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Sociobioeconomy and Açaí: Recommendations for Climate Resilience and Socio-environmental Justice in the Amazon

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Sociobioeconomy and Açaí: Recommendations for Climate Resilience and Socio-environmental Justice in the Amazon

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Organized by
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INTRODUCTION

Açaí is one of the pillars of the Amazonian sociobioeconomy, sustaining the livelihoods of thousands of families and forming an integral part of the region's food culture. The 2017 Agricultural Census recorded 47,855 properties in Brazil with more than fifty açaí palms, of which 35,374 are located in Pará and 1,901 in Amapá (IBGE, 2017). Between 1996 and 2017, the number of açaí enterprises in Pará—covering both cultivation and extraction—increased by 533%, reaching an average production of 8.7 tons of fruit and an average gross income of R$13,100 per household (FAPESPA, 2024). It is estimated that household consumption of açaí accounts for 16% of total production, with 10% consumed during the harvest and 6% in the off-season (Almeida et al., 2021).

The sector is also a major source of employment and income, engaging approximately 176,000 people in Pará, 86% of whom work in rural production (Costa et al., 2021). In Amapá, between 25,000 and 30,000 people are involved in harvesting, processing, and marketing activities (Euler, 2020). Açaí is a daily staple food for millions of Amazonian residents, contributing substantially to the region's caloric and nutritional intake. In both urban and rural areas of Pará, the fruit can provide up to 25% of total caloric intake per person (Nogueira et al., 2019).

Despite the economic growth of the value chain, primary producers—mainly agro-extractive families—still capture only a small share of the added value, often working under informal conditions and lacking access to key public policies such as rural credit and technical assistance (Santana et al., 2021; SEEG Amazônia, 2022).

Beyond its economic relevance, açaí plays a central role in traditional agroforestry systems, which reconcile production with the conservation of floodplain ecosystems (Nogueira et al., 2019). The açaí value chain is also strategically important for the Amazonian bioeconomy, representing a model of sustainable forest use with strong potential for local value addition and integration into sustainability-oriented markets (Santana et al., 2021). However, it is already facing the impacts of the climate crisis. Producer communities report declining productivity, shifts in harvest periods, and increasing disease incidence linked to climate stress.

Projections indicate that by the end of the century, the Amazon could experience a rise of up to 4 °C in average temperature and a reduction of up to 40% in rainfall, profoundly altering production conditions (IPCC, 2021). Another study reveals that extreme droughts in the region are now 30 times more likely than during the pre-industrial period, with climate change as the main driver (Longo et al., 2025).

In this context, the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) opens new opportunities by positioning açaí as an example of a product capable of integrating forest conservation, income generation, and climate responsibility. Structuring sectoral commitments and incorporating the açaí chain into climate finance mechanisms—such as carbon credits, payments for ecosystem services (PES), and low-carbon production chain initiatives—represent viable pathways for strengthening its resilience to climate change (CBD, 2022; UNEP, 2023).

Thus, beyond being a symbolic food of the Amazon, açaí is emerging as a potential vector for climate solutions, linking socio-environmental justice, the valorization of traditional territories, and innovation in sustainability (Homma, 2020).

This policy brief aims to present a set of recommendations designed to strengthen collaborative actions for climate change mitigation and adaptation, positioning açaí as a driver of sustainable development, innovation, and cultural expression in the Amazon. It was developed collectively through the discussions and knowledge generated by the Diálogos Pró-Açaí Initiative, particularly during the "Açaí em Pauta" webinar series, which brought together researchers, experts, and representatives from government agencies, community organizations, and other stakeholders in the value chain.

The contributions collected from these dialogues were analyzed and systematized by members of the Sustainability Working Group. Additionally, the "Recommendations Notebook for the Sustainability of the Açaí Value Chain" served as a key reference and source of inspiration for the preparation of this document.

By integrating existing knowledge with specific, actionable recommendations, this brief outlines a strategic roadmap to strengthen the açaí value chain through multisectoral approaches focused on ecosystem conservation and the prosperity of traditional açaí-producing communities.

THE AÇAÍ VALUE CHAIN AND THE CLIMATE CRISIS

Scientific projections indicate that the Amazon rainforest may undergo profound structural transformations due to the combined effects of climatic and anthropogenic disturbances. Between 1981 and 2020, data already show a rising trend in average temperature during the dry season (July to October), and projections for 2050 suggest that some areas of the Amazon could lose ecological stability. Instead of remaining stable forests, these regions may become bistable ecosystems—systems capable of oscillating between forest and savanna states—or even consolidate as stable savannas, particularly in drier areas (Flores et al., 2024; Bottino et al., 2023).

Another cause for concern is the recurrence of extreme drought events, such as those observed between 2001 and 2018, which weakened forest resilience, increased tree mortality, and reduced recovery capacity after subsequent disturbances (Rodrigues et al., 2023). The expansion of road networks also drives degradation, as road openings facilitate deforestation, illegal logging, and fires, making roadside areas particularly vulnerable (Longo et al., 2025).

