DMCC

THE FUTURE OF TRADE

SPECIAL COCOA EDITION

AGRI COMMODITIES SERIES

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Introduction

INTRODUCTION

Cocoa is one of the world's most versatile commodities, prized not only for chocolate but also for its applications in beauty, wellness and functional foods. Few commodities capture the contradictions of global trade quite like cocoa. More than 5–6 million smallholder farmers, most in Côte d'Ivoire and Ghana, produce over 60% of the world's beans, yet the bulk of value is added thousands of miles away in Europe, North America and, increasingly, Asia.

But the system is under strain. The 2023/24 crop year saw production fall nearly 13% to 4.4 million tonnes, triggering the sharpest deficit in decades and sending prices to record highs. For farmers, fixed "farmgate" prices offer little scope to reinvest; for processors, soaring costs risk reformulation and shrinkflation. Consumers, meanwhile, are demanding more with younger buyers willing to pay for single-origin, ethical and health-linked products, reshaping demand from indulgence to wellness.

The trade in cocoa is therefore evolving on three fronts. First, diversification. Ecuador's output surged by 84% over the past decade as Latin America consolidated its place in the value chain. Meanwhile, producing countries are pushing to expand grinding at origin.

More than 5–6 million smallholder farmers, most in Côte d'Ivoire and Ghana, produce over 60% of the world's beans, yet the bulk of value is added thousands of miles away

Second, regulation. Europe's deforestation rules are making traceability and transparency prerequisites for market access. Third, innovation. From lab-grown cocoa to climate-resilient cultivars and blended recipes, new approaches are emerging to mitigate volatility and meet shifting tastes. As the sector adapts, cocoa is a test case for how global trade can confront climate shocks, rising consumer scrutiny and the need to spread value more equitably along the chain.

Executive Summary

EXECUTIVE SUMMARY

The future of cocoa will depend on building resilience through climate-adapted farming, transparent supply chains, diversified production and financial innovation, ensuring the commodity remains viable in a world of shifting tastes and tighter rules.

Supply shock and price surge

Erratic weather, disease and ageing trees have slashed West African output, creating the deepest deficit in decades and sending prices to record highs. Fixed farmgate prices in Ghana and Côte d'Ivoire prevent reinvestment, fuelling smuggling and entrenching fragility, while multinationals tighten their grip on processing and trade.

Diversifying production

Latin American producers such as Ecuador, Peru and Brazil are expanding supply and processing, while origin-country grinding in Africa is increasing to capture more value domestically and boost livelihoods.

Shifting demand patterns

While chocolate still dominates, growth is increasingly driven by premium products, ethical sourcing and functional applications in nutraceuticals, pharmaceuticals and personal care. Cocoa is evolving from indulgence to wellness.

Executive Summary

Tightening regulation

Europe's deforestation rules and rising consumer scrutiny make traceability and ethical sourcing essential for market access and premium pricing.

Innovation at the frontier

From lab-grown cocoa and disease-resistant cultivars to alternative formulations using carob or upcycled fibres, new technologies are emerging to mitigate volatility and address sustainability concerns.

New trade hubs

Building on its success with coffee and tea, Dubai is leveraging world-class logistics, blending and storage services and structured trade finance. It is positioning itself as a bridge between producers and global buyers, offering a replicable model for resilience in cocoa trade.

SECTION 1

MARKET SNAPSHOT

PRODUCTION LANDSCAPE

Cocoa production is dominated by West Africa, which supplies more than 60% of global output, led by Côte d'Ivoire and Ghana, followed by Nigeria and Cameroon. Latin America, particularly Ecuador, Brazil and Peru, plays an expanding role, while Asia (notably Indonesia) remains a significant though declining contributor. Once harvested, cocoa is processed into liquor, butter and powder, which serve as the building blocks of diverse industries. Around 80–85% of demand is driven by chocolate and confectionery, but cocoa derivatives are increasingly used in beverages, dairy, baked goods, nutraceuticals and personal-care products.

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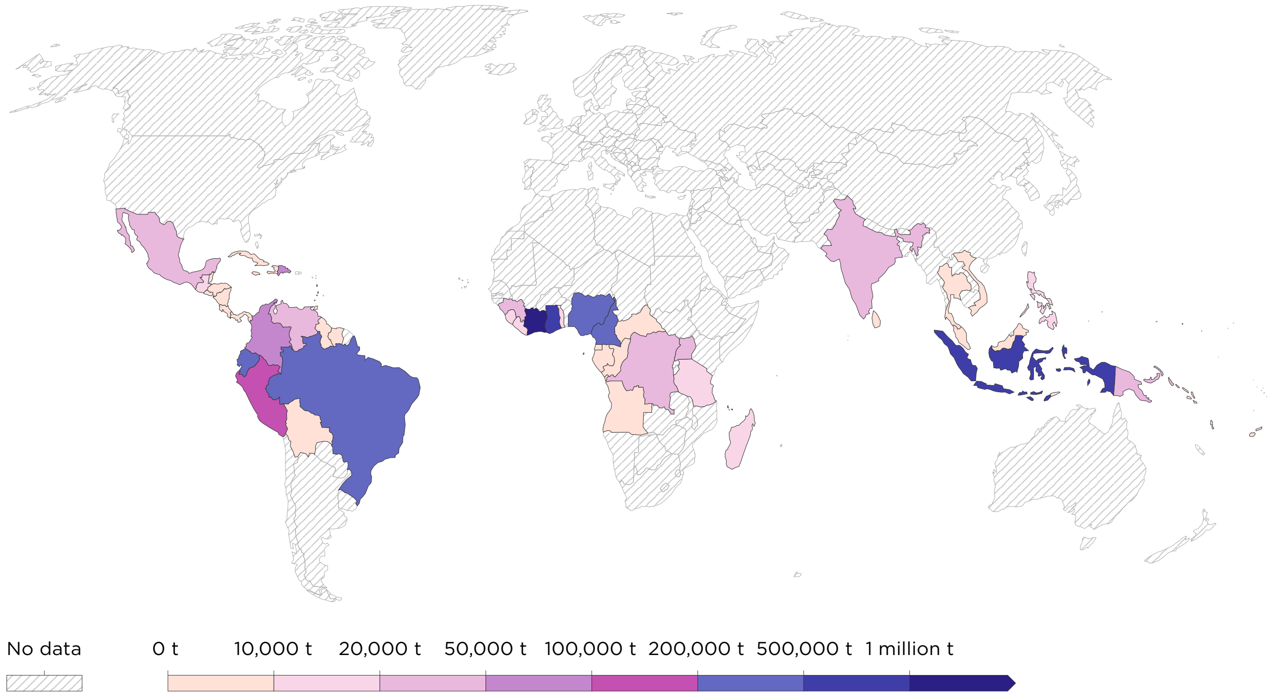
FIGURE 1

Cocoa bean production, 2023 (tonnes)



Source: Food and Agriculture Organisation of the United Nations (2025)

