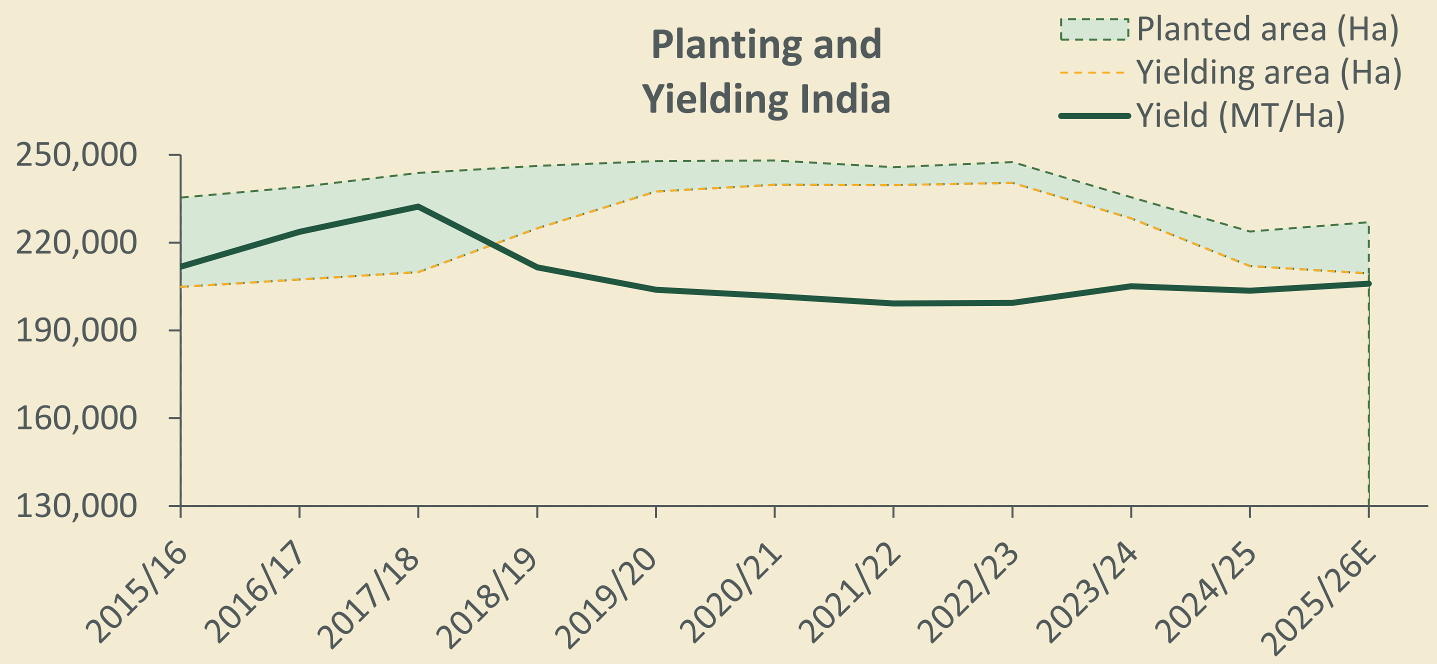
India Production stabilized after a reduction last year

