



Invest in Sergipe: **BIOECONOMY AND AGRIFOOD SYSTEMS**

DESENVOLVE-SE
AGÊNCIA SERGIPE DE DESENVOLVIMENTO



SERGIPE
GOVERNO DO ESTADO

BIOECONOMY AND AGRIFOOD SYSTEMS

Bioeconomy has proven to be one of the state's most important economic sectors, capable of generating wealth and reducing social inequalities.

Bioeconomy in Sergipe

Agriculture and livestock account for 5.4% of Sergipe's Gross Domestic Product (GDP) and continue to grow sustainably. Each year, the production of both permanent and temporary crops increases, positioning the state as a reference in the Northeast region.

Sergipe is the second state with the highest agricultural productivity in Brazil: 5,126 kg/ha, 2024/2025 harvest.

The state stands out as a key player in Northeastern agriculture, benefiting from technological innovations and institutional support to increase productivity.

The 10 States with the Highest Agricultural Productivity (2024/2025 Harvest)



Source: CONAB. Grain Harvest Bulletin. 9th survey. June/2025.

Agricultural Production (Temporary and Permanent Crops)

3rd Largest orange producer in the Northeast (394,859 tons)

2nd Largest sweet potato producer in the Northeast (67,049 tons)

3rd Largest rice producer in the Northeast

(39,927 tons)

4th Largest lemon producer in the Northeast (13,935 tons)

3rd Largest peanut producer in the Northeast (1,611 tons)

4th Largest corn producer in the Northeast (874,463 tons)

4th Largest coconut producer in the Northeast (131,688 tons)

Source: IBGE – Municipal Agricultural Production, 2023.

Fruit Production in Sergipe

Fruit production in Sergipe is diverse and significant for the Northeast.

Some fruits stand out for their potential to drive new industries in the state's food sector:

3rd largest tangerine producer in the Northeast (6,514 tons)

5th largest mango producer in the Northeast (13,968 tons)

7th largest pineapple producer in the Northeast (32,260 units)

6th largest passion fruit producer in the Northeast (13,485 tons)

6th largest guava producer in the Northeast (9,855 tons)

Source: IBGE – Municipal Agricultural Production, 2023.

Efficient and Competitive Corn Production

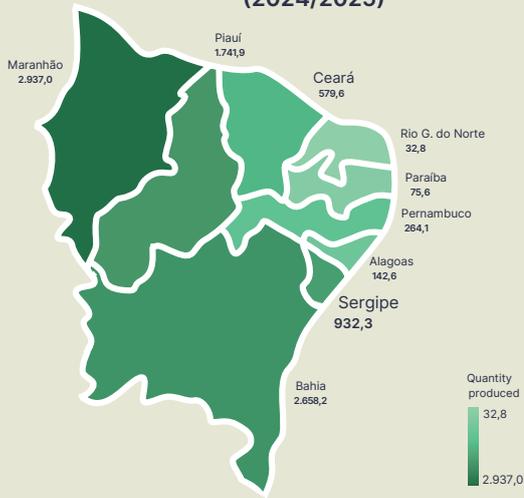
Sergipe is the 4th largest corn producer in the Northeast and has the highest average productivity per hectare among Northeastern states, reaching 5,126 kg/ha.

This is achieved through integrated approaches: public policies, investments in agricultural research and innovation, and sustainable practices ensuring sector resilience.



The institutional support of various partners is essential to foster the development of corn cultivation in Sergipe.

Northeast: Corn Production (in thousands of tons) Harvest (2024/2025)



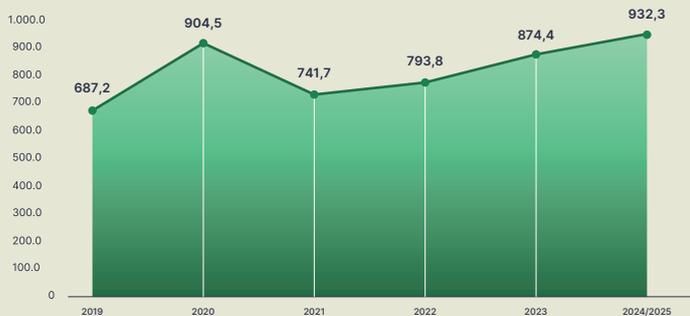
Source: CONAB. Grain Harvest. 90 Survey. June/2025.

Corn Production

The evolution of corn production in Sergipe reflects not only the state's agricultural potential but also the challenges faced over the years due to climatic conditions and external variables.

To increase competitiveness, Sergipe will focus on adopting advanced agricultural technologies and improving supply chain management. These measures can help mitigate the effects of climate variability and other external factors, promoting more stable and sustainable production and ensuring that Sergipe continues to stand out in the agricultural landscape of the Northeast and Brazil.

Sergipe: Evolution of Corn Production (ton)



Source: CONAB. Grain Harvest Bulletin, various years. Grain Harvest Bulletin, 9th survey. June/2025.

