Eleonora Escalante Strategy presents the last season of

Central America: A Quest for the Progression of Economic Value. Season IV.

The origin of Central America political-economy.

Period of study: From 1700 to 1900

Episode 12

The Cacao Pilot Scoop of Central America

www.eleonoraescalantestrategy.com

Central America: A Quest for the Progression of Economic Value. Season IV From 1700-1900: The origin of Central America political-economy.

Outline Calendar

Season IV goes from 19 September to 31 December 2025

19-Sept-2025 Episode 1	26-Sept-2025 Episode 2	3 and 10-Oct-2025 Episode 3 & 4	17-Oct-2025 Episode 5	24-Oct-2025 Episode 6
Mexican Influence in Central America	Derailment of violence and inner conflicts between Spaniards and Indians	Independence Bells (1800-1823) Part I Independence Bells Part II	United Provinces of Central America (1823-1840)	A voyage after the Republics Separation (1840-1870)
31-Oct-2025 Episode 7	**7-Nov-2025 Episode 8**	**14-Nov-2025 Episode 9**	**21-Nov-2025 Episode 10**	**28-Nov-2025 Episode 11**
Philosophical Foundations of Agricultural Liberalism 1870-1900	When there is no precious metals?. Agricultural commodities in Central America	The consolidation of the Hacienda Model in Spanish America	The Golden Bean of Coffee in Central America	The Indigo Courage in Central America.
5-Dec-2025 Episode 12	**12-Dec-2025 Episode 13**	**19-Dec-2025 Episode 14**	**26-Dec-2025 Episode 15**	**31-Dec-2025 Episode 16**
The Cacao Pilot Scoop of Central America.	Sugar Industry in Central America	Livestock and other agricultural subsistence products	Bananas joining the Plateau of Central America 19th century	Summary and Conclusions Industrial Factory Development in CA: It was Never a priority

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

Central America: A Quest for the Progression of Economic Value. Season IV

A piece of the economic puzzle of Spanish Central America in Four Seasons

Big Picture of our Content. Season IV as of 19th of September 2025.

Season	Start Date	Finish Date	Number of episodes	Historical Timeline to Analyze	Main General themes
One (I) Autumn -Winter 2024	October 4th, 2024	December 27th, 2024	13 episodes	1492-1558	• Historical foundations • Castile & Aragon: Discovery of Spanish America, the Holy Roman Empire • Charles V Holy Roman Emperor: his local, personal, regional, religious, and international agenda • The Spanish Inquisition
Two (II) Winter-Spring 2025	January 24th, 2025	May 2nd , 2025	13 episodes	1492-1700	• Spanish America with a Medieval Allure: Conquest and Colonization. • Understanding the economics philosophy of the Habsburgs Rulers in Central America: Philip II, Philip III, Philip IV, and Charles II. • Commodities: Mining extraction of precious metal reserves
Three (III) Spring-Summer 2025	May 23rd, 2025	August 29th , 2025	14 episodes	1700-1900	• School of Salamanca • The Bourbon era begins. From Philip V (1683-1746) to Alfonso XIII (1886-1941) • The War of Spanish Succession • The Jesuit Suppression and Restoration (1773-1814) • The meaning of the French Revolution in Spanish America • The Why of Napoleon Bonaparte
Four (IV) Autumn-Winter 2025	September 19th, 2025	December 31st, 2025	15 episodes	1700-1900	• Independence Bells of Central America (1800-23) • United Provinces of Central America (1823-40) • Derailment of violence and inner conflicts • Charted Urban vs Forgotten Rural • Mining + Agricultural Commodities. Never an Industrial Factory Development. • Main agriculture production industries: Cacao, Indigo, coffee, sugar, livestock, bananas. • What´s next?

Past saga: done

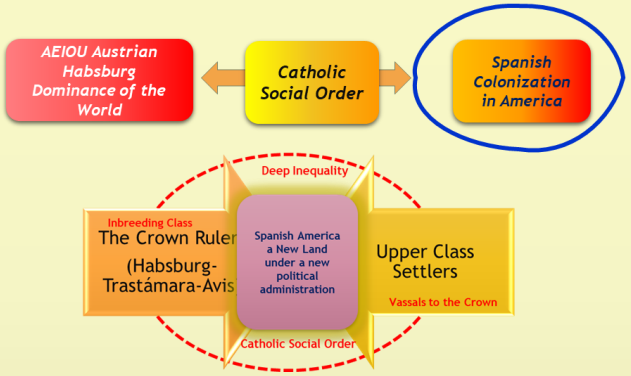
Past saga: done

Past saga: Done

We are here

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America



"Most of good historians are chroniclers of events. A Chronicler narrates, but doesn´t explain the facts. Before proceeding further in our civilization, corporate strategists are obliged to understand the different explanations and interpretations of history. Otherwise, history will repeat under new circumstances".
Eleonora Escalante Strategy. El Salvador

Our agenda for today´s master class:

The Cacao Pilot Scoop of Central America

1. *Cacao 101*
2. *Why was cacao so precious?*
3. *Mapping cacao production-16th/17th century*
4. *The scoop on the move: Horizontal Growth Trajectory 18th-19th centuries*
5. *Consumption patterns driving the demand of Cacao*

Source
https://greendepotgt.com/blogs/news/el-tesoro-de-guatemala-descubriendo-el-mejor-cacao-del-pais

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Cacao 101

What is the cacao plant?

The scientific general cacao name is "Theobroma Cacao L". Theobroma means "food of the gods". According to ICCO (International Cocoa Organization), the Theobroma has been divided into 22 species, of which Theobroma cacao is the most widely known.

The cacao tree with its clusters of red blossom and Golden yellow pod fruits is a plant that grows in the zone called Cacao global belt between 10ºN and 10ºS of the Equator, where the climate is perfectly appropriate for its crops.

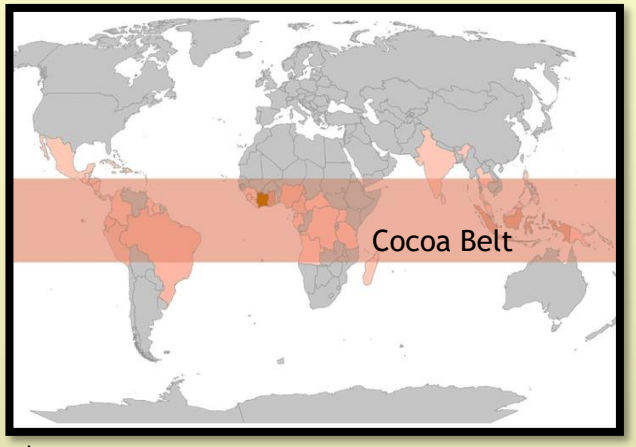
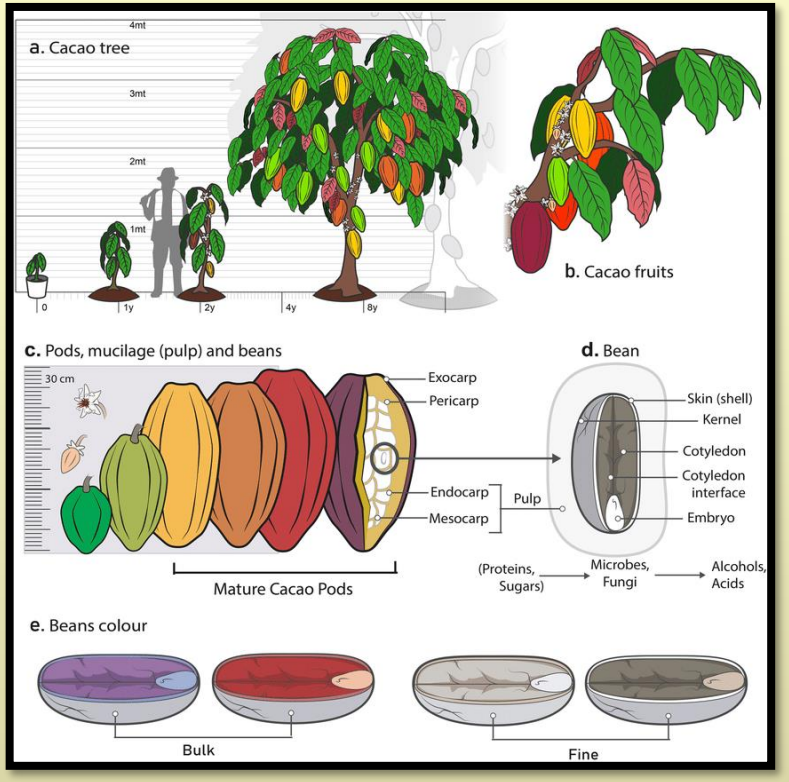


Image source: https://www.researchgate.net/figure/Cocoa-Belt-major-producing-countries-5_fig1_384921187

Constant research about cocoa origins has been updating our knowledge about its geographic roots. However, Europeans found it first when Columbus reached the Atlantic coasts of Central America.

Characteristics of the Cacao Tree:

- It is a tree that remains between 4 up to 8 meters height.
- Its wood is porous and light
- The bark is color cinnamon, with alternating leaves from 30 to 40 cm in length and from 10 to 12 cm broad.
- The flowers are single or united in bunches, on the thicker branches and along the trunk from the root upwards. These are very small on red-white colour.
- The pods take place only from the flowers of the stem or thicker branch. The frit is at first green and then turns yellow, but depending on the variation, it can turn to different autumn palette tints of orange and red. Usually when mature, the pods are entirely color crimson.
- The shape of the pod is at your right. The shell of the pod is softer and encloses a set of 25 to 40 almond shaped seeds of cacao surrounded by s white sweetish pulp.
- The fruit ripens throughout the whole year, but slowly during the dry season. The time needed for reaching maturity is about 4 months.
- There are around one or two regular gathering seasons for harvest, depending on the country. In Brazil, the harvest takes place in February and July, while in South Mexico in March and April. In the Amazonian forests, the fruit of cacao is collected at all times of the year.