FIGURE 2

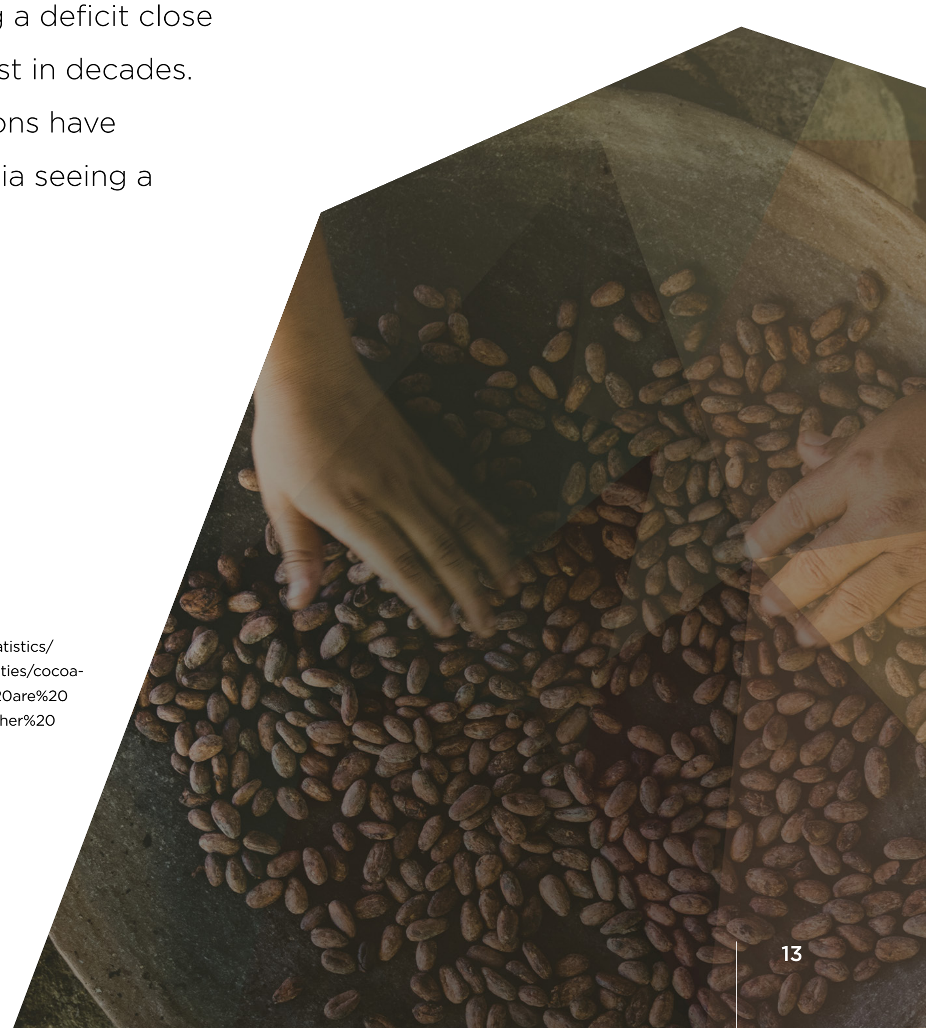
Top ten producers

Country	Year	cocoa beans || million tonnes
Côte d'Ivoire	2023	2.37
Ghana	2023	0.65
Indonesia	2023	0.64
Ecuador	2023	0.38
Brazil	2023	0.30
Cameroon	2023	0.30
Nigeria	2023	0.28
Peru	2023	0.17

Source: Food and Agriculture Organisation of the United Nations (2025)

After two consecutive tight seasons, the International Cocoa Organisation (ICCO) estimates 2023/24 production fell by nearly 13% to about 4.4 million tonnes

The cocoa market is emerging from an extraordinary supply shock due to poor weather and disease hitting plantations in West Africa. After two consecutive tight seasons, the International Cocoa Organisation (ICCO) estimates 2023/24 production fell by nearly 13% to about 4.4 million tonnes, while grindings (also known as cocoa nibs used to create various chocolate products) slipped by nearly 5% to 4.8 million tonnes,[1] yielding a deficit close to half a million tonnes, the largest in decades. Grindings in key consuming regions have continued to fall in 2025, with Asia seeing a double-digit drop.[2,3]

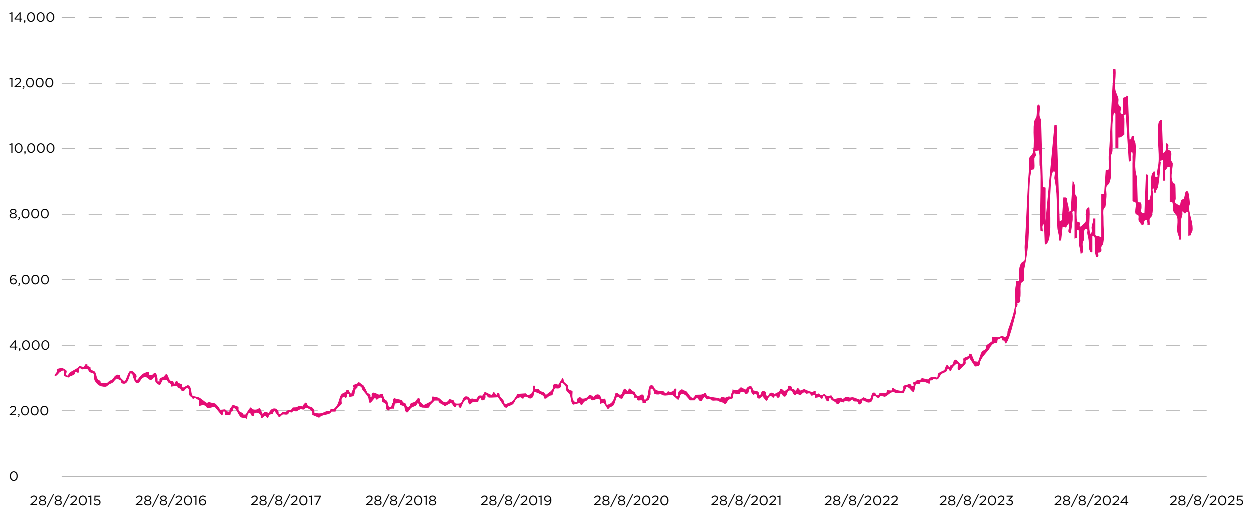


[1] https://www.icco.org/may-2025-quarterly-bulletin-of-cocoa-statistics/
[2] https://www.jpmorgan.com/insights/global-research/commodities/cocoa-prices#:~:text=prices%20coming%20down?-,Cocoa%20prices%20are%20falling%20on%20the%20back%20of%20softer%20industrial,further%20downward%20pressure%20on%20prices
[3] https://finance.yahoo.com/news/cocoa-prices-plunge-global-cocoa-161257293.html

SECTION 1: Market snapshot

FIGURE 3

Cocoa price, $ per tonne



Source: LSEG Workspace

After a blistering 2024 in which prices nearly tripled, the price of the commodity remains stubbornly high (figure 3). Skyrocketing prices are not a sign of strength but of structural instability, says Mauro Danilo Ribezzi, founder of Ribezzi Group, a diversified conglomerate headquartered in Dubai. Lindor chocolate producer, Lindt, has passed on higher costs to customers, helped by the launch of Dubai-style chocolate. While Barry Callebaut which supplies Nestlé and Hershey Co. has suffered a 30% fall in shares as they wait for prices to come down.[4]

Bean exports and semi-finished cocoa shipments (in bean-equivalent terms) rose 6.1% y/y in Q1 of the 2024/25 crop year (Oct–Dec 2024) as origins prioritised moving product and buyers scrambled to secure cover, even as absolute volumes remained constrained by harvest shortfalls.[5] Specialty traders and brokers are increasingly active in niche markets such as organic or fine-flavour cocoa.

[5] https://www.icco.org/may-2025-quarterly-bulletin-of-cocoa-statistics/

BEYOND INDULGENCE: COCOA'S EXPANDING APPLICATIONS

The global cocoa market was valued at approximately $16.6 billion in 2025 and is projected to reach around $26.2 billion by 2035, growing at a compound annual rate of about 4.7%.[6] Chocolate remains a staple in shoppers' baskets, valued as both an affordable treat and a versatile indulgence.[7] Nevertheless, the global premium chocolate segment, fuelled by products like single-origin bars, artisanal truffles and health-conscious formats (e.g., reduced sugar, high cacao or plant-based), is competing with standard offerings. The premium chocolate market is expected to grow from $31.9 billion in 2024 to $40.6 billion by 2030, at a steady CAGR of 4.3%.[8]

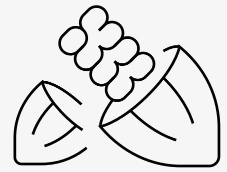
While confectionery still accounts for the lion's share of demand, growth is increasingly driven by cocoa's diversification into adjacent industries such as cosmetics, pharmaceuticals, nutraceuticals and functional "better-for-you" snacking foods.

