



BRAZILIAN COCOA: SOCIALY AND ENVIRONMENTALLY RESPONSIBLE



EDUCACAU



AIPC

Associação Nacional das Indústrias
Processadoras de Cacau

Instituto

arapyau



SUMMARY

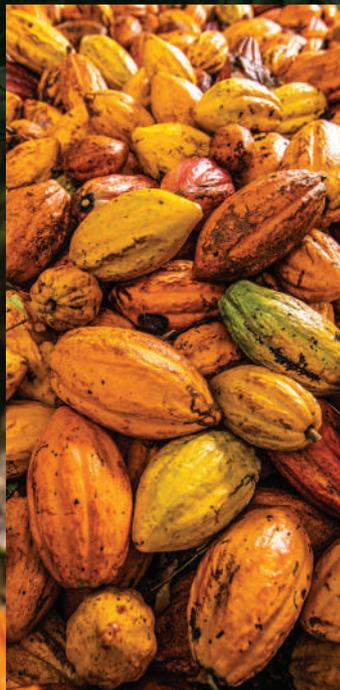
01 - 02

HISTORICAL
CONTEXT



03 - 04

WORLD COCOA
PRODUCTION



05 - 06

BRAZILIAN
PRODUCTION



07 - 08

COCOA IN THE
BRAZILIAN BIOMES



09 - 10
SOCIAL
BENEFITS



11 - 12
SUSTAINABILITY AND
ECOSYSTEM SERVICES



13 - 14
COCOA
VARIETIES AND
BY-PRODUCTS



15 - 16
DIFFERENTIALS OF
BRAZILIAN COCOA



INTRO- DUCTION

Cocoa is a fruit that originated in the Amazon region. The first records of consumption date from over 5,000 years ago. At the beginning of the 20th century, the country became one of the biggest cocoa producers in the world. However, from 1989 to 1999, Brazilian cocoa production suffered its biggest crisis caused by witches' broom disease.

Over time, the sector resumed growth, and the country regained its place among the largest global producers. Brazil is currently the world's 6th largest cocoa producing country; however it is not self-sufficient production-wise.

Brazilian production, ~200,000 tons annually, is predominantly in agroforestry systems which offer significant environmental benefits, mitigating climate change and conserving biodiversity. Moreover, it is produced mostly by family smallholders, which contributes to income generation and food sovereignty for over 93,000 families.

In summary, Brazilian cocoa has key differentials such as income generation for family smallholders, deforestation-free production, and reclamation of degraded areas. The country has public policies to foster the cocoa production chain in the country, such as the Inova Cacau 2030 plan. This is aimed at boosting production beyond 400,000 tons per year, not only efficiently, but also promoting environmental sustainability and increasing income for producers.



HISTORICAL CONTEXT



BEGINNING

Cocoa is a fruit that originated in the Amazon region. The first records of consumption date from over 5,000 years ago, predating Brazil's history.



1820

Commercial cocoa cultivation begins in Ilhéus, using the Cabruca* growing system.

**Cabruca-cocoa is an ecological agroforestry cultivation system. It is based on replacing forest strata with crops of economic interest, implanted non-continuously in the forest understory surrounded by natural vegetation, without interfering in mesological relations with the remaining systems.*



1891

Neugebauer, the first chocolate factory in Brazil, opens.



1667

The state of Pará is the first major cocoa producer in Brazil. Cultivation is promoted by Portugal, which authorizes local authorities to plant the crop as an incentive for settlers.



1860

The first exportation of cocoa from Bahia takes place. 67 tons are exported to the United States.



1914

Brazil becomes the largest cocoa exporter in the world.



1986 and 1987

Brazilian cocoa production reaches the historical landmark of 426,000 tons.



1989 and 1999

The effects of the proliferation of the fungus are so devastating that production in Bahia decreases by around 63%.



Since 1999

Brazil has been slowly recovering from the losses caused by the witches' broom infestation. Currently, average annual cocoa production in the country is 200,000 tons a year.