Source: https://www.researchgate.net/figure/Representation-of-a-cacao-tree-b-cacao-fruits-c-cacao-pods-and-d-e-bulk-and_fig1_357803382

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

A group of researchers Ivañez-Ballesteros et Al. has recently discovered that the yields of cacao crops are higher when maintaining high local canopy cover, preserving surrounding forests, and ensuring genetic cross-compatibility among planted cacao varieties through pollinators. (2025)

Cacao 101

Origins

When the Spaniards discovered the Caribbean, Central America and México (1492-1525) cacao was a beloved products of the pre-Hispanic populations. Cacao role was essentially divine in properties, economically monetary and tributary.

ICCO International Cocoa Org

https://www.icco.org/growing-cocoa/

According to ICCO.org, it seems that recent archaeological evidence positions Southern Ecuador as a place where cacao was already used 5,300 years ago.
Domestication of the plant occurred by around 1775 BCE.
Since then, the seeds have been used by the three main pre-Columbian civilizations: The Mayas, the Incas and the Aztecs.
Cocoa beans were used by these civilizations as food ingredient (beverage, atole-mixed with corn flour and spices), and currency for trade, or ritual behavior.

Joyce (2021)

https://clacs.berkeley.edu/archaeology-chocolates-deep-history-latin-america

According to Anthropologist Joyce of Berkeley, her research in Honduran Ulua Valley has confirmed that the use of cacao must be pushed to before 1150BCE, at least in the Olmec Towns of México Gulf Coast to Honduras.
Joyce also acknowledge an interdisciplinary research team led by Sonia Zarrillo, who has detected traces o Theobroma plants in Ecuador, dating 5,300 years ago.
Joyce asserts that cacao origins might have been in South America and then moved to México-Central America.
The use of cacao seeds was an economic standard of value in MX and northern Central America, used as currency in buying and selling goods. It also meant tribute from subject tribes to victor native societies.

Cornejo, Motamayor et al. (2018)

https://doi.org/10.1038/s42003-018-0168-6

This research is a pioneer one from the genomic perspective. It affirms that the Theobroma Cacao genetic groups are ten:
1. Amelonado
2. Contamana
3. Criollo of CA: Modern Criollo
4. Curaray of South America: Ancient Criollo
5. Guianna
6. Iquitos
7. Marañon
8. Nacional
9. Nanay
10. Purus.

Note: Cacao comparison Variations will be shown and analyzed on next slide.

The criollo variation corresponds to México and Central America and part of northern Ecuador, Colombia), and the rest of varieties are found in the Amazon basin.

Tscharntke et. Al (2022)

https://www.researchgate.net/publication/366691772_Socio-ecological_benefits_of_fine-flavor_cacao_in_its_center_of_origin

For Tscharntke et. Al team, a pattern on how the cacao tree was originated corresponds the understory of the Amazon rainforest. Cacao then diversified genetically in western Amazonia, and then it was domesticated in the region covering southern Ecuador and Northern Peruvian Amazon, before it was introduced in Central America.
Using a molecular analyses of cacao germplasm with microsatellites, Tscharntke´s team has identified 11 main genetic groups today: criollo, marañon, curaray, Iquitos, Nanay, Contamana, Madre de Dios, Amelonado-Catango, Purus, Rondônia, Guiana, Nacional Piura White and Nacional Boliviano.
However, these variations of today are the product of 500 years of inbreeding, in which the quality has been jeopardized.

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

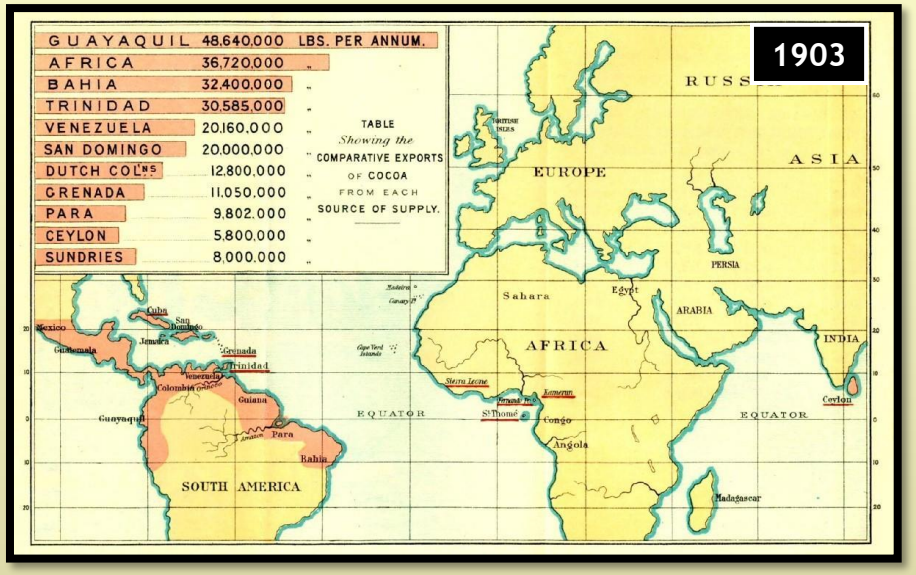
The Cacao Pilot Scoop of Central America

Cacao 101

Geographical Original Distribution of the Cacao Tree. Comparative sources.

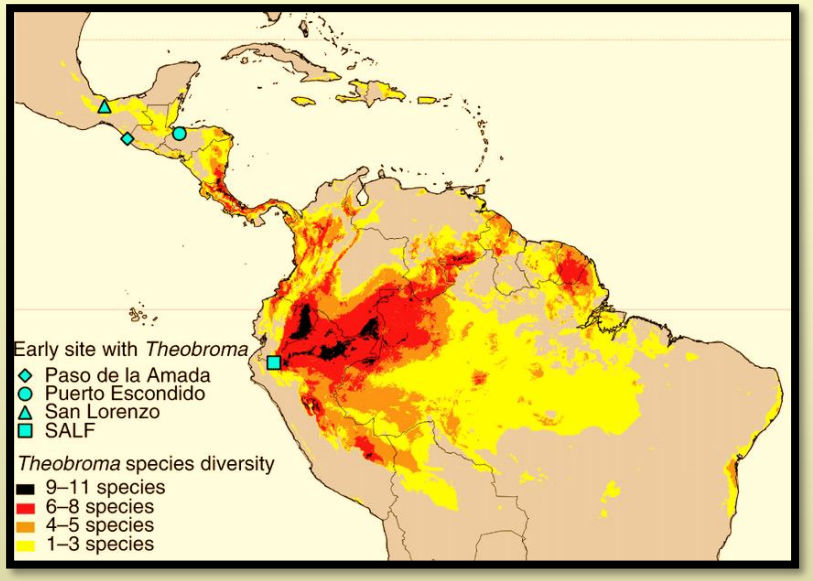
Until this day, it has been confirmed that America was the cradle of the original Theobroma cacao plants. However, it was in the Kingdom of Guatemala, that Columbus and Hernando Cortés faced its first experience with cacao in a native beverage called Chocolatl

According to Paul Zipperer (1915) and Brandon Head(1903)



Brandon Head (1903): https://www.gutenberg.org/files/16035/16035-h/16035-h.htm
Paul Zipperer (1915)
https://www.gutenberg.org/cache/epub/55584/pg55584-images.html

According to Zarrillo et Al. (2018)



Source: https://www.researchgate.net/figure/Locations-of-the-four-archaeological-sites-in-Mexico-Central-America-and-South-America_fig1_328582045

- According to Paul Zipperer (1915), the original geographical distribution of cacao trees at the end of the 19th century were Central America, south of México, Greater and lesser Antilles, Martinique, Trinidad, St. Lucia, Granada, Cuba, Haiti, Jamaica, Puerto Rico, Guadeloupe and Saint Domingo.
  In South America: the republics of Venezuela, Colombia, Guyana, Ecuador, Perú, and northern parts of Brazil, along the middle Amazon. In all other countries of the Old World, the cacao was naturalized, either by colonists and priests.
- According to Zarrillo et Al (2018), using a genetical ancient DNA approach, the added value is that they have identified genetic traces of cultivated Theobroma genus plants in Ecuador (dating 5,300 years ago).

All the information of these slides is supported and inferred from the bibliography page 22-23.

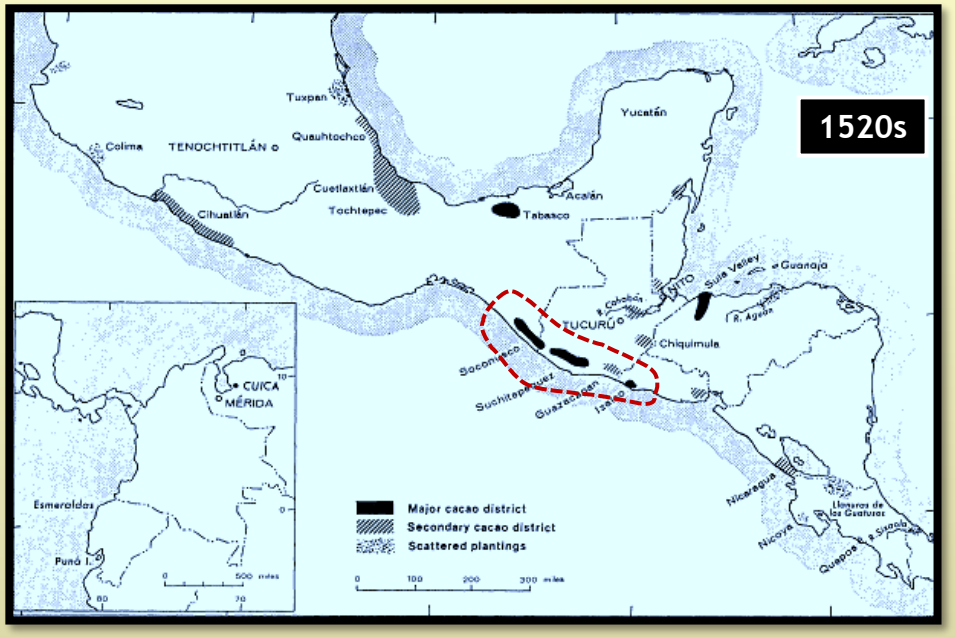
Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Cacao 101

Hernando Cortés and Pedro de Alvarado discovered at their arrival to México and Guatemala

According to John Bergmann (1968)



Source image:Bergmann, John F. "The Distribution of Cacao Cultivation in Pre-Columbian America." Annals of the Association of American Geographers 59, no. 1 (1969): 85-96. http://www.jstor.org/stable/2569524.