The premium chocolate market is expected to grow from $31.9 billion in 2024 to $40.6 billion by 2030

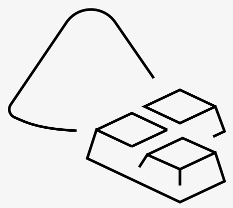
[6] https://www.futuremarketinsights.com/reports/cocoa-market
[7] https://candyusa.com/news/new-nca-report-reveals-latest-consumer-trends-in-chocolate-consumption/
[8] https://www.grandviewresearch.com/industry-analysis/premium-chocolate-market-report

For instance, consumer fascination with cacao - the raw form of the bean - as a superfood is rapidly expanding, encompassing not just the beans but also the often-neglected pulp and shells. Global demand for high-quality cacao beans is on a steady climb, valued at approximately $14.3 billion in 2024 and projected to surge to $23.6 billion by 2033, powered by consumer preferences for ethically sourced, antioxidant-rich ingredients and traceable sourcing. Younger consumers are emerging as powerful drivers of value-driven behaviour. The influence of cacao sourcing on purchase decisions in the US, for instance, has jumped from 16% in 2018 to 28% today pointing to a growing demand for ethical products.[9]

WHAT'S THE DIFFERENCE BETWEEN CACAO AND COCOA?



Cacao refers to the raw material, the fruit (pod), trees and byproducts. It is often used to emphasise the minimally processed, dense form of the bean.



Cocoa refers to the processed cacao bean, which is the commercially traded commodity. It is created after the beans are finely ground into a powder and roasted, and can be consumed as a drink or blended with sugar, milk, cocoa butter and cacao to make chocolate.

Consumer fascination with cacao - the raw form of the bean - as a superfood is rapidly expanding, encompassing not just the beans but also the often-neglected pulp and shells

[9] https://candyusa.com/wordpress/wp-content/uploads/2024/10/Getting_to_know_Chocolate_Consumers_2024_ExecSummary-FINAL.pdf

The cacao shell fibre sector, once a low-value by-product, is gaining traction as a functional food ingredient[10] and pioneering brands are unlocking the full potential of the cacao fruit. Companies like US brand Blue Stripes are capitalising on underutilised components including the pod husks, pulp and lining to create innovative products (e.g., whole-cacao bars, cacao water, trail mixes) that enhance flavour, nutrition and environmental sustainability by drastically reducing waste.[11] Its market is set to grow from $456 million in 2025 to $630.9 million by 2035, driven by demand for fibre-rich, sustainable inputs in bakery, cereals and nutraceuticals.[12]

Cocoa polyphenols, which are potent antioxidants with anti-inflammatory benefits, are said to reduce oxidative stress linked to diseases like cancer and diabetes. Their high concentration makes cocoa a sought-after ingredient in functional foods and supplements, where demand is rising with consumer interest in immunity-boosting products. Valued at $97.4 million in 2024, the cocoa polyphenols market is projected to grow at a 5.8% CAGR through 2030.[13]

The cocoa butter sector was valued at $5 billion in 2024 and is expected to reach $9.37 billion by 2032

North America and Asia Pacific are key growth regions, with Japan incorporating cocoa polyphenols into products like energy drinks.[14]

The beauty and personal-care industry is also a fast-growing frontier. Cocoa butter's creamy texture and emollient qualities have made it a cornerstone of moisturisers and body lotions, while cocoa polyphenols are increasingly highlighted in skincare products for their protective, anti-ageing properties.[15] The cocoa butter sector was valued at $5 billion in 2024 and is expected to reach $9.37 billion by 2032.[16] Pharmaceutical applications remain niche but important. Cocoa derivatives are used in drug delivery systems and suppositories, demonstrating the versatility of the commodity beyond food.

[10] https://www.foodmanufacturing.com/ingredients/news/22910781/chocolate-that-harnesses-the-cocoa-fruits-full-potential
[11] https://www.bluestripes.com/pages/about-us?srsltid=AfmBOooy4fJzdvjWUo9aml-Frmt-dhxFo1ep9LEdkHFChw1yVZzwYBL4
[12] https://www.futuremarketinsights.com/reports/cocoa-shell-fiber-market
[13] https://www.grandviewresearch.com/industry-analysis/cocoa-based-polyphenols-market-report
[14] https://www.grandviewresearch.com/industry-analysis/cocoa-based-polyphenols-market-report
[15] https://pmc.ncbi.nlm.nih.gov/articles/PMC11592858/
[16] https://www.verifiedmarketresearch.com/product/cocoa-butter-market/

SECTION 2

MARKET-SPECIFIC CHALLENGES AND OPPORTUNITIES

VOLATILE WEATHER AND DISEASE

West Africa's weather and disease profile sits at the heart of the recent supply squeeze. Côte d'Ivoire and Ghana are together responsible for over half of the world's supply of cocoa beans.[17] Swollen-shoot virus and black-pod disease, a fungal infection that rots cocoa pods, have devastated plantations.[18]

[17] https://www.fairtrade.org.uk/farmers-and-workers/cocoa/about-cocoa/
[18] https://www.reuters.com/markets/commodities/major-ghana-cocoa-region-81-infected-with-bean-disease-icco-2024-07-18/

SECTION 2: Market-specific challenges and opportunities

Erratic rainfall and prolonged heatwaves, exacerbated by the effects of climate change, have encouraged the spread of disease that has severely reduced yields, while ageing tree stock and lagging replanting programmes limit the pace of recovery.

"Many of our cocoa plantations are ageing and have suffered from years of underinvestment. This not only makes them more vulnerable to disease but also less productive overall. Farmers often lack access to high-quality inputs - fertilisers, pesticides, improved seedlings - simply because the financial resources needed to reinvest in their communities have not been flowing back at the scale required. As a result, the cycle of low productivity and limited incomes continues, and that needs to change," describes Kwadwo Boachie-Adjei, Founder and CEO of Kumbi Cocoa, a US and Ghana-based company which works to create a direct, equitable relationship with farming cooperatives.

Farm abandonment and the smuggling of beans to neighbouring markets have exacerbated issues further still.

With supply heavily concentrated in West Africa, the sector remains acutely vulnerable to localised disruptions. Ghana's regulator recently warned of renewed weather-related risks[19] with Côte d'Ivoire officials expecting 2024/25 output to hold only around last season's depressed level. West African production is likely to see another 10% decline in the upcoming 2025/26 season.[20]

[19] https://www.reuters.com/sustainability/climate-energy/ghanas-cocoa-regulator-warns-production-drop-amid-heavy-rains-2025-07-15/
[20] https://www.reuters.com/world/africa/west-africa-facing-10-drop-cocoa-output-202526-industry-sources-say-2025-07-09/

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Kumbi Cocoa

PRICING AND MARKET ACCESS

Although record-high international prices have bolstered nominal farmer incomes, growers in Ghana and Côte d'Ivoire get paid a price by the government that is too low for them to invest in pesticides, fertilisers and new plants that would help to respond to current issues plaguing their markets.[21] Fixed farmgate prices can also encourage cross-border smuggling when neighbouring countries' rates diverge. Authorities raised farmgate prices to support incomes, but production recovery remains precarious.[22] "The economic issue of the cocoa world is extremely fragile. For every one dollar chocolate bar, the farmers only receive two cents," explains Mr Ribezzi. The unequal distribution of value across the chain is unsustainable, risking farmer exit and long-term supply collapse unless stakeholders intervene to rebalance margins: "People will just run away."

