Photo from Microsoft Stock Images

Eleonora Escalante Strategy
presents
the Summer Saga of the year

Cacao and Coffee 101.

Success strategies for Small Farm Holders

Episode 12.

Key Resources Part 2

Indonesian Cacao

www.eleonoraescalantestrategy.com

21/8/2026

Cacao and Coffee 101.
Success Strategies for Small Farm Holders

Next saga:
Human Talent:
From Feudal
Slaves to Digital
Beggars.
As of
October 15th

Outline Calendar *One Season: From May 22nd to September 25th, 2026*

22-May	Episode 1 ✓	Introduction
29-May	Episode 2 ✓	A new philosophy beyond circular economy
5-June	Episode 3	Sustainability: Beyond caring for the land Part I
12-June	Episode 4 ✓	Sustainability: Beyond caring for the land Part II
17-22 June		Teacher´s week Pedagogical Pause El Salvador (Happy Teacher's Day)
26-June	Episode 5 ✓	New Models of Ownership & Corporate Governance
3-July	Episode 6 ✓	Customer Segments
10-July	Episode 6A ✓	Customer Segments Version 2.0
17-July	Episode 7 ✓	Value Propositions I
24-July	Episode 8 ✓	Value Propositions II
31-July	Episode 9 ✓	Distribution Channels
07-August	Episode 10 ✓ We will work on vacations	Certifications Quality Control (FAIRTRADE)
14-August	Episode 11 ✓	Key Resources Part I
21-August	Episode 12 ✓	Key Resources Part II Indonesian Cacao
28-August	Episode 13	Revenue Streams Cost Structure Ethiopian Coffee
04-Sept	Episode 14	Competitiveness, Research & Innovation
11-Sept	Episode 15	Financing & Access to Capital
18-September	Episode 16	Key Partnerships
25-September	Episode 17	Epilogue Summary Conclusions Research Agenda

This outline is subject to change if the author considers it appropriate for your learning experience.

Eleonora Escalante Strategy
State of the Art Corporate Strategy

Key Resources Part 2

AGENDA

Cacao and Coffee 101. Success Strategies for Small Farm Holders

1. Illustrating key resources needed by learning about Ethiopia and Indonesia
2. Indonesian Cacao
   a. Historical standing
   b. Current Economic Structure Indonesia
   c. Social and Employment Context
   d. Exports and Imports
   e. How did Indonesia organize its resources to strengthen cocoa small-farmers
3. Ethiopian Coffee → this case will be used as example for episode 13 (revenue streams and cost structure).

Photo Source: Microsoft Stock Images

All the references cited and used for our inferences are shown in slide 15-16.

Key Resources Part 2

We have already covered the human capital section. We will continue with the rest of factors today.

All the references cited and used for our inferences are shown in slide 22-24

Key Resources are more than a playbook. Without them, farmers will never be able to find the best formula for their differentiation efforts with coffee and cacao. Remember we are building a differentiation strategy.

What is a differentiation resource?

It is every resource required to supply a unique product with a value that customers are willing to pay with a price premium for:

a) Extra-Fine quality
b) Superior degree of varieties to choose
c) Exceptional sensorial experience at testing
d) Excellent delivery
e) Improved brand image
f) Higher Certainty of the PDO of coffee or cacao beans
g) Outstanding sustainability: caring for people, caring for the land/environment, caring for society of upstream producers.

- There are at least 5 key resources to consider. These resources should be more valuable than the accounting assets of the small farmer balance sheet:

Cash

Cash

- Cash liquid deposited in banks, cash invested in interest-bearing accounts or in treasury bills, bonds (notes).
- The cash can be invested in minority passive or active investments or even overnight funds.
- Any lower risk cash management security is included.

Fixed

Land Proprietorship ✓

Building, Plant, Equipment, etc. ✓

- Long Lived Real Assets that include the value of the land, any erected shop, office, warehouse, or construction related to the farming activities, processing plants, machinery, equipment, vehicle to work the land, etc.
- The valuation of the fixed assets is at historical cost (book value) adjusted for estimated loss provision in value from the aging of the PPE. This adjustment is called depreciation.
- The land can rise its value particularly if the farmer invests in its protection and sustainability improvement.
- When the land is leased by the farmer: if it is treated as an operating lease, the lease is an expense of the income statement. If it is treated as a capital lease, it is recognized both as an asset and as a liability on the balances sheet.

Operational ✓

Non-Cash Operating Working Capital

- This is calculated as the difference between Operating current assets (minus) Operating current liabilities.
- It is calculated as:
- **Non-Cash Operating Working Capital =** Inventories (+)Other noncash current assets (-)Accounts Payable (-) Other non-interest-bearing current liabilities
- **Or Non-Cash Operating Working Capital =** (Current Assets (-) Cash and Marketable securities) (-) (Current liabilities - Short Term debt and current portion of long-term debt)

Human ✓

Human Capital

- Operational Workers (employees of the farms) value
- Social Welfare Benefits of the Operational workers (pension social security)
- Worker's time invested in education
- Training received, from previous certifications too.
- Staff (administrative)
- Owner leadership and dedication
- Specialized skills obtained by personnel

Non-Physical

Intangible & Intellectual Rights

- Goodwill
- The New Protected Denomination of Origin (PDO)
- Brands
- Patents
- Trademarks (Geographical Indication GI, or a Denomination of Origin DO)
- Secret formula blends of cacao or coffee
- Copyrights
- Company Farm data
- Any other intangible asset

Source: Swaminathan, B. My personal notes on his course at Johnson School Cornell University: Economic Evaluation of Capital Investments, Spring term 1999.

INDONESIA

Resources for Cacao Small-holders

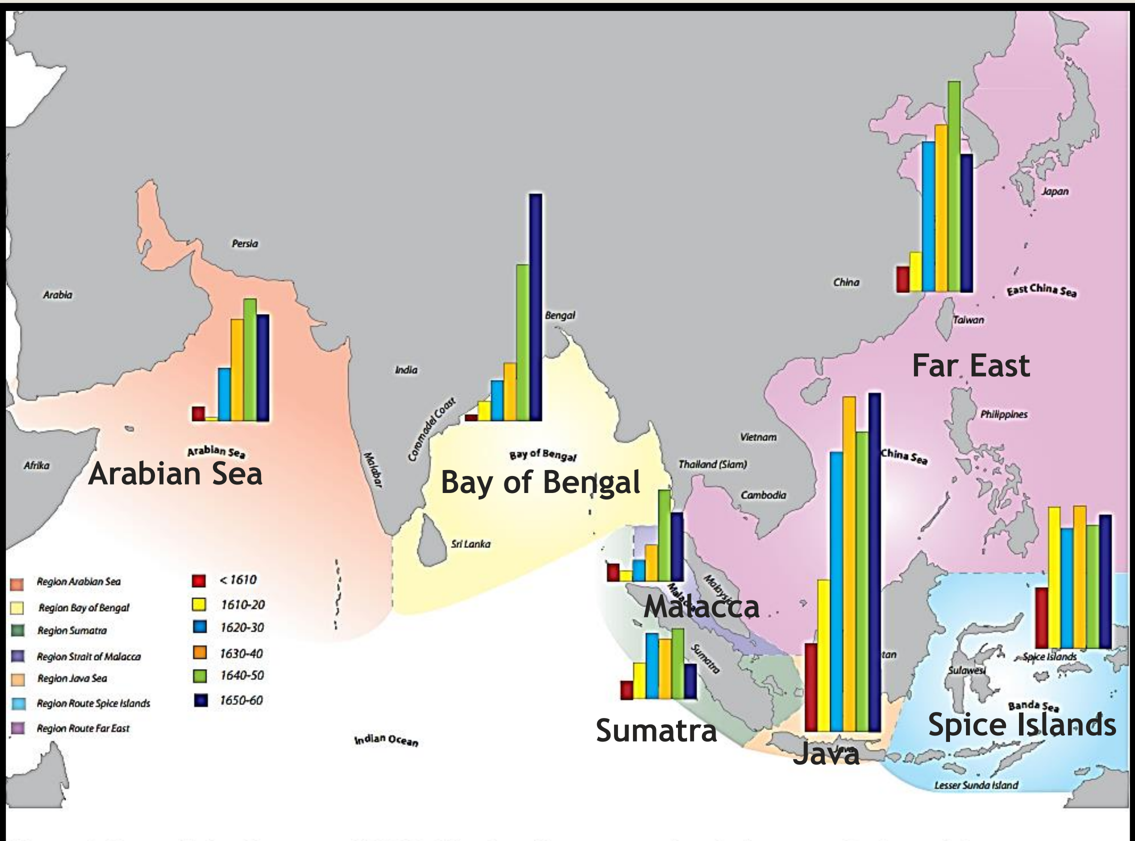
Key Resources Part 2

INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

The Dutch East India Company (Verenigde Oostindische Compagnie - VOC) settled its hub of commerce in Asia, in the territory of what is now Indonesia.
For the Dutch frontrunners of the 17th century, the VOC endeavors created wealth as has never seen in Europe, contributing to the enrichment of the Dutch Republic in the middle of a war against Spain.
According to Professor Jan Nijman, the VOC was the trading agency model for excellence that every king in Europe wanted to copy.
The VOC operational base was established in Batavia (Jakarta), in the territory of Java.