- When the Spaniards conquered México, they found extensive cacao orchards cultivated in the wet, warm lowlands bordering the Gulf of México and along the pacific coast. Locations such as the Lowlands of Tuxpan, the valley of the Río Ameca, along Jalisco-Nayarit and Tabasco. To the MX Pacific, the zones of cacao were Colima and Cihuatlan.
- The kingdom of Guatemala held the core of Cacao, down to Soconusco, Suchitepéquez, the Izalco's and other secondary cacao districts to as far south as Costa Rica.
- The cool highlands of México (Aztec territories) were not feasible for the cultivation of Theobroma cacao.
- But in Mexico the cacao beans were not only a luxurious beverage for the nobility; they were used as a currency and monetary token.
- Given the difficult of growing cacao in the highlands of the Aztecs, when Cortés crossed the isthmian, he and Pedro de Alvarado, found the cultivation of the crops was mainly confined to the lowlands Pacific of Central America.

In 1502, Columbus found a trading Indian canoe at the coast of Northern Honduras. The native trade items included:

1. Dyed and colorfully decorated cotton cloth
2. Tools/weapons of stone and copper
3. Cacao beans.

In colonial times, the Soconusco region belonged to the Kingdom of Guatemala.
There is a differentiation between the meaning of cacao in Mexican lands in comparison to the cacao of Guatemala.
The value of cacao for the Mexican plantations was trade for profits. Tabasco was not politically subjugated to the Highland Aztec people.
However, in the Kingdom of Guatemala the meaning of cacao was tribute. Each year the Soconusco district sent more than 400 cargas (about 24,000 pounds of cacao) as a tribute to the Spaniard authorities of the valley of México (New Spain)

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Cacao 101

Cacao from Guatemala as a tribute to the Spaniards (1548-51)

How was the cacao tribute measured?
A measure of 400 cacao beans = 1 zontle
20 zontles (8,000 cacao beans) = 1 xiquipil
3 xiquipiles (24,000 cacao beans) = 1 carga
1 "carga" weighted between 50 to 60 pounds or half quintal (half cwt hundred-weight approximately).

According to John Bergmann (1968)

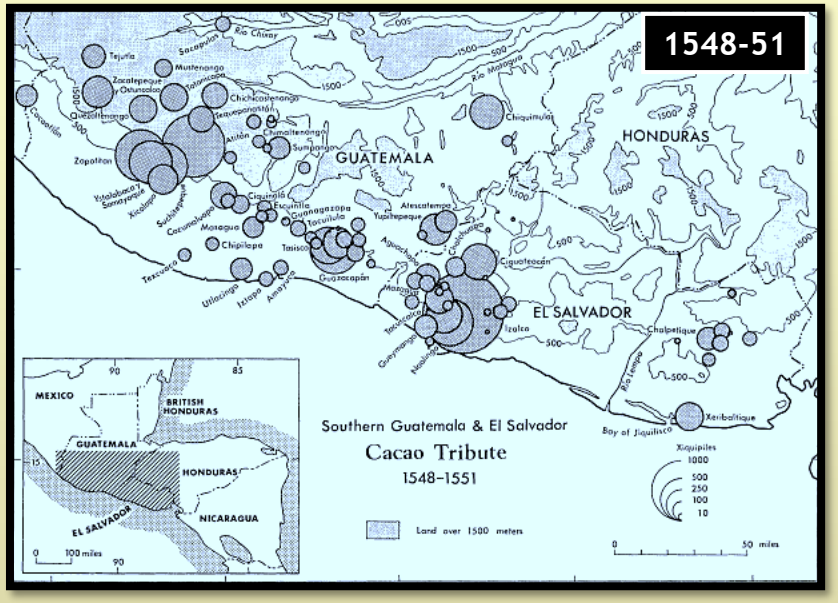


Image Source: Bergmann, John F. "The Distribution of Cacao Cultivation in Pre-Columbian America." Annals of the Association of American Geographers 59, no. 1 (1969): 85-96. http://www.jstor.org/stable/2569524

- When Pedro de Alvarado entered from Soconusco to Cuscatlan (SV), he travestied all the cacao plantations of the coastal lowland.
- The document "Tasación de Tributos (1548-51)" shows the native tribute from the encomiendas (private and royal) in the format of cacao beans that were given to the Crown officials and the encomenderos.
- From the map at your left, the three main areas with heaviest production were: Suchitepéquez, Guazacapán and Izalco.
- The importance of cacao at Izalco in terms of Indian tribute was approximately the same as that of the entire Suchitepéquez of Guatemala. Bergmann suggests that cacao was introduced by the Spaniards to the Nonualcos after the 1548-51 tasación.
- The document *"Tasaciones de los naturales de las provincias de Guatemala, Nicaragua y Yucatan e pueblos de la villa de Comayaguaque se sacaron por mandado de los señores president e oidores de la audiencia y la cancilleria real de los confines 1548-51)"* is an assessment for the king of Spain that offered a mapping of the capacity of production and paying tribute of the pueblos indios.

Cacao tribute in Guatemala and El Salvador (1548-51)

Cacao District	Number of Pueblos	Xiquipiles	Pounds
Suchitepequez	26	5,585	111,700
Escuintla	13	1,080	21,600
Guazacapán	13	1,946	38,920
Izalco	31	5,302	106,040
Chiquimula	3	390	7,800
San Miguel	12	800	16,000
Unidentified as to district	11	606	12,120
Total	109	15,709 xiquipiles (5,236 cargas)	314,180

This quantity (314,180 pounds) represents only the "tribute to Spaniards", not the total production. Francisco de García Peláez, historian and bishop, calculated a round annual amount of 100,000 cargas/year or 6 million pounds as the average annual yield of cacao production for the latter 16th century in Southern Guatemala-El Salvador. Then 5,236 cargas represented a little more than 5% in tribute of the area´s total yield.

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Cacao 101

Cacao from Caribbean, Honduras, Nicaragua and Costa Rica.

According to John Bergmann (1968)

Caribbean Honduras

Two principal areas of production appear in this región: The Izabal lowlands (lands bordering the Río Polochic) and the Sula Valley of Honduras/both banks of River Ulúa.
Everywhere else, cacao was produced only in scattered areas of Peten, in southern British Honduras near the Sarstoon River, and in some coastal valleys of Northern Honduras as far as the Aguan.

Nicaragua

The "report of 1548-51 Tasación de tributos" indicated some minor harvests in León and Granada.
López de Velasco wrote that Cacao was also planted in Nueva Jaen (head of the San Juan River).
Apparently, the production of Nicaragua cacao was merely for local consumption and monetary exchanges.

Costa Rica

Juan Vasquez de Coronado mentions that cacao was encountered at the Indian province of Quepo on the Pacific Slope of the Central Cordillera. Additionally, it was also in three other areas: Llanuras de los Guatusos (south of Lake Nicaragua), Nicoya province and the Sixaola River valley.
In 1610 Fray Agustín de Ceballos observed good quality and quantity of cacao in Sixaola.

In Central America, between 1523 to 1590 the Spaniards troubled the world of the Indian cacao

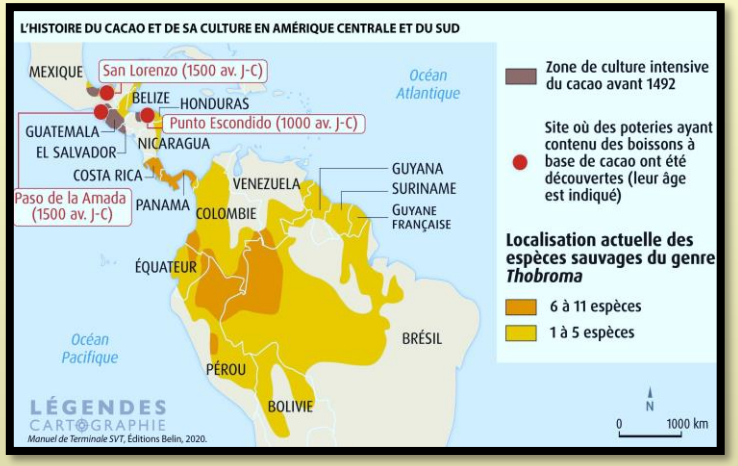
The most destructive search for wealth occurred in the format of territorial control by using Indian labor in the format of encomienda or direct slavery. In Nicaragua and Southern Honduras, during the first half of the 16th century, the the Spanish slavers raided and depopulated areas to trade and export slave humans.
In Guatemala-El Salvador, Spaniard's wealth derived from encomiendas. The cacao encomiendas were lucrative. Spanish encomenderos collected a tribute tax on every cacao tree. The alarming depopulation of the natives is related to harsh labor in cacao plantations, not only to epidemics. We will see the issue of the depopulation Indian situation on next slide.

Wealth of Spaniards & Crown Income → **Demand for labor** → **Survival of Indians**

- **The revenues from production were sent to México under the King of Spain-Castile approval**
- **The tributes from the Indians were sent to the King of Spain-Castile**
- **The contraband sales of cacao to smugglers was the source of revenues of the Spaniards/creoles in Central America**

The relevant cacao production of the Kingdom of Guatemala (Audiencia de los Confines) lasted only until the end of the 16th century. It seems that depopulation of Indian labor stopped its harvests.
In the 17th century, the cacao of Guayaquil (Ecuador) and Caracas traveled to the Mexican market in greater quantities and at cheaper prices, eliminating the demand of cacao from Guatemala.