For processors, elevated bean prices have driven up the cost of cocoa liquor, butter and powder, adding to pressures from higher energy bills, shipping rates and financing costs. Sustained price inflation risks accelerating the adoption of cocoa substitutes or lower-cocoa-content alternatives. Major brands, including Nestlé have dropped the word 'chocolate' from some UK products as cocoa content falls below the 20% legal minimum.[23] Mars Inc shaved 10 grams off its Galaxy chocolate bar, blaming "growing pressures" for the move.[24] Shrinkflation and recipe reformulation are becoming common tactics to manage input costs, but overuse risks undermining consumer trust.[25,26]

[21] https://www.ft.com/content/069a7c43-1fda-48b0-b6c9-d009abb19950
[22] https://www.bloomberg.com/news/articles/2025-07-01/ghana-plans-to-slightly-raise-cocoa-farmgate-price-as-cedi-gains?embedded-checkout=true
[23] https://www.thegrocer.co.uk/news/white-chocolate-digestives-and-kit-kats-no-longer-white-chocolate/706607.article
[24] https://www.theguardian.com/food/2023/sep/26/galaxy-chocolate-bars-now-10-smaller-amid-shrinkflation
[25] https://www.which.co.uk/news/article/shrinkflation-on-the-rise-which-reveals-the-items-that-have-shrunk-in-size-but-not-in-price-az2376B4mj5T
[26] https://www.foodnavigator.com/Article/2025/08/06/cocoa-shortage-forces-chocolate-label-changes/

SECTION 2: Market-specific challenges and opportunities

"The economic issue of the cocoa world is extremely fragile. For every one dollar chocolate bar, the farmers only receive two cents. People will just run away."

Mauro Danilo Ribezzi,
Founder,
Ribezzi Group

REGULATORY RISKS ARE RISING

The chocolate industry has long faced controversy around issues of labour, illegal tree felling and soil contamination. These issues persist in cocoa plantations because of structural market failures and weak accountability across a highly fragmented value chain. This exposes firms and investors to mounting reputational, legal and regulatory risks as scrutiny and due diligence rules intensify.

Deforestation is an entrenched feature of cocoa production, with decades of forest clearance in West Africa accelerating biodiversity loss and altering rainfall patterns that underpin yields. Since 2000 the growing of cocoa has caused more than 37% of forest loss in protected areas of Côte d'Ivoire and 13% of deforestation in reserves in Ghana.[27] Both nations continue to experience high forest loss overall. Côte d'Ivoire is thought to have lost more than 90% of its forest cover since 1950, and Ghana may have lost more than 65%.[28]

New regulations in Europe, the biggest consuming region, will require companies to show that their beans have not come from deforested land

[27] https://www.nature.com/articles/s43016-023-00751-8
[28] Barima, Y. S. S. et al. Cocoa crops are destroying the forest reserves of the classified forest of Haut-Sassandra (Ivory Coast). Glob. Ecol. Conserv. 8, 85–98 (2016).

SECTION 2: Market-specific challenges and opportunities

New regulations in Europe, the biggest consuming region, will require companies to show that their beans have not come from deforested land under the EU Regulation on Deforestation-free Products and that firms are addressing adverse human rights under the Corporate Sustainability Due Diligence Directive. Mr Boachie-Adjei predicts that such requirements will not remain limited to the EU but are likely to extend to cocoa imports into the US and Asia as well. Adherence to regulation will be difficult to prove in an industry reliant on smallholder-based supply chains where farm-level data is scarce and implementing robust monitoring and verification systems is costly and time-consuming. Companies able to credibly prove their cocoa is deforestation-free and ethically sourced are in a better position to secure market access, attract investment and command price premiums.[29]

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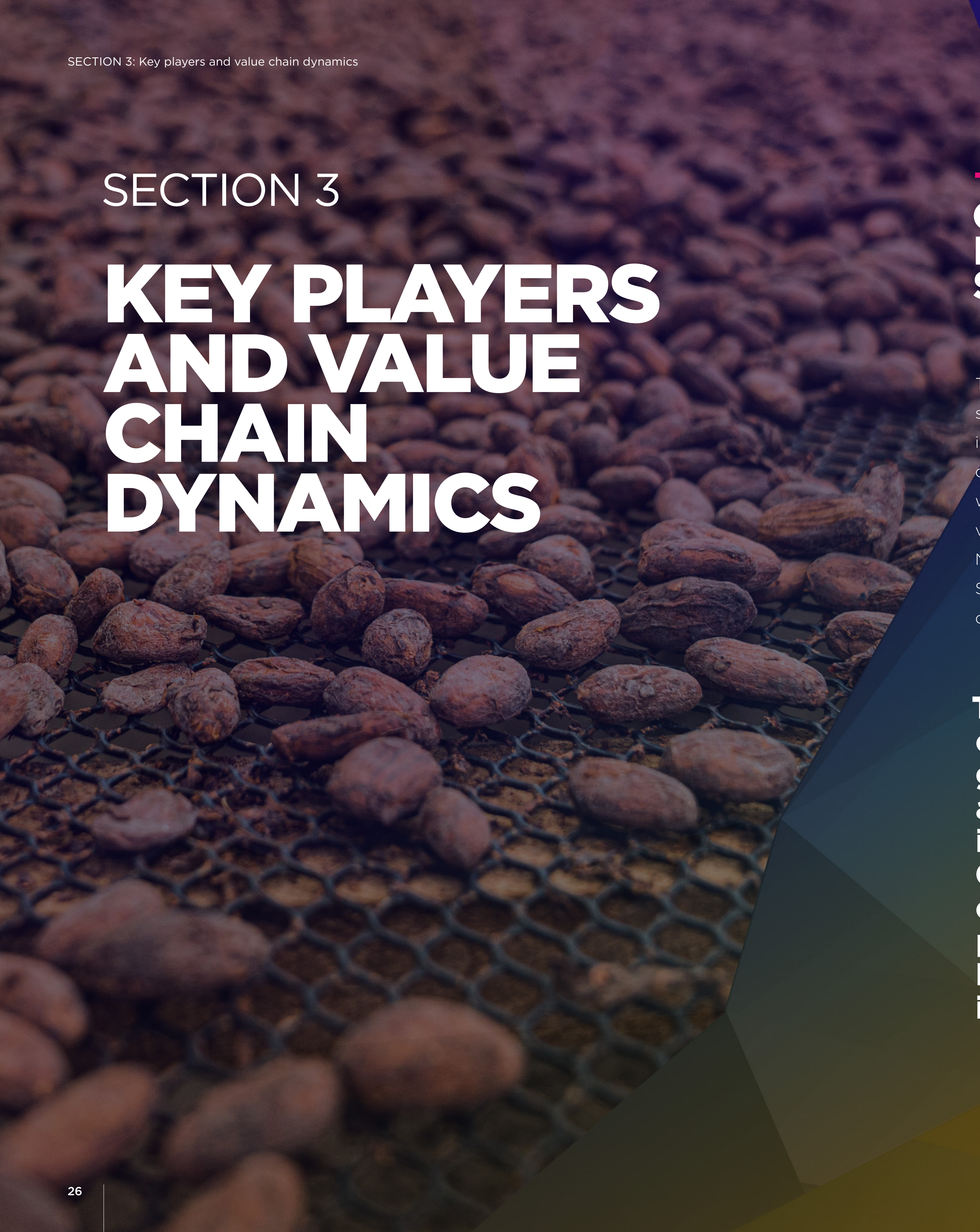
[29] https://www.bloomberg.com/news/articles/2024-05-17/cocoa-crisis-made-worse-by-underpaying-farmers-tony-s-ceo-says