The Indonesian archipelago as we know it today represented the heart of trading and commerce for the Dutch frontrunners of the 17th century. Indonesia was the Dutch East India possession. It was there, where the trade prospered through the VOC.



Map 3.6: General development of VOC shipping (frequency of arrivals per region) to 1660

The VOC hub of trade was established in Batavia (Jakarta, the current capital of Indonesia).
As of 1595, the intra-Asian maritime network of the VOC was happening in 6 maritime regions:

1. Arabian Sea
2. Bay of Bengal
3. Sumatra
4. Strait of Malacca
5. Java Sea
6. Spice Islands Route
7. Route Far East

The trade of the VOC was not only occurring between Asia and the ports of the Dutch Republic (Antwerp), but it was also occurring between all the Dutch trading posts ad strongholds in Asia.
According to Parthesius, between 1595 and 1660, 1,368 VOC ship voyages between Europe and Asia were recorded, and 11,507 voyages in the intra-Asian network occurred.
The spice islands region and the Java sea were the important supply and destiny of core products for the VOC.

Image Source: Parthesius, R. Dutch Ships in Tropical waters. The Development of the Dutch East India Co. shipping network in Asia 1565-1600. Page 19.

Key Resources Part 2

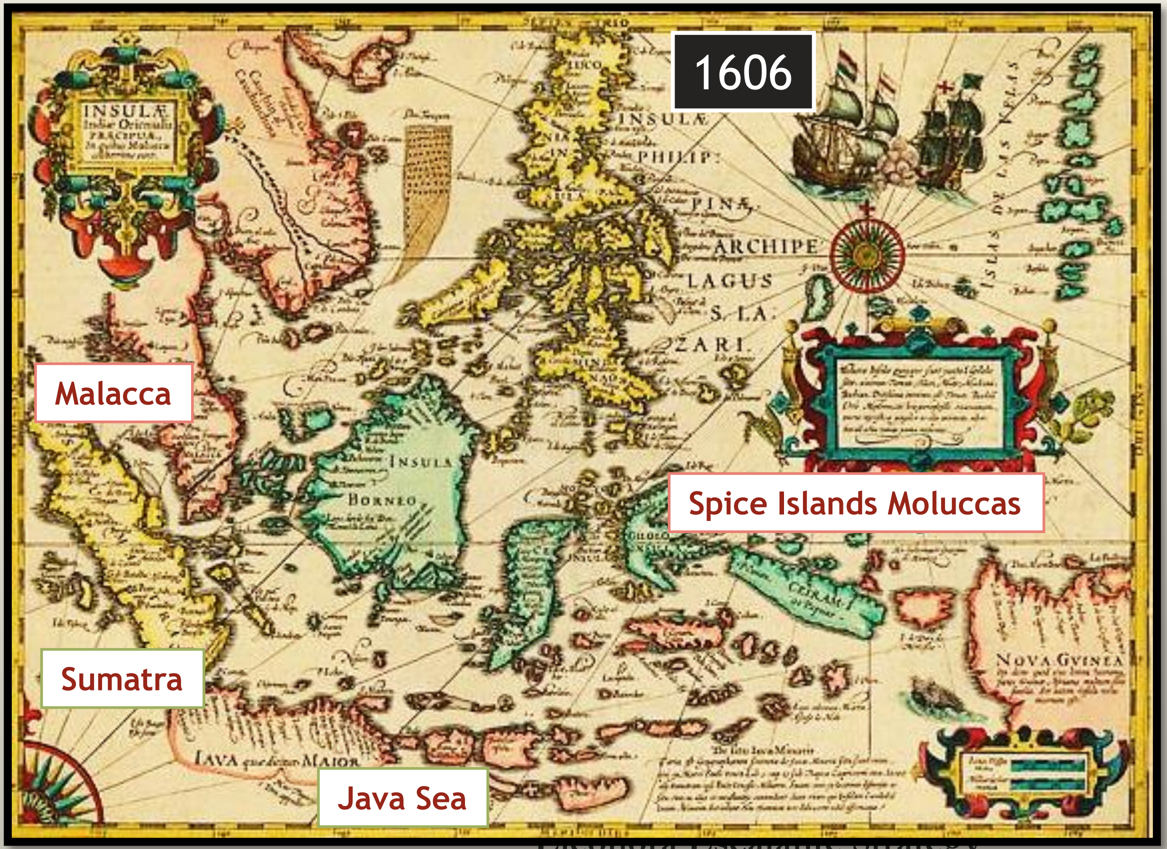
INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

The VOC trade shipping system in Asia, with headquarters in Batavia (Java Island) philosophical foundation was the search for profits. The VOC built an economic power that was translated into political and military leadership as of 1602.

The VOC was founded as a merger of six Dutch companies, and its impact on trade was so disruptive then that changed the existing rules of it. It was between 1595 and 1660 that the geographic expansion of shipping activities out of the region of the map at your right changed trade history forever.

The VOC trade and shipping system gave birth to the Dutch East Indies territories, the most important colony for the Dutch Republic in Asia.



Historically, the Indonesian Archipelago was the VOC center of operations that extended shipping commercial routes from Mocha (Yemen) to Nagasaki (Japan).

The points of presence of the VOC were called trading factories and/or fortified basis with military control, and direct supervision of production.

Among the most important trade products of the VOC trade between the East Indies and Europe, and within the Intra-Asian network, we can mention:

- Coffee from Yemen
- Silk from Persia
- Tin from Malacca
- Porcelain from China
- Textiles from India
- Spices from the Indonesian Islands, Malabar and Ceylon.
- Opium from Bengal
- Tea and Elephants from Ceylon
- Precious metals from Japan

Image Source: Insulae Indiae Orientalis made by Hondius, Mercator Atlas first published in 1606. https://www.oldworldauctions.com/catalog/lot/110/618

Key Resources Part 2

INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

The VOC established in less than 50 years, a trade network in Asia with the following characteristics:

1. **Flexibility in marketing strategies:** Products were sold where the prices were highest, Asian ports or Europe, instead of moving everything to the Dutch Republic.
2. **Monopolistic trading:** the VOC held monopoly of several commodities, and this allowed to manipulate prices, by temporarily reduce supply through hidden storage.
3. **Dumping practice:** the VOC was eager to grow larger market share, sacrificing short term losses (with low-prices below the cost of production), in their pursuit to make long-term profits.
4. **VOC paid wages:** employees and administrators were paid on a provision basis and later fixed salaries.

The VOC trade and shipping installed a culture of reinvestment and business growth, in which the profits of each year were the resources used as a source of reinvestment and permanent capital for periods of 10 years.

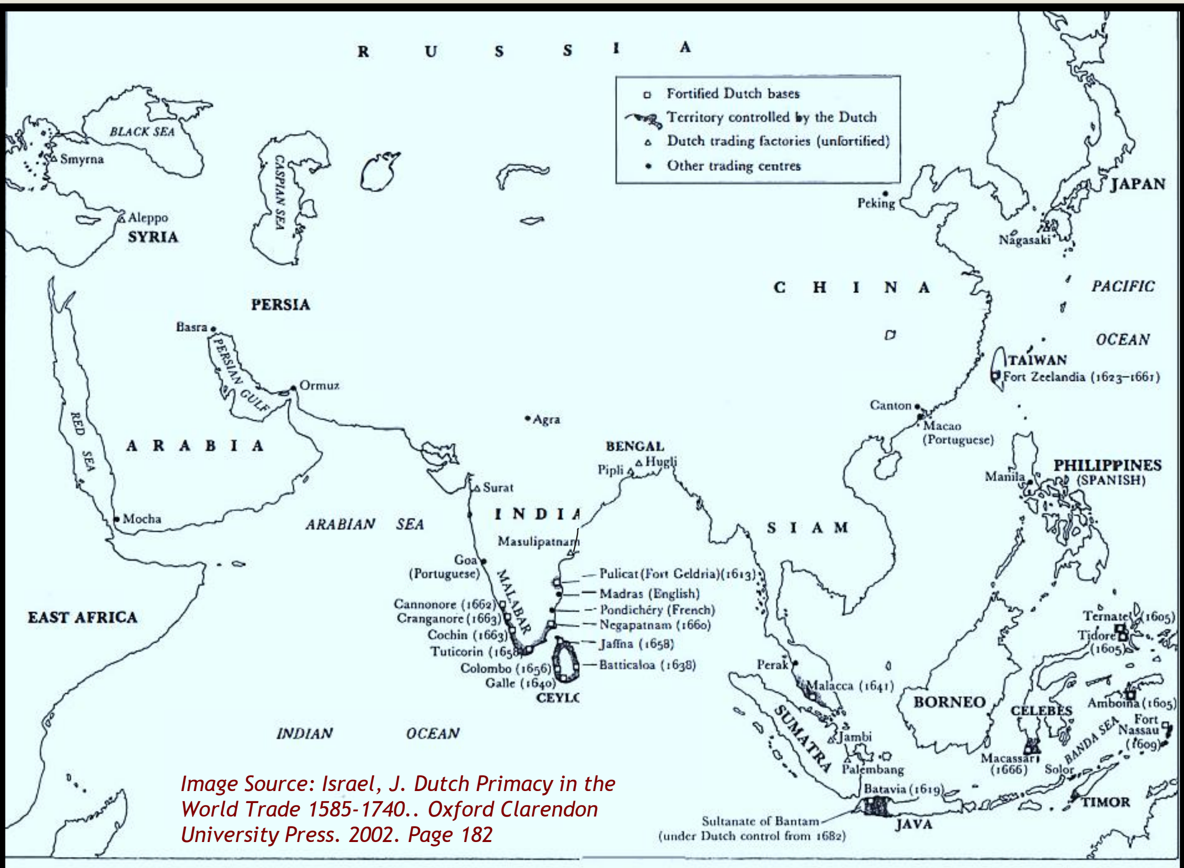


Image Source: Israel, J. Dutch Primacy in the World Trade 1585-1740.. Oxford Clarendon University Press. 2002. Page 182