The trajectory of cacao production moved to South America as of the 17th century.



https://www.facebook.com/LegCarto/posts/dossier-sp%C3%A9cial-p%C3%A2ques-lunivers-du-chocolat-carte-du-jour-aux-origines-du-cacao-/987978949982709/

Image source to illustrate the geographical zones of cacao (historically and currently)

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

The healing properties of cacao were well known by the pre-Columbian populations.
We want to share 4 slides of the medical properties of the cacao seeds accumulated since 1521.
Research historical-anthropological by
https://www.academia.edu/26657390/Food_of_the_gods_cure_for_humanity_A_cultural_history_of_the_medicinal_and_ritual_use_of_chocolate_J_Nutr_130_2057S_2072S

Why was cacao so precious?

Let´s see all the medical properties of cacao seeds prepared as chocolate

Positive Claims of Cocoa healing (1/12)

- Agitation: lessens/reduces (Que´ lus 1730, p. 51)
- Anemia: improves (Villanueva y Francesconi 1890, p. 329)
- Angina/heart pain: reduces (Lavedan 1796)
- Aphrodisiac properties (see Sexual appetite)
- Appetite: awakens/improves (Lavedan 1796)
- Asthma: reduces (Hughes 1672, pp. 153-154, Graham 1828, p. 231)
- Belching: controls/lessens (Lardizabal 1788, pp. 16-18)
- Blood: generates/produces (Hughes 1672, pp. 153-154, Lavedan 1796; Stubbe 1662, pp. 68-69)
- Body: fortifies/invigorates/nourishing to/refreshes/repairs: (Brillat-Savarin 1825, p. 95, Florentine Codex 1590, Part 12: 119-120, de Quelus 1730, p. 46, Hughes 1672, pp. 153-154, Lavedan 1796, Linne´ [Linnaeus] 1741)
- Brain: strengthens (Stubbe 1662, pp. 53-54)
- Breast milk production/lactation, increases quantity (Debay 1864, pp. 101-108, Stubbe 1662, pp. 58-60)
- Breath: amends/sweetens (Colmenero de Ledesma 1631, p. A4, Stubbe 1662, p. 67)
- Breath: reduces shortness of (Gage 1648, p. 108)

Positive Claims of Cocoa healing (2/12)

- Calming (see Nerves)
- Cancer: reduces (Villanueva y Francesconi 1890, p. 329)
- Catarrh: reduces (Acosta 1604, p. 271, Hughes 1672, pp. 146, 153-154)
- Chest ailments (dryness or undefined): reduces (Blegny 1687, pp. 282-285, Valverde Turices 1624)
- Childbirth (see Labor)
- Chlorosis (see Greensickness)
- Colds: reduces (Stubbe 1662, p. 67)
- Colic: reduces (Lavedan 1796)
- Conception: improves probability of (Colmenero de Ledesma 1631, p. A4)
- Consumption/tuberculosis reduces (Colmenero de Ledesma 1631, p. A4, Donzelli 1686, pp. 284-287, Hughes 1672, pp. 146, 153-154, Lavedan 1796)
- Cough: reduces (Blegny 1687, pp. 282-285, Colmenero de Ledesma 1631, p. A4, Florentine Codex 1590, Part 12: 12, Stubbe 1662, p. 11)
- Countenance: preserves the (Hughes 1672, pp. 153-154)
- Debilitation (general): improves (Debay 1864, pp. 101-108)

Positive Claims of Cocoa healing (3/12)

- Delivery (see Labor)
- Diarrhea/belly fluxes/dysentery/griping of the guts: reduces (Blegny 1687, pp. 282-285, Donzelli 1686, pp. 284-287, Dufour 1685, p. 77, Florentine Codex 1590, Part 12: 170, Hernandez 1577, p. 305, Lavedan 1796, Stubbe 1662, pp. 58-60, Villanueva y Francesconi 1890, p. 333)
- Digestion: improves/promotes (Brillat-Savarin 1825, pp. 95-96, Colmenero de Ledesma 1631, p. A4, Quelus 1730, pp. 44, 50, Hurtado 1645, Vol.1, 2:13, Panades y Poblet 1878, p. 191, Rengade 1886, p. 91, Saint-Arroman 1846, p. 86, Savarin 1825, pp. 95-96)
- Digestion (laxative effect): produces (Farfan 1592)
- Disposition: consoles/improves (Colmenero de Ledesma 1631, p. A4, Florentine Codex 1590, Part 12: 119-120)
- Distempers: reduces (Stubbe 1662, p. 67)
- Dysentery (see Diarrhea)
- Dyspepsia (see Stomach)

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

"Chocolate is food. Chocolate is medicine".
Research historical-anthropological by
https://www.academia.edu/26657390/Food_of_the_gods_cure_for_humanity_A_cultural_history_of_the_medicinal_and_ritual_use_of_chocolate_J_Nutr_130_2057S_2072S

Why was cacao so precious?

Let´s see all the medical properties of cacao seeds prepared as chocolate

Positive Claims of Cocoa healing (4/12)	Positive Claims of Cocoa healing (5/12)	Positive Claims of Cocoa healing (6/12)
• Emaciation/thinness/wasting: reduces (Debay 1864, pp. 101–108, Donzelli 1686, pp. 284–287, Hernandez 1577, p. 305, Hughes 1672, p. 146, Linne´ [Linnaeus] 1741, Saint-Arroman 1846, p. 85) • Energy: improves (Stubbe 1662, p. 3) • Exhaustion: relieves/repairs (Brillat-Savarin 1825, pp. 95–96, Debay 1864, pp. 101–108, Quelus 1730, p. 45) • Ergot poisoning (see St. Anthony's Fire) • Exercise: nourishing to body after (Hughes 1672, p. 145) • Exhaustion: reduces (Donzelli 1686, pp. 284–287) • Fainting: relieves (Buchan 1792, p. 224, Quelus 1730, p. 51, Florentine Codex 1590, Part 12, 176, Hughes 1672, pp. 153–154, Princeton Codex 1965, Incantation XIV, pp. 35–37) • Fatigue: reduces (Brillat-Savarin 1825, pp. 95–96, Debay 1864, pp. 101–108, Blegny 1687, pp. 282–285, Stubbe 1662, p. 3) • Female complaints (general): reduces (Saint-Arroman 1846, p. 86) • Fever: reduces/relieves/ (Blegny 1687, pp. 282–285, Donzelli 1686, pp. 182, 284–287, Dufour 1685, p. 77, Florentine Codex 1590, Part 12: 176, 178, Hernandez 1577, p. 305, Hughes 1672, pp. 153–154, Princeton Codex 1965, Incantation XIV, pp. 35–37, Stubbe 1662, p. 79)	• Flatus/flatulence/wind: controls/dissipates/reduces (Lavedan 1796, Lardizabal 1788, pp. 16–18, Stubbe 1662, pp. 53–54) • Galactagogue properties (see Breast milk) • Gout/podagra: reduces (Lavedan 1796) • Green sicknesses/chlorosis: reduces (Colmenero de Ledesma 1631, p. A4, Saint-Arroman 1846, p. 86, Villanueva y Francesconi 1890, p. 329) • Gums: strengthens (Stubbe 1662, pp. 53–54) • Hair (white hair): delays growth of (Lavedan 1796) • Hangover: reduces effects of (Brillat-Savarin 1825, p. 97) • Hemorrhoids/piles: reduces (Linne´ [Linnaeus] 1741, Ponce 1902, p. 123) • Health: essential to/preserves (Hughes 1672, p. 124, Quelus 1730, pp. 44–45, Lavedan 1796) • Heart: corroborates/strengthens/vivifies (Dufour 1685, pp. 90–91, Lavedan 1796, Stubbe 1662, pp. 53–54, 68–69) • Heart pain (see Angina) • Heart palpitations: relieves (Blegny 1687, pp. 282–285) • Hoarseness: relieves (Quelus 1730, pp. 76–77) • Hypochondria: reduces (Linne´ [Linnaeus] 1741) • Indigestion (see Stomach)	• Infection (general): reduces (Colmenero de Ledesma 1631, p. A4, Florentine Codex 1590, Part 12: 112) • Inflammation (general): reduces (Colmenero de Ledesma 1631, p. A4, Stubbe 1662, p. 43) • Insomnia (see Sleep) • Intestinal complaints (general distress): reduces (Colmenero de Ledesma 1631, p. A4, Debay 1864, pp. 60, 101–108, Florentine Codex 1590, Part • 12: 112) • Irritation (mental); reduces (Brillat-Savarin 1825, p. 100) • Itch: reduces (Stubbe 1662, pp. 58–60) • Jaundice: reduces (Colmenero de Ledesma 1631, p. A4) • Kidney complaints (general): reduces (Dufour 1685, pp. 75–76, Gage 1648, p. 108, Friar Agustın Davila Padilla cited by Torres 1997, p. 244) • Kidney stone/gravel: cures/expels (Colmenero de Ledesma 1631, p. A4, Hughes 1672, p. 153–154) • Labor/childbirth/delivery: facilitates (Buchan 1792, p. 224, Colmenero de Ledesma 1631, p. A4) • Leukorrhea/"whites": reduces (Quelus 1730, p. 44) • Life: improves (Debay 1864, pp. 101–108) • Life-span (see Longevity) • Limbs: strengthens (Dufour 1685, pp. 75–76)

All the information of these slides is supported and inferred from the bibliography page 18-19.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Why was cacao so precious?