SECTION 3

KEY PLAYERS AND VALUE CHAIN DYNAMICS

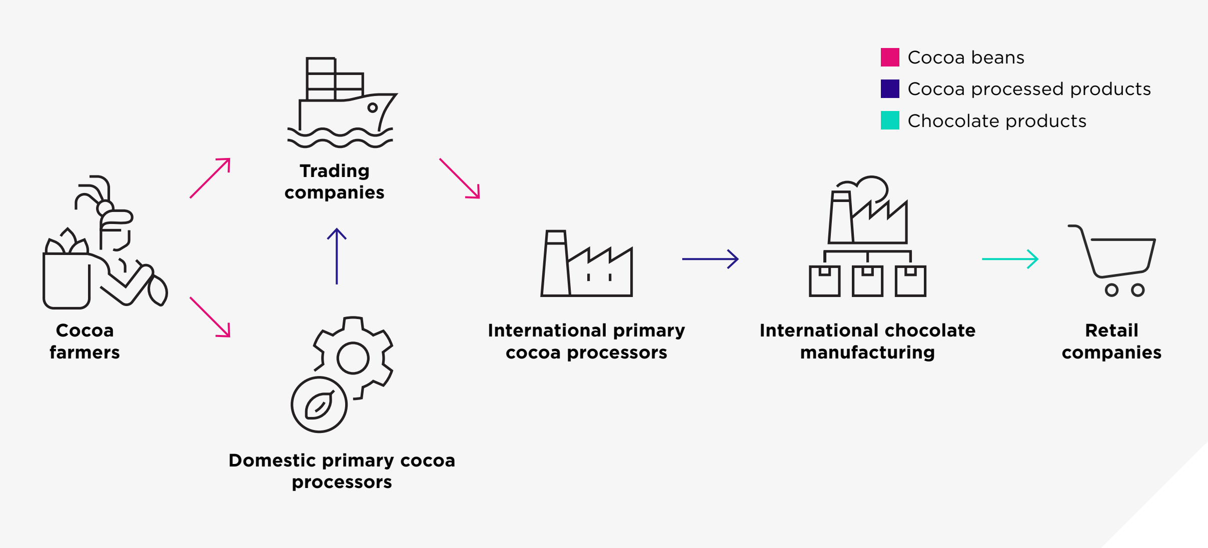
GLOBAL PRODUCTION SHIFTS

The cocoa value chain is complex, shaped by a sharp geographic imbalance as around 70% of cocoa is cultivated in West and Central Africa, while most consumption and high-value processing takes place in Europe, North America and increasingly Asia. Sandwiched in-between producers and consumers are local intermediaries, who sell to exporters, who in turn sell to chocolate manufacturers and traders, often sitting in Europe and are backed by investors in New York and London (figure 4). This structural divide reinforces the dependence of smallholder farmers on distant downstream actors and exposes the entire sector to concentration risks.

The cocoa value chain is complex, shaped by a sharp geographic imbalance as around 70% of cocoa is cultivated in West and Central Africa, while most consumption and high-value processing takes place in Europe, North America and increasingly Asia

FIGURE 4

Cocoa supply chain



Source: Large gaps in voluntary sustainability commitments covering the global cocoa trade[30]

Europe remains the primary destination for raw beans with the Netherlands and Belgium acting as the main hubs for the re-export of cocoa beans in Europe. The Netherlands is the world's largest importer, bringing in cocoa (whole, broken, raw or roasted) worth $2.2 billion in 2023, underpinned by its role as a hub for grinding and re-export of semi-finished products (figure 5).[31] Raw beans flow into Rotterdam and Amsterdam, feeding vast processing facilities in the Zaanstad cluster where they are ground into butter, liquor and powder.

Much of this volume is then re-exported. In 2023 the country shipped 187,000 tonnes of beans abroad, which is around 21% of its imports, with Germany taking the lion's share, followed by Austria and Italy.[32] Beyond beans, significant volumes of semi-finished products and chocolate are also dispatched to European markets. Malaysia ranks second, reflecting both its own domestic consumption and its importance as a processing centre for Asia's expanding food and beverage markets.

[30] https://www.sciencedirect.com/science/article/pii/S0959378023000626
[31] The Dutch market potential for cocoa, Government of Netherlands, 2024
[32] https://www.cbi.eu/market-information/cocoa/what-demand

The Netherlands is the world's largest importer, bringing in cocoa (whole, broken, raw or roasted) worth $2.2 billion in 2023, underpinned by its role as a hub for grinding and re-export of semi-finished products

FIGURE 5

Top ten countries by import value of cocoa beans, 2023

Country	Import value of cocoa beans (USD)
Netherlands	$2.2 billion
Malaysia	$1.5 billion
Germany	$1.3 billion
Belgium	$996.9 million
United States	$769.3 million
Indonesia	$582.1 million
France	$459 million
Canada	$359.2 million
Italy	$325.8 million
Turkey	$315.1 million

Source: IndexBox Market Intelligence Platform[33]

[33] https://www.indexbox.io/blog/world-worlds-best-import-markets-for-cocoa-bean/

While West Africa remains a dominant producer, Ecuador, Peru and Brazil have emerged as viable alternatives.[34] Ecuador's production expanded by nearly 84% between 2014 and 2024 (figure 6), compared with just 3% in Côte d'Ivoire. Ecuador has also consolidated its role as Latin America's largest exporter of processed and semi-processed cocoa products. Peru has gained recognition for fine-flavour cocoa, commanding premiums in specialty markets, while Brazil is expanding grinding capacity under its Inova Cacau 2030 strategy.[35] Looking ahead, global trade will be shaped by a twin push toward supply diversification and greater resilience, alongside tighter integration between producing and consuming regions.

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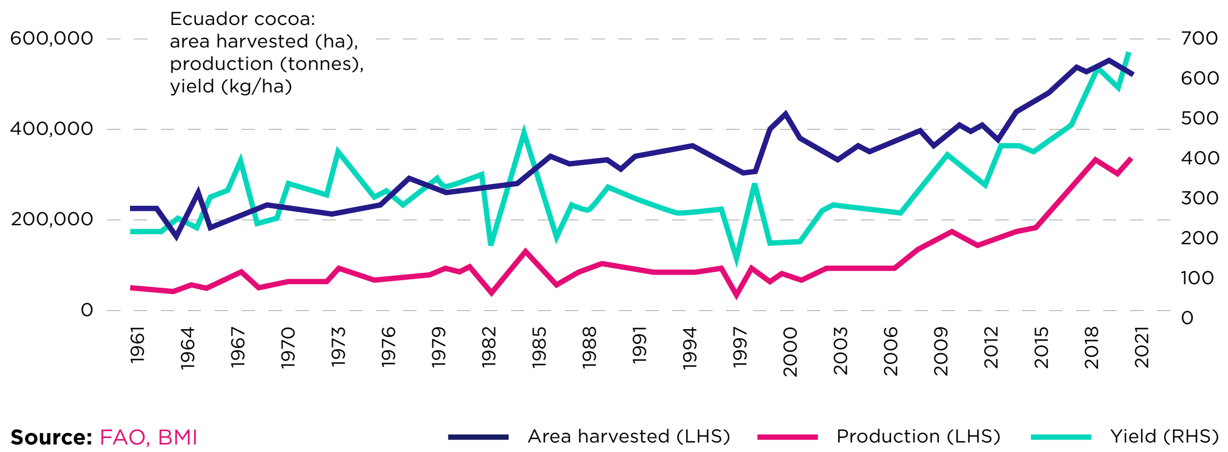
FIGURE 6

Ecuadorian cocoa production has picked up in the past decade



Source: FAO, BMI

[34] Latin American Cocoa Market Share Set To Increase As Structural Factors Weigh On West African Production, BMI - Fitch Solutions, 20246
[35] https://worldcocoafoundation.org/storage/files/plano-inova-cacau-2030-versao-ingles.pdf

Midstream, a small number of multinational trading and processing companies exert outsized influence. Switzerland's Barry Callebaut, Singapore's Olam Food Ingredients and France's Touton, for instance, dominate bean aggregation, grinding and logistics. They operate large plants in both origin countries and major consumer markets, converting raw beans into cocoa liquor, butter and powder. Control over storage, shipping and hedging capacity gives these players significant sway over trade flows and pricing. Recent reports that commodity and energy trader Hartree Partners is considering acquiring Touton, which handles nearly 10% of global cocoa, underline the consolidation pressures rippling through the chain as financing becomes tighter and physical availability more constrained.[36]