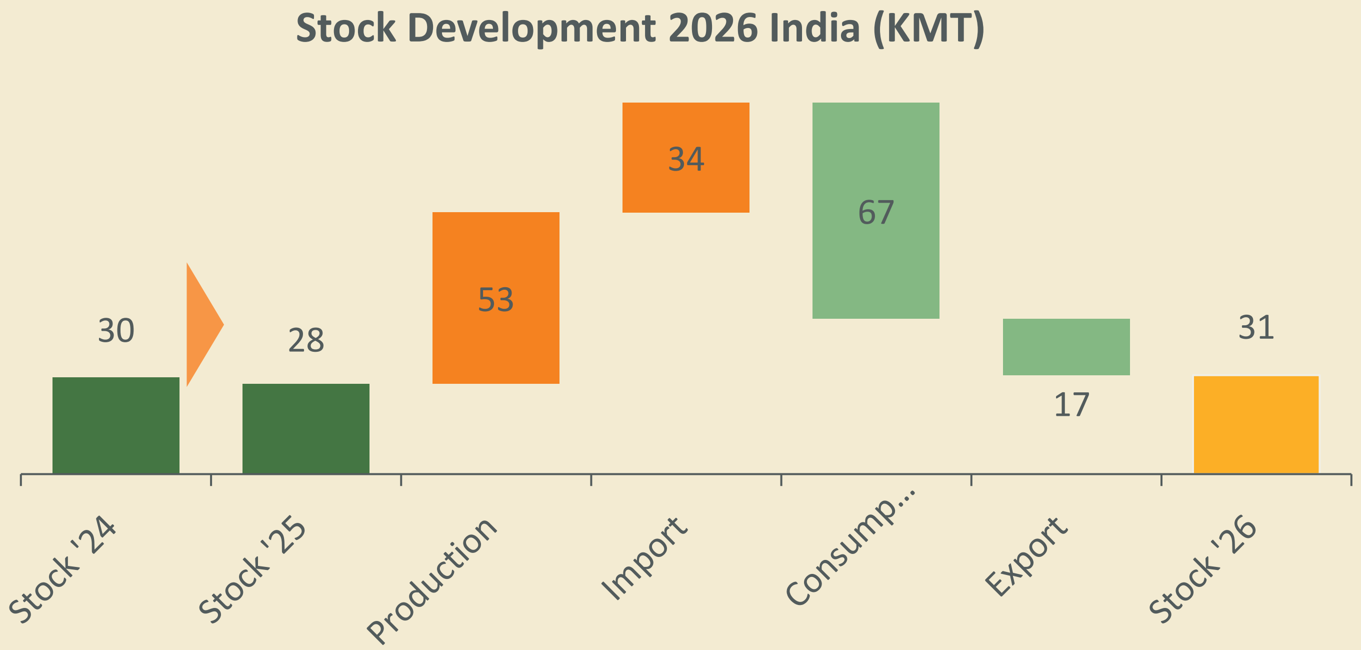
India is a net importer of pepper; the largest export destination is the USA





- Production estimated at 53 KMT this year, with an average yield after a year of declining area due to reduced rainfall and heatwaves
- Largest volumes are produced in on intercrop plantations in Karnataka, where coffee is the biggest competing crop, second producing state is Kerala where smaller scale cultivation competes with crops such as cardamom
- Production is largely for domestic consumption, supported by imports from Sri Lanka, Vietnam, Brazil and Indonesia





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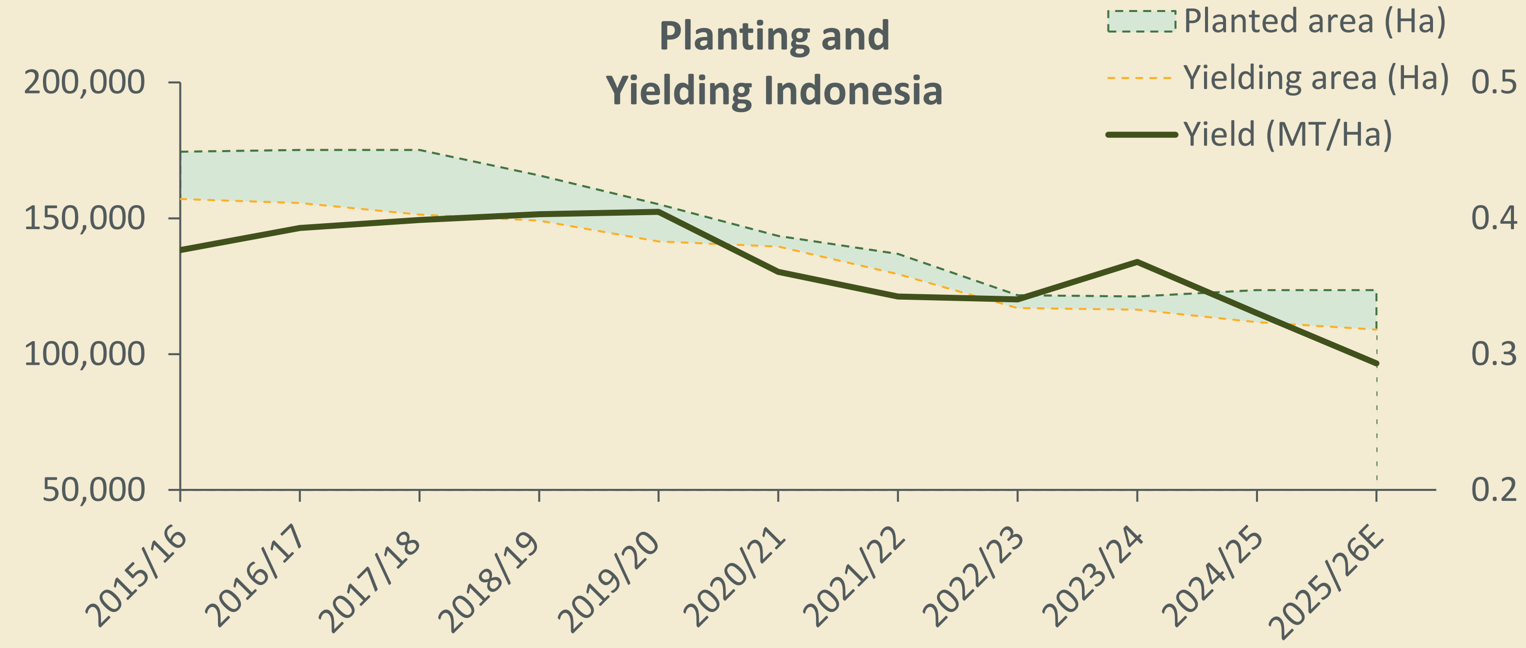
Indonesia production has declined due to a declining area and yield