Before the conquest of America, cacao was prepared as a beverage only for adult males of high rank.
Research historical-anthropological by
https://www.academia.edu/26657390/Food_of_the_gods_cure_for_humanity_A_cultural_history_of_the_medicinal_and_ritual_use_of_chocolate_J_Nutr_130_2057S_2072S

Let´s see all the medical properties of cacao seeds prepared as chocolate

Positive Claims of Cocoa healing (7/)

- Liver complaints/distempers: reduces (Donzelli 1686, p. 182, Dufour 1685, pp. 111–113, Gage 1648, pp. 107–108, Hernandez 1577, p. 305, Stubbe 1662, p. 3)
- Longevity: improves/lengthens/prolongs (Quelus 1730, pp. 45, 58, Lavedan 1796, Stubbe 1662, pp. 84–86)
- Lung inflammation/irritation: reduces (Blegny 1687, pp. 282–285, Quelus 1730, pp. 76–77)
- Matrice (see Womb)
- Menstrual flow: provokes (Stubbe 1662, pp. 53–54, 68–69)
- Moral nature: improves (Saint-Arroman 1846, p. 86)
- Nerves (delicate)/nervous distress: calms/improves (Brillat-Savarin 1825, p. 100, Debay 1864, pp. 60, 101–108, Rengade 1886, p. 91)
- Nutrition/nutritious: improves (Villanueva y Francesconi 1897, p. 23)
- Obesity (see Weight gain)
- Obstructions (general): reduces/opens (Colmenero de Ledesma 1631, p. A4, Stubbe 1662, p. 67)
- Pain (general): eases (Quelus 1730, pp. 76–77)
- Pain (abdominal): eases (Aguilera 1985, p. 119)
- Piles (see Hemorrhoids)
- Podagra (see Gout)

Positive Claims of Cocoa healing (8/9)

- Poison: antidote/counters/expels (Aguilera 1985, p. 119, Colmenero de Ledesma 1631, p. A4, Quelus 1730, pp. 76–77, Dufour 1685, pp. 90–91)
- Pregnancy: nourishes embryo (Hughes 1672, pp. 153–154)
- Rectal bleeding/bloody flux: reduces (Florentine Codex 1590, Part 12: 189, Hughes 1672, p. 124, Stubbe 1662, pp. 3, 53–54)
- Rheumatism: reduces (Blegny 1687, pp. 282–285, Hughes 1672, p. 146)
- Scurvy [?]: reduces (Hughes 1672, p. 144)
- Seizures: reduces (Princeton Codex 1965, Incantation XIV, pp. 35–37)
- Sexual appetite/aphrodisiac properties/desire/pleasure: increases (Hernandez 1577, p. 305, Colmenero de Ledesma 1631, p. A4, Linne´ [Linnaeus] 1741, Monlau 1881, p. 238, Aguilera 1985, p. 119)
- Skin eruptions: reduces (Princeton Codex 1965, Incantation XIV, pp. 35–37)
- Sleep: encourages (Blegny 1687, pp. 282–285, Quelus 1730, p. 46)
- Sleep: prevents (Colmenero de Ledesma 1631, p. A4)
- Snake bite: talisman against (Morton 1981, pp. 556–557, Thompson 1956, p. 106)

Positive Claims of Cocoa healing (9/9)

- Spirit: gladdens/invigorates/revives (Florentine Codex 1590, Part 12: 119–120, Hughes 1672, pp. 153–154, Stubbe 1662, pp. 68–69)
- Spleen: deadens (Blegny 1687, pp. 282–285)
- St. Anthony's fire: reduces (Stubbe 1662, p. 43)
- Stomach (dyspepsia/(general complaints)/indigestion/weak/windy): corroborates/helps/reduces (Acosta 1604, p. 271, Brillat-Savarin 1825, pp. 95–96, Debay 1864, p. 60, Blegny 1687, pp. 282–285, Dufour 1685, pp. 90–91, Florentine Codex 1590, Part 12: 112, Graham 1828, pp. 412–413, Hughes 1672, p. 124, Hurtado 1645, Vol. 1, 1:1, 3:21, Lavedan 1796, Panades y Poblet 1878, p. 192, Stubbe 1662, pp. 11, 58–60, 67–69, Valverde Turices 1624)
- Strength: recovers/repairs (Quelus 1730, pp. 45, 51)
- Sweat: provokes/increases (Hughes 1672, pp. 124, 153–154, Stubbe 1662, pp. 84–86)
- Syphilis: reduces (Debay 1864, p. 91)
- Teeth: cleans (Colmenero de Ledesma 1631, p. A4)
- Thinking (tormented): soothes (Brillat-Savarin 1825, p. 97)

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

The chocolate in México medicines were recorded in several codex. Mainly the Badianus Manuscript, the Florentine Codex and the Princeton Codex (Ritual of the Bacabs). Research historical-anthropological by https://www.academia.edu/26657390/Food_of_the_gods_cure_for_humanity_A_cultural_history_of_the_medicinal_and_ritual_use_of_chocolate_J_Nutr_130_2057S_2072S

Why was cacao so precious?

Let´s see all the medical properties of cacao seeds prepared as chocolate

Positive Claims of Cocoa healing (10/12)

- Thirst: quenches (Quelus 1730, p. 46, Stubbe 1662, pp. 58–60)
- Throat (infected/inflamed): reduces (Blegny 1687, pp. 282–285, Dufour 1685, pp. 75–76)
- Toothache: reduces (Stubbe 1662, pp. 53–54)
- Tuberculosis (see Consumption)
- Tumors/swellings/pustules: reduces (Hughes 1672, p. 144, Stubbe 1662, pp. 53–54)
- Ulcers: reduces (Stubbe 1662, pp. 58–60)
- Urine flow: increases/provokes (Colmenero de Ledesma 1631, p. A4, Gage 1648, p. 108, Hughes 1672, pp. 153–154, Stubbe 1662, pp. 53–54,
- 58–60, 84–86)
- Vermifuge/anthelminthic: effective as a (Debay 1864, p. 90)
- Virility: increases (Lavedan 1796)
- Vitals: strengthens (Hughes 1672, pp. 153–154)
- Violence: reduces (Debay 1864, pp. 101–108)
- Vomiting: controls/reduces (Blegny 1687, pp. 282–285, Lardizabal 1788, pp. 16–18, Lavedan 1796)
- Wasting (see Emaciation)
- Warmth: increases (Lavedan 1796)
- Weakness: relieves (Debay 1864, pp. 101–108, Hernandez 1577, p. 305, Saint-Arroman 1846, p. 85)

Positive Claims of Cocoa healing (11/12)

- Weight gain/obesity/putting on fat: leads to increased (Cardenas 1591, Colmenero de Ledesma 1631, p. A4, Dufour 1685, pp. 99, 115–116, Gage 1648, p. 110, Hernandez 1577, p. 305, Stubbe 1662, p. 30)
- “Whites” (see Leukorrhea)
- Wind (see Flatus; stomach)
- Womb/Matrice: comforts/strengthens (Dufour 1685, pp. 75–76, Stubbe 1662, pp. 53–54)
- Worms (see Vermifuge)

Positive Claims of Cocoa healing (12/12)

- There are other properties attributed to the cacao bark, the cacao butter, the cacao flowers, the cacao fruit pulp (eaten) and the cacao leaf.
- Chocolate or cacao in its multiple formats is praised for its ample medicinal properties.
- As Eleonora Escalante Strategy, we consider of crucial relevancy to list all the properties listed by numerous Spanish, English, French and other nationalities accounts between 16th to the 19th centuries.
- This 4 pages list of medicine properties of cacao is from the paper “ Food of the Gods: Cure for Humanity? A Cultural History of the Medicinal and Ritual Use of Chocolate”. This paper authors include Louis Grivetti, Teresa Dillinger, Patricia Barriga, Sylvia Escarcega, Martha Jimenez and Diana Salazar Lowe. For more information about this academic paper: click here https://jn.nutrition.org/article/S0022-3166(22)14379-8/pdf

- We encourage our readers to read this long list of cocoa attributes. Blessings.

All the information of these slides is supported and inferred from the bibliography page 22-23

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Mapping Cacao Production 16th - 17th centuries

Bartolomé de las Casas flew to Spain to convince Charles V HRE Crown of the abuse and oppression of the encomenderos towards the Indians under the cacao plantation system (1540s-50s).

It wasn´t sugar. It was cacao in the kingdom of Guatemala. Cacao was the pioneer pilot scoop project of slavery plantations economy in America.

The cacao plantations system was the FIRST attempt of the Spanish nascent empire in agriculture-plantations exports economy in America.

1. Existing Cash commodity crops
2. Conquered Land
3. Forced enslaved labor (encomienda is slavery) plus tribute
4. Racism-social hierarchy
5. Exploitation-Harsh working conditions till death.

Factor of Cacao Production: Indian Labor

How was the cacao tribute and tributary depopulation of the different provinces of Central America during the 16th to 17th centuries?

Soconusco (page 71)

Years	Official Amount	Alleged Additional Amounts	Indian Population (Tributaries)
Pre-conquest	400 cargas	?	30,000
1524-26	?	?	15,000
1563			1,600
1571	400 cargas	200	2,000 "or less"
1573	400-500 cargas	100	1,600
1576	650 cargas	100	1,800
1609	1,157 cargas	?	2,000
1613	1,133 cargas	?	2,000

Guatemala-Verapaz (page 93)

Year	No. of Tributaries	No. of Villages
1544	12,000 to 14,000	
1561	6,000 to 7,000	
1566	3,856	
1571	3,135 to 3,329	15
1573	3,864	15
1578	3,135	15
1583-84	c. 3,000	15
1590	1,948	12
1598	1,948	12
1664	2,105	

Honduras (page 59)

Year	No. of Tributaries
1524	400,000
1539	15,000
1541	8,000+
1571-74	8,100+
1582	5,106
1582	4,840
c. 1590	4,864

Costa Rica (page 332)

Year	Indian Tributaries	Indian Population
1563	20,000	80,000?
1573		
1581		7,000
1583	1,126	4,504
1645	800	3,200
1655	620	
1665	400	1,600
1675	500	2,000
1681	400	1,600
1714		999

Nicaragua (page 53)

Year	No. of Tributaries
c. 1520	600,000
1544	30,000
1548	11,137
c. 1560	6,050
c. 1570	6,000-6,500
1663	5,100
1674-76	4,540
1685	4,716

Source of data: Each province holds its notes and references at the indicated page. Mc Leod, Murdo. Spanish Central America. UT Press. 2007.
https://utpress.utexas.edu/9780292717619/

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Mapping cacao production-16th/17th century

Main Encomenderos of Central America 16th century at the service of the royal Spanish crown

