



Ministry of Agriculture and Livestock - Mapa Secretariat for Innovation, Rural Development, Irrigation and Cooperativism -SDI

INOVA CACAU 2030

Strategies to promote sustainable development in the cocoa producing regions of Brazil

MAPA's mission: To promote the sustainable development of agricultural production chains for the benefit of Brazilian society

Brasilia MAPA **2023**

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MESSAGE FROM THE MINISTER

Innovation plays an important role in formulating strategies to create a healthy environment and synergies between the different sectors involved in Brazil's agribusiness production chains. The aim is to contribute to sustainable development and add value to different products.

For the benefit of Brazilian society, the Ministry of Agriculture and Livestock (MAPA) presents the Inova Cacau 2030 Plan. This initiative was developed by the Executive Committee of the Cocoa Farming Plan (Ceplac) in partnership with CocoaAction Brasil.

The Inova Cacau 2030 Plan is the result of intensive research, data consolidation, information processing and dialogue with various sectors. It is dynamic and will be constantly monitored and improved. The focus is on promoting innovative, conscious and articulate governance in decision-making.

The Inova Cacau 2030 Plan brings together practices and experiences with the potential to transform the Brazilian cocoa scenario, enabling Brazil to become a world reference in the sustainable production of the fruit. The results will have an impact on production efficiency and improve the quality of life, work and income of thousands of families in our country.

Carlos Henrique Baqueta Fávaro

State Minister for Agriculture and Livestock



CONTEXTUALIZATION

Brazil was once the world's leading cocoa producer, with an average of 400,000 tons per year, or 25% of world production. However, in the 1990s, the sharp fall in international cocoa prices due to increased exports from African countries, combined with domestic economic problems and the arrival of witches' broom disease in Bahia, then the main producing state, meant that national production halved in less than 10 years.

Even with the increase in cocoa production in the state of Pará in subsequent years and the gradual recovery of cocoa cultivation in Bahia, which accounts for around 95% of national production, Brazil still has a deficit in cocoa production to meet domestic and export demand, estimated at 300,000 tons/year. This estimate takes into account the capacity of the country's milling industry, with large, medium and small processing plants, and the more than 300 chocolate brands located in the various producing regions that use the bean directly for their bean-to-bar and tree-to-bar products. In addition to meeting domestic demand, there is also the growing demand from the international market, estimated at an additional 1 million tons per year over the next 10 years, where Brazil can become an exporter of almonds and derivatives and expand its business to other markets.

Increasing cocoa production is therefore of strategic importance for the country, which is the only one of the producing countries to have all the sectors of the cocoa and chocolate value chain. This includes production units, mills and chocolate factories, making it possible to generate foreign exchange by expanding exports of chocolate and its derivatives, as well as resuming exports of almonds.

This requires improving the productive efficiency and sustainability of cocoa plantations and increasing the area under cultivation, which involves overcoming a number of challenges ranging from the development of technical assistance and rural extension (ATER) and access to credit to the marketing of the product.

In this context, the Federal Government, represented by the Ministry of Agriculture and Livestock, through the Executive Committee of the Cocoa Farming Plan, together with the private sector, represented by CocoaAction Brasil, has developed the INOVA CACAU 2030 PLAN in a participatory and collaborative manner.



In order to draw up the plan, various pieces of information on the cocoa production chain were gathered and processed into a comprehensive diagnosis, which made it possible to plan strategic operations and actions with a national focus. The methodological framework adopted was Strategic Situational Planning (SSP), a method based on the identification of complex problems that require a multidimensional approach, be they political, economic, social, environmental, cultural, etc., as well as multi-sectoriality in order to find solutions, relying on broad interaction between the sectors of the production chain, bringing together efforts that facilitate their construction and subsequent implementation.

Throughout the process of building and systematizing knowledge of how the cocoa production chain works, it has become clear that the problems reported are complex and deeply intertwined. This means that the chain's challenges need to be addressed in a structured and systemic way, with solutions that can operate in multiple dimensions. The way found for a systematic approach to the cocoa chain was to work along four axes: i) economic-productive; ii) social; iii) environmental; and iv) governance. Targets and indicators have been developed taking into account public policies and resources of various kinds, so that they are not only bold and challenging, but also precise and feasible.

In order to broaden the participation of the various sectors of the cocoa production chain, the Plan has been structured in two phases: the Strategic Plan, presented here, which proposes operations, actions, objectives and indicators; and the Tactical-Operational Plan, to be developed in the first half of 2024, with the aim of proposing activities and projects capable of achieving results in order to overcome bottlenecks and exploit opportunities for the entire chain.

With this set of elements, the INOVA CACAU 2030 PLAN meets the main requirements for an instrument of this type to guide the actions of the various sectors of the production chain in the coming years, so that it can be adopted by all interested public, private and civil society entities.

Lucimara Chiari

Director of the Executive Committee of the Cocoa Farming Plan

Pedro Paulo de Faria Ronca

Director of the CocoaAction Brasil Initiative

MAIN OBJECTIVE

The objective of the INOVA CACAU 2030 PLAN is to consolidate Brazil as the benchmark of sustainable cocoa origin for the world, focusing on the conservation of production and the guarantee of improved living and working conditions throughout the chain.