After selling stocks in 2024, exports fell, reflecting Indonesia's reduced production



- Production estimated at 32 KMT this year following a decline in area and a low yield; harvest set to take place in July to September
- The current yield drop is caused mostly by excessive rainfall and aging vines; main competing crops are coffee and cocoa
- Post the 2024 price increase, exports in 2024 surged above production to 45 KMT, drawing from long-term stocks, mainly shipped to Vietnam
- This year's exports from January to April are at 7 KMT, 51% lower than the same period in 2025; February 2025 saw the last large export volumes with more that 5 KMT in one month
- The majority of exports consist of white pepper in most years

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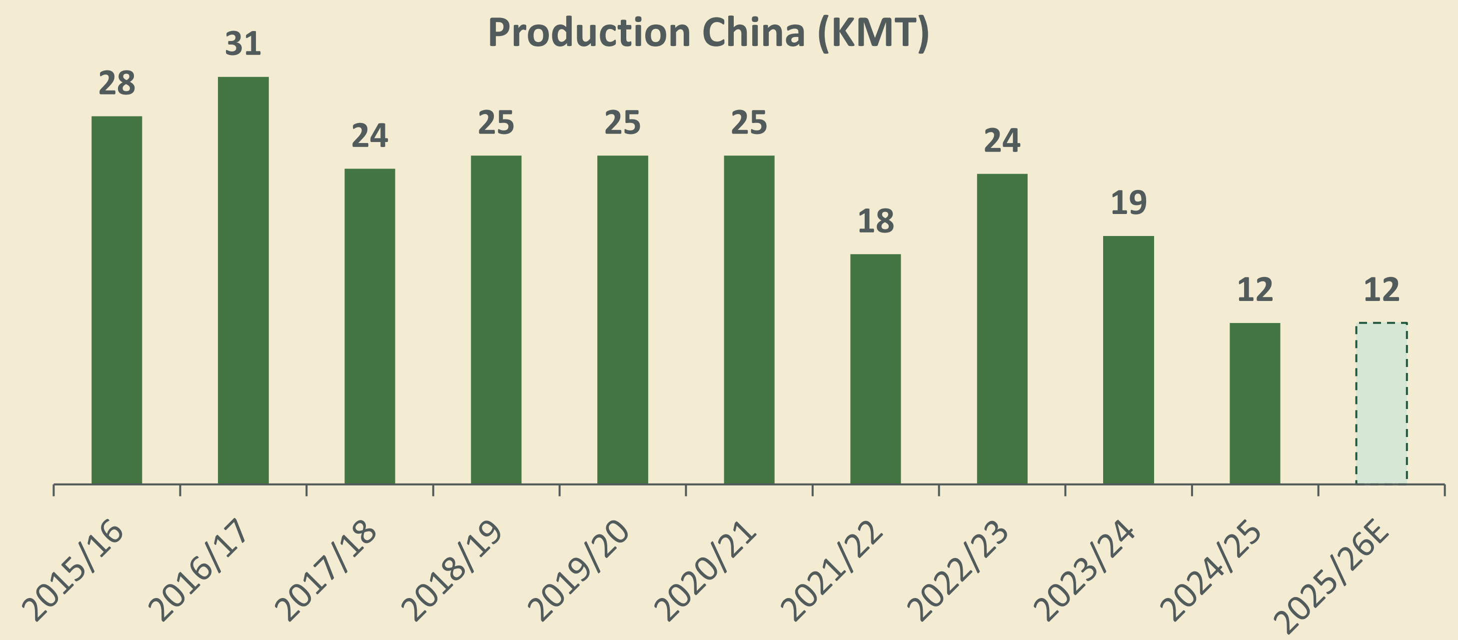