Conversely, protected areas and Indigenous territories act as important buffers of resilience, where the risk of ecological transition is significantly lower. In these territories, traditional land-use practices and local governance play decisive roles in curbing the spread of degrading activities.

A combination of variables—including rising temperatures, altered rainfall regimes, extreme droughts, proximity to roads, and the presence or absence of protected areas—was used to develop a "Transition Potential Index", identifying regions where forests face the risk of irreversible degradation and transformation into open ecosystems, such as savannas or pastures (Flores et al., 2024).

If these trends persist, by 2050 the Amazon could experience substantial losses in ecological stability (Flores et al., 2024; Bottino et al., 2023). This process will directly affect the productivity of açaí and other socio-biodiversity species, representing not only an economic threat but also a food security concern, as communities that depend on açaí may face restricted access to the fruit—with significant implications for their nutrition, culture, and livelihoods (Martins, 2024).

BEYOND THE CLIMATE CRISIS

The sociobioeconomy of açaí faces structural challenges that extend across land tenure, environmental, economic, and social dimensions. The lack of land regularization in floodplain areas and other territories weakens the rights of agro-extractive families, limiting their access to public policies, rural credit, and the implementation of agroforestry certifications. In addition, technical assistance remains scarce and discontinuous, hindering the adoption of sustainable management practices.

High levels of informality within the value chain lead to underreporting and underestimation of total production value, compromising the accuracy of official data on production and commercialization.

Another major bottleneck lies in logistics and infrastructure. The açaí supply chain is complex and highly dependent on rivers and poorly maintained roads, which increase transportation costs and dependence on intermediaries. The unreliable electricity supply in many communities also contributes to significant post-harvest losses and hinders the implementation of innovative processes, such as traceability systems and cold storage technologies.

Açaí-producing territories are also under increasing pressure from high-impact economic activities, including mining, livestock expansion, and deforestation-related fires. Since the year 2000, nearly 30 environmental disasters have been recorded in the Amazon, many linked to mining operations, resulting in river contamination, loss of territories, and direct harm to the health and livelihoods of traditional populations. These events represent major setbacks for regional sustainability and for maintaining the forest as a living territory (SUMAÚMA, 2024).

The lack of integrated governance between public and private sectors, along with weak environmental monitoring and enforcement, exacerbates these externalities. Combined with the pressures of the climate crisis, these factors create a scenario of systemic vulnerability, in which açaí—symbol of the sociobioeconomy—is directly affected.

The concept of "Living Forest" emphasizes that the vitality of the Amazon depends not only on its

biological conservation, but also on the permanence and well-being of the populations who inhabit and manage it. In the case of the açaí value chain, the forest is conceived as a territory of life, production, and culture, not as an untouched or isolated space.

Keeping the forest alive means recognizing that riverine, agro-extractive, quilombola, and Indigenous peoples play a fundamental role in its conservation—ensuring the genetic diversity of açaí, supporting natural regeneration, and maintaining the ecological balance of floodplain ecosystems.

Overcoming these structural challenges is essential for advancing and implementing effective climate-focused recommendations. This, in turn, requires a coordinated agenda involving government institutions, civil society, agro-extractive communities, community organizations, research and extension institutions, and the private sector—an agenda capable of integrating land-use planning, technical assistance, infrastructure development, and participatory governance.

VOICES FROM THE COMMUNITIES

Communities across the Amazon are already perceiving the impacts of the climate crisis. Numerous reports from producers describe declines in productivity, changes in harvest timing, and an increase in diseases associated with climate stress (Diálogos Pró-Açaí Platform, 2025).

Below are selected testimonies from community leaders highlighting how the changing climate is already affecting their production systems and daily lives.

"We have farmers who have gone more than 90 days without rain on their properties. This is very worrying—our soils here cannot stay exposed for that long without water. The consequences have been severe for açaí production and for our other crops. We've also noticed the emergence of pests and diseases that we never had before, and we strongly believe this is linked to climate change."

— Hamilton Condack, President of RECA Cooperative, Nova Califórnia, Rondônia

"We can't resort to deforestation—but to make that possible, we need a development policy that allows us to live sustainably."

— Teofro Lacerda Gomes, President of the Agro-extractive and Livestock Cooperative of the Santo Ezequiel Moreno Community (COOPIAÇÁ), Pará

"In our community, we can clearly see the effects of climate change. The climate is becoming more irregular—the rainy and dry periods are no longer the same—and that directly affects açaí production and other activities. The rivers and streams have also changed their behavior, which impacts the daily lives of our extractivist families."