FIGURE 7

Top ten chocolate exporters, 2024

Country	Export value of chocolate (USD)
Germany	$7.1 billion
Belgium	$5.3 billion
Poland	$3.26 billion
Italy	$3.12 billion
Netherlands	$2.83 billion
Canada	$2.8 billion
United States	$2.1 billion
France	$1.9 billion
United Kingdom	$1.2 billion
Switzerland	$1.17 billion

Source: OEC

[36] https://www.reuters.com/world/europe/hartree-talks-buy-major-cocoa-trader-touton-sources-say-2025-08-11/

LOCALISING PRODUCTION AND PROCESSING

High volatility in international cocoa prices creates risk across the value chain, with farmers shouldering the greatest burden. To counter this, producing countries are increasingly seeking to capture more value at home by processing beans into semi-finished products for export (figure 8). Localising processing retains more foreign exchange, creates skilled jobs and strengthens domestic industry. Yet, as Mr Boachie-Adjei stresses, "processing commodities at origin is always challenging - it requires significant capital investment. But even when the money is available, without reliable access to markets, those investments can't deliver real impact. At the end of the day, it's not just about what you can build and own, it's about whether you can move your product and connect to buyers." West Africa may produce roughly three-quarters of the world's cocoa, but farmers earn a measly income. Without direct market access, Mr Boachie-Adjei says even government-backed processing plants may struggle to compete.

Cocoa grinding at origin is expected to grow, rising from 2.33 million tonnes in 2021–22 (47% of global grindings) to a projected 2.41 million tonnes in 2022–23, according to the ICCO.[37] The global ingredient giant Barry Callebaut opened a cocoa export facility in Ecuador and committed to further investments in productive and sustainable cocoa farming.[38] In 2024, Ecuador exported 432,268 tonnes of cocoa beans, and 38,889 tonnes of processed and semi-processed cocoa products - the highest volume in Latin America.[39] Côte d'Ivoire has likewise prioritised domestic value addition, inaugurating a $233 million grinding plant near Abidjan in July 2025.[40] The new facility boosts national capacity by 50,000 tonnes and supports the government's ambition to process half of its cocoa output domestically.

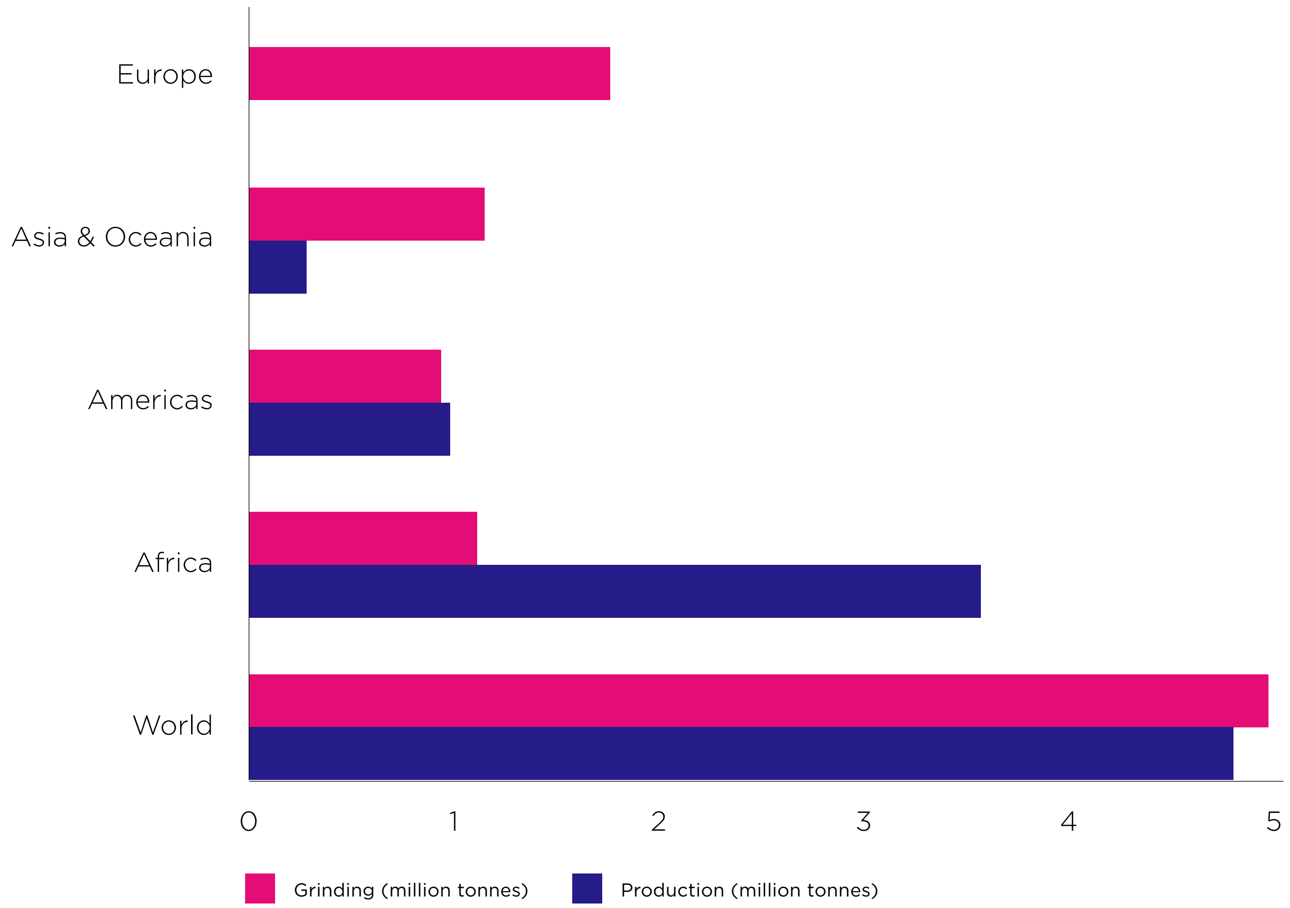
[37] https://www.icco.org/wp-content/uploads/Grindings_QBCS-XLIX-No.-2.pdf
[38] https://www.barry-callebaut.com/en/about-us/media/news-stories/bienvenidos-taycan-barry-callebauts-new-home-ecuador
[39] https://www.preferredbynature.org/news/cocoa-purpose
[40] https://toppingafrica.com/cote-divoires-233-million-cocoa-factory-a-new-era-for-african-value-addition

SECTION 3: Key players and value chain dynamics

Producing countries are increasingly seeking to capture more value at home by processing beans into semi-finished products for export

FIGURE 8

Global cocoa production (million ha) and grinding (million tonnes)



Source: Based on data from the ICCO

SECTION 4

DUBAI AS A TRADE NEXUS

Dubai has carved out a role as one of the world's most dynamic commodity hubs, leveraging its geographic position between producing and consuming regions, its sophisticated logistics and its appetite for trade innovation.

The UAE's infrastructure, including the Jebel Ali Free Zone (JAFZA), enables traders to move goods swiftly between Africa, Asia, Europe and the Middle East. For agricultural commodities, this creates resilience in global value chains, offering flexibility at times of supply disruption and providing liquidity when markets tighten.