2019:

Brazil is included on the International Cocoa Organization (ICCO) list of countries that produce quality cocoa. Organization of the first National Special Cocoa Quality Contest, which is today in its 5th edition.



1989

A disease known as witches' broom, caused by the fungus *Moniliophthora Perniciosa*, spreads throughout the south of Bahia.



1999 and 2000

After the witches' broom infestation, cocoa production reached its lowest level ever: 123,000 tons.



Brazil is currently the 6th largest cocoa producing country worldwide.



WORLD COCOA PRODUCTION

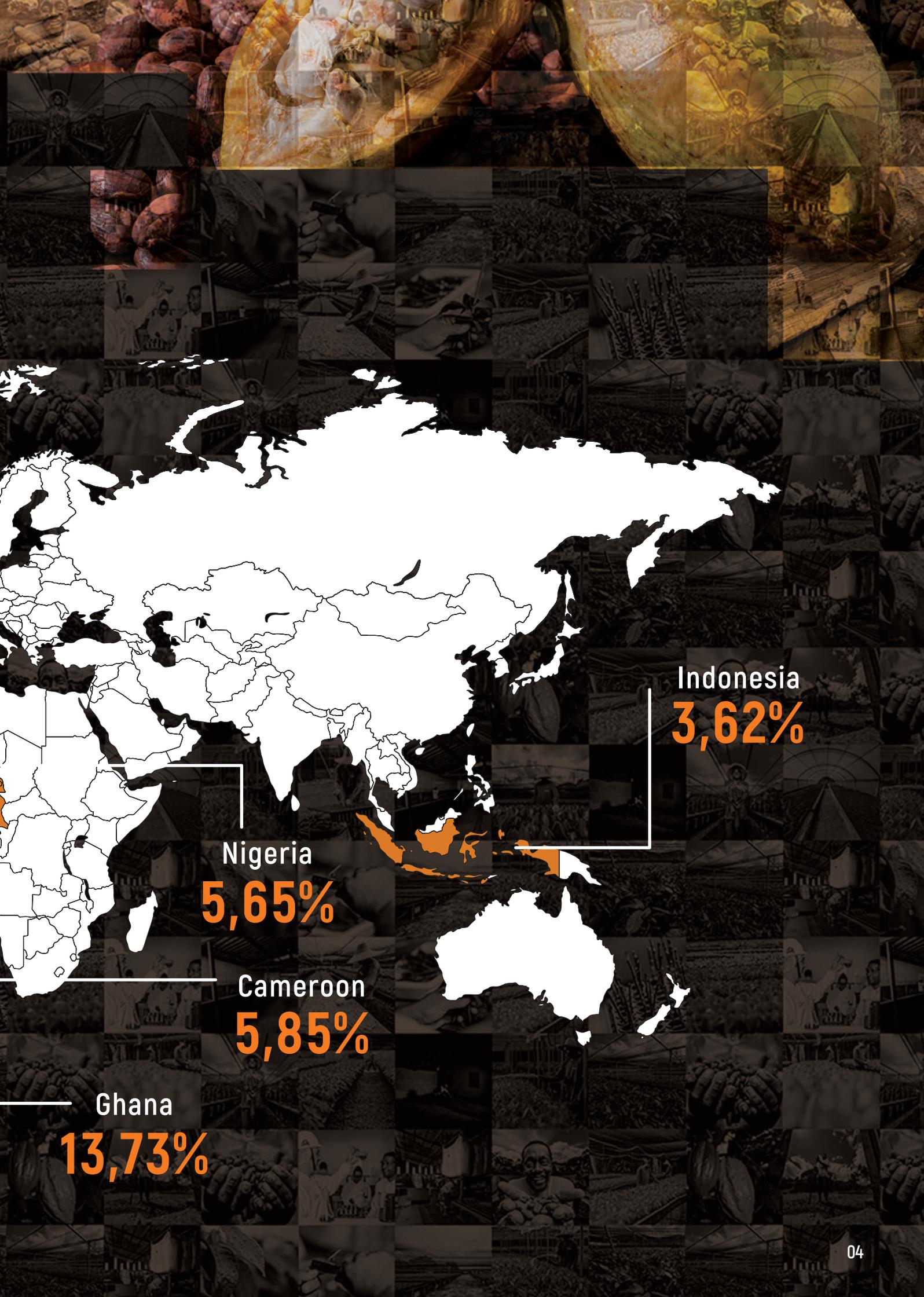
Others
13,83%

Ivory-Coast
44,03%

Ecuador
8,86%

Brazil
4,43%
6st place

Source: ICCO Quarterly Bulletin of Cocoa Statistics, Vol. XLIX, No.4, Cocoa year 2022/23 - Published on: November 30, 2023.