GUIDELINES

- Increase the efficiency of production units in terms of productivity, product quality and cost reduction, with socio-environmental benefits;
- Promote the sustainable use of natural resources in cocoa producing regions, using effective technologies with low environmental impact;
- Adopt provisions that regulate labor relations and promote the well-being of producers and other workers;
- Develop and implement technical and financial mechanisms for the conservation of the environment and biodiversity, and for the restoration of degraded ecosystems, with the aim of increasing the effectiveness and coherence of planning, monitoring and forest restoration efforts;
- Promote fair and sustainable cocoa production and marketing systems based on transparent trading relationships that bring producers and consumers closer together, prioritizing institutional support for family farmers;
- Increase the participation of women and rural youth in production and entrepreneurship in the cocoa chain;
- Provide subsidies to improve access to public and private resources earmarked for primary production and help create specific rural development instruments for sustainable cocoa farming - sustainable technologies and practices that increase productivity and cocoa production.

PREMISES

- Promoting good agricultural practices in cocoa farming improves aspects of the crop and the efficiency of production systems;
- The growth of the world's population and the emergence of new markets with the growth of emerging economies have increased chocolate consumption and therefore the demand for cocoa;
- Increasing the productivity and quality of cocoa improves producers' income and benefits the entire chain;
- The development and adoption of sustainable production technologies increases productive efficiency and minimizes risks;
- The availability of land in traditional and non-traditional regions for the expansion of cocoa farming;

- The fight against child labor begins with education in schools;
- Actions to raise awareness of decent work are reflected in workers' productivity and quality of life.
- Associations and cooperatives help to integrate and involve the production sector, leading to greater competitiveness and economic returns;
- Agroforestry systems with cocoa promote the recovery of degraded areas and reduce the risk of deforestation and fires;
- Payment for Environmental Services (PES) projects can be used in economic valuation to calculate the opportunity costs that rural producers incur by restricting their land use options when they enter a PES scheme;
- Maintaining cocoa in the Amazon and Atlantic forest biomes promotes the conservation of native forests:
- Helping to control illegal deforestation in cocoa production areas increases the competitiveness of the product in Brazil and abroad.

AXES, OPERATIONS AND ACTIONS

One of the main bottlenecks in the development of this Plan was the significant discrepancy between the data on Brazilian cocoa production from different sources in the country, particularly in terms of area and quantity produced and harvested.

The wide dispersal of farms, their location (in the Atlantic Forest or the Amazon Rainforest), with roads that are difficult for researchers to access, and the poor connectivity in rural areas (no internet or telephone signal) are all factors that make field surveys complex.

Despite the inconsistency of the data, a broad diagnosis of the production chain was carried out in order to set feasible objectives, without losing sight of the fact that these must be bold and challenging in order to motivate and encourage the actors involved.

The INOVA CACAU 2030 PLAN has been structured around four axes, three of which are operational and act synergistically, and one of which is the governance axis of the plan. For each axis, operations have been proposed and, within these, actions with clearly defined goals and indicators.

AXIS 1: ECONOMIC - PRODUCTIVE

Strategic objective:

• To increase the productive efficiency of Brazilian cocoa farming and the income of producers.

Strategic target:

• To exceed production of 400,000 tons of cocoa per year by 2030.

Low production efficiency is one of the biggest bottlenecks in the cocoa chain. Without adequate productivity, producers are unable to sustain their businesses and improve their livelihoods.

It is known that the adoption of basic cocoa crop management practices, coupled with continuous training of producers through qualified technical assistance, access to improved genetic material (seeds and seedlings) for replacement/densification of land, and access to credit, can change the reality of the countryside and promote a virtuous circle for national cocoa farming. In addition, there is a promising expansion of cocoa plantations in both traditional and non-traditional areas of cocoa production. The Plan is designed to ensure that this expansion takes place in a sustainable manner, particularly in areas with high human population densities, with cocoa being a powerful vector for reforestation. To this end, it is also necessary to increase the availability of improved genetic material, seeds and planting materials, together with access to credit and qualified technical assistance, so that these areas can adopt sustainable production systems.

Operations - Axis 1:

OP1 - Sustainable expansion of cocoa production and increased productivity

Goals

- Increase the number of producers receiving qualified technical assistance to 30%;
- Increase the number of contracts to 15,000 per year and reach BRL 250 million in loans taken out by producers under the Safra Plan;
- Revitalize 100,000 ha of production areas, improving the density of cocoa trees and/or renewing them;
- 30% of producers participating in public or private sustainability programs;
- Expand cocoa production areas by at least 120,000 ha;
- Produce approximately 30 million cocoa seeds and seedlings per year by 2030; and
- Train and certify 150 nurseries to produce cocoa seeds and seedlings.

Indicators

- Number of producers receiving technical assistance; number of ATER technicians trained;
- Area in hectares of cocoa plantations planted;
- Area in hectares of densified and/or renewed cocoa plantations;
- Certifications, sustainability programmes, Carbono + Verde, GAP [good agricultural practices] events, training materials;
- SICOR data; and
- IBGE, CAR, CEPLAC, Embrapa, MapBiomas (MapCacau), private sector projects, public and private financial intermediaries.

Strategic Action Matrix - Operation 01:

Action 1.1

Increase the number of producers receiving qualified technical assistance

There are various institutions (state and municipal bodies, SENAR, NGOs and others) that provide Technical Assistance and Rural Extension (ATER) services to cocoa producers. These services have their own specific characteristics and are aimed at different profiles of producers, men and women. By understanding the logic of each of them, the plan aims to strengthen, expand and improve the scope and results of ATER by structuring and implementing a coordinated network that articulates and integrates actions, taking into account different approaches and methods, with collective and digital ATER strategies, serving producers in a coordinated way that meets their needs.

With the implementation of this set of measures to improve ATER for cocoa producers in terms of quality, frequency and continuity, it is hoped that 30% of all cocoa producers in the country will be served by 2030.