5.4 The Dutch empire in Asia at its height, c.1670.

During the 17th century, the nature of the trading posts for the Dutch VOC was philosophically different in comparison to the rest of the empires: The Dutch were not interested to control the land, but in trade. Even the military operations and forts were conceived to safeguard trade. Initially, the VOC was acting as an intermediation agent, buying goods and services at every base (factories or trading centers), and then selling them where they were needed, gaining a profit in the exchange. Can you see the VOC philosophical perspective?

Over time, the evolution of the VOC scope changed with the purpose to keep the trade smooth and to establish quality control of production. They installed Batavia in Java in 1619, but it became a colony under Dutch control as of 1682.

Additionally, the VOC was vertically integrated but decentralized in Asian production centers, shipping, maintenance of trading posts, shipbuilding, storage (warehousing) and marketing in the Dutch Republic, and cartographic services.

The trade in Asia by the VOC, was planned and coordinated from Batavia, not in Europe.

Key Resources Part 2

INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

The Importance to show our readers about the historical roots of Indonesian Cacao. The roots of growing cacao in Indonesia occurred when the archipelago was a colonial possession of the United Kingdom of The Netherlands. The Dutch East Indies were controlled by the Dutch Republic for ECONOMIC profits based on trade and commerce. The VOC took military action to take-over different production zones for gaining the monopoly of the crops, but their goal was not to perfect colonialism as the British did.

The VOC was established during the 80 years war of independence of the Dutch Republic from Spain. The VOC was a chartered trading company in which the Dutch new State transferred sovereign rights to the VOC, and it provided funds and military support for its operations and for its defensive strategy in Asia.

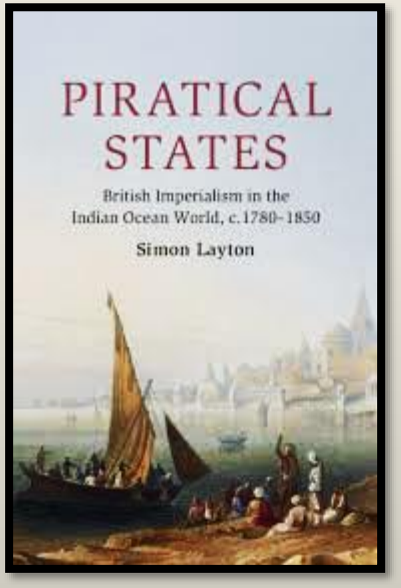


Image Source: Layton S. Piratical States: British Imperialism in the Indian Ocean World, c.1780-1850. Cambridge University Press; 2026.

The Dutch government helped the VOC to assert naval and military power in the East Indies. It was permitted to act on behalf of the Dutch Republic State.

The VOC built fortifications, fought wars, made treaties with other powers, and things were positively growing for the Dutch, until England captured most of the trade with China by the 18th century.

When England became the protagonist of trade in Asia, Japan stopped to provide gold to the VOC as of 1752. Most of the forts and strongholds of the Indian coasts and the points of access in the Persian Gulf were lost to England during the 18th century. At the 19th century entrance, only Indonesia was kept as a Dutch colony and Ceylon was ceded to the British. Finally, after the Napoleonic wars in Europe, the Dutch VOC ceased to exist. Why?

According to Nijman, there was a mix of several reasons:

1. Large-scale corruption in the Asian territories
2. Dutch capital flight to invest in the English East India Company
3. Shift in demand for certain commodities
4. The draining conflicts of interests between the political interests of the Dutch Republic and the economic logics of the VOC.
5. The VOC core strategy drifted from commercial to territorial possession of the land, which increased the expenditures of the company. Britain's invasions of Java and Ceylon occurred (the latter taken from the Dutch in 1796)
6. Inadequate military posture after England outstripped the Dutch sea power in Asia. The VOC was not built for political domination but used military power to increase or protect economic trade. This strategy was opposed and different to what England did in Asia
7. The VOC deterioration and decay occurred, and the Dutch East Indies colony emerged as a territorial possession with a cultivation system, while England military and political ambitions in Asia.

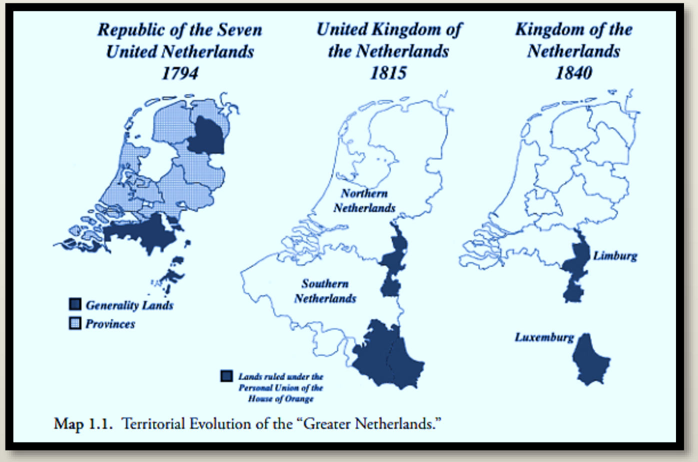
Key Resources Part 2

INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

When the VOC weakened its operations, the shift to Dutch Colonialism occurred.
When the Dutch Republic was taken by Bonaparte, Marshall Daendels was appointed as governor-general in 1808 to Batavia.
Then during the British Interregnum (1811-16), Britain Governor Thomas Raffles introduced the land-rent system and other British imperialist practices without success.
The Java Diponegoro war occurred between 1825-30.
From 1830 – c.1870, the Dutch governor-general Johannes van den Bosch introduced the Cultuurstelsel (compulsory cultivation period) with the purpose of making the colony more profitable and re-implement the plantation model of the Caribbean but now suited for the Java archipelago.

The Netherland Indies (what is now Indonesia) as of the 19th century, shifted its political-military and economic strategy. "As of King Willem I (1815), the United Kingdom of the Netherlands, founded a series of corporations to which he delegated aspects of his absolutist sovereignty, including the rights to exploit royal domains…"



Map 1.1. Territorial Evolution of the "Greater Netherlands."

Image Source: Schrauwers, Albert. Merchant Kings Corporate Governmentality in the Dutch Colonial Empire, 1815-1870. Berghahn Books. 2021.

Cacao was introduced from the botanical gardens of Bogor (formerly Buitenzorg), and gradually, after its acclimatization, it became a marginal crop. "While cocoa cultivation initially remained marginal, overshadowed by coffee or rubber, it gained importance thanks to the fertility of volcanic soils and a constantly growing global demand."

Image Source: https://www.emersonkent.com/map_archive/imperialism_asia_map.htm

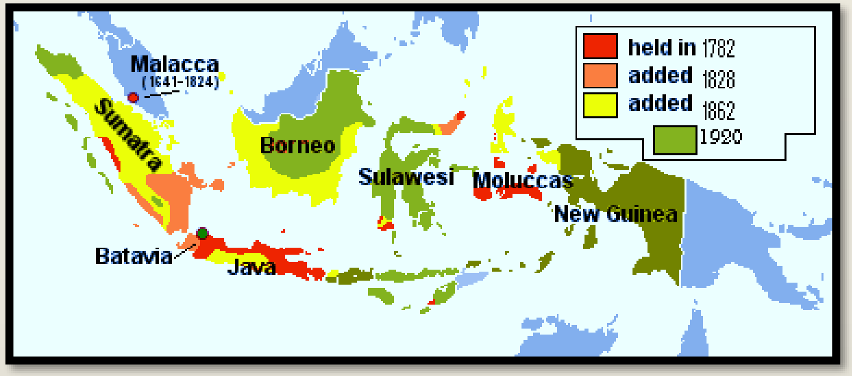
The initiative of the "Cultivation System" took place under Governor Van Den Bosch to stimulate Javanese farmers to grow more crops for exports. The motivation of this system was to facilitate the emergence of the private planter class. The cultivation system has been criticized as oppressive and exploitative. However, it helped to put half the population to work in tea, tobacco, indigo, sugar and coffee plantations.
Cacao made its entrance in the territory through the Botanical Gardens at Bogor.