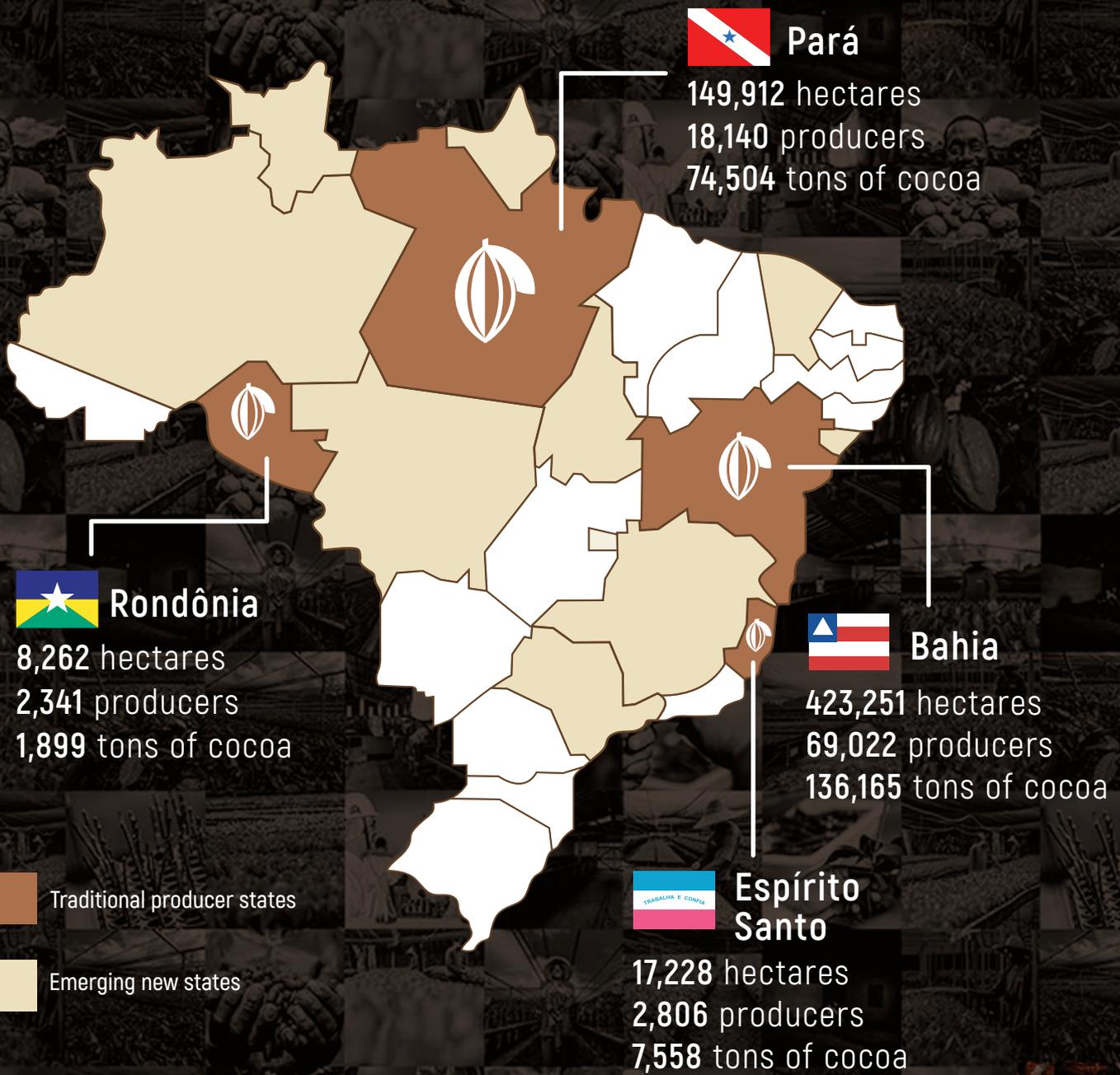
Ghana
13,73%

Cameroon
5,85%

Nigeria
5,65%

Indonesia
3,62%

BRAZILIAN PRODUCTION



Source: Area and producers - IBGE 2021/IBGE Agricultural/Livestock Census 2017. Tons (Receipt of production by Brazilian industry) - SindiDados - Campos Consultores - 2023.

DATA ON CHAIN



600,000 hectares of cocoa production;



80% of the cocoa produced in agroforestry systems (AFS): diversified agricultural