Action 1.2

Promote adequate planting density and renewal of cocoa plantations

Several cocoa producing regions are facing serious problems due to the low density of cocoa trees per hectare and the high age of productive land. These factors have a direct impact on the lower productivity of these farms and consequently on the income and quality of life of producers and their families.

In this context, the Plan foresees the revitalization of 100,000 hectares by 2030 by adjusting the density of cocoa trees per hectare and/or renewing these areas in order to increase production and productivity. It is therefore necessary to have clear and feasible strategies to structure the production and distribution of seeds and plantlets of good genetic quality to producers.

Action 1.3

Structuring and implementation of a seed and seedling production system for the expansion and sustainable renewal of cocoa production in the country

In order to increase crop production, it is proposed to expand plantations and promote the revitalization of existing areas. To this end, a strategy for the production and distribution of cocoa seeds and plantlets should be structured to meet a demand equivalent to 30 million seedlings per year, including vegetatively propagated plantlets and seedlings.

The planting of seedlings, mainly used in Pará, will require an annual production of 14 million hybrid seeds of improved progeny.

This will be done by strengthening the current capacity of CEPLAC and its partners to produce improved genetic material adapted to the different regions, as well as by implementing an integrated program of technological training for nurserymen and certification of nurseries to enable the production of quality seeds and seedlings for producers in the quantities proposed in the Plan.

Action 1.4

Encourage the adoption of good agricultural practices and the efficient management of the land used for production

Producers who effectively integrate sustainable practices into their production system have the opportunity to achieve better financial results, as efficient resource management saves on inputs, improves productivity and almond quality, and allows them to control production costs. In addition to the economic aspects, the adoption of sustainable practices promotes improvements in the use of natural resources (soil, water, etc.), thereby reducing the impact of production.

In a context where the consumer market is becoming increasingly demanding and Brazil wants to be a sustainable cocoa sourcing option for the world, the promotion of good agricultural practices is a fundamental aspect. There is currently a wide range of public, private and third sector organizations that aim to educate producers in this regard, either through verification/certification or even their own sustainability programmes. The aim of the Plan is to support and help producers so that at least 30% of them are involved in some kind of action along these lines.

Action 1.5

Safra Plan to strengthen and expand access to public rural credit

Currently, the number of cocoa producers who have access to credit to finance and invest in their crops is relatively limited (taking into account access to credit under the Safra Plan in 2021, there were only 7,000 contracts for financing and investment in cocoa farming), which has implications for production, productivity and quality. At the root of this limited access are problems related to land regularization, low availability of bank guarantees, limited receipt of ATER, fear of bank debt, among other factors. In order to achieve the increases in production, productivity, quality and sustainability advocated by the Plan, it is a precondition to improve producers' access to credit, mobilizing greater volumes of resources, integrated with an efficient ATER service to promote the modernization of production systems.

In this way, the Plan aims to strengthen and propose mechanisms to producers to help increase the number of credit agreements (15,000 agreements/year in 2030), reaching amounts close to BRL 250 million taken through the Safra Plan.

Action 1.6

Promoting sustainable cocoa expansion

The diagnosis of cocoa production showed that there are degraded areas in the various producing countries that have been used for cocoa production, reflecting the interest of producers and state governments in expanding the areas planted with this crop. On the basis of current production and the potential for expansion, growth projections have been established for the area planted, which will enable the production target set to be achieved by 2030.

The Plan aims to expand cocoa plantations by 120,000 hectares by 2030, based on the premise that this will be achieved through sustainable production models in traditional and non-traditional production areas.

OP2

Quality improvement, value creation and traceability

Goals

- By 2030, 70% of the cocoa produced in Brazil should be classified as 1, 2 or 3;
- 70% of production to be traceable by 2030; and
- 10% of commercialized production above market value.

Indicators

- Data provided by the Centro de Inovação do Cacau (Cocoa Innovation Centre CIC);
- Volume of cocoa marketed by the producer with the issue of an NF SEFAZ invoice;
 and
- Certifications, public sector, cooperatives, "bean to bar" association.

In order to advance the production of quality cocoa in Brazil, it is essential to improve the efficiency of the harvesting and post-harvesting processes, with particular attention to good practices in the selection and handling of the fruit, the improvement of fermentation and drying conditions for the beans, and their proper storage. The Inova Cacau Plan has therefore defined actions and measures to advance these processes, as well as promoting the expansion of production traceability and certification.

The Inova Cacau 2030 Plan proposes that technical training should focus on aspects related to the preparation and classification of almonds, good harvesting and post-harvesting practices. Important aspects that influence the flavor and purity of the almonds, physical and chemical characteristics that are essential to standardize the quality of the raw material in order to offer a differentiated flavor and aroma. This strong commitment to the training of people involved in the harvesting and post-harvesting processes should lead to an increase in quality and a reduction in losses.

Another priority of the Plan is the continuous development of techniques and equipment for collective processing, encouraging associations and cooperatives to optimize scale and management, based on the successful experiences of other countries that have developed these technologies and reduced costs for producers. Implementing the actions set out in this section of the Inova Cacau 2030 Plan means paving the way for greater traceability of production. This should cover at least 70% of Brazilian production by 2030, and for certifying the quality and origin of Brazilian cocoa at a level similar to that of other producing countries, leading to greater market integration and better remuneration for producers.