Key Resources Part 2

INDONESIA: Historical Standing

All the references cited and used for our inferences are shown in slide 22-24

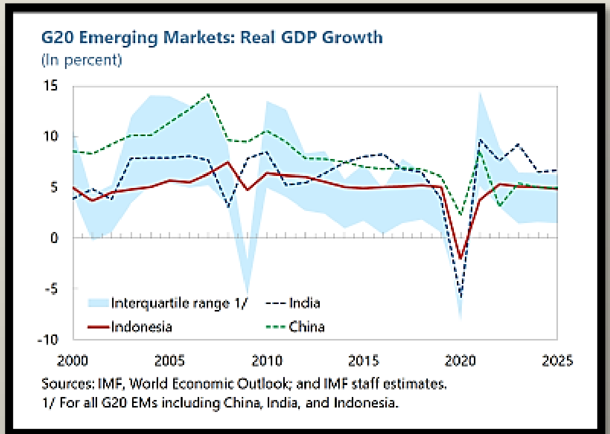
Dutch Colonialism continued until 1949. Between 1828 to 1920, the Netherlands continued growing its control over the rest of the archipelago. This expansion was through agreements with local rulers (called sultans or princes).
With each new territory, roads, railways, steamships and communications were developed to serve the new plantation economy.
In 1901, the Ethical Policy project began under Dutch Queen Wilhelmina, as financial aid from the Netherlands to the Dutch Indies in health services and education, but then it was inefficient.
World War II cut the continuity of the Dutch rule under Japan authorities in 1942, and three years later dictator Sukarno took the leadership of the new state Indonesia until a coup d´etat in 1967 from another dictator General Suharto who established a regimen of 30 years (governing between 1967-98).
Since Y2K, several presidents have governed the nation as a democratic republic. As of 2024, Pranowo Subiano is the current president of Indonesia.



Map Source: https://www.sil.si.edu/expeditions/1926/map/index.cfm

- Indonesia declared its independence from the Netherlands in 1945. However, the portion of west New Guinea was added in 1969. East Timor gained its independence from Portugal in 1975, and it was kept under Indonesia´s rule until 2002.
- The Indonesian Archipelago is a complex diverse group of 17,500 islands, of which 7,000 are inhabited. The main islands are Sumatra, Borneo (Kalimantan), Java, Celebes, and the western part of New Guinea.
- The population of Indonesia is 284 million (2024). With numerous ethnical groups, being the most relevant: Javanese (40%), Sundanese (15.5%), Malay (3.70%), Batak (3.6%), Madurese (3.03%), and the Betawi (2.88%).

- The official language is the Indonesian, but there are 250 multiple dialects.
- The inequality in GINI index is 0.4 (rural), and 0.34 (urban).
- The position rank in the Human Development index is 113.
- The GDP of Indonesia is 1.45 trillion USD (2025). The nation has grown from 165 billion (2000) to 1.45 trillion (2025) in 25 years. This is remarkable.
- Land area: 1,904,443 sq km
- Sea area (economic zone): 3,166,163 sq km
- Climate: Tropical
- Currency: Rupiah (Rp)
- Minimum salary per month: USD $111-USD $317/month. Agriculture: USD $194/month



The GDP growth during the last 25 years for Indonesia has been around 5% average.
https://www.imf.org/-/media/files/publications/cr/2026/english/1idnea2026001-source-pdf.pdf

Key Resources Part 2

INDONESIA: Current Economic Structure

All the references cited and used for our inferences are shown in slide 22-24

Seven years ago, Indonesia initiated a visionary strategy under President Widodo: Golden Vision 2045.
According to the IMF, Indonesia´s goal to becoming a high-income country by 2045 has driven the government to target higher real growth via a supportive macro policy mix and expanding government-led initiatives. These include Industrial Policy (IP) to lift the value added of Indonesia's commodities (down-streaming), gain self-sufficiency in food and energy, boosting human capital investment.
However, most people live as low-class citizens.

Indonesia´s economic structure has shifted since the year 2000. Its GDP growth is the result of a balanced contribution of all economic sectors.

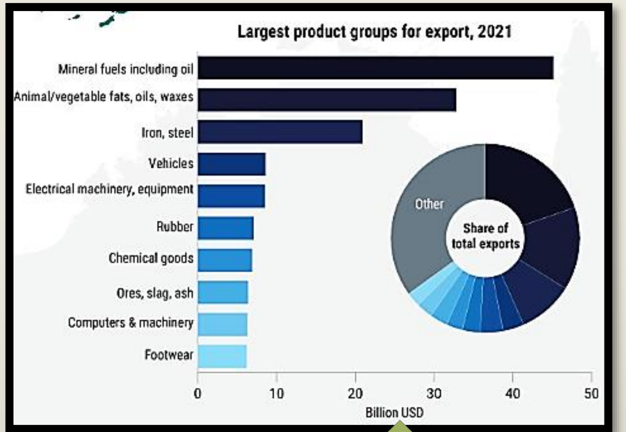
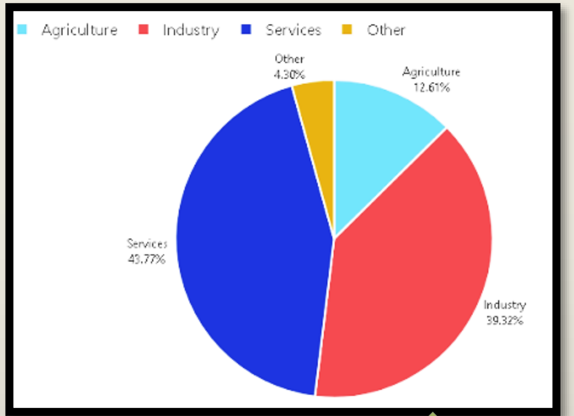


Image Source: https://geopoliticalfutures.com/indonesias-record-breaking-year/



Indonesia
BMI Fitch Solutions Trade & Investment Risk Report Quarterly Report June 2026.

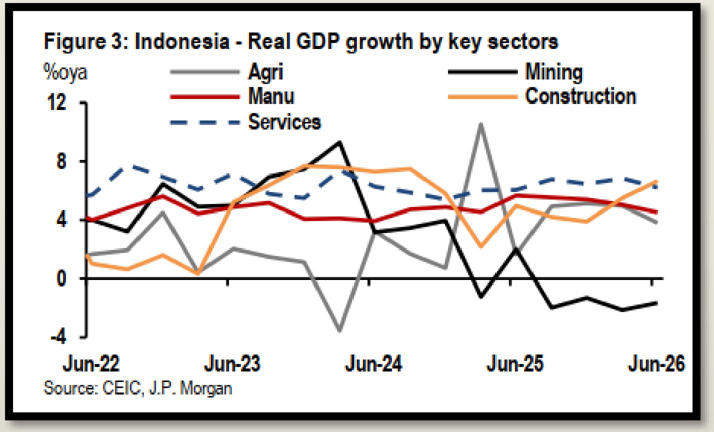
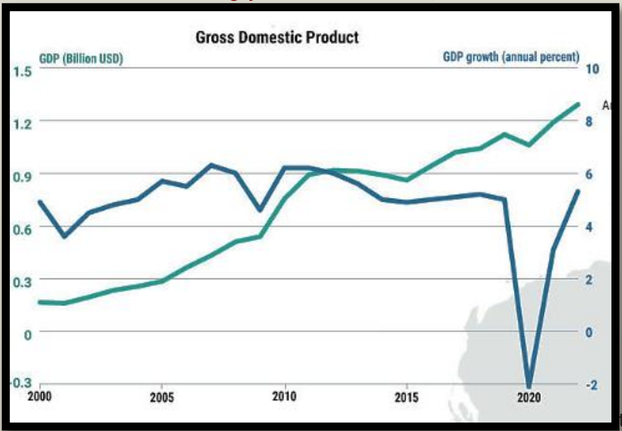
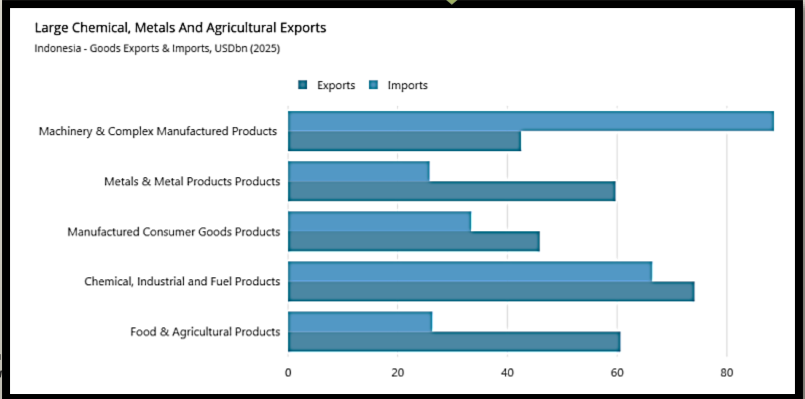


Image Source: Boonnuch, Ch. Indonesia JPMorgan Economic Research Asia Pacific, 6-Aug-2026.