systems that deliberately cultivate native and/or exotic trees together with crops and/or livestock;



In 2023, more than **220,000 tons** of cocoa received; the industries absorb around **95%** of all the cocoa produced in Brazil;



5% of the national cocoa production is considered fine/specialty cocoa;



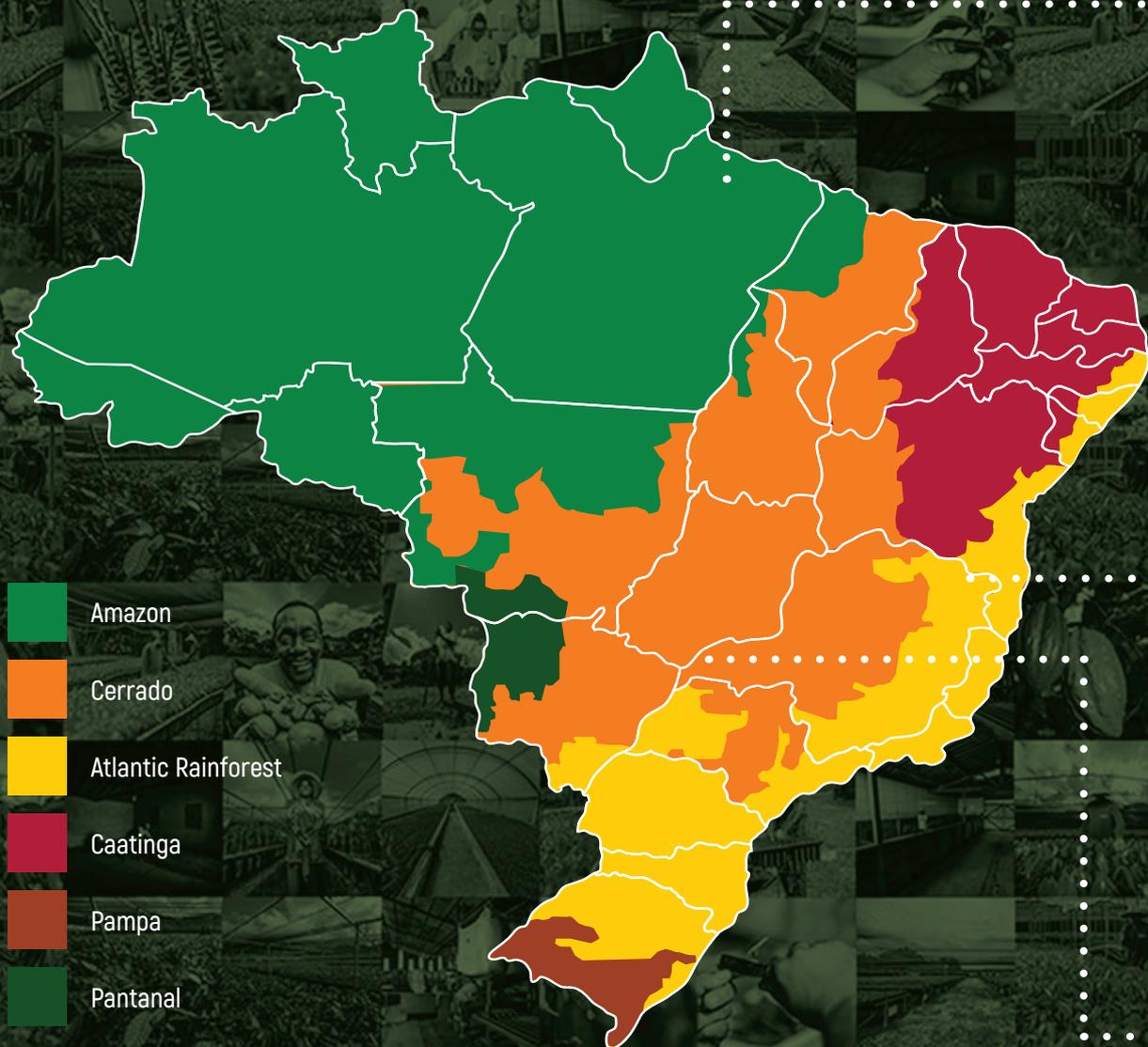
Over **93,000 cocoa producers**, most of them smallholders:
10 ha/producer;