Strategic Action Matrix - Operation 02:

Action 2.1

Improving post-harvest and processing of Brazilian cocoa

To improve the quality of cocoa produced in Brazil, it is essential to improve post-harvest processes. Currently, Brazilian production falls short of basic quality requirements, resulting in a high percentage of defects in the beans. Problems such as poor fermentation and drying result in higher than desired levels of slate-colored seeds, smoke odor and moisture. For this reason, the plan provides for training and education of cocoa producers in harvesting, post-harvesting, processing and storage, so that by 2030 at least 70% of the cocoa produced will be classified as type 1, 2 or 3.

Action 2.2

Increasing cocoa volumes with traceability

Given the tradition of cultivation and the diversification of production areas, there is great potential for Brazilian cocoa to occupy a prominent and recognized position on the international market. The consumer market for cocoa and its derivatives is increasingly demanding transparency about the origin of products, as well as the social and environmental practices used in production. The Inova Cacau 2030 Plan must be aligned with this perspective, which is why it has set the goal of making 70% of cocoa production traceable by 2030.

Action 2.3

Promoting cocoa value chains

Another aspect of improving the quality of Brazilian cocoa is the flourishing market for speciality chocolates with high cocoa content, as well as organic, varietal and other certifications such as denomination of origin. For these products, the quality of the cocoa must be superior to type 1 cocoa, known as fine flavored cocoa. Although all of Brazil's exports are already recognized as fine flavored cocoa, albeit in very small quantities, it is the increase in the production of cocoa of this standard that should make it possible to conquer new niche markets.

The Plan also includes cocoa by-products (nibs, lozenges, caramelized beans, jellies, etc.) obtained by verticalizing production, such as artisanal chocolates, and it is hoped that by 2030 Brazil will be selling 10% of the volume produced above market value.

OP3

Strengthening knowledge, technology and innovation creation

Goals

- Increase investment in scientific and technological research in the chain to reach at least 2% of the ratio of cocoa GDP to the gross value of cocoa production;
- Ensure that 100% of existing phytosanitary protection programmes are maintained; and
- Revise the methodology for obtaining data on the chain and conduct a new census of Brazilian cocoa farming.

Indicators

- State government indicators amount transferred to FAPs; MCTI (CNPq, Finep); MEC (Capes); private sector investment; number of articles published (Capes); number of intellectual property registrations (INPI and RNPC);
- MAPA, SFA, DSV, CEPLAC; and
- Validation of the methodological review by the different actors in the chain; publication of updated data.

In order for cocoa production in Brazil to grow in production and productivity with quality and socio-environmental sustainability, it is strategic to strengthen and expand the generation, dissemination and adoption of scientific knowledge and technologies applied to the development of the production chain. In this sense, the Inova Cacau 2030 Plan has designed its operations, actions and activities to strengthen partnerships and articulations, enabling different actors to contribute in the areas of Science, Technology and Innovation (ST&I) to promote the development of the entire chain.

The Inova Cacau 2030 Plan attaches great importance to ST&I initiatives being carried out in a coordinated manner, and advocates redesigning and strengthening the governance model for these processes so that efforts are made in a synergistic, cooperative and collaborative manner, sharing knowledge of ongoing initiatives between all links in the chain, so that the benefits of improving processes can be appropriately appropriated.

Strategic Action Matrix - Operation 03:

Action 3.1

Expansion of investment in research, innovation and knowledge and technology transfer

One of the essential factors for the development of the cocoa production chain is investment in Science, Technology and Innovation (ST&I), especially to overcome obstacles related to production and productivity, labor shortages, crop management, post-harvest processing, among others. To meet this challenge, Ceplac has been restructured to work with Embrapa through the creation of the Mixed Research and Innovation Unit [UMIPI – cocoa], in order to take advantage of the conditions established in the ST&I legal framework and ensure greater agility in the implementation of actions.

The reformulation of the governance model for Science, Technology and Innovation in the cocoa chain will be based on the proper structuring of UMIPI - cocoa, by establishing management models and significantly expanding partnerships that involve other actors in the innovation process, to increase the volume of resources allocated to this purpose. In this way, the Plan aims to increase investment in scientific and technological research in the chain so that it reaches at least 2% of the ratio between cocoa GDP and the gross value of cocoa production.

Action 3.2

Maintenance of phytosanitary defense systems that ensure the protection and health of crops

Brazilian agriculture is an extremely important part of the country's GDP. Part of the success and growth of Brazilian agribusiness is due to the commitment of public and private sector organizations to the development of quality research and innovation, which has become a global benchmark. In this process, specifically with regard to the phytosanitary defense system, the Ministry of Agriculture and Livestock (MAPA), through the Secretariat of Agricultural Defense (SDA), acts in a sound and assertive manner. The aim is towards preventing, containing and, if necessary, taking action, establishing biosafety protocols and monitoring potential pests and diseases that could negatively affect the production of a given crop.

Brazilian cocoa farming suffered a severe blow in the 1980s when the witches' broom disease struck, decimating large areas and leaving a significant number of farmers in a crisis. Gradually, after a long period, cocoa in Brazil has made a significant recovery, thanks to the producers, of course, but also to a large extent to the various organizations in the production chain that have supported this recovery. This occurred through investments in research, innovation, technology, credit mechanisms, etc., which, together with technical assistance, have put Brazilian cocoa on an upward production spiral. In this way, the Plan reaffirms and aims to promote the maintenance of existing phytosanitary defense systems, as well as supporting the competent bodies and those interested in promoting new tools to help and support producers in the event of the arrival of new diseases that threaten the country's cocoa growing areas.