— Valdenes Ferreira de Sousa, President of the Mixed Agro-extractive Cooperative of Santo Antônio do Tauá (CAMTAUÁ), Pará

"Just as an example—from last year to now, açaí has changed a lot. The harvest time has shifted, the pulp quality has changed, and even the ripening process is different. The fruits dry out on the trees while still green because of the excessive heat."

— Joseleno Cantão Queiroz, President of the Baixo Tocantins Fruit Cooperative (COOFBAT), Mocajuba, Pará

RECOMMENDATIONS

The following set of recommendations has the potential to foster structural and long-term transformations in the açaí value chain in response to the climate crisis. By prioritizing strategic and systemic solutions, the goal is to strengthen community resilience and promote sustainability across the entire chain—addressing the root causes of vulnerability rather than merely reacting to its effects. Given the strong interdependencies that characterize the açaí sector, this approach seeks to amplify systemic impacts and generate multiplier effects, contributing to the construction of a more resilient and climate-adapted value chain.

AXIS: MONITORING, TERRITORIAL PLANS, AND INTEGRATED PROCESSES

Establish participatory monitoring mechanisms with agro-extractive communities, based on realistic goals and measurable indicators, to strengthen the açaí sector's capacity to respond to climatic events. Beyond official data produced by institutions such as IBGE, CONAB, EMATER, and research centers like EMBRAPA, it is essential to consolidate a network of local producers who can contribute on-the-ground information regarding harvest patterns, climatic variations, pest outbreaks, and environmental anomalies. Digital technologies can play a crucial role in monitoring the impacts of the climate crisis, allowing adaptive management decisions to be made quickly and based on real-time data. Implementing this recommendation requires a multisectoral strategy, involving community participation, private sector expertise, and research institutions, to ensure that challenges are well understood and that solutions are context-appropriate for the Amazon. This community-based monitoring network could be integrated with agroclimatic early warning systems and accessible digital platforms, enabling local data and perceptions to feed into territorial-scale forecasts and diagnostics, rather than relying solely on national-level data.

Systemic outcome: participatory monitoring as a strategic tool for climate risk management, strengthening local decision-making, supporting public adaptation policies, and contributing to a collaborative, localized, and data-driven understanding of the açaí chain.

Climate Adaptation

Promote the development of Local Açaí Productive Adaptation Plans (PLAP-Açaí) as a strategic public policy tool to strengthen the adaptive capacity of agro-extractive communities in the face of droughts, heatwaves, and growing harvest unpredictability. These plans should be supported by policies integrating technical assistance agencies, research institutions, and community organizations, fostering participatory processes for diagnosis and territorial planning. Grounded in climatic, productive, and local knowledge data, PLAPs can guide investments and adaptation actions such as participatory mapping of extractive areas, harvest forecasting, and strengthening of complementary value chains. By institutionalizing and financing these plans, the state contributes to building local adaptation and climate resilience strategies, reducing vulnerabilities while ensuring the economic and food security of Amazonian communities.

Systemic outcome: strengthened adaptive capacity and climate resilience among Amazonian agro-extractive communities.

Climate Adaptation

Inspiration

The National Bioeconomy Development Plan (PNDBio) is part of Brazil's National Bioeconomy Strategy and is being developed through a participatory process involving Regional Workshops and a Public Consultation. The process is led by the National Bioeconomy Commission, composed of 17 government representatives and 17 members of civil society, including Indigenous peoples, traditional communities, academic institutions, and private sector representatives. Social participation is essential to ensure that the Plan responds effectively to real local needs.

Learn more:
https://www.gov.br/mma/pt-br/composicao/sbc/dpeb/estrategia-nacional-de-bioeconomia/plano-nacional-de-desenvolvimento-da-bioeconomia

Prioritize land regularization in territories occupied by Indigenous Peoples, Quilombola Communities, Traditional Populations, and Family Farmers (PIQCTAFs) as a strategic and fundamental measure in the context of the climate crisis. This initiative provides legal security for those who conserve forests and manage natural resources sustainably. By linking land tenure regularization with sustainable rural development policies, it is possible to create an enabling environment for forest conservation and carbon sequestration. To make this initiative effective, it is crucial to establish regional land regularization committees that include public institutions and community leaderships, ensuring joint deliberation on territorial priorities. Additionally, integrating land and environmental databases into a unified public platform can reduce overlaps and conflicts of jurisdiction while creating transparent monitoring dashboards. Such actions contribute to reducing land grabbing and deforestation, recognizing the central role of local communities as forest guardians, and reinforcing both social and ecological resilience in the face of the climate crisis.

Systemic outcomes: reduction of deforestation and land grabbing; strengthened ecosystem integrity; enhanced carbon sequestration; and greater social and economic resilience for local communities.