Average national productivity: **~368 kg cocoa/ha.**

Source: Area and producers - IBGE 2021/IBGE Agricultural/Livestock Census 2017. Tons (Receipt of production by Brazilian industry) - SindiDados - Campos Consultores.

COCOA IN THE BRAZILIAN BIOMES



Cocoa is mainly produced in 3 Brazilian biomes: **Amazon, Atlantic Rainforest, and Cerrado.**

97% of the cocoa production is concentrated in the Amazon and Atlantic forests.



AMAZON: AFS WITH NATIVE PRODUCTS

Cocoa is a native fruit of the Amazon. It is used as a source of income and to promote ecological restoration.

Means of production: Agroforestry Systems (AFS).



ATLANTIC RAINFOREST: CABRUCA-COCOA

The crop has been produced in this biome for two centuries.

Means of production: Cabruca-Cocoa, ecological agroforestry cultivation system. It is based on replacing forest strata with crops of economic interest, implanted non-continuously in the forest understory surrounded by natural vegetation, without interfering in mesological relations with the remaining systems.



CERRADO: RESTORATION OF DEGRADED AREAS.

Emergence of production with the restoration of degraded areas.

Means of production: Full-sun cocoa.

SOCIAL BENEFITS

GENERATION OF JOBS AND INCOME:

The chain is responsible for the creation of approximately **200,000 direct and indirect jobs.**



A large part of Brazil's cocoa is produced by **family smallholders on properties under 10 hectares.**

Source: Cacau e chocolate no Brasil. Desafios na produção e no comércio global (Cocoa and chocolate in Brazil: Challenges in production and in global trade), Ministry of Industry, Overseas Trade and Services, in cooperation with UNESCO.



ECONOMIC DIVERSIFICATION

Producing cocoa in association with other crops helps to diversify the producers' sources of income. For example, when there is a shortfall or loss of harvest because of pathogens, diseases, extreme droughts or when prices drop, these products can guarantee an alternative source of income, complementing income and ensuring greater security for the producers.



FOOD SOVEREIGNTY

Moreover, cocoa produced in agroforestry systems makes a significant contribution to the producers' food sovereignty. Growing a variety of crops ensures self-sufficiency in food, making producers resilient to the setbacks that can affect monoculture. Accordingly, integrating cocoa with other crops guarantees a constant source of foodstuffs, reinforcing the producers' independence and ensuring food stability.

Source: Report on ecosystem services in shaded cocoa forests from LEAC/UESC.