Spaniard Management of the Cacao entrepreneurial plantations-model

A mix of three factors decimated the Native Indian population during the 16th century before the formal abolition of the encomienda:

1. Overwork in harsh conditions correlated to intl. crops economic boom.
2. Export of slaves, forced migrations
3. Diseases (Epidemics)

The richest encomenderos of Central America c-1550

Name	Income per annum in pesos de oro	Comments
Juan de Guzmán	4,000	"Plus what he collects illegally." This is the father of the notorious cacao *encomendero* of the 1570s, Diego de Guzmán. Juan de Guzmán was from Salamanca, and was either the cousin or nephew of Gov. Alonso de Maldonado, also from Salamanca. A Maldonado grant. Cacao.
Martín de Guzmán	2,000	A cacao *encomienda*. Maldonado's brother? A Maldonado grant.
Francisco Xirón	4,000	One of the great cacao *encomiendas* of the 1570s. A Maldonado grant.
Juan López	2,000	Both were probably Maldonado grants. Calderón's *encomienda* was in the cacao area.
Francisco Calderón	2,000	
Viuda de Becerra	1,600	
A younger son of Sancho de Barahona	2,000	Originally an Alvarado grant. The father then quarreled with Alvarado and lost several grants. He won his case and received further favors under Maldonado. He controlled one-half of Santiago Atitlán, the cacao trading point between the coast and Santiago. Atitlán also dominated parts of the cacao coast of Guazacapán.
A younger son of Gaspar Arias	2,000	An Alvarado grant?
Gómez Díaz de Reguera	1,500	A Maldonado grant?
Younger son of Gonçalo de Ovalle	1,700	A Maldonado grant?

Source: Bartolomé de las Casas to Crown (1552?), AGI Indiferente General 1093. (Reported in Bataillon, "Las Casas et Le Licencié Cerrato.") See also *Cartas de Indias*, pp. 38-44; CDI, 24:561-3.

Table source: Mc Leod, Murdo. Spanish Central America. UT Press. 2007. https://utpress.utexas.edu/9780292717619/ Page 117

Official ⟷ **Reality**

Official traditional history picture the conquistadores as an Iberian lower-class of wealth hunters, some of them with minor nobility ranks, who took the risk of coming to America (without the king), and envisioned themselves as feudal lords at their return to Valladolid or Madrid.

To become rich required to obtain large quantities of precious metals (not cacao), large cattle estates in Central America and a good service job to the king, to obtain a nobility title-coat of arms.

Official history separates the king and the royal family from the decision making of Spanish American entrepreneurial economic endeavors.

Eleonora Escalante Strategy suggests that the conquistadores were members of the military orders, the SWAT mercenary team of the King (or kings) who came to discover America after Columbus. We also advise that México and Central America were conquered directly by members of the dynastic royal group of Castile-Aragon/Habsburg Aviz-Valois. This truth has been concealed for more than 500 years. At that time, there was no single event of warfare where the royal leader wasn´t present. We also advocate that the Kingdom of Guatemala was the new home for this dynasty, and during the 16th century, it was being prepared to become the decision-making hub for the Americas.

As a result, cacao production was the first cash crop successful economic-plantation pilot project led directly by the royal dynasty, using its team of encomenderos.

According to McLeod, the cacao plantation model, was a desperate intent to create new wealth from exports. "These entrepreneurial ambitions made control of labor more important than control or ownership of land." The immediate profits after the conquest were slave exports, silver mining, cacao, encomiendas for service and tribute.

All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

The scoop on the move: Horizontal Growth Trajectory 18th-19th centuries

Historical Trajectory of Cocoa Production

Over time, the use of cocoa by Europeans pulled the extension of its cultivation from Guatemala to South America.

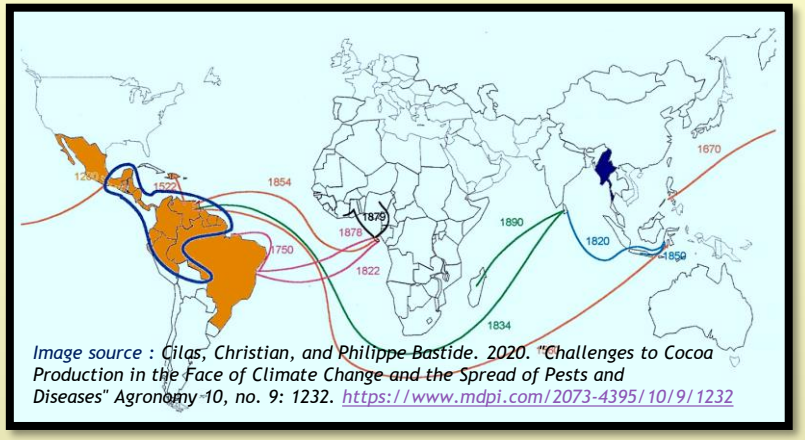


Image source : Cilas, Christian, and Philippe Bastide. 2020. "Challenges to Cocoa Production in the Face of Climate Change and the Spread of Pests and Diseases" Agronomy 10, no. 9: 1232. https://www.mdpi.com/2073-4395/10/9/1232

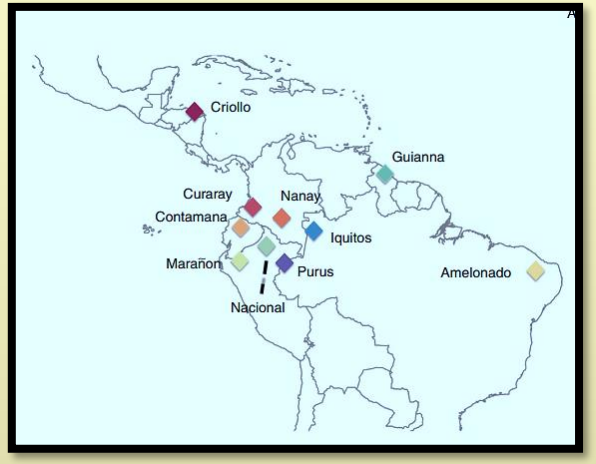
By 1915, there were 10 commercial varieties of cacao:

1. Theobroma cacao-Linneus. Called the true original cacao with three main varieties, criollo, forastero and hybrid.
2. Theobroma cacao bicolor: The seeds mixed with Brazilian-Caracas beans.
3. Theobroma Speciosum Wildenow of Brazil
4. Theobroma silvestre-Forest Cacao
5. Theobroma guayanense, from Guianna
6. Theobroma subincanum-white leaves
7. Theobroma microcarpum- small fruited cacao
8. Theobroma glaucum-grey cacao-Caracas beans
9. Theobroma angustifolim: narrow leaves
10. Theobroma ovatifolium: oval leaf-Mexican

The taste of chocolate spread throughout Spain after the return of Hernando Cortés to the Iberian Peninsula, then England, the Spanish Habsburg Belgium and later to Italy. Cacao was kept as a luxury item coming from America for several decades. It took more than 150 years of taste evolution to expand the massive demand in Europe, and it only occurred when they mixed cocoa with sugar.

When plantations couldn´t continue in Central America, these were transferred to Indonesia, but developed intensely in South America, particularly in Colombia, Guyana, Ecuador and Venezuela from the end of 16th century and all 17th century. During the 18th century, the amazonian varieties of Cacao were exported through Portuguese-Brazilian merchants. Finally, during the 19th century, the cacao plantations were introduced massively into Africa, and the rest of parts of India and Asia.

After Cortés arrival to México-Central America, enslaved Indians from Honduras and Nicaragua, were a profitable trade export to the Caribbean and Panama. Then with cacao plantations, Indian slaves were abused as an inexhaustible labor resource, with brutal overwork and physical coercion. When the Native populations diminished by 1590, the Spaniards moved the cacao centers of production to Ecuador and Venezuela, and the rest of South America.



2018: A research by Cornejo et Al. using ADMIXTURE (model genomic clustering-based analysis) confirmed to identify 10 genetic cacao groups: 1. Criollo, 2. Amelonado, 3. Contamana, 4. Curaray, 5. Guianna, 6. Iquitos, 7. Marañon, 8. Nacional, 9. Nanay, and 10. Purús.
The Criollo cacao of Central America has closer germplasm with the Colombia-Ecuador border trees (same family species).

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Consumption patterns driving the demand of Cacao

The process of tasting domestication of cacao in Europe.

Most of the chocolate was transferred by clergy members into the royal families of Europe. The Spaniards kept the transformation process of cacao beans to paste for decades. However, the Italians propagated the recipe.

Chocolate was embraced fully by Europeans through a process that took 150 years (from 1502 to 1650)

Theoretically, there are several models used by scholars that explain how consumption raises (demand increase) happens with foreign food. Scholar Marcy Norton has made an interesting compilation about the theories behind the internalization of chocolate in Europe.
For Eleonora Escalante Strategy, initially, Europeans found chocolate repugnant and disgusting to the palate. However, this first categorization of the product was simply functional. Overtime when Europeans cognized the "properties", or in strategic terms, when they identified the "elements of value" of the drink called "chocolate", the product itself moved from a functional tasting element of value to a medical healing and spiritual transcendent level. The process of education of Europeans was through pain relievers and gain creators beyond the taste. Of course, sugar aided to cut the bitterness of the "stimulant beverage", but it was a long process of 150 years of Indian indirect tutoring that triggered the demand of cacao in European standards.

Spanish (then Europeans) learned to like chocolate because:

Native Indian Females Education to Spaniards (concubines, wives, servants) → Indian villages tradition to share chocolate with Catholic Priests → Availability of cacao through marketplaces → The attributes or properties were felt and seen by Spaniards → Sugar was added and diffusion all over Europe began

During the 16th century and first half of the 17th century, most of the clergy expanded the news about chocolate properties.
In Spain, the recipe of the beverage was kept as closer to the original native American. However, they preferred it sweet. The game changer factor occurred when Florentine Carletti (1606) brought the chocolate properties to the public by adding sugar. The Spanish Habsburgs transferred its "luxury healing cocoa indulgence" to the Bourbons, with Theresa wife of Louis XIV, and afterward, it was introduced from Martinique to France (1679). By the middle of 17th century, chocolate was in general use in England and Germany. The first chocolate factory in Germany was built by Prince Wilhelm von der Lippe about the year 1756 at Steinhude.