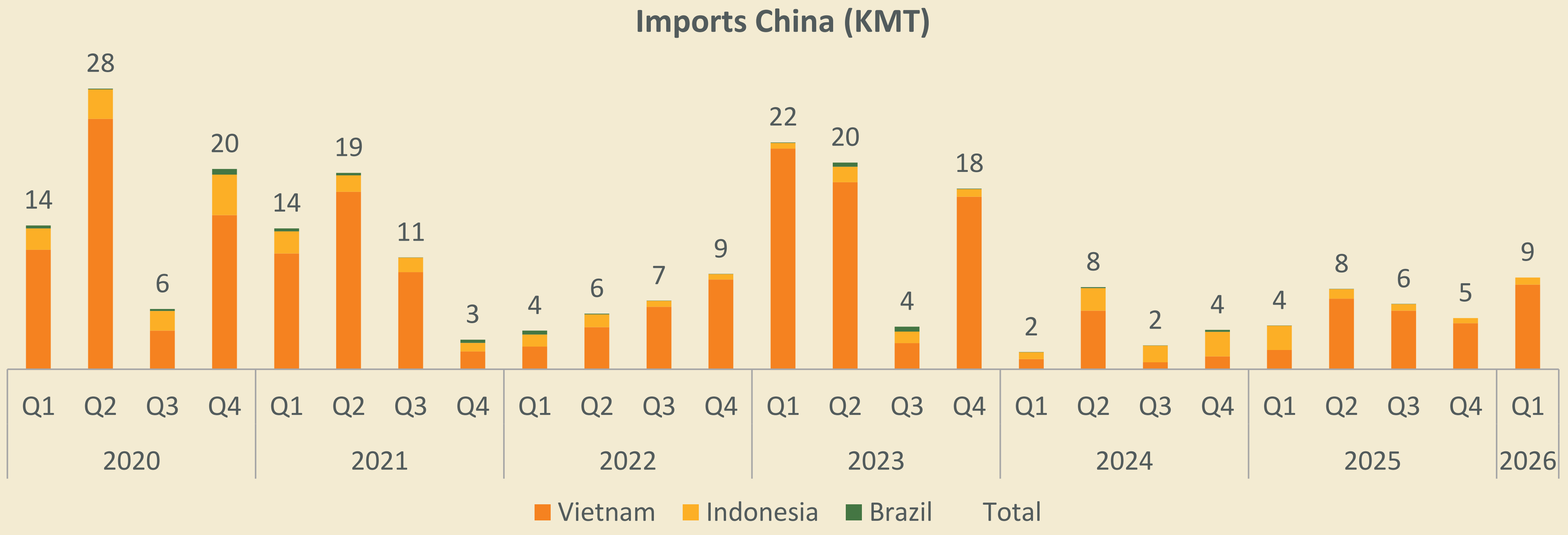
1. *Eximpedia*. Export data May 2026

China production declined after typhoon Yagi Increasing China's dependence on imports

As stock levels can vary widely in China, its buying remains difficult to predict





- Production expected to be low at 12 KMT due to typhoon Yagi in September 2024
- China focuses almost exclusively on white pepper; growing takes place in Hainan
- Chinese import volumes fluctuate; volumes from Vietnam –where the majority of imports originate– from January until April nearly three folded to 12 KMT compared to the same period in 2025
- Stocks in China can vary more widely than is typical in other countries, with peak levels reaching up to two years of supply
- With an estimated domestic consumption of 65 KMT, China needs to increase further its imports