SUSTAINABILITY AND ECOSYSTEM SERVICES



REDUCTION IN PRESSURE FOR DEFORESTATION

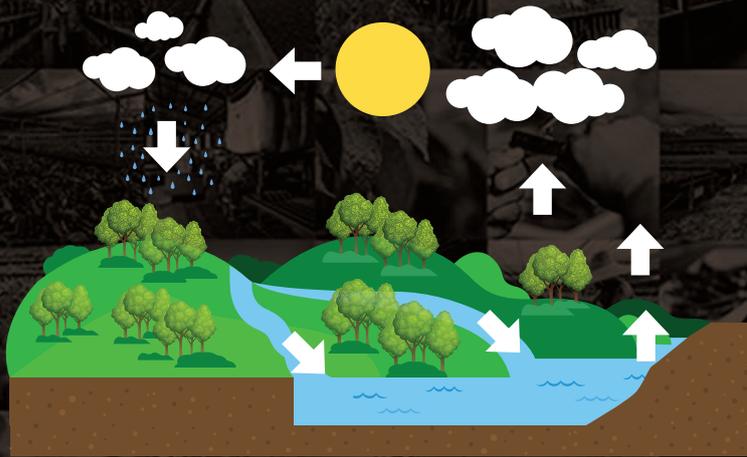
The adoption of sustainable practices and economic alternatives, such as agroforestry systems, minimizes the need for agricultural expansion in forest areas, reducing deforestation and preserving natural ecosystems.



CREATION OF ECOLOGICAL CORRIDORS, CONNECTIVITY OF FRAGMENTS AND GENE FLOW

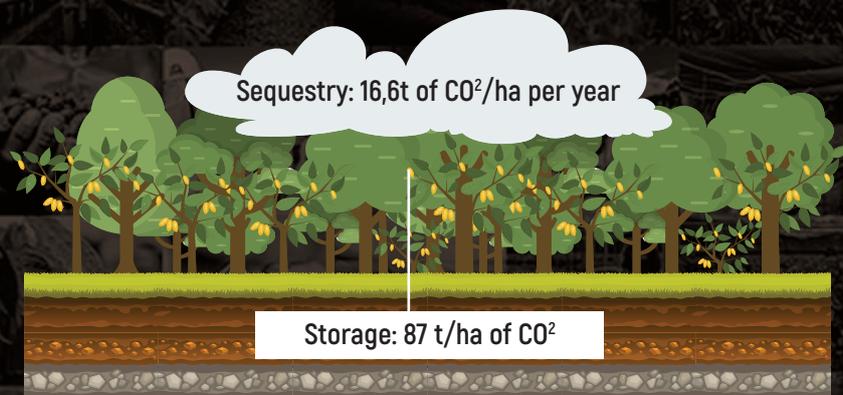
Agroforestry systems, particularly with native species, contribute to the formation of ecological corridors, promoting connectivity between fragments of habitats and facilitating gene flow for genetic diversity, in addition to facilitating pollination and the dispersal of seeds.

Source: Report on ecosystem services in shaded cocoa forests from LEAC/UESC.



REGULATION OF THE HYDROLOGIC CYCLE

Cocoa agroforestry systems play a vital role in regulating water. They conserve water in the soil, prevent erosion and contribute to the sustainability of water resources.



CARBON STOCKS AND REMOVAL OF CO²

Growing cocoa in agroforestry systems functions as an effective carbon sink, storing carbon and removing CO² from the atmosphere. It is an efficient strategy for mitigating climate change. In 18 years, growing cocoa in AFS has absorbed around 300t CO²/ha, sequestering an average of 16.6t of CO²/ha per year.

CONSERVATION OF BIODIVERSITY

Producing cocoa in agroforestry systems promotes the conservation of biodiversity, providing multifunctional habitats that sustain a variety of species, contributing to the resilience of ecosystems.



VARIETIES OF COCOA

There are three groups of cocoa trees:

Criollo, Forastero and Trinitario.



Criollo

It is a large fruit usually that has a thin, rough shell that is dark green when unripe, turning to yellow or an orange shade when ripe.



Forastero

Forestero cocoa is usually rounder and has flat beans of an intense violet color, producing cocoa known as "basic". This is the most common variety, accounting for 80% of global production. It is very common in the plantations in Bahia, the Amazon and African producer countries.