All the information of these slides is supported and inferred from the bibliography page 22-23

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

All the information of these slides is supported and inferred from the bibliography page 22-23.

The Cacao Pilot Scoop of Central America

Consumption patterns driving the demand of Cacao

During the 17th century, chocolate traveled mainly as a "peculiar" gift within aristocratic circles.

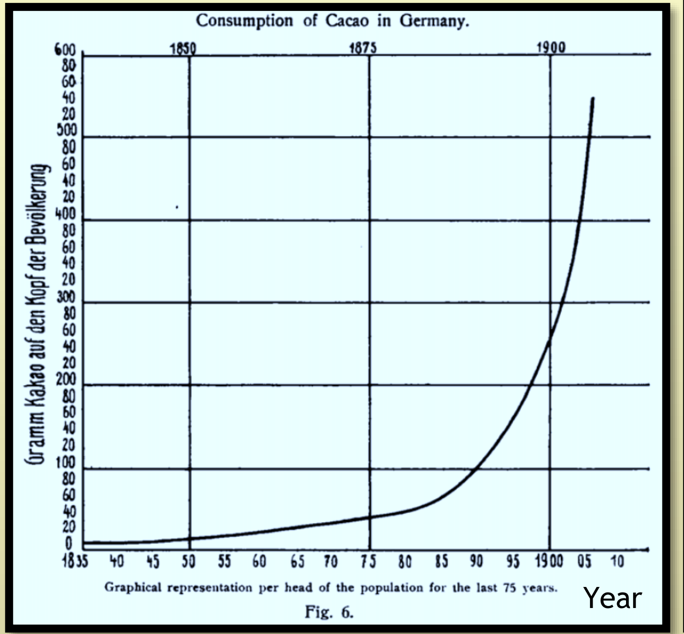
The 17th century was the period in which the chocolate spread slowly through European courts and clerical networks. Still during this period it was a luxury item, confined to the elites. The chocolate contagion occurred through the constellation of households and courts of the Habsburgs and its associated royal territories (Spain, Italy, The Netherlands, Austria, the HRE, etc).

At the end of the 17th century chocolate became a luxury item with elements values of kindness, gifting exquisite, a superb customary present among nobles, an exotic beverage as a sign of distinction, an icon of refinement.

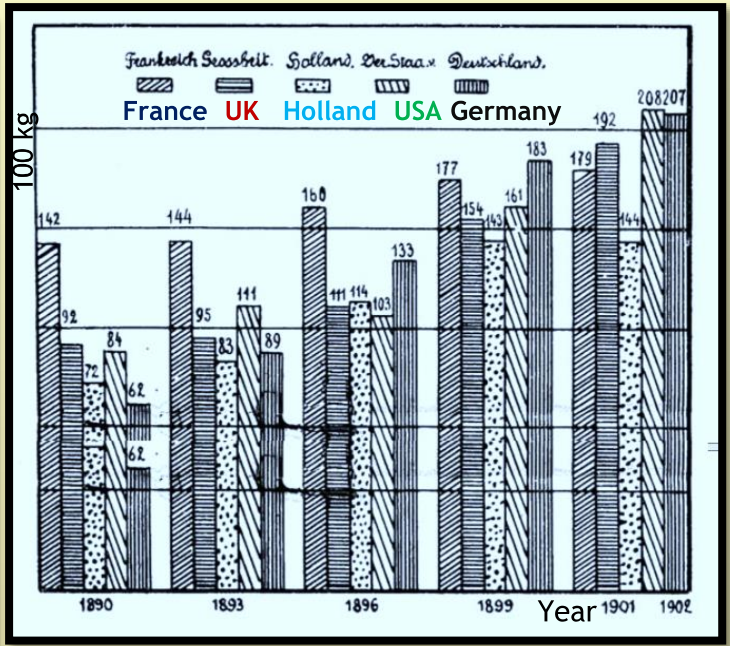
During the 18th and 19th century, the consolidation of the supply of cacao in Africa, permitted its expansion to all European countries.

One of the most famous recipes for the healthy European aristocrats (proposed by Ledesma in 1631) was:

Ingredients
100 cocoa beans
2 chilis
A handful of anise
1 stick of vanilla Campeche
2 native flowers Meca-Xóchilt
2 pinches cinammon
12 almonds or hazelnuts
½ pound sugar
1 pinch of achiote



Quantity of cacao consumed per head of the population (from 1835 to 1910)



Relative growth of cacao consumption in Germany, when compared with other countries (1890-1902)

Graphs from : Zipperer, P. The manufacture of Chocolate and other cacao preparations. Berlin W Verlag Von M. Krayn. 2015 https://www.gutenberg.org/files/55584/55584-h/55584-h.htm

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

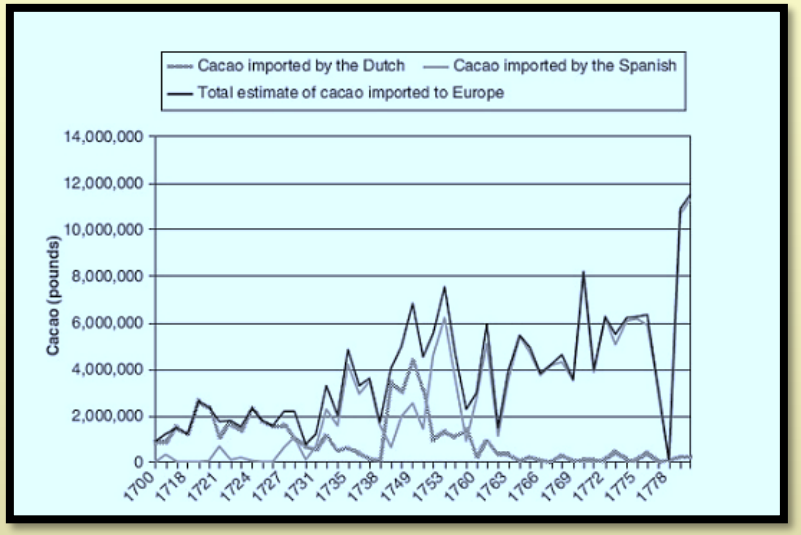
The Cacao Pilot Scoop of Central America

Consumption patterns driving the demand of Cacao

The South American chocolate took the spotlight of production as of 1590. And later it was taken by Africa and Indonesia.

The supply of cacao beans to European Nations

Central America has never been a massive source of cacao for the international marketplace after 1590. It was merely the kick-off pilot project. Some specialty cacao cultivars have subsisted in Central America at a minor scale since then.



Aram, B. & Yun casalilla, B. Global godos and the spanish empire, 1492-1824, Chapter 14.Palgrave MacMillan, 2014. https://link.springer.com/book/10.1057/9781137324054

Figure 2.1 World production of cocoa beans (1900–2010), by region in 1000 metric tons
Source: Mitchell (2007a, 2007b, and 2007c) and FAOSTAT (2013a).[1]
[1] For the Asian region no data was available in Mitchell's historical statistics. Therefore, Mitchell's historical statistics were combined with data from FAOSTAT, available from 1961 onwards.

Table 2.2 The largest cocoa-producing countries, 1900–2012, in tons and in % of world's total production

Country	1900 (1901)		1960		2012	
	Tons	%	Tons	%	Tons	%
Ivory Coast	0 (0)	0 (0)	94,000	8	1,559,441	34
Indonesia	0 (0)	0 (0)	1000	0	712,200	15
Ghana	1,000 (2,400)	2 (3)	439,000	39	700,020	15
Nigeria	0,200 (0,300)	0 (0)	189,000	17	400,000	9
Cameroon	0,500 (0,700)	1 (1)	74,000	7	272,000	6
Brazil	0 (18,000)	0 (19)	163,000	14	248,524	5
Ecuador	19,000 (23,000)	36 (24)	44,000	4	224,163	5
Dominican Republic	0 (7,000)	0 (7)	40,000	4	54,279	1
Colombia	0 (3,000)	0 (3)	14,000	1	44,241	1
Mexico	0 (1,000)	0 (1)	17,000	2	27,000	1
Trinidad and Tobago	14,000 (12,000)	27 (13)	6000	1	2000	0
São Tomé and Principe	17,000 (17,000)	32 (18)	9000	1	2000	0
Malaysia	0 (0)	0 (0)	1000	0	18,000	0
World	52,700 (94,400)	100 (100)	1,131,000	100	4,608,121	100

Source: FAOSTAT (2013a).