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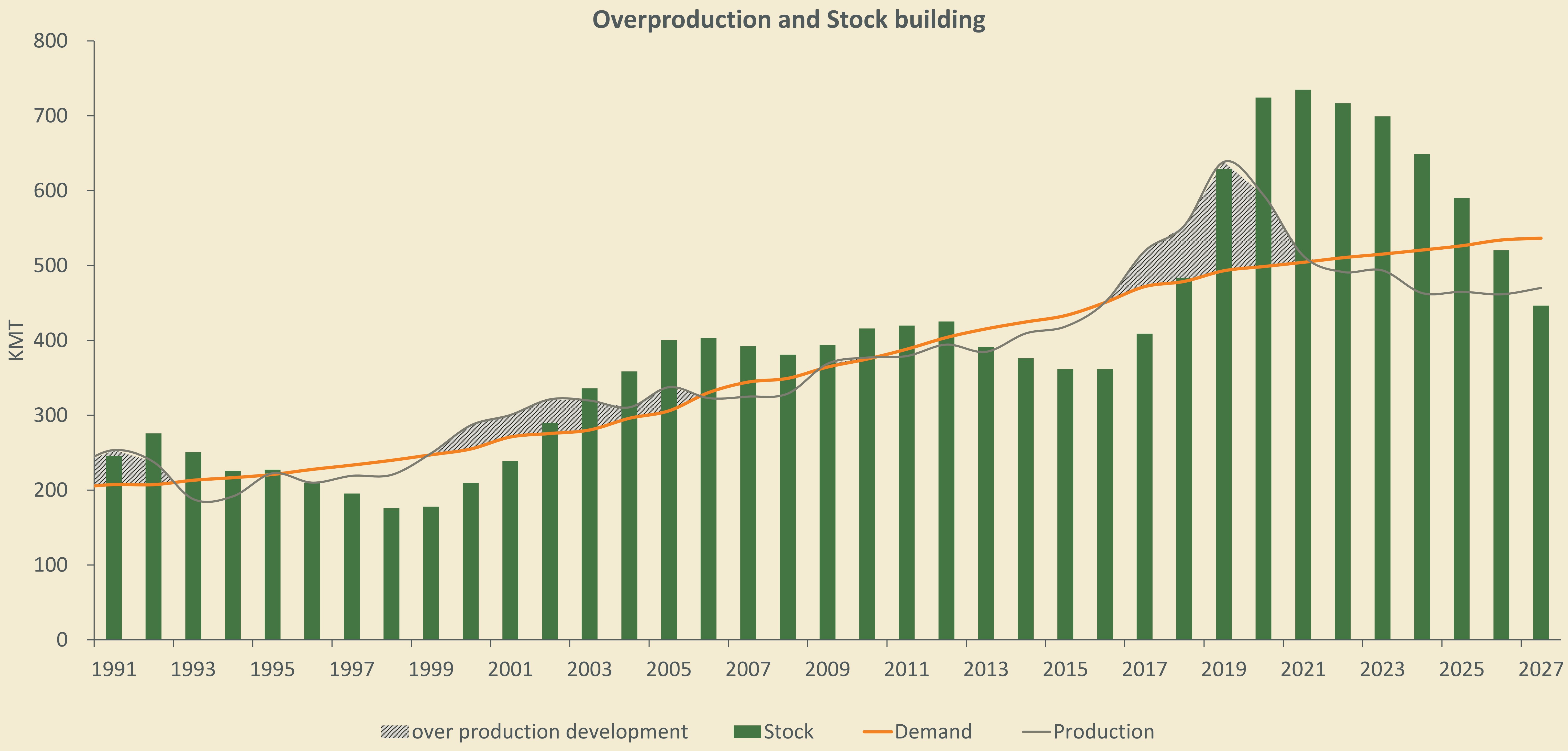
Demand growth remains while supply declined; global stocks are under pressure