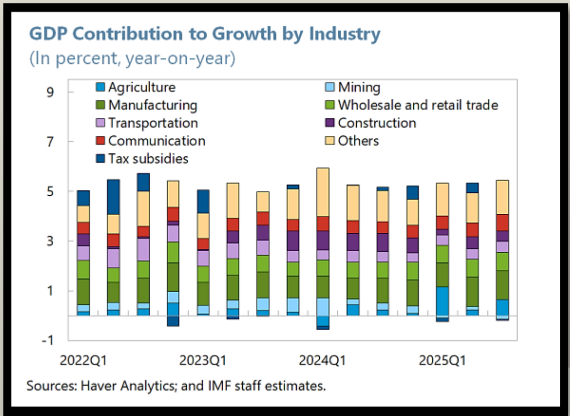


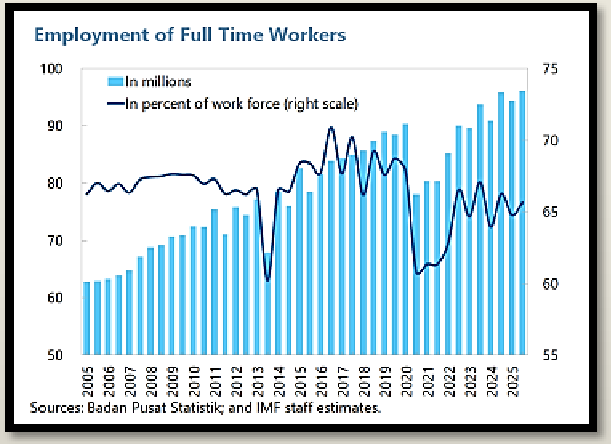
Image Source: IMF Executive Board 2025 Article IV Consultation Report

Key Resources Part 2

INDONESIA: Social and Employment Context

According to the Economist Intelligent Unit, Indonesia is the largest and most populous economy in South-east Asia, but much of its labor force remains low-skilled and informal. The economy is heavily reliant on the production and export of raw commodities, including coal, coffee, palm oil, nickel and natural gas. The government has sought to develop value-added industries, particularly in manufacturing and downstream processing of raw materials; however, this shift has enjoyed mixed success, owing to infrastructure constraints, regulatory challenges and global market fluctuations.

Indonesia´s economic structure has shifted since the introduction of the digital economy. It has caused a GDP growth in many corporations (and respective industries) because of cost-reduction reasons, but it has impacted the allocation of people who are unemployed, or are displaced by automation, applications, and AI.



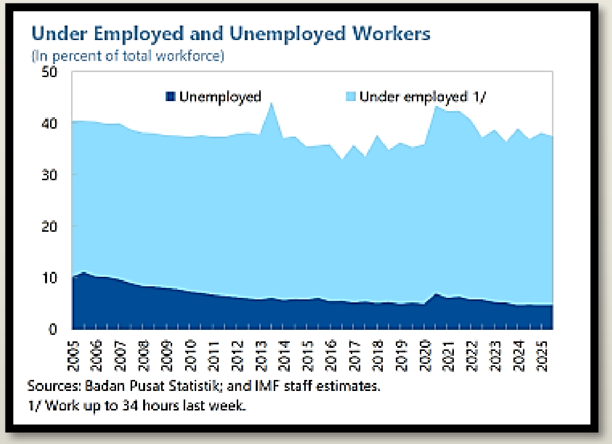
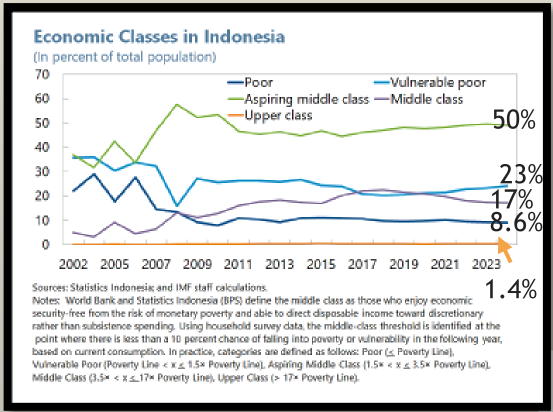


Image Source: IMF Executive Board 2025 Article IV Consultation Report

- According to the IMF, the middle class is shrinking since 2018, see gray line in the graph above. It has gone down by 5.4 percentage points from its 2018 peak.
- Similar declines have been documented elsewhere (e.g., India, Thailand, Vietnam, Brazil) due to job losses from automation, artificial intelligence, and rising living costs.
- Eleonora Escalante Strategy has determined that globally it is required to earn on average $20 pppd to become a middle-class citizen. Our value is calculated using consumption patterns per month.
- For Indonesia, the minimum wage per month is 3,451,945 IDR (US$ 6.46 pppd), this implies that even certain part of the aspiring middle class is earning a minimum wage.

Social class Analysis 2025 INDONESIA - 284 million in total are classified (World Bank-IMF)					
Indonesian Social Classes	Lower Threshold	Upper Threshold	Approx % of the population		Population (million people)
Poverty Line (P)	$0	$ 3.00 pppd	8.6%	81.6% is low class	24.4
Vulnerable poor (V)	$3.00 pppd	$4.50 pppd	23%		65.3
Aspiring Middle Class (AMC)	$4.50 pppd	$10.50 pppd	50%		142
Middle Class (MC)	$10.50 pppd	$51.00 pppd	17%		48.3
Upper Class (UC)	$51.00 pppd	>	1.4%		4.0



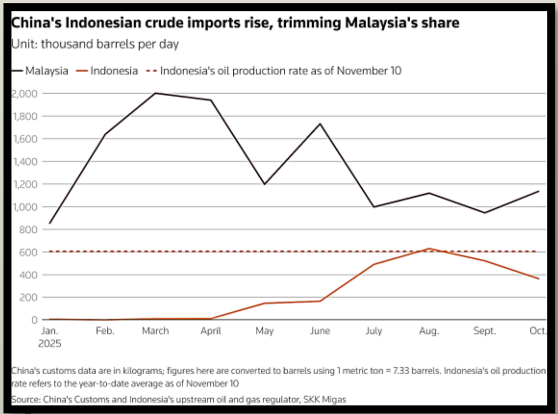
All the references cited and used for our inferences are shown in slide 22-24

Key Resources Part 2

INDONESIA: Exports and Imports

All the references cited and used for our inferences are shown in slide 22-24

According to the EIU (June 2026) country report, the exports of Indonesia represent 21% of the GDP at current market prices. This percentage represents an amount of around 290 billion USD (year 2025). According to Standard and Poors, Indonesia current Crude Oil production is 605,000 barrels per day.



Source: https://www.reuters.com/business/energy/surging-chinese-imports-indonesia-oil-point-to-rebranded-iranian-crude-traders-2025-11-21/

Indonesia´s economic partners in international trade

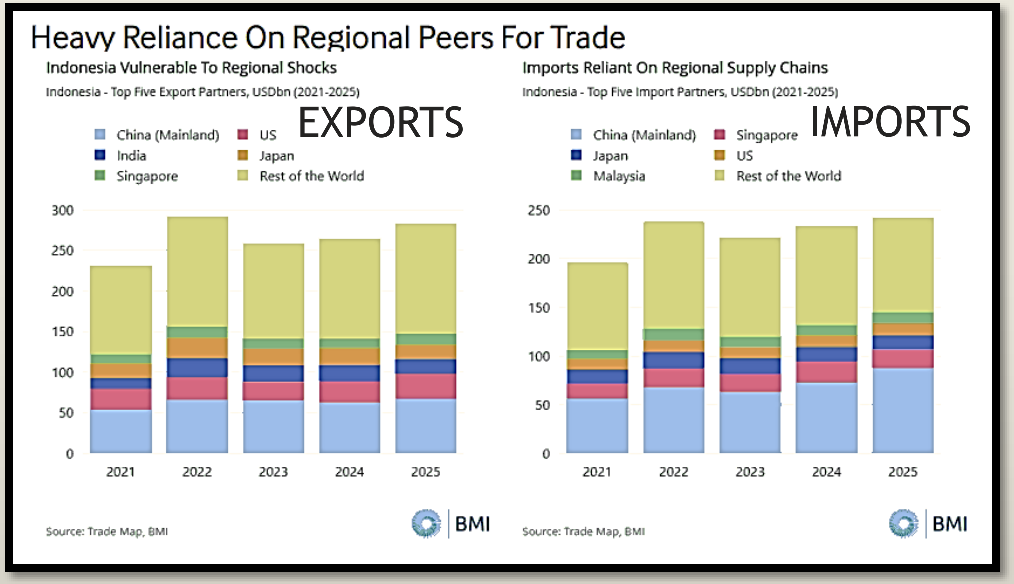


Image Source: BMI-Fitch Solutions. Indonesia Trade & Investment Risk Report - June 2026.

Image Source: IMF Executive Board 2025 Article IV Consultation Report

- Indonesia free-trade policies have promoted numerous trade agreements to diversify its trade. Indonesia is number one principal producer and exporter of nickel in the world (commodity).
- Indonesia exports different types of commodities, mainly:
  - Agricultural commodities: coffee, cocoa, rice, palm oil and rice.
  - Energy commodities: Petroleum Oil, Coal, and Liquefied Natural Gas
  - Industrial commodities: iron and steel, nickel, natural rubber, tin, and gold.