Action 3.3

Strategy for collecting and consolidating cocoa farm data

Collecting data on a production chain is essential for planning actions to improve it. The data must therefore be credible, as close to reality as possible, and accepted by the various players in the chain, so that strategies can be drawn up and public policies proposed that can have a positive impact on the sector.

Cocoa farming has specific characteristics that make it difficult to collect and analyze data from different sources throughout the country, leading to disparities. The wide dispersion of producers, their location (in the Atlantic Forest or the Amazon Rainforest), with roads that are difficult for researchers to access, and the low level of connectivity in rural areas (no Internet or telephone signal) are all factors that make field surveys difficult. This is why the Plan envisages the formulation of a strategy for a methodological review of data collection and consolidation, with the aim of supporting the proper planning of the chain's actions, as well as proposing a new census of Brazilian cocoa farming that will help measure the proposed progress.

Therefore, in order to adequately plan and monitor the increase in production, productivity and expansion of the areas proposed in this plan, it is important to understand and overcome the limitations resulting from the divergence and lack of data, and to jointly seek cooperation between the public and private sectors in order to improve current methodologies.



AXIS 2: SOCIAL

Strategic objective:

• Improvement of working conditions and social organization of cocoa producers.

Strategic target:

- · Zero child labor and slavery-like practices in cocoa growing areas;
- Increase the turnover of cooperatives and encourage the expansion of the number of associated/cooperating producers by 30% by 2030 tons of cocoa per year by 2030.

The Social Axis of the plan focuses on measures and actions aimed in particular at producers and rural workers, but which affect the entire production chain. Encouraging associations and cooperatives, working on gender issues and the participation of youths, as well as curbing child labor and slave-like conditions are the key points of this axis.

Operations - Axis 2

OP4

Reinforcement of the actions of social organizations in the cocoa chain

Goals

Reach a total of 30% of producers in cooperatives and/or associations by 2030.

Indicators

- · Number of new producers joining cooperatives and/or associations; and
- Turnover of cooperatives (OCB).

Addressing the critical issues that affect the development of the cocoa chain requires actions with producers that promote the expansion of the level of association and the strengthening of cooperatives, ways that contribute to a better organization of producers and a better use of the economic potential of cocoa. According to data from the 2017 Agricultural Census, only 11.4% of cocoa producers are organized in cooperatives and associations.

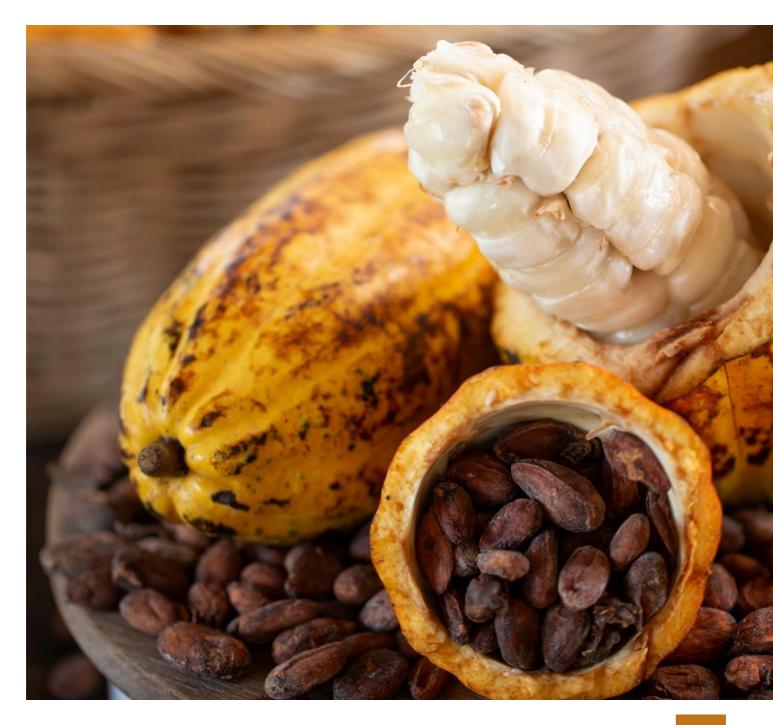
This level of organization among producers will be able to generate positive effects throughout the chain, which already has relevant entrepreneurial benefits, such as the Bean to Bar and Tree to Bar organizations, as well as other initiatives that will be promoted by the Plan. Actions based on these approaches will be fundamental in overcoming the asymmetries of scale that exist in the chain, where small producers predominate, and in enabling productivity and quality gains, value added and the social sustainability of production.

Strategic Action Matrix - Operation 04:

Action 4.1

Strengthening and promotion of co-operativism/associativism in the cocoa chain

The Inova Cacau Brasil 2030 Plan recommends that the organization of producers should be promoted by structuring technical assistance and financing projects that meet the needs of entrepreneurs, cooperatives and associations in the chain, increasing the economic organization of producers, strengthening this segment and its negotiation processes and other links, reducing asymmetries and transaction costs between different actors. Thus, the Inova Cacau 2030 Plan aims to reach a level of 30% of cocoa producers in associations and/or cooperatives by 2030.



OP5

Enhancement of women's and rural youth's participation in production and entrepreneurship in the cocoa production chain

Goals

• In the cocoa production chain, at least 30% of women and youths are involved in production and entrepreneurship.

Indicators

Data from IBGE, SENAR, EMATER and state organizations.