Trinitario

This variety is the result of crossbreeding Criollo and Forastero cocoa. It produces seeds whose color varies from pale yellow to dark purple. The fruit is of intermediate quality.

With these varieties, Brazil exports cocoa whose quality is recognized by the ICCO. We have two organizations dedicated to the genetic mapping of cocoa varieties and quality: Executive Commission for Cocoa Cultivation Planning (CEPLAC) and Cocoa Innovation Center (CIC).

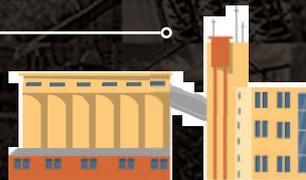
COCOA PRODUCTS AND BY-PRODUCTS

01



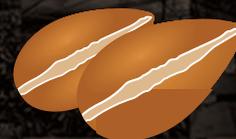
Pre-processing of the fruit: harvesting the cocoa, removal of the seeds, extraction of pulp, fermentation of the seeds, drying and storing the beans.

02



The beans are sent for crushing. They are submitted to a classification process.

03



Once dried and fermented, the beans are cleaned and shelled.

04



The internal part of the bean after the bean has been shelled is called the cocoa nib.

05



The nibs are ground and then roasted, which produces cocoa paste/liquor.

06



The cocoa paste is then pressed in a mechanical process and separated into cocoa butter and cocoa cake.

07



Cocoa powder is obtained from the cocoa cake.

08



The cocoa powder, butter and liquor are sold to food industries.

DIFFERENTIALS OF BRAZILIAN COCOA

INCOME GENERATION AND PRODUCTIVITY



In the past, productivity in Brazil was **400kg/hectare** (currently it is **368kg/ha**). If productivity is improved and returns to the previous level, there could be an estimated 15% increase in producers' gross income.



In Brazil, agroforestry systems with cocoa generate a net income **3 to 6 times** higher than livestock production per unit of area.

DEFORESTATION-FREE PRODUCTION



In Brazil, **99.6% of the cocoa is produced outside conservation units**, national parks, indigenous lands, and other protected areas.



Since 2008, **85%** of the area currently planted with cocoa in the Amazon region (Pará) **is in non-deforested land**.

RESTORATION OF DEGRADED AREAS



It is estimated that there is **~100 million hectares** of degraded pastureland in Brazil that could be used for cocoa production. This would eliminate the need to resort to deforesting new areas. This strategy not only preserves existing forests, but also acts as a catalyst for restoration, contributing to the recovery and revitalization of damaged ecosystems.

ESTABLISHED PUBLIC POLICIES



Inova Cacau 2030: target of exceeding production of **400,000 tons of cocoa per year by 2030, making Brazil the fourth largest global producer**, increasing efficiency in cocoa production and boosting producer income, taking into account socio-environmental aspects of production.



Family Agriculture Crop Plan: agricultural credit access program with BRL 71.6 billion for the Pronaf (Programa Nacional de Fortalecimento da Agricultura Familiar) family agriculture reinforcement program.

Furthermore, because access to credit is essential to foster the cocoa chain, there are public, private and joint initiatives, such as the BNDES development bank Blended Finance program, to complement public policies and facilitate access to credit with technical assistance.

Source: Area - IBGE 2021/IBGE Agricultural/Livestock Census 2017. Tons (Receipt of production by Brazilian industry) - SindiDados - Campos Consultores. Data from CocoaAction Brasil reports. Degraded areas: Atlas da Pastagem (Pastureland atlas), 2022. LAPIG/UFV. Inova Cacau and Plano Safra; gov.br





Executors:

Instituto
arapyau 



AIPIC
Associação Nacional das Indústrias
Processadoras de Cacau



EDUCACAU

Support:

CocoaAction
Brasil



World Cocoa
Foundation



CIC

Centro de Inovação do Cacau



CNA



MINISTÉRIO DA
AGRICULTURA
E PECUÁRIA

GOVERNO FEDERAL



UNIÃO E RECONSTRUÇÃO