In volatile sectors like cocoa, where weather shocks in West Africa ripple quickly through supply and pricing, Dubai's capacity to warehouse, blend and finance shipments potentially makes it an increasingly critical stabiliser. Investments in cold chain and temperature-controlled warehousing are essential to maintaining product quality and reducing loss during transit—particularly as climate change raises the risk of heat damage along shipping routes.[41]

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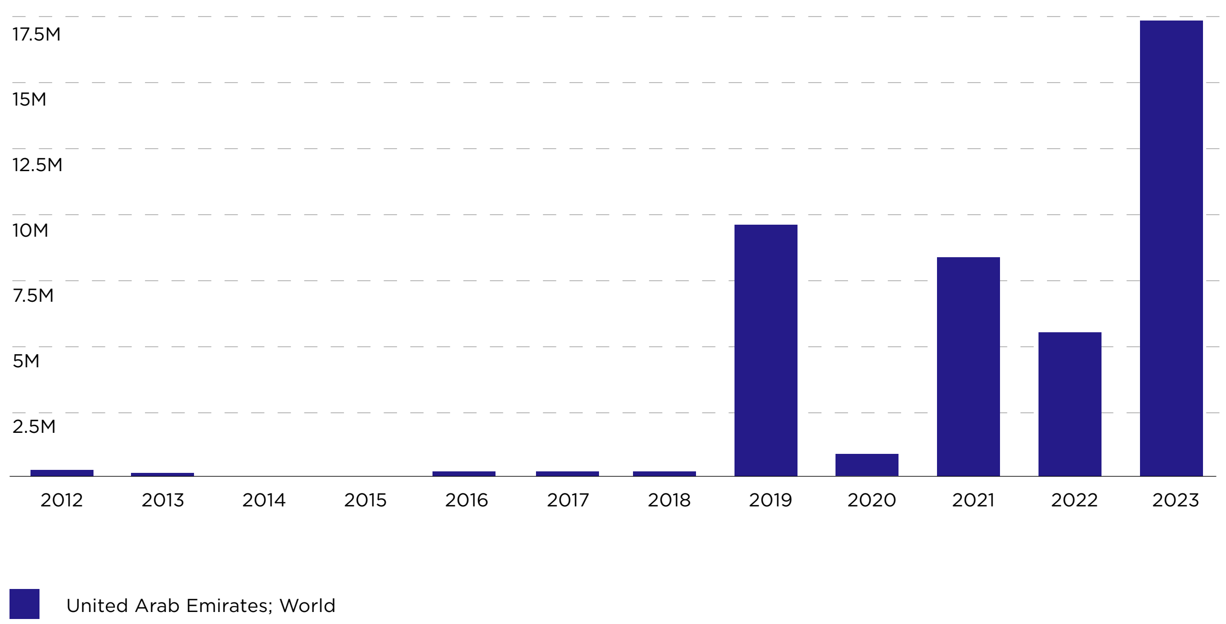
[41] https://arviem.com/cargo-condition-monitoring-in-transit-reducing-waste-and-damages-in-cocoa-supply-chains/

Dubai's rise as a trade nexus in cocoa is still emergent but backed by measurable growth. In 2023, the UAE imported $17.3 million worth of cocoa beans (whole or broken, raw or roasted), with Côte d'Ivoire supplying about 96% of that volume (figure 9).[42] The UAE also imported $65.3 million worth of finished chocolate and cocoa-containing products in 2023.

In 2023, the UAE imported $17.3 million worth of cocoa beans. Exports of raw beans in the same year reached $16.4 million, primarily to regional markets

FIGURE 9

UAE imports of cocoa beans (whole or broken, raw or roasted), US$



Source: TrendEconomy

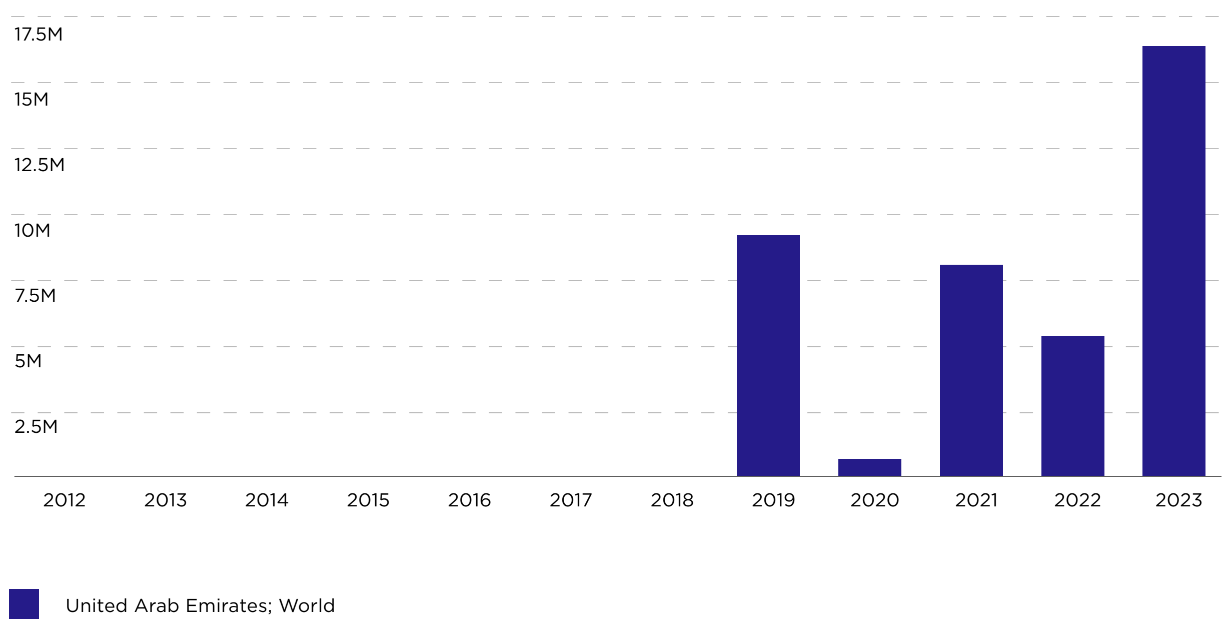
[42] https://trendeconomy.com/data/h2/UnitedArabEmirates/1801

Exports of raw beans from the UAE in the same year reached $16.4 million (figure 10), primarily directed to Iran and other regional markets, making it the 28th largest exporter of cocoa beans (out of 134) in the world.[43] The fastest growing markets for cocoa bean exports from the UAE between 2022 and 2023 were Malaysia, Saudi Arabia and Kuwait.[44]

While these figures remain small compared to major hubs like the Netherlands, they signal accelerating activity in trade flows, both in upstream raw materials and downstream finished goods.

FIGURE 10

UAE exports of cocoa beans (whole or broken, raw or roasted), US$



Source: TrendEconomy

[43] https://oec.world/en/profile/bilateral-product/cocoa-beans/reporter/are
[44] https://oec.world/en/profile/bilateral-product/cocoa-beans/reporter/are

DMCC'S AGRI-FOOD COMMODITIES ECOSYSTEM

DMCC (Dubai Multi Commodities Centre) has become the backbone of a strategy to develop a world-leading agri-food commodities ecosystem in Dubai, building a cluster model that has already reshaped trade in coffee and tea. The DMCC Coffee Centre, launched in 2019, has positioned Dubai as a hub for storage, roasting, packaging and re-export. It expanded in September 2025 to support international market access and business growth for members and stakeholders.[45] The DMCC Tea Centre has supported Dubai's rise as one of the world's largest tea re-exporters. Both centres combine state-of-the-art warehousing with value-added services such as grading, blending, packaging and branding, while linking directly to trade finance through DMCC's Tradeflow platform.[46]

Leveraging its expertise in tea and coffee, DMCC is actively pursuing ambitions in the cocoa sector. Plans are already underway to launch a state-of-the-art DMCC Cacao Centre, initially incubated within the Coffee Centre at Jebel Ali. The ambition is to provide grading, storage, blending and branding services underpinned by structured trade finance tools, which are vital for liquidity in a market prone to volatility.

"When it comes to understanding the trade of commodities, I think that the UAE has a perfect, favourable business climate," says Mr Ribezzi. "The beauty of the DMCC, the entire ecosystem, is that we don't just operate as traders, we operate as facilitators." Dubai's hub model can create a new ecosystem where all actors, from farmers to financiers, have a role and voice in shaping the sector's future.