Strategic Action Matrix - Operation 05:

Action 5.1

Actions to increase women's and youth participation in the cocoa chain

With the aim of involving and strengthening the participation of women and youths in the cocoa production chain, important issues will be discussed. Such as the importance of the social organization of rural women and youths in the context of cocoa farming; participation in the market for quality beans; production of quality cocoa; production of cocoa powder for institutional markets; use of bio-inputs in cocoa farming; sustainable management and nutrition of cocoa trees; promotion of social inclusion and gender equality.

OP 6

Promotion of decent work and improvement of living conditions

Goals

- Provide decent work training to at least 80% of cocoa producers by 2030; and
- Eliminate slavery-like labor and child labor in cocoa production by 2030.

Indicators

 Number of assessment notices issued - data from the Ministério Público do Trabalho (Brazilian Labor Law Enforcement Authority).

Strategic Action Matrix - Operation 06:

Action 6.1

Awareness raising and training on decent work practices

Training producers and workers on decent work practices is an important step in making them aware of the seriousness of the issue and empowering them to seek knowledge and promote structural change in their relationships. In addition, the formalization of labor relations and agricultural partnerships, as well as the promotion of workers' health and safety through NR-31, are essential components for improving working and living conditions in the cocoa chain in Brazil.

In this context, the Plan proposes to provide training on decent work practices to at least 80% of cocoa producers by 2030.

Action 6.2

Elimination of slave labor and child labor in cocoa regions

Despite the fact that in the last five years, only in 2019 and 2022, there were incidents of slavery-like working conditions in cocoa production, involving 7 and 6 workers respectively (Sub-Secretariat of Labor Inspection - SIT, Ministry of Labor and Social Security - MTP), there are still inadequate working conditions in cocoa farms, mainly related to incidents of working in slavery-like conditions and a certain amount of child labor. The strategic objective of the plan is the complete eradication of these practices by incorporating the ILO's Decent Work Guidelines and, to this end, education campaigns will be carried out throughout the cocoa farming community.



AXIS 3: ENVIRONMENTAL

Strategic objective:

 Promote cocoa farming as an alternative to rehabilitate degraded land and productive conservation models, and reduce illegal deforestation.

Strategic target:

- Contribute to the monitoring of illegal deforestation;
 Promote reforestation through sustainable production models that include cocoa farming;
- Promoting payment for environmental services (PES) in production systems that include cocoa.

Cocoa production in agroforestry systems has great potential to rehabilitate degraded areas, help control illegal deforestation, promote reforestation and carbon sequestration, and conserve biodiversity and springs, a vocation that goes back to its Amazonian origins and its positive interaction with other species in the forest environment, as is the case with *cabruca* system in the Atlantic Forest.

This environmental component is closely linked to the main national priorities related to climate change and biodiversity conservation, and should facilitate the achievement of Brazil's National Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). The actions of Inova Cacau Brasil 2030 will therefore be articulated with national strategies to adapt to and mitigate the effects of climate change and biodiversity.

Operations - Axis 3

OP7

Contribution to improved control of illegal deforestation in cocoa growing areas

Goals

 Provide a free tool to cross-check data and analyze illegal deforestation and cocoa production areas.

Indicators

Tool ready and available for use by 2030.

In Brazil, cocoa has historically been associated with the conservation of native forests in the biomes where it is grown. As a species that thrives when grown in the shade of other trees, it is an excellent ally in the conservation of biodiversity. A study by EMBRAPA and partner institutions (2022) has shown that the sustainable expansion of cocoa has been extremely beneficial for the Amazon, combining the creation of jobs and income with forest conservation. Similarly, in a recent study of 83 communities in southern Bahia, MapBiomas (2023) found that there does not seem to be a clear trend towards increased deforestation in the forest or, alternatively, in areas shaded by cocoa.

Strategic Action Matrix - Operation 07:

Action 7.1

Monitoring illegal deforestation in cocoa growing areas

A number of public and private monitoring tools are currently helping to understand and warn of new deforestation hotspots in Brazil. Despite the immense contribution of these tools, it is not yet possible to overlay data from cocoa production areas with areas of illegal deforestation to assess the positive and negative impacts of this agricultural activity.

To this end, the Plan will contribute to the coordination, promotion and implementation with interested institutions, so that by 2030 there will be a tool available free of charge that allows for the cross-referencing and analysis of data on illegal deforestation and cocoa production areas.

OP8

Sustainable cocoa production models promote reforestation

Goals

- 100% of crop expansion areas in degraded areas;
- Encourage the increase of areas that can be adapted to legal reserves with cocoa production.

Indicators

• IBGE, increase in the expansion of new cocoa farming areas, state reports.

In order to achieve self-sufficiency and promote Brazil as a potential source of sustainable cocoa for the world, it is essential to increase production and productivity in the chain. In this context, promoting the expansion of new cocoa areas and the recovery of Legal Reserves are fundamental parts of this process, so that Brazil can stand out as a safe source of sustainable cocoa that combines conservation, compliance with environmental laws and reforestation of degraded areas with production in traditional and non-traditional areas.

Strategic Action Matrix - Operation 08:

Action 8.1

Promoting sustainable cocoa production systems to regenerate degraded areas

If cocoa is to play the sustainable role mentioned above, it is essential to have a clear objective that no new areas of native forest need to be cleared. The same EMBRAPA study (2022) also points out that 75 per cent of the areas planted with cocoa in 2019 had already been deforested in 2008, the year of the Brazilian Forest Code, and that 70 per cent of cocoa in Pará is grown in degraded areas, mostly by family farmers and in agroforestry systems. As a result, these areas, most of which have been converted from pasture, are recovering, with a reduction in fires and deforestation in the region.