Climate Mitigation

AXIS: TECHNICAL AND SCIENTIFIC SUPPORT FOR SUSTAINABLE FOREST MANAGEMENT

Ensure access to high-quality Technical Assistance and Rural Extension (ATER) for Indigenous Peoples, Quilombolas, Traditional Communities, and Family Farmers, enabling the adoption of low-impact forest management and the enrichment of productive areas with diverse native species. The expansion of açaí production in degraded areas through the implementation of Agroforestry Systems (SAFs) can also represent an important opportunity for these communities. Ensuring that producers receive continuous and specialized technical assistance will lead to the development of more resilient production systems, better equipped to withstand climatic variations, while also contributing positively to forest conservation.

Systemic outcomes: reduced pressure on deforestation; strengthened socioeconomic resilience among extractivist families; improved food and climate security; and greater adaptive capacity in the face of the climate crisis.

Climate Adaptation

Inspiration

The Center for Science and Development in Digital Agriculture (Semear Digital), based at Embrapa Digital Agriculture in Campinas, and supported by FAPESP, aims to bring connectivity, training, and digital agriculture technologies to small and medium-sized producers across Brazil's five regions. In Breves (Pará), Semear Digital was introduced to address challenges in the açaí and honey value chains. Based on low-impact management principles, the system provides technical assistance and guidance, including the use of drone imagery, to support agro-extractive producers in improving productivity and sustainability.

Learn more:
https://www.embrapa.br/busca-de-noticias/-/noticia/95821404/centro-busca-melhorar-qualidade-de-vida-no-marajo-com-tecnologias-digitais-para-as-cadeias-do-acai-e-do-mel l

Integrate technical assistance and rural extension (ATER) policies, supported by public and community organizations, to promote the sustainable management of açaí and the diversification of crops through Agroforestry Systems (SAFs). This integration strengthens the açaí value chain by increasing productivity without compromising biodiversity or driving deforestation, fostering the rational use of natural resources and the recovery of degraded areas. By encouraging sustainable practices and the adoption of SAFs, the initiative contributes to greater carbon sequestration and reduced greenhouse gas emissions, making it an effective strategy for mitigating the climate crisis. Additionally, productive diversification enhances both the economic and ecological resilience of Amazonian communities, making them less vulnerable to climatic and market fluctuations.

Systemic outcomes: reduced vulnerability to extreme weather events, pests, and diseases; improved soil, water, and biodiversity conservation; strengthened economic and food security—ensuring income and food even during açaí production downturns; and, in the long term, the development of more robust and sustainable production systems.

Climate Mitigation

Inspiration

The RECA Cooperative, located in Nova Califórnia, Rondônia, has based its production on Agroforestry Systems since 1989. Currently, the cooperative has around 300 members who cultivate more than 40 species of fruit trees, timber, and medicinal plants across 1,000 hectares. Açaí is one of its key products, with an annual output of approximately 180,000 kilograms of pulp.

Learn more: https://www.instagram.com/reca.coop/

Promote and disseminate low-impact forest management and agroforestry-based açaí production systems as key strategies for biodiversity conservation and climate resilience. These models reconcile forest conservation with income generation, reducing deforestation while maintaining ecosystem services. By integrating native species and sustainable practices, such systems become valuable tools for climate adaptation, ensuring production continuity and improving the quality of life for communities that rely on açaí for both food and income. A multisectoral strategy is essential to ensure that this recommendation is effectively implemented. For example, private companies that purchase and process açaí can drive the wider adoption of sustainable practices, while public ATER institutions play a fundamental role in training and advising producers on sustainable production methods.

Systemic outcomes: reduced areas of low forest diversity; preservation of essential ecosystem services; and continuity of açaí production under changing climatic conditions through more resilient production systems.

Climate Adaptation

Inspiration

The Manejaí Cooperative, located in Portel, Pará, promotes sustainable production and fair trade of açaí. The cooperative brings together local producers, fostering sustainable management practices and valuing the work of extractivist families. Through collective organization, Manejaí strengthens the açaí value chain, ensuring fair working conditions, better prices, and access to wider markets. The cooperative employs low-impact management techniques to produce high-quality açaí without harming the forest. It also conducts training sessions and establishes demonstration units to share best practices with other producers. Manejaí is part of a broader socio-environmental development strategy, linked to the Center for Reference in Conservation, Management, and Restoration of Agroecosystems, an initiative led by Embrapa under the Bem Diverso and Sustenta & Inova projects.

Promote the development of meliponiculture (native stingless beekeeping) as a complementary activity within territories managing native açaí stands and Agroforestry Systems (SAFs). This practice is strategic for both climate adaptation and the conservation of floodplain ecosystems. Stingless bee keeping enhances the natural pollination of açaí palms, increasing productivity and the natural regeneration of managed areas, while also diversifying the income sources of agro-extractive families—particularly benefiting women and youth. Encouraging meliponiculture strengthens community social capital, promotes biodiversity conservation, and supports low-impact agroforestry practices, aligned with the transition toward more resilient and sustainable territories.