[45] https://dmcc.ae/latest-news/dmcc-coffee-centre-expands-with-premium-member-space-as-new-report-positions-dubai-at-centre-of-usd-26-billion-coffee-trade?hs_amp=true
[46] https://dmcc.ae/ecosystems/financial-services/tradeflow

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Crucially, DMCC offers something African producers are currently missing – direct access to markets and capital, according to Mr Boachie-Adjei. By connecting growers to global off-takers, it can shift them from price-takers to competitive players. "The DMCC provides a true level playing field - combining expertise, capital, and market access with a unique geographical advantage that allows trade to flow seamlessly in every direction: east, west, north, or south." This neutrality and connectivity enable producers – particularly in Africa – to reach buyers and financiers directly, rather than being locked into the margins set by a handful of commodity houses. Despite strong consumer demand, the Gulf lacks local cocoa processing.

DMCC could anchor value-added activity in the region, reducing reliance on imports and capturing downstream benefits. "It's going to be a game-changer," says Mr Boachie-Adjei, "The UAE, the DMCC, is stepping in and filling a huge void."

"It's going to be a game-changer, the UAE, the DMCC, is stepping in and filling a huge void."

SECTION 5

FUTURE OUTLOOK, INNOVATIONS AND INVESTMENT TRENDS

The supply shock of 2023/24 has underscored the fragility of the traditional model, pushing industry players to explore a broader set of innovations, spanning farm-level interventions, product reformulation and entirely new production technologies.

SECTION 5: Future outlook, innovations and investment trends

DIGITISING THE COCOA TRADE

Technology is reshaping how cocoa is traded, with the potential to shift power closer to producers. "When you can pay farmers directly, you're giving them immediate access...everyone has a phone that can make or receive a digital payment," notes Mr Boachie-Adjei. Mobile-first fintech platforms cut out leakage and layers of intermediaries, enabling growers to receive fairer and faster payments. Beyond direct transfers, new models such as crypto bonds could find a place in the future of cocoa trade, says Mr Ribezzi, who suggests that tokenised assets and DeFi lending - a decentralised system for crypto-asset borrowing and lending built on blockchain technology - could unlock fresh capital flows for smallholder farmers traditionally excluded from credit.

Digitisation is also becoming a requirement for market access. Blockchain-enabled traceability, paired with monitoring software, ensures compliance with deforestation rules and broader sustainability standards.

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These platforms, Mr Boachie-Adjei stresses, will "help to monitor and regulate some of the issues in these sectors. It's all part of the disruption that we need." The convergence of fintech, blockchain traceability, and digital monitoring means cocoa trade is moving beyond compliance to a more transparent and resilient system - one where smallholders and non-traditional investors alike can participate directly.

LAB-GROWN COCOA

Cell-culture technology is drawing the attention of major manufacturers and investors keen to sidestep cocoa's chronic vulnerabilities to weather, disease and geopolitics. Startups are cultivating cocoa cells that yield cocoa mass without farms, offering the promise of a steadier and potentially lower-impact supply. The idea of lab-grown cocoa has gained heavyweight backing. Barry Callebaut has partnered with Zurich University of Applied Sciences to advance cell-culture methods, while Japan's Meiji has invested in California Cultured, whose founder claims the firm has already "cracked" dark chocolate.[47] Yet formidable hurdles remain including scaling production at viable cost, reproducing the complex flavour notes of traditional cocoa and navigating evolving safety and labelling rules. For sustainability-minded brands, however, the prospect of climate-resilient, ethically marketed lab-grown chocolate is tantalising enough to justify the bet.

CHOCOLATE WITHOUT COCOA

While purists may balk, blended products are gaining traction among younger, health- and climate-conscious consumers. Formulators are experimenting with alternative ingredients such as carob, roasted grains or upcycled fruit fibres to partially replace cocoa solids in chocolate while preserving texture and flavour. The innovation in confectionery offers manufacturers a way to manage costs and reduce exposure to volatile bean markets. Cargill, for instance, invested $41 million in a new facility that reduces cocoa content, using complementary ingredients such as plant-based fibres and alternative flavour carriers.[48] Other firms are trying to avoid the use of cocoa entirely. US start-up Voyage Foods creates cocoa-free milk-chocolate-style bars from grape seeds, sunflower flour, sugar, fat and natural flavours.

[47] https://www.meiji.com/global/news/2024/pdf/240209_01.pdf
[48] https://www.foodnavigator.com/Article/2024/09/18/Cargill-spends-big-on-Netherlands-spray-facility-expansion/

SECTION 5: Future outlook, innovations and investment trends

Startups are cultivating cocoa cells that yield cocoa mass without farms, offering the promise of a steadier and potentially lower-impact supply. The idea of lab-grown cocoa has gained heavyweight backing

RESISTING DISEASE

Research institutions and national cocoa boards are accelerating the development and distribution of disease-resistant, high-yield varieties.[49] These cultivars, bred to withstand swollen-shoot and black-pod disease and to perform better under heat stress, are central to recovery strategies in West Africa. Public-private partnerships, such as the Cocoa & Forests initiative, that are often backed by donor finance or corporate sustainability funds, are expanding nurseries, farmer training and agroforestry practices that blend cocoa with shade trees to improve soil health and biodiversity.[50] Innovation in farming methods and plant varieties is vital to sustain yields, says Mr Ribezzi citing trials in Ghana to improve resistance and productivity, but it must be paired with careful land management to avoid deforestation and illegal farming.

PREMIUMISATION

On the demand side, premiumisation continues to shape growth segments. Artisanal chocolate makers are carving out market share with single-origin bars, small-batch processing and transparent sourcing stories. For producing countries, these niche segments present an opportunity to capture more value by linking high-quality, differentiated cocoa directly to premium buyers.

[49] https://innovativegenomics.org/programs/sustainable-agriculture/engineering-disease-resistant-cocoa-with-crispr-genome-editing/
[50] https://worldcocoafoundation.org/programmes-and-initiatives/cocoa-and-forests-initiative

Key recommendations

KEY RECOMMENDATIONS

Without greater and smarter investment, the global cocoa economy will remain vulnerable to climate shocks, disease outbreaks and structural imbalances between origin and consuming markets. Closing the investment gap needs to extend across the value chain.

Promote equitable participation across the value chain

Producing countries should not remain confined to the role of raw material suppliers. Policies and partnerships must focus on enabling local industries - particularly state-owned or domestic factories - to compete effectively in processing and value addition. This requires fairer market access, targeted investment and a shift in perception so that producing nations are recognised as full participants in the cocoa value chain, not just growers.

From suppliers to partners

West African producers account for three-quarters of global cocoa but capture only cents on the dollar, as market access and downstream value remain concentrated in a few trading houses. Origin processing alone will not close this gap. Trade hubs such as Dubai can help shift the balance by linking producers directly to buyers, finance and downstream opportunities - moving governments and farmers from mere suppliers to true partners in the cocoa economy.

Digital traceability as advantage

New regulations, such as the EU's deforestation rule, are making digital proof of origin non-negotiable, with the US and Asia likely to follow. Fintech platforms now allow direct farmer payments and tokenised investment, bypassing layers of intermediaries. Blockchain-enabled traceability, paired with AI-driven yield forecasting and satellite monitoring, can make supply chains both transparent and responsive. Digital transformation is therefore more than compliance as it broadens participation and turns sustainability demands into a competitive edge for the cocoa trade.

Capturing shifting consumer demand

Younger consumers increasingly favour healthy, ethical products and are open to alternatives beyond chocolate – from cacao-based drinks to flour made from discarded pods. Producers and traders that invest in innovation and diversify product lines can tap new markets as lifestyle trends evolve and extract greater value from the crop.

Governments as equity partners

Producer governments remain stuck in a supplier role, capturing little of the downstream value. Raising farmgate prices or subsidising inputs is not enough. Public-private partnerships that grant governments equity stakes or revenue shares in downstream operations would create a fairer distribution of value and a more stable foundation for the cocoa trade.

Accelerate innovation across the value chain

The cocoa sector must embrace innovations that ease pressure on traditional supply while lowering the environmental footprint of production. Investment in disease-resistant cultivars, cell-cultured cocoa, precision fermentation and plant-based cocoa extenders will help stabilise supply, reduce environmental impact and meet consumer demand for sustainable alternatives.

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