- Indonesia´s top export partners are her 4 neighbors: China, Japan, India and Singapore. The fifth nation is the USA.
- Indonesia´s top import partners are China, Singapore, Malaysia, Japan, and the USA. The largest import categories machinery and complex manufactured products. Indonesia is making a huge effort to industrialize to support economic growth and manufacture certain technological goods.

Cacao and Coffee 101.
Success Strategies for Small Farm Holders

Key Resources Part 2

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

We have studied how Indonesia has diversified its GDP economic structure.
For Indonesia, the agricultural commodities represent between 12% to 14% of the GDP at any given year.
Cacao represents a substantial agricultural income for Indonesia in its export commodity matrix.
However, Indonesia´s production of cacao has faced different challenges because the country has shifted from producer and exported of cacao to processor of cacao beans (imported from Ecuador or other nations).
Let´s see what has happened.

The ambiguity of the data about Cacao is giant. We have visited the EIU, World Bank, BPS official data, FAOSTAT, ICCO, and numerous researchers.

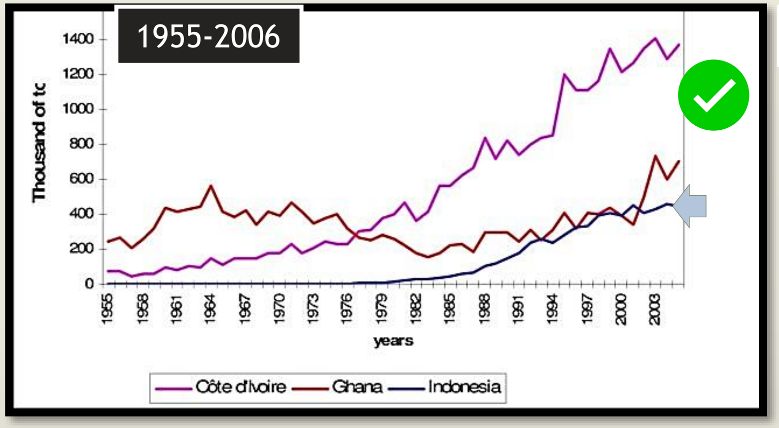
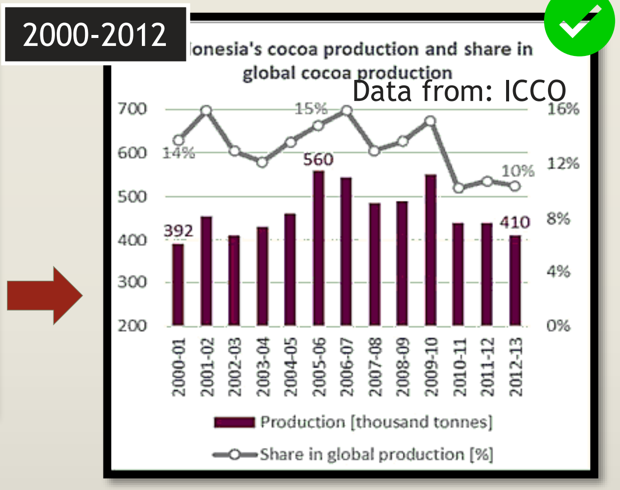
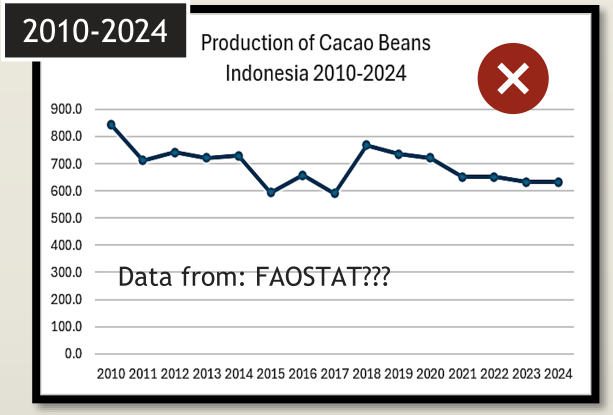


Figure from : https://www.researchgate.net/publication/281711886_The_new_Ghana_cocoa_boom_in_the_2000s_from_forest_clearing_to_Green_revolution



Nugraba, D, and Hitchins, R. Public Private Development Partnerships in commodity sectors, a case study from Indonesia. Springfield Center, Swiss Contact Report 2021.



Production of Cacao beans 2010-2024. Data from FAOSTAT. In thousands of Tonnes.

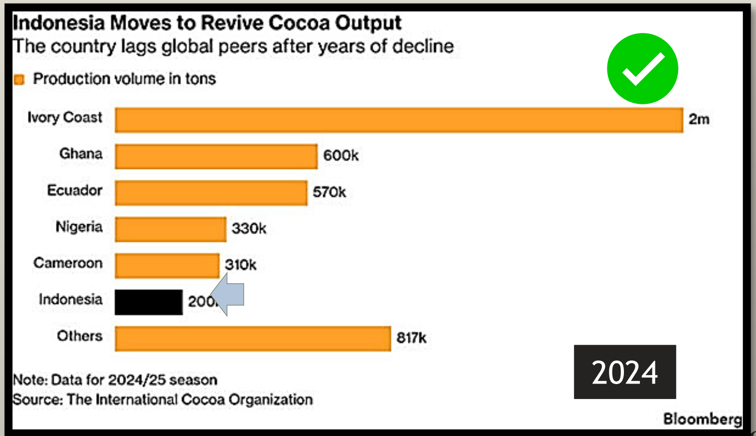
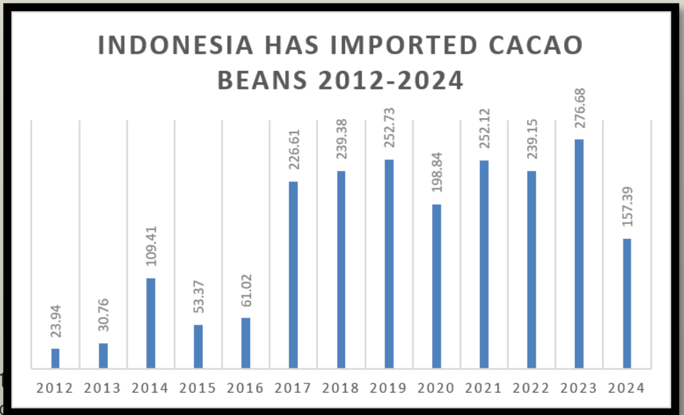


Figure from https://themalaysianreserve.com/2026/08/06/indonesia-seeks-to-revive-cocoa-output-after-years-of-decline/



Indonesia Imports of Cacao beans per year. Source WorldBank WITS website.

Indonesia has been importing Cacao beans as of 2012, mainly from Ecuador, Cote D´Ivoire, Malaysia, Nigeria, Peru, Cameroon, and Dominican Republic. Some years Ghana, Uganda or Kenya have also sent their cacao beans to Indonesia.

Key Resources Part 2

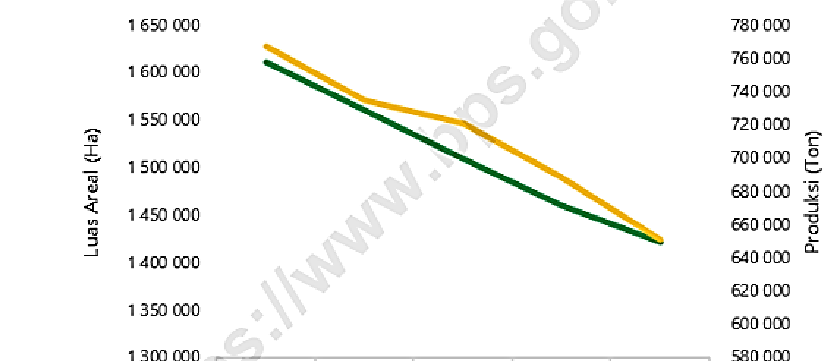
RBI POLICY

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

Resources for the cocoa farmers of Indonesia have been allocated according to the nation cocoa strategy.
Lately the cocoa plantation mix has declined.
Official data from the government states that the area dedicated to cacao plantations is 1.3 million hectares (year 2025).
Indonesia Ministry of Agriculture has stated in November 2025, that only 64% of that area is producing cacao, while the rest of the area is damaged by diseases, or it is in the juvenile phase (it is still not yet producing pods) or the farmers have switched to palm oil.
Additionally, half the farmers do not want to dry the beans but sell them without fermenting "due to marginal price premium from unfermented beans" while monetizing the harvest as soon as possible.
The result: POOR QUALITY of cocoa beans due to no fermentation and processing it is the best option for cacao butter/paste.
So, it seems that most of the beans produced in Indonesian farms are sold unfermented, while only 10% of the cocoa crops are still of fine quality.