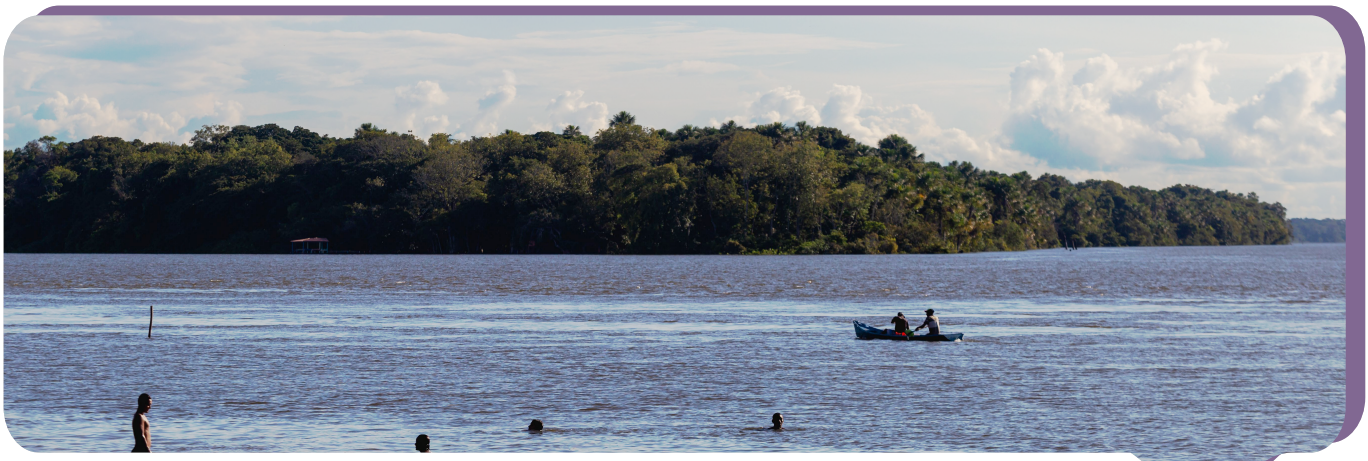
Systemic outcomes: *maintenance of essential ecosystem services supporting açaí productivity; increased pollination and natural regeneration; reduced production losses; and strengthened local biodiversity and economic security for agro-extractive communities. Tags: Climate Mitigation, Climate Adaptation*

Climate Mitigation Climate Adaptation

Finance research on açaí-related diseases associated with climate change as a key strategy to strengthen the adaptive capacity of the açaí value chain. Such research helps to understand how climate change, rainfall alterations, and other environmental factors affect the health and productivity of açaí palms. Based on this knowledge, it becomes possible to develop localized solutions and management strategies that minimize harvest losses and ensure the long-term sustainability of production, thereby improving socio-environmental resilience. This responsibility should be shared across all sectors of the value chain—and not fall solely on producers and communities—so that risks and economic burdens are distributed more fairly and equitably.

Expected outcomes: strengthened scientific understanding of açaí resilience under climate stress; development of effective prevention and response systems that reduce economic and production losses; and the sustainable continuity of açaí supply under future climatic scenarios.

Climate Adaptation



AXIS: FINANCING MECHANISMS

Establish a public climate financing mechanism (Stabilization and Delivery Guarantee Fund) for the açaí value chain. This climate finance mechanism would target agro-extractive territories involved in açaí production and integrate four complementary instruments: (i) Creation of a Stabilization and Delivery Guarantee Fund — to compensate for production losses during droughts and heatwaves, ensuring direct sales with minimum lots (for PAA/PNAE and industry). The fund would be triggered by parametric climate indicators (rainfall, river levels, temperature, SPEI/ENSO anomalies) and territorial harvest data. (ii) Promotion of climate-triggered contracts and standardized addenda with the industry, establishing minimum prices and volume flexibility when

climate indicators exceed critical thresholds. (iii) Integration with PGPM-Bio/Sociobio Mais (Minimum Price Guarantee Program) without overlap — maintaining the price floor under PGPM-Bio, while the new fund covers physical production losses, logistics costs, and advances to sustain direct delivery flows. (iv) Blended funding combining public budgetary resources with international forest finance sources, prioritizing the Tropical Forests Forever Facility (TFFF) — a multilateral initiative anchored at COP30 — as well as partnerships with the Amazon Fund, Green Climate Fund (GCF), and regulated parametric insurance mechanisms. States and municipalities could operate the instrument through territorial public calls, with local committees and the use of official data (from CONAB, IBGE, EMATER, EMBRAPA) integrated with community producer networks for harvest forecasting and loss verification.

Systemic outcomes: Income and supply stabilization during extreme years; reduced dependence on middlemen; continuity of public procurement; protection of local food consumption (food security); economic incentives for keeping the forest standing; greater predictability for industry and cooperative contracts; and attraction of international climate capital with clear performance metrics for forest conservation.