These facts show the enormous potential that Brazil has to expand cocoa production in areas with high human population density, combined with different production systems such as consortia and agroforestry. For example, the Inova Cacau 2030 plan aims to achieve the proposed expansion of 120,000 hectares entirely in already areas affected by enthronization. Therefore, intensifying research and studies into the economic viability of production models that generate income for producers and contribute to the recovery of degraded areas is fundamental to the balanced and sustainable expansion of the crop in the country.

Action 8.2

Encouragement of the recovery of Legal Reserves through sustainable production systems, including cocoa, where legally permitted

According to Law 12.651/2012, each rural property must maintain an area of native vegetation as a legal reserve. That is, an area within a rural property or possession whose function is to ensure the sustainable economic use of the natural resources of the rural property, to contribute to the maintenance and recovery of ecological processes. In addition to promoting the conservation of biodiversity, as well as the shelter and protection of wild fauna and native flora. Its minimum percentage of the property's area can be as high as 80 per cent, depending on the location.

Even today, many rural properties in Brazil have environmental obligations in this regard and must comply with the Brazilian Forest Code by restoring or re-establishing Legal Reserve (LR) areas. Currently, the states of Pará and Rondônia have normative instructions (Pará: IN Nº7/2019; Rondônia: IN Nº1/2020) that establish the criteria and procedures for rural landowners and squatters to restore the Legal Reserve by planting cocoa in agroforestry systems. Authorizing the restoration of these areas to cocoa cultivation not only promotes the recovery of forests, but also creates an alternative for producers to increase their income from their land, while guaranteeing productive conservation. In this way, the plan aims to promote an increase in the areas that can be adapted to legal reserves with cocoa production in the states where it is legally permitted.

OP9

Payment for Environmental Services (PES) in different systems of cocoa production

Goals

Integrate at least 2% of the cocoa growing area into the PES market by 2030.

Indicators

Promotion of events and materials on the topic, dissemination of normative instructions.

As a perennial crop grown in sustainable systems with good potential profitability, cocoa can increase family farmers' incomes, especially if they value the various ecosystem services it promotes, such as carbon sequestration from the atmosphere and soil and water conservation.

Cocoa is a crop that can be fully adapted to the assumptions of the green economy because of the sustainability characteristics of the main production systems. It is therefore possible to set targets for the areas to be included in the green economy, which will have the positive effect of sequestering significant amounts of carbon.

In order for cocoa to play a role as a crop that reduces greenhouse gas emissions and promotes ecosystem restoration, it is essential to carry out studies that objectively assess its potential and capacity for inclusion in the green economy and how producers can be remunerated for the environmental services they provide. The activities foreseen in the plan will make it possible to establish a solid basis for seeking to integrate cocoa farming into markets that recognize its environmental differentiation.

Strategic Action Matrix - Operation 09:

Action 9.1

The promotion of business models that allow the potential of cocoa production to be used for payments for environmental services (PES)

In order to strengthen cocoa farming in the environmental agenda and to take advantage of the opportunities offered by Payment for Environmental Services (PES) and other financial mechanisms for sustainability, the third axis of the Inova Cacau 2030 Plan will contribute to the development of processes, protocols and metrics for measuring and monitoring carbon sequestration in different cocoa production systems, so that by 2030 at least 2% of the cocoa growing area is integrated into the PES market.

Farmers and their organizations will be trained on the models and ways of accessing these types of financing, supported in setting up PES projects and production protocols, and in presenting projects to international and multilateral funds that support environmental conservation.

AXIS 4: GOVERNANCE

Strategic objective:

• To ensure the management and monitoring of the plan, to involve the different links in the chain and to maximize the achievement of the proposed objectives.

Strategic target:

Achieve 100% of the Plan targets.

The governance of the Plan will be established at two levels: (i) **Strategic level** - where a Plan Management Council (CGP) will be established, made up of the different sectors of the cocoa production chain, both public and private. In addition to the representatives of the sectors of the chain, other key players at national level may be part of this council, such as MIDR, MDA, MMA, IBAMA, SENAR, Embrapa, among others. The members of the CGP will be selected by a delegation from MAPA in liaison with CocoaAction; and (ii) **Operational level** - this will be established at territorial or regional level, where Plan Operational Committees (COP) will be set up, made up of institutions and organizations working in the cocoa chain. This will be done through membership, which will indicate projects and initiatives that could be added to the Plan's set of operations and actions for the growth and strengthening of the cocoa production chain. Once included, the initiatives and projects will be monitored within the framework of the Plan.

OPERATIONS - AXIS 4

OP10

Inter-institutional coordination to implement the Inova Cacau 2030 Plan

Goals

 Have a solid and established governance structure that helps to engage stakeholders in compliance and implementation, monitors indicators and progress, and communicates and makes transparent the actions of the Inova Cacau Brasil 2030 Plan.

Indicators

- Governance at the strategic and tactical-operational levels defined during the first six months of the Plan.
- Percentage of the Plan's objectives achieved;
- Number of activities and projects monitored.

The coordination and proper implementation of a sectoral plan will only be satisfactory if there is a solid and competent governance structure, with a high level of representation of the various sectors, and with good powers of articulation and involvement of the various actors in the production chain, so that they are committed and have a sense of belonging to the compliance,

implementation and reporting of the actions contained in the Plan.

The same governance structure must be able to monitor the progress made using indicators and propose changes of direction when it deems this necessary for the smooth running of the actions and activities. In addition, the entities participating in the governance structure of the Inova Cacau 2030 Plan must communicate transparently with all interested parties and civil society on the progress of the actions and the achievement of the objectives set.