**Area, production and productivity yields (2018-22)
Official Data from the Indonesia Badan Pusat Statistik/BPS-Statistics Indonesia.**



	2018	2019	2020	2021	2022
Luas Areal (Ha)	1 611 014	1 560 945	1 508 955	1 460 396	1 421 009
Produksi (Ton)	767 280	734 795	720 660	688 210	650 612

Source:
https://www.bps.go.id/id/publication/2023/11/30/ef4419ba62e6ec7d4490218e/statistik-kakao-indonesia-2022.html

RBI: Resource based Industrialization is an economic development strategy that aims to convert a country´s raw materials into manufactured (or semi-manufactured goods) through local industry for exports or sale in the domestic or regional markets. The RBI is applied to commodities.

What is the Resource-Based Industrial (RBI) Policy and why does it matter for cocoa farmers in Indonesia?

- The RBI policy was launched after the failures of the Import-substitution industrialization (ISI) and export-oriented industrialization (EOI).
- During the 2010s, after China´s evident success with manufacturing, the RBI has been the trendy industrial policy, particularly in ASEAN nations.
- The RBI advantages: a reduction in price volatility of commodities, added value to the communities (raising the value of the products), employment creation, diversification of the economy, building new skills and training in how to process raw materials.
- The RBI disadvantages: a relatively low revenue retention, still heavy dependence on export markets, lack of skilled personnel, and the possible curse of the "Dutch Disease" if no measures are taken into account by the government.
- The RBI strategy of Indonesia in the cacao has propelled the nation to become the Asia´s cocoa processing hub as of 2019.
- The manufacturing processing plants of cacao are FDI (Foreign Direct Investments), and a few domestic-owned processing plants. Foreign grinders from Multinational Corporations (MNCs) dominate the processing grinding, despite the efforts of the government to increase the local domestic investments in grinding cocoa.

The Dutch Disease in economics occurs when an economic sector declines because of the booming of another economic sector, giving rise to inflation and declining savings in investments.

Cacao and Coffee 101.
Success Strategies for Small Farm Holders

Key Resources Part 2

LAND AND TREES

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

Resources are organized depending on the main objective of the corporate strategy. Indonesia shifted from the "bulk cacao" upstream farming to the midstream and downstream manufacturing and processing since the 2010.

The Indonesian government issued a regulatory scheme No. 67/PMK.011/ 2010 concerning the imposition of Export Levy and Export Levy Tariffs to subdue the export of cocoa beans as raw material and move to manufacturing of semifinished products. We suggest a multidimensional rationale for this shift in corporate strategy:

1. RBI policy: Resource Based Industrialization (RBI) was applied to increase the value added to processed cocoa exports,
2. To avoid quality control of the beans at the farmgate, and evade troubles with the buyers
3. To face the substitution of cacao plantations for palm oil or rice
4. Climate change and environmental challenges
5. Diseases: Cocoa pod borer (CPB)
6. Natural disasters and Others.

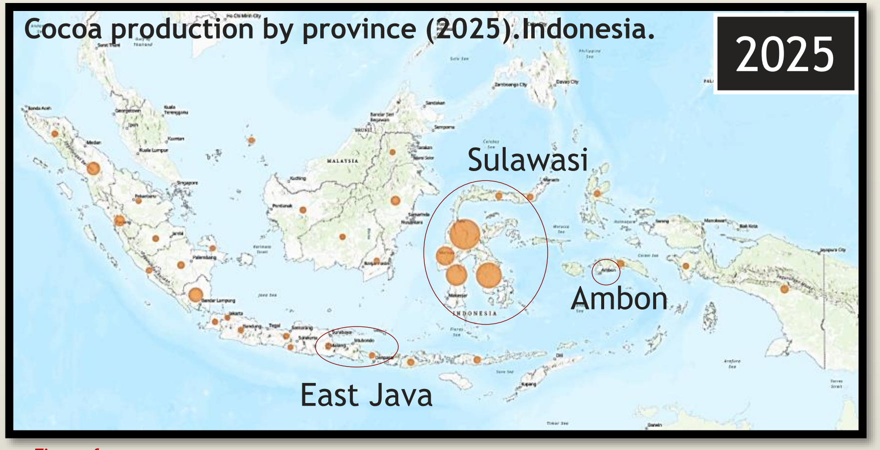


Figure from https://uscssi.hub.arcgis.com/maps/10d66bf3b34b4a9ab329f6389f7ebd68/explore?location=-2.839901%2C121.247278%2C7

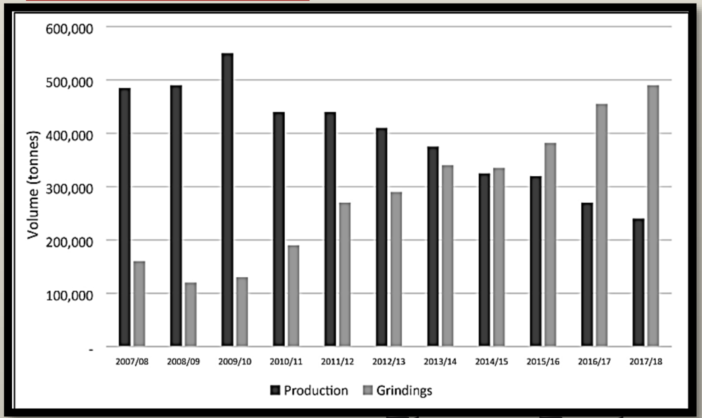


Figure from https://www.researchgate.net/publication/342783324_Resource_based_industrial_policy_in_an_era_of_global_production_networks_Strategic_coupling_in_the_Indonesian_cocoa_sector/figures

The history of Cacao plantations in Indonesia is key to understand why Indonesia has shifted its strategy in commodities.

- The plantation system in Indonesia was introduced during the Dutch colonial phase. We have already explored the "cultuurestelsel" epoch between 1830 to 1870 by Governor Johannes Van den Bosch.
- Despite that cacao was introduced in 1560 to Minahasa, North Sulawasi (called Celebes islands). By 1859, there were between 10,000 to 12,000 cacao trees in Ambon islands (Banda Sea).
- In 1911, the Indonesian Coffee and Cocoa Research Center (Puslitkoka) was established in Jember, East Java.
- After the Independence from Japan (1949), all the Dutch owned plantation companies were subject to nationalization, and the whole industry faced setbacks.
- It wasn´t until the 2000s, that cacao was understood as a profitable source of income, as provider of employment to small-farmers.
- In 2002, the cacao provided employment to 900,000 farming families, most of them from Eastern Indonesia; because of its historical legacy.
- In terms of land, the cocoa centers of production have always beenSouth Sulawesi, Southeast Sulawesi and Central Sulawesi. Additionally other larger state plantations are in East Java, and Sumatra.
- In the graph at your left, you can see the proportion of production, in comparison to the grinding business growth.
- It is confirmed that Indonesia has shifted from producer of cocoa beans to semi-finished manufacturing, importing beans from everywhere since the 2010s.
- Why? Why has this happened?

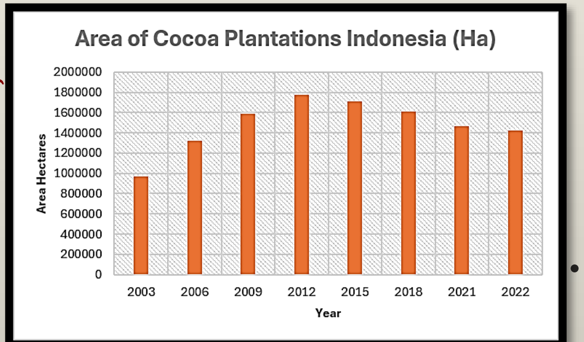
LAND and TREES

Key Resources Part 2

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

Since its beginnings, the cocoa production core area has been 4 provinces of Sulawesi (Sulawesi Tengah, Sulawesi Selatan, Sulawesi Tenggara, and Sulawesi Barat). The rest is scattered in Aceh, Sumatra Utara, Sumatra Barat, Lampung, Nusa Tengara Timur, and Java Timur.



Source: BPS, Statistics Cacao 2022.

The cacao trees are living in 34 provinces of Indonesia. As living species, they are growing in a total area of 1.4 million hectares, but the government suggests only 60% of that area is yielding beans. Let´s learn the whereabouts of the land and the cacao trees of Indonesia.

YEAR 2022

- 99.6% of 1.4 million hectares cacao plantations belongs to small-holders
- The production of the cocoa beans according to the Indonesia Statistics Bureau (BPS), the production of cacao beans was in total 650,612 tons. The ICCO asserts the production was 160,000 tons. Why is this difference? What is going on there?
- The BPS of Indonesia reports a volume of 385,421 tons of exports of cocoa products with a value of $1.3 billion USD.
- Imports Y 2022 ascended to 146,833 tons.

YEAR 2022

- Let´s study the production, areas and yields of the top 10 provinces of cacao farmers in Indonesia. Using the BPS database.

Area and Production Cocoa Beans of Estates in Indonesia by province, year 2022			
Province	*Area HA*	*Production (tons)*	*Yield kg/ha*
Aceh	94,631	36,596	702.00
Sumatra Utara	53,077	35,426	993.00
Sumatra Barat	66,464	35,321	774.00
Lampung	76,903	48,199	793.00
Java Timur	39,142	20,159	761.00
Nusa Tenggara Timur	62,100	21,097	629.00
Sulawesi Tengah	274,003	130,848	729.00
Sulawesi Selatan	179,564	86,915	726.00
Sulawesi Tenggara	227,029	104,649	653.00
Sulawesi Barat	142,319	69,779	792.00
Total top 10	***1,215,232***	***588,989***	***755.20***
The top ten provinces represent 86% in area, and 91% of the total production of cacao in Indonesia.	86%	91%	Average

Source: BPS Indonesia, Statistics Cacao Report 2022.