Climate Mitigation

Inspiration

The Tropical Forests Forever Facility (TFFF) is a new model of climate finance that financially rewards countries for conserving tropical forests, making preservation more profitable than destruction. The fund aims to mobilize around R$700 billion in the international market at low interest and low risk, reinvesting in profitable projects. The profits are distributed to tropical countries according to the area conserved, while investors recover their capital with returns. In this way, the TFFF ensures sustainable development for local communities, economic viability for forest nations, and financial returns for investors — recognizing the economic value of ecosystem services provided by forests.

Facilitate access to financing and incentive mechanisms, such as the Bolsa Verde Program, as a core strategy to reduce deforestation and mitigate the effects of the climate crisis in the Amazon. These instruments recognize and reward those responsible for conserving the forest, encouraging sustainable practices and strengthening the role of communities in maintaining ecosystems and conserving biodiversity. It is essential to simplify access and expand eligibility, ensuring that traditional territories and communities not yet covered are included.

Systemic outcomes: Expansion of eligible areas under the program; stronger incentives for sustainable practices; reduced deforestation pressures; and empowerment of agro-extractive communities.

Climate Mitigation

Ensure stable financing systems for short food-supply chains, prioritizing local and seasonal foods as a key strategy to strengthen community resilience, promote food sovereignty, and support climate adaptation. One of the main barriers faced by açaí-producing communities is limited access to short and diversified markets, due either to the scarcity of such sales points or to logistical constraints in product distribution. This limitation reduces the availability of fresh food and increases dependence on ultra-processed products. The climate crisis tends to worsen this scenario, heightening uncertainties in production and increasing the frequency of extreme events that disrupt the entire value chain.

Expected result: Strengthened socioeconomic resilience; reduced dependence on intermediaries; decreased logistical distances; and promotion of food sovereignty, even amid extreme climate events.

Climate Adaptation

AXIS: EDUCATION AND KNOWLEDGE BUILDING

Expand access to technical information on the impacts of climate change, through diverse formats and communication channels, as this is essential to strengthen the adaptive capacity of the açaí value chain. The qualified dissemination of knowledge enables agro-extractive producers, technicians, and companies to better understand risks, adopt sustainable management practices, and monitor socio-environmental impacts—thus enhancing resilience to the climate crisis. It is equally important to ensure that youth and women have access to, and leadership roles in, these training and knowledge-exchange processes, recognizing their central role in maintaining traditional practices, fostering innovation, and developing local solutions for climate adaptation.

Expected result: Continuous circulation of technical data, enabling faster and evidence-based decision-making, improved açaí forest management, and better natural resource governance. This measure helps reduce information asymmetries within the value chain and strengthens collective capacity to respond to extreme climatic events.

Climate Adaptation

Promote climate education in both urban and rural schools, as this is crucial to form new climate leaders and maintain the climate agenda in public awareness. Including this theme in rural and forest-based schools allows children of açaí producers to understand, from an early age, the importance of forest conservation and low-impact management, recognizing the strategic role of agro-extractive and agroforestry practices for the sustainability of the Amazon.

Systemic outcome: Stronger integration between traditional and scientific knowledge, promoting the appreciation of the forest and sustainable extractivist practices. In the long term, the formation of local leaderships expands the socio-environmental resilience of communities, strengthens participatory governance, and ensures the continuity of conservation and climate adaptation strategies.

Climate Adaptation

AXIS: FOOD AND NUTRITIONAL SOVEREIGNTY

Strengthen and simplify access for cooperatives, associations, and agro-extractive producers to public food procurement programs such as PNAE (National School Feeding Program) and PAA (Food Acquisition Program), as this is a key strategy for mitigating the climate crisis. These programs stimulate local and sustainable food production, reducing emissions associated with transportation and food waste. To be effective, it is necessary to expand dialogue channels with community organizations, maintain permanent negotiation forums, and adopt participatory monitoring mechanisms to identify barriers and co-create adaptive solutions. Comprehensive technical assistance—including forest management, production planning, and administrative and financial management—is fundamental. On the regulatory side, it is recommended to establish specific rules that ensure priority and differentiated treatment for traditional communities, tailoring public calls to their realities. Regarding CAF (Family Agriculture Registry) regularization, joint efforts and public agency partnerships have proven successful. It is also crucial to reduce delays in financial transfers to suppliers, ensuring predictability and financial security for community organizations.

Systemic outcomes: Strengthened agro-extractive production; increased community resilience; enhanced food sovereignty and security; and consolidation of sustainable practices throughout the açaí value chain.

Climate Mitigation

Inspiration

The Permanent Dialogue Table – Catrapovos Brasil, created in 2021 by the Federal Prosecution Service's Chamber for Indigenous Peoples and Traditional Communities, is an initiative that strengthens traditional school feeding in these communities, ensuring compliance with legislation that prioritizes food procurement from family agriculture.