Source. Squicciarini, Mara P., and Johan Swinnen (eds), The Economics of Chocolate (Oxford, 2016; online edn, Oxford Academic, 24 Mar. 2016). https://academic.oup.com/book/25997

All the information of these slides is supported and inferred from the bibliography page 22-23

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

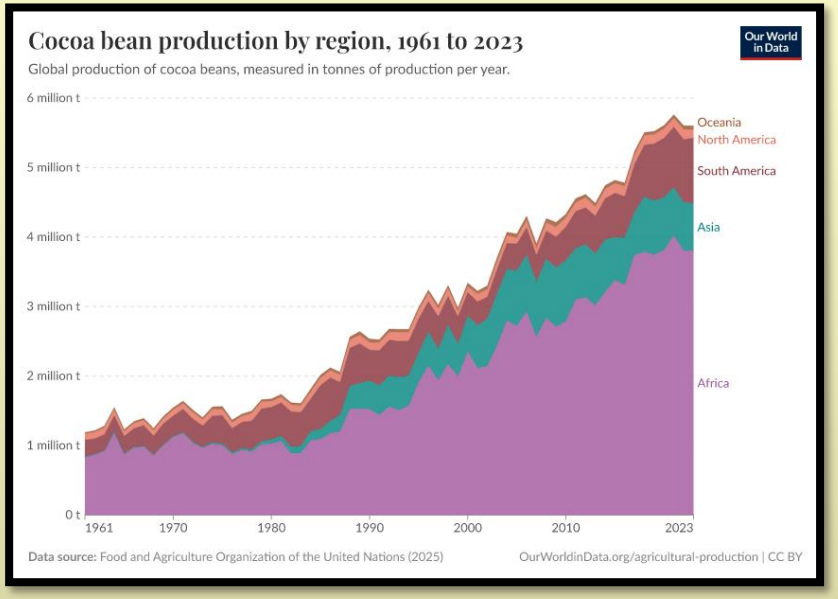
Production and consumption patterns of today

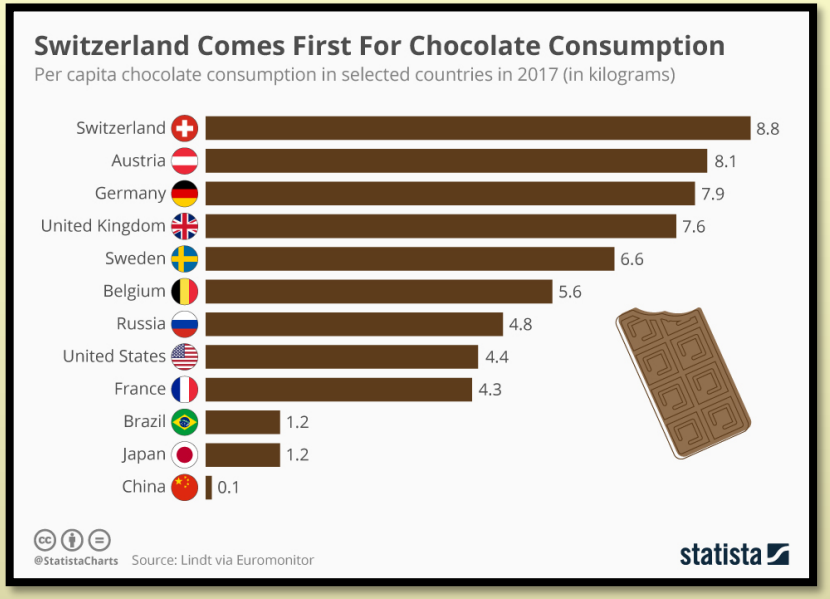
The supply of cacao beans to the world

The supply of the cacao today (2023).

https://www.visualcapitalist.com/worlds-top-cocoa-producing-countries/

The DEMAND of the cacao (2017)





All the information of these slides is supported and inferred from the bibliography page 22-23.

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Bibliography 1/2

1. Wortman, Miles. Government and Society in Central America, 1680-1840. Columbia University Press, 1982 most of the chapters. https://biblioteca.ufm.edu/opac/record/1090401
2. Mc Leod, Murdo. Spanish Central America. UT Press. 2007. Chapters 4,5,6,7,and 12. https://utpress.utexas.edu/9780292717619/
3. Tracy, J. the rise of Merchant Empires. 1993. https://www.cambridge.org/sv/universitypress/subjects/history/regional-history-after-1500/rise-merchant-empires-long-distance-trade-early-modern-world-13501750
4. Smith and Paquette, the Oxford Handbook of Slavery in the Americas. 2012. Lohse, Russell. Chapter 2 México and Central America. https://academic.oup.com/edited-volume/34514/chapter-abstract/292844829
5. Aram, B. and Yun-Casalilla B. Global Goods and the Spanish Empire, 1492-1824. Palgrave MacMillan,201. Chapter 14 https://link.springer.com/book/10.1057/9781137324054
6. Zipperer, P. The manufacture of Chocolate and other cacao preparations. Berlin W Verlag Von M. Krayn. 2015 https://www.gutenberg.org/files/55584/55584-h/55584-h.htm
7. Ross, Corey. Ecology and Power in the age of Empire. Europe ant the transformation of the tropical world. Oxford University Press. 2017. Chapter 2. https://academic.oup.com/book/3156
8. McNeil, C. Chocolate in Mesoamerica, A Cultural History of Cacao. University press of Florida, 2006.
9. Squicciarini, Mara P., and Johan Swinnen (eds), *The Economics of Chocolate* (Oxford, 2016; online edn, Oxford Academic, 24 Mar. 2016), https://academic.oup.com/book/25997
10. Origin of Cacao https://www.nationalgeographic.com/culture/article/chocolate-domestication-cocoa-ecuador
11. Cornejo, O.E., Yee, MC., Dominguez, V. et al. Population genomic analyses of the chocolate tree, Theobroma cacao L., provide insights into its domestication process. Commun Biol 1, 167 (2018). https://www.nature.com/articles/s42003-018-0168-6#citeas
12. From Cacao to Chocolate https://wellcomecollection.org/stories/from-cacao-to-chocolate
13. https://www.cambridge.org/core/journals/environmental-conservation/article/tropical-forests-and-cocoa-production-synergies-and-threats-in-the-chocolate-market/C9B13062D8A6C5EDBEDFFE490B14D9C3
14. For Cacao 101 Section:
    - Lanaud, C., Vignes, H., Utge, J. et al. A revisited history of cacao domestication in pre-Columbian times revealed by archaeogenomic approaches. Sci Rep 14, 2972 (2024). https://www.nature.com/articles/s41598-024-53010-6
    - Cilas, Christian, and Philippe Bastide. 2020. "Challenges to Cocoa Production in the Face of Climate Change and the Spread of Pests and Diseases" Agronomy 10, no. 9: 1232. https://www.mdpi.com/2073-4395/10/9/1232
    - https://www.curationist.org/editorial-features/article/how-chocolate-reached-the-eastern-hemisphere

Our next stopover is sugar in Central America.

Image Source: https://www.eleconomista.net/actualidad/La-zafra-azucarera-redujo-su-produccion-en-Guatemala-un-7.2--durante-2021-20210729-0008.html

Central America: A Quest for the Progression of Economic Value. Season IV. From 1700-1900: The origin of Central America political-economy.

The Cacao Pilot Scoop of Central America

Bibliography 2/2

14. For Cacao 101 section:
    - https://storymaps.arcgis.com/stories/519e3906423546a4948d87317bcaf633/print
    - Valle Pavón, Guillermina del. "The Cocoa Trade in New Spain in the 18th Century." Oxford Research Encyclopedia of Latin American History. 2021 https://oxfordre.com/latinamericanhistory/view/10.1093/acrefore/9780199366439.001.0001/acrefore-9780199366439-e-923
    - Todd, E.T., Arigoni, F., Holzwarth, J. et al. Developing a core collection for the conservation of Theobroma cacao's genetic diversity. BMC Genomics 26, 896 (2025). https://link.springer.com/article/10.1186/s12864-025-11882-6
    - Nieves-Orduña, Helmuth Edisson, Markus Müller, Konstantin V. Krutovsky, and Oliver Gailing. 2021. "Geographic Patterns of Genetic Variation among Cacao (Theobroma cacao L.) Populations Based on Chloroplast Markers" Diversity 13, no. 6: 249. https://www.mdpi.com/1424-2818/13/6/249
    - Ivañez-Ballesteros, Blanca and Aycart-Lazo, Pablo and Ocampo-Ariza, Carolina and Maas, Bea and Tscharntke, Teja and Thomas, Evert and Peters, Marcell K. and Steffan-Dewenter, Ingolf, Cacao Fruit Set Depends on Variety, Pollinator Diversity, Local Canopy Cover and Tree Rich Landscapes. Available at SSRN: https://ssrn.com/abstract=5359970
    - https://scienceofchocolate.com/bean-to-bar-blog/are-there-only-three-varieties-of-cacao-which-one-is-best?
    - https://www.cacaonet.org/global-strategy/where-we-are-today
    - https://www.icco.org/growing-cocoa/
    - Motamayor, J., Risterucci, A., Lopez, P. et al. Cacao domestication I: the origin of the cacao cultivated by the Mayas. Heredity 89, 380–386 (2002). https://www.nature.com/articles/6800156
    - Tschnartke et. Al. Socio-ecological benefits of fine-flavor cacao in its center of origin, https://www.researchgate.net/publication/366691772_Socio-ecological_benefits_of_fine-flavor_cacao_in_its_center_of_origin/link/6454f5f14af78873525e7b46/download
    - https://clacs.berkeley.edu/archaeology-chocolates-deep-history-latin-america
15. https://www.researchgate.net/figure/Representation-of-a-cacao-tree-b-cacao-fruits-c-cacao-pods-and-d-e-bulk-and_fig1_357803382
16. https://www.researchgate.net/figure/Cocoa-Belt-major-producing-countries-5_fig1_384921187
17. Zarrillo, S., Gaikwad, N., Lanaud, C. et al. The use and domestication of Theobroma cacao during the mid-Holocene in the upper Amazon. Nat Ecol Evol 2, 1879–1888 (2018). https://www.nature.com/articles/s41559-018-0697-x
18. Head, Brandon The Food of the Gods https://www.gutenberg.org/files/16035/16035-h/16035-h.htm
19. Grivetti, Louis. "Food of the Gods: Cure for Humanity? A Cultural History of the Medicinal and Ritual Use of Chocolate. J Nutr 130:2057S-2072S." Journal of Nutrition, n.d. https://www.academia.edu/26657390/Food_of_the_gods_cure_for_humanity_A_cultural_history_of_the_medicinal_and_ritual_use_of_chocolate_J_Nutr_130_2057S_2072S
20. Norton, M. Tasting Empire: Chocolate and the European Internalization of Mesoamerican Aeesthetics. The American Historical Review. Vol. III, 2006- https://www.jstor.org/stable/10.1086/ahr.111.3.660
21. Bergmann, John F. "The Distribution of Cacao Cultivation in Pre-Columbian America." Annals of the Association of American Geographers 59, no. 1 (1969): 85-96. http://www.jstor.org/stable/2569524

Our next chapter, Sugar – sugar in Central America.

Sugar sugar in Central America 18th-19th centuries
Photo: Galería Guatecaña.

Thank you

The origin of Central America political-economy.

Period of study: From 1700 to 1900

https://eleonoraescalantestrategy.com/