YEAR 2022

- Trees per hectare: According to Daymond et al. the average size of the cacao small farm is 0.71 ha. The overall range of farm sizes is between 0.11 to 3.2 ha.
- Cocoa tree density: The average is 888 trees per hectare. The range of cocoa trees per hectare is between 272 to 2598 per hectare.
- Shade: The average proportion of radiation intercepted by the cocoa canopy is 67%
- Mean age of the farms: 15 years.
- 96% of the small farmers are the owners of their plots.

Key Resources Part 2

Manufacturing Plants and Equipment

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

Since the 2010s, the cacao national tree park of Indonesia is in productivity troubles because the cacao trees are too sick and the lack of superior cocoa seedlings.
The yields have decreased to 755 kg/ha, or less, in comparison to 1500-2000 kg/ha of the 1990s.
Diseases have affected 40% of the cocoa tree park (Cocoa Pod Borer, black pod, vascular streak dieback, etc).
The farmers in desperation have started to switch to the oil palm industry.
Additionally, because several manufacturing plants are already based in Indonesia (midstream and downstream type), the lack of local production has triggered imports of cocoa beans.

The Ministry of Agriculture of Indonesia has revealed that there are 750,000 tons/year capacity manufacturing-processing plants of cocoa. But currently are working at 60% capacity, given the lack of cocoa beans.

• Segment of the Industry	• Products of the segment	• Number of plants in Indonesia
• Upstream: (at the farm)	• Cacao fruit (pods) • Cacao beans fermented and dried • Cacao beans unfermented	• Not applicable
• Midstream: called cocoa grinding facilities • (semi-finished products of cocoa)	• Cocoa Paste • Cocoa Liquor • Cocoa cake • Cocoa butter (non defatted, wholly or partially defatted) • Cocoa powder	• According to several press sources there are 11 manufacturing midstream plants in Indonesia with capacity of 739,250 tons/year (New York Times Indonesia-TEMPO English) • According to researcher Zulfiandri there were 17 factories in 2007, of which at that time only 6 plants continued operating after 2010.
• Downstream: • Chocolate industry	• Chocolate non filled in blocks, bars, slabs • Chocolate filled in blocks, bars, slabs • Food prepared with chocolate: bread, cakes, confectionery, chocolate specialty	• 900 mini, small-medium chocolate processing plants with capacity of 462,126 tons per year (New York Times Indonesia-TEMPO English) • 31 artisan chocolate high quality from fermented bean to bars with capacity of 1,242 tons per year (New York Times Indonesia-TEMPO English)

Cargill, Gresik-East Java

Barry Callebaut, Gresik, East Java

Barry Callebaut, Bandung, West Java


Guang Chong, Batam Sumatra


Olam OFI, Tangerang Banten, Java


JeBe Cocoa, Gresik, East Java

Mars, Makassar, Sulawesi

Cocoa grinding facilities

Source: Public photos Google.

Operational Working Capital

Key Resources Part 2

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

Since 2014, the World bank recommended to help financially to all farmers with the purpose of fixing their issues then.
The WB proposal was to help farmers to cover their living costs, meanwhile the cocoa trees could yield higher again after new planting, rejuvenation, and/or seedlings of superior quality.

How much money do small farmers need to survive until the cacao trees of their farms are fully functional, without diseases, totally recovered and producing higher yields?
The answer to this question is the non-reimbursable financial aid they need from intl. donors.

After the threat of the diseases to cacao, particularly the Cocoa Pod Borer (CPB) Pest (2000s), the government and the private multinational corporations entered public-private or NGO partnership programs to help farmers with technical knowledge, certifications, farmer training, sustainability support, etc.

List of main initiatives to help small farmers.	Rationale	Details
SUCCESS: Sustainable Cocoa Enterprise Solutions for Small Holders.	Technical solutions to cocoa troubles in harvesting, pruning, fertilization, combat the CPB, etc.	Funded by USDA ad USAID from 2000-2005: Developed Farmer Field School
AMARTA I and II	Partnership with business. Post harvest processing and fermentation.	Funded by USAID from 2007 to 2013.
LED NTT (East Nusa Tenggara)	Cocoa sector technical knowledge and farmer training expertise	Executed by Swisscontact in East Nusa Tenggara province from 2004-12.
SPAN Swiss project for business recovery in Aceh and North Sumatra	Learning about limitations of cooperatives and farmer groups	Funded by SECO, Swiss Solidarity and Chevron Foundation 2005-2009
PEKA Cocoa Economic Development in Aceh	Rehabilitation of cocoa farms, improving yields and processing, access to financial services.	Part of EDFF, donors by the World Bank. 2010-12
FAO FFS: FAO Farmer Field Schools	Control of the pest CPB, experiential learning methods, group learning.	As of 1980s.

It is not a coincidence that the provinces that received these programs, or were actively engaged in them since 2000s, are now in the level of top 10 producers of cacao beans of Indonesia.

There have been more programs such as the Mars Cocoa Development Centers, the MCC Millenium USA support for cocoa farmers, and Swisscontact SCPP (Sustainable Cocoa Production Program).

The missing part of all these programs has been financing management aid and non-reimbursable assistance in the format of working capital, meanwhile the farmers recover their cacao higher yields again.

Source: Public photos Google.

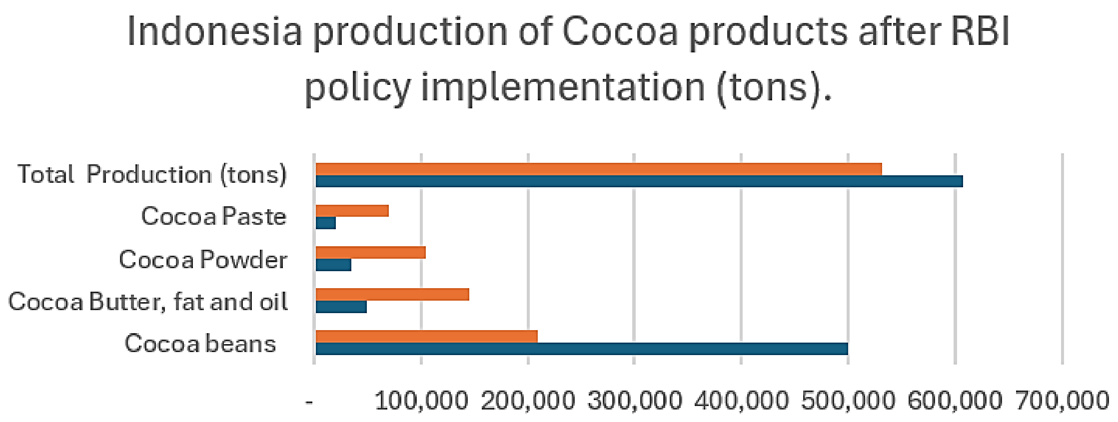
Key Resources Part 2

INDONESIA: How did Indonesia organize its resources to strengthen cocoa small-farmers

All the references cited and used for our inferences are shown in slide 22-24

The business of Cacao in Indonesia shifted because of the RBI policy.
But the low-quality of the beans is not going to change if there is not an incentive to keep certain amount of beans for the high-quality premium segment.

After the RBI policy, Indonesia decided to move from exporting cocoa beans to sell other cocoa products.



	Cocoa beans	Cocoa Butter, fat and oil	Cocoa Powder	Cocoa Paste	Total Production (tons)
2020	210,000	145,000	105,000	70,000	532,020
2010	500,000	50,000	35,000	20,000	607,010

Source: graph created by Eleonora Escalante Strategy with data from BMI-Fitch Solutions Company Indonesia Agriculture Report August 2026. Page 40

Indonesia has started a transformation of its corporate and business strategy, and the shift has occurred during the last 15 years or so. The unit export price of Cocoa butter is 10X multiple of the unit export price per ton of cacao beans.

Our strategic reflections will offer the summary of all our introspections regarding the different resources that we have exposed today, including the section of intangible resources, which is something that Indonesia new value proposition still has a long road to go.

Key Resources Part 2

Bibliography 1/3

- *To be added over the weekend. Thank you for your understanding.*

All the variables measured by the AOC terroir assessment are sources of projects that will require climate change financing. Can you see the link that connects the harvests with possibilities of green finance?
Without a doubt we believe that all the farms on the tropical belt will benefit from an AOC system segmentation or a PDO from the European Union. Our contribution is to open the eyes to all the global value chain players about it. The upstream pricing commodity mistake must be fixed first. And with it, the transparence of the whole value chain will be correct for all, the upstream (farmers), midstream (European-American processors of the beans), downstream (Final transformers into experiences for the ultimate consumers).

Photo from Microsoft Stock Images

Thank you

Coffee and Cacao 101.
Success strategies for Small Farm Holders

https://eleonoraescalantestrategy.com/