Inspired by the Traditional Peoples' Food Commission (Catrapoa) experience in the state of Amazonas, the initiative addresses legal and sanitary bottlenecks, enabling direct purchasing of local foods. The program has already benefited thousands of students and producers, incorporating more than 60 regional foods into school meals and valuing the culture, economy, and food sovereignty of traditional communities.

For more information, visit:
https://www.mpf.mp.br/atuacao-tematica/ccr6/catrapovosbrasil/a-catrapovos

Establish the Amazonian Basic Food Basket as an official reference for public food policies (PAA, PNAE, community kitchens) and for monitoring the cost of living, as a strategic measure to strengthen regional food security. This basket should prioritize regional, fresh, and minimally processed foods—such as açaí, cassava flours and tapioca, fish, nuts and traditional oils, fruits, and local vegetables—with modular lists and weight compositions tailored to each territory (floodplains, uplands, urban peripheries) and seasonality. Implementation steps: (i) Federal regulation establishing the Amazonian Basic Food Basket with nutritional and cultural parameters; (ii) Local pricing methodology based on field data collection and community panels; (iii) Public procurement with regional quotas and reference prices; (iv) Integration into POF/PNAD to measure food access and sufficiency; (v) Preparation guides for schools and public institutions aligned with the Brazilian Dietary Guidelines. Governance and monitoring: an inter-ministerial committee with Amazonian research networks and annual indicators on access, quality, cost, and household income.

Expected results: Improved diet quality; reduced consumption of ultra-processed foods; strengthened short supply chains and regional economies; and greater food resilience in the face of climate events.

Climate Adaptation

Inspiration

The Açaí in Schools Program, developed in Afuá, Pará (PA), emerged from the challenge of ensuring the inclusion of açaí in school meals and expanding access to the PNAE program, guaranteeing healthy, local, and culturally appropriate food.

The Technical Note No. 03/2020/6th CCR/MPF, issued by the Federal Prosecution Service, facilitated the simplification of sanitary procedures for the inclusion of foods produced by Indigenous and traditional communities. Previously, public procurement calls for açaí required sanitary inspection seals, which excluded local farmers from participation. The technical note made the process more inclusive.

In a joint initiative among EMATER and the Secretariats of Education, Environment, and Agriculture, the 24 regional açaí production hubs were visited while identifying schools equipped to process the fruit. Currently, schools receive fresh açaí, perform cleaning and processing on-site, and produce the pulp within the school environment—ensuring adequate, healthy, and culturally relevant nutrition for Amazonian children.

For more information, visit: https://www.youtube.com/watch?v=3l5SxTgUAm8

AXIS: INNOVATION AND SOCIOBIOECONOMY

Promote certification systems that verify the socio-environmental sustainability of açaí production as a strategy to encourage low-impact production practices. The adoption of certification standards that value sustainable forest management and the leadership of local communities strengthens production models that keep the forest standing while conserving ecosystem services. Moreover, certification can expand access to national and international markets committed to socio-environmental criteria, creating economic incentives for agro-extractive producers to adopt low-impact practices and contribute to mitigating the structural causes of the climate crisis in the Amazon. To ensure fairness, this process must be linked to financing mechanisms for implementation, guaranteeing that cooperatives and associations can access and maintain these instruments.

Systemic outcomes: Recognition of low-impact environmental practices; expanded access to socio-environmentally responsible markets; creation of long-term economic incentives that encourage sustainable production and forest conservation.

Climate Mitigation

Inspiration

The Participatory Guarantee Systems (SPG), also known as participatory certification, is a process that ensures organic quality based on collective responsibility and mutual trust among its members—who may include producers, consumers, technicians, and other stakeholders committed to strengthening sustainable practices. These systems adapt to diverse social, cultural, and territorial contexts, generating credibility through direct participation and social control, without depending on external audits.
An inspiring example is the Xingu Indigenous Territory Association (Atix), a pioneer in Indigenous participatory certification in Brazil. The process involves Indigenous leaders and technicians at every stage, strengthening autonomy, local leadership, and the valorization of traditional knowledge, while also expanding access to sustainable markets.

For more information, visit:
https://www.gov.br/funai/pt-br/assuntos/noticias/2015/indigenas-do-parque-do-xingu-sa o-os-primeiros-a-certificar-a-propria-producao-organica

Ensure the implementation of traceability mechanisms within the açaí value chain to make visible not only the origin but also the production model. Although açaí has become a global commodity, there is an expanding trend toward low-diversity monocultures. Making sustainable, low-impact production systems transparent and valued is a key strategy for mitigating the causes of the climate crisis. To advance this agenda, it is essential to empower communities, ensuring they have the technical capacity and infrastructure to implement and maintain traceability systems.