Strategic Action Matrix - Operation 10:

Action 10.1

Structuring of the governance for the co-ordination, monitoring and evaluation of the Plan

A sectoral plan as important as the Inova Cacau 2030 Plan requires a representative multistakeholder governance structure, involving public, private and civil society actors in its coordination, monitoring and evaluation of the results obtained. To this end, the Plan provides for the structuring and mobilization of the entities that will make up the governance by the first quarter of 2024.

Good governance requires, above all, public trust and responsibility, as well as other essential elements, which are presented below:

Transparency

For the good governance of the Inova Cacau 2030 Plan, it will be important to establish mechanisms that ensure transparency, control and accountability of public agents (objective and subjective), through measures to monitor activities and provide accountability.

Responsiveness

The good governance of the Plan must balance the work of the different institutions that will contribute in different ways to the achievement of the planned results for the development of the chain. In this context, the diversity of the nature of each of these institutions and their different ways of working must be taken into account and compatibility established between the elements of good governance, such as transparency, the responsiveness of the institutions and the processes for communicating the results to the public.

Participation

The governance structure of the Inova Cacau 2030 Plan should have information on the projects and initiatives that are part of it, especially those related to the timetable, the costs involved the areas of activity and the beneficiary public. During the diagnostic phase, an inventory was made of all the initiatives carried out by Ceplac.

This information should be reviewed periodically in order to monitor its progress.

In this way, the Executive Secretariat will need to establish interaction with all participating institutions that have projects and initiatives within the framework of the Plan, regardless of their stage of implementation.

Furthermore, the governance process needs to be managed in such a way that people and institutions remain involved throughout the implementation period of the Plan. Adequate involvement is essential for good governance, given the responsibilities for implementing projects and initiatives, monitoring, evaluating and improving the strategies of the Plan's member institutions.

Roles and responsibilities of the different actors

Good governance requires that roles and responsibilities are very well defined and communicated to the institutions (and the people within them) involved in the implementation of the Plan, which is essential to avoid miscommunication and duplication of effort. In this way, the governance model will define the forms of communication with stakeholders, the document templates and the information systems to be used.

Objectively defining the roles and responsibilities of people and institutions is a facilitating factor, so that people know where to turn in case of doubt. The governance model should also define document flows and any system feeds (if any) to enable the plan to be monitored. In addition, meetings should be scheduled at regular intervals, depending on the need to follow up on issues.

Action 10.2

Commitment to the Plan, its implementation and reporting by the different actors in the cocoa chain

The governance structure set up to coordinate the Inova Cacau 2030 Plan must have the role of articulating and involving different actors from the most diverse links in the sector to join the Plan. Nevertheless, it is necessary to establish and maintain a relationship of trust with these organizations so that they feel that they belong to the Plan and can implement and report on their actions on the ground, which will constitute the expected results. It is therefore proposed that the Plan should have at least 40 participating institutions, representing all the links in the chain.

Action 10.3

Monitoring of performance indicators to assess the achievement of the strategic objectives of the Plan

The governance structure is responsible for monitoring the established indicators and proposing adjustments to the targets and changes in direction according to the assessment of the achievement of the proposed targets for the proper progress and implementation of the Plan. To this end, it has been established that the Plan should be at least 50% fulfilled by 2026 and fully implemented by the end of 2030. The monitoring system will cover both the strategic and operational objectives of the Plan, as well as the development of activities and projects at the tactical-operational level, through the expected results and impacts.

Action 10.4

Communication of progress and transparency of the plan's coordination actions

The governance of the Inova Cacau 2030 Plan must regularly communicate the progress of the actions and the fulfillment of the objectives of the Plan to all the entities involved, as well as to civil society.

TARGET AUDIENCE

- · Family farmers, associations and cooperatives;
- Small, medium and large-scale farmers;
- Technical Assistance and Rural Extension (ATER);
- Other links in the production chain ST&I actors, input suppliers, almond processors, chocolate factories and others; and
- Indirect beneficiaries logistics, marketing, retail and consumer sectors.

EXPECTED IMPACT

The actions of Inova Cacau 2030 will have an impact on the entire production chain, increasing the gross value of production and generating wealth in the countries involved, avoiding imports and their associated phytosanitary risks, and strengthening producers and the national industry.

More than 80 percent of cocoa farmers are family farmers, so measures to improve technical assistance and access to credit, as well as training to adopt appropriate management practices and technologies will have a positive impact on productivity and income, contributing to poverty reduction and the prosperity of the farmers involved.

Support for nurseries, research and innovation to develop new cocoa varieties and mechanization and automation techniques will open up new frontiers, including non-traditional cocoa growing areas, attract new producers, expand production and create thousands of direct and indirect jobs that will benefit the entire production chain.

Cocoa has great potential for carbon sequestration and restoration of degraded land. Combined with other crops in a diversified agroforestry system, the expansion of cocoa farming will contribute to the conservation of ecosystems and generate income linked to payments for environmental services and carbon assets.

With chocolate as its main product, Inova Cacau 2030 Plan includes actions to train and promote entrepreneurship, attract young people and women to the production chain, and promote social inclusion and gender equality.

By expanding the use of good harvesting, post-harvesting and processing practices, improving the quality of the beans and supporting certification and traceability, this plan will help increase exports of fine flavored cocoa and its derivatives, contributing to Brazil's trade surplus and bringing international recognition to the quality of Brazilian cocoa.

The Inova Cacau 2030 Plan will contribute directly to the achievement of at least 11 of the 17 United Nations Sustainable Development Goals (SDGs):