2026 is the fifth year in a row with global production below global demand



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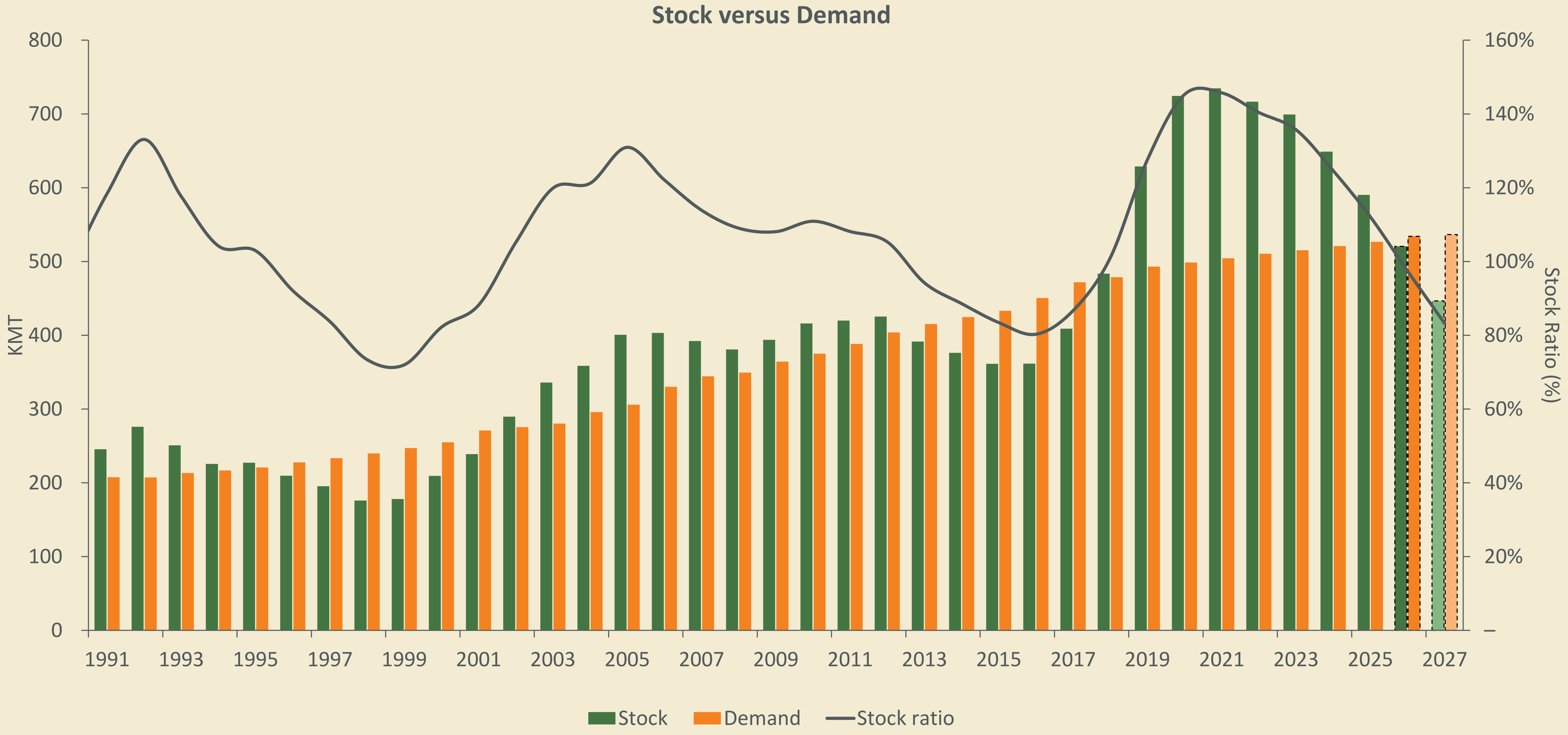
Global stock ratio continues trending downward dropping below 100% this year

Dependent on next year's crop size, the stock ratio could drop towards 80%



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Sustainable farming encounters bottlenecks towards an aligned chain

Challenges range from aligning farming practices to translating them into customer value

Resilience driven

- Smallholder, agroforestry
- Intercropping, biodiversity
- Lower input dependence
- Naturally aligned with sustainability

Efficiency driven

- Large scale, monoculture
- Focus on yield, cost efficiency
- Standardized and scalable
- Higher dependency on external inputs

Bottlenecks from farm to market	Actions
Declining compliance rates	**Engage farmers** to adopt sustainable practices
Regenerative agricultural practices not standardized	**Standardize** and align farming practices
Limited measurement and quantification of impact	**Measure** on farm to quantify impact Meet sustainability targets of EU and multi-national buyers
Sustainability not optimally monetized in the market	**Translate to customer value** from environmental and climate impact

High **stated interest** in sustainability, but **actual willingness** to pay is selective[1]

Claims perceived as both **good for me** and **good for the planet** capture higher premiums[1]

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1. *McKinsey & Company*, Talk is cheap: How much will consumers really pay for green products?

Thank you for your attention

Feel free to ask any question or reach out to:

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