Systemic outcomes: Promotion of transparency and socio-environmental responsibility across the açaí value chain; ensured traceability from origin to final consumer; creation of economic incentives, market diversification, and strengthened value chains aligned with socio-environmental criteria.

Climate Mitigation

Add value to açaí seeds through circular economy solutions—such as the production of tannins, activated charcoal, and bioflocculants - —to contribute to climate crisis mitigation by transforming waste into value-added products. This strategy reduces waste and decomposition processes that generate greenhouse gas emissions, while fostering low-carbon production alternatives, diversifying the local economy, and making the açaí chain more sustainable and resource-efficient.

Systemic outcomes: Reduction of emissions associated with residue decomposition and waste; promotion of local economic diversification; creation of new low-carbon value chains and increased income-generation opportunities for agro-extractive communities.

Climate Mitigation

Inspiration

The Federal University of Pará (UFPA) has been a leader in research on açaí seed utilization. Ongoing studies explore the potential of this residue for producing biofuels, acoustic insulation materials, mobile panels, and oil-absorbing filters for aquatic and port environments.

For more information, visit:
https://ascom.ufpa.br/index.php/banco-de-pautas/75-acai/146-caroco-de-acai-origina
-pr odutos-tecnologicos-na-ufpa

AXIS: GOVERNANCE AND MULTISECTORAL STRATEGY

Promote the international visibility of the açaí value chain within global climate agendas and negotiations, recognizing its importance for the Amazonian sociobioeconomy and for global mitigation and adaptation goals. Strengthening the participation and leadership of local communities is essential to ensure their voices, knowledge, and priorities are represented in international dialogues. A multisectoral strategy should bring together public policies, private sector

actors, scientists, civil society organizations, and forest peoples, fostering collaboration around forest conservation, ecosystem integrity, and the valorization of biodiversity.

Systemic outcomes: Reinforced position of the Amazon as a global reference in forest and biodiversity conservation; strengthened participatory governance; and the long-term consolidation of a resilient, sustainable açaí value chain, integrated into global mitigation and adaptation objectives.

Climate Mitigation 

Foster coordination across the different segments of the açaí value chain to strengthen climate mitigation efforts. Integrated action enables the identification of critical emission points, the promotion of low-impact management and low-carbon processing, and the development of collective solutions that reconcile production with forest conservation. This networked collaboration also enhances political and technical influence, contributing to the creation of public policies that recognize the strategic role of the açaí chain in emission reduction and in building a sustainable and inclusive Amazonian economy.

Expected result: Strengthened multisectoral strategies for tackling the climate crisis, consolidating a more resilient açaí value chain with greater policy influence and coordination capacity.

 **Climate Mitigation**

AÇAÍ AS A VECTOR OF CLIMATE RESILIENCE

The açaí value chain embodies the Amazon's potential to offer concrete solutions to the climate crisis—combining biodiversity conservation, income generation, and the empowerment of local communities and territories. Advancing the mitigation and adaptation agenda requires cooperation across all sectors of the chain: agro-extractive producers, communities, private sector, governments, research institutions, and civil society. This involves expanding knowledge exchange, stimulating research and technological innovation, and fostering strategic initiatives and public policies that promote sustainable, low-carbon agroforestry production.

However, it is crucial that every recommendation or action be built through active dialogue, ensuring qualified listening and joint construction with forest peoples, who are the most directly affected by both the climate crisis and the development models imposed on their territories.

During COP30, the city of Belém will become the epicenter of a global call to position sociobioeconomy as a driver of climate and social development. In this context, recognizing açaí as a strategic asset of Brazil's ecological transition reinforces the urgency of integrating production and conservation, science and traditional knowledge.

By positioning açaí as a vector of climate resilience, a sustainable, inclusive, and low-carbon sociobioeconomy model is consolidated—one capable of becoming a global reference for forest- and agroforestry-based socio-productive initiatives.

The recommendations presented in this policy brief outline pathways to transform challenges into opportunities, linking public policy, science, technological innovation, traditional knowledge, and multisectoral cooperation. Implementing these actions represents a collective call to action, ensuring that açaí remains a living expression of standing forests and socio-environmental justice, aligned with the Amazon's climate-resilient future.

DIÁLOGOS PRÓ-AÇAÍ INITIATIVE

Diálogos Pró-Açaí is a multisectoral network established in 2018 to promote qualified dialogue aimed at strengthening and ensuring the sustainability of this key sociobiodiversity value chain.

The initiative originated from the project "Green Markets and Sustainable Consumption", a partnership between the Ministry of Agriculture, Livestock and Supply (MAPA) and the German Cooperation for Sustainable Development (GIZ), with implementation support from the IPAM/EcoConsult Consortium

and the Instituto Terroá.

Its mission is to connect, engage, and mobilize key actors in support of a fair and sustainable development of the açaí value chain, through collective construction of recommendations and intersectoral agendas.

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