Sugarcane Production

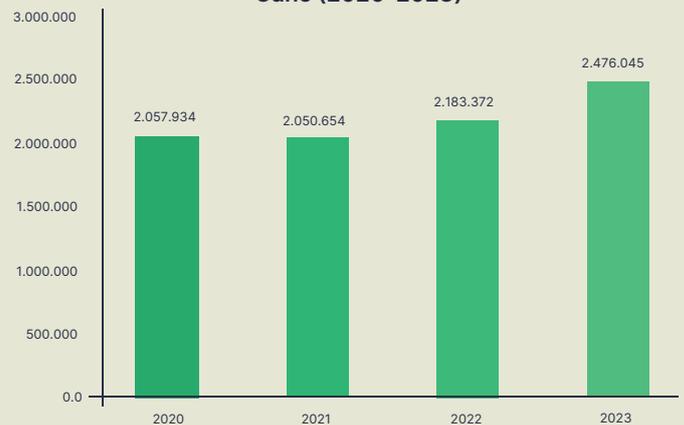
Sergipe is the 7th largest sugarcane producer in the Northeast and the 5th largest sugar producer.

In 2023, sugarcane production reached 2,476,045 tons, a 13.4% increase compared to the previous year

Between 2020 and 2023, production grew 20.28%, reflecting improved agricultural practices and rising demand for sugar and ethanol.

The outlook for the sector is optimistic, with projections indicating that sugarcane production in the Northeast will continue to grow in the coming years, driven by investments in technology and improvements in agricultural practices.

Sergipe: Annual Production of Sugar Cane (2020-2023)



Source: Sergipe Observatory. Profile of Sergipe Agriculture, various years.

Sugar Exports

Sugar is an important export commodity for Sergipe, being shipped to Africa, Asia, and Europe.

In 2024, sugar exports represented approximately 13.5% of Sergipe's total exports, highlighting the importance of this product to the state's economy.

With the strengthening of agricultural practices and attention to international market demands, Sergipe will continue to expand its exports in the coming years. The sugar-energy sector plays a crucial role in the Sergipe economy, contributing significantly to the region's exports.





Biofuel Production: Ethanol

Ethanol production in Sergipe is a crucial component of the state's sugar-energy industry, reflecting its productive capacity and the importance of biofuels in the energy matrix.

Total ethanol production in the Northeast is significant, with an estimated 1.833 billion liters for the 2023/24 harvest. Sergipe contributes about 6% of the Northeast's total production, highlighting its relevance within the regional context.

With continued investments in technology and sustainable agricultural practices, Sergipe is expected to resume growth in ethanol production in 2025 and strengthen its position in both the regional and national markets.

Sergipe: Anhydrous and Hydrous Ethanol Production (2014/2023) (Million Liters)



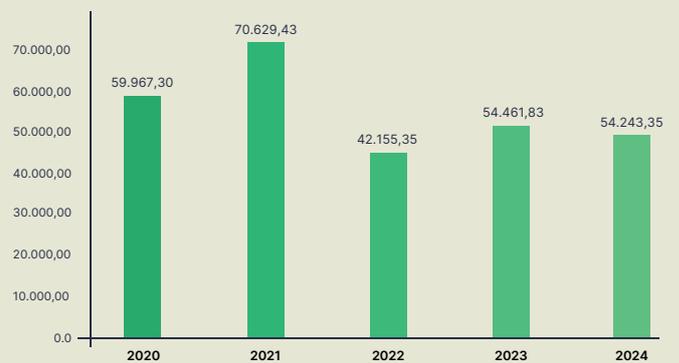
Source: Brazilian Statistical Yearbook of Petroleum, Natural Gas and Biofuels 2024.

Bioelectricity from Sugarcane Bagasse

Electricity generation from sugarcane bagasse has become an important renewable energy source in Sergipe. This diversifies the state's energy matrix while reducing greenhouse gas emissions.

There is significant potential and opportunities to increase installed capacity and improve generation efficiency, thus contributing to a more sustainable and secure energy future for Sergipe.

Sergipe: Bioelectricity Generation (Sugarcane Bagasse) (MWh)



Source: UnicaData. Sugarcane and Bioenergy Observatory. Bioelectricity Generation Panel.

Orange Production

Orange production in the Northeast of Brazil is a significant agricultural activity, contributing to both the regional and national economies.

In 2023, production data shows that Sergipe stands out as the second-largest producer in the Northeast region.

The state stood out in several metrics:

Production: With 394,859 tons, Sergipe is the 5th largest producer in Brazil and the 2nd largest in the Northeast, highlighting its relevance in citrus production.

Yield: The average yield in Sergipe was 12,786 kg per hectare, higher than that of Bahia (12,531 kg per hectare), indicating significant production efficiency.

Production Value: The total production value in Sergipe was R\$ 368.6 million, reflecting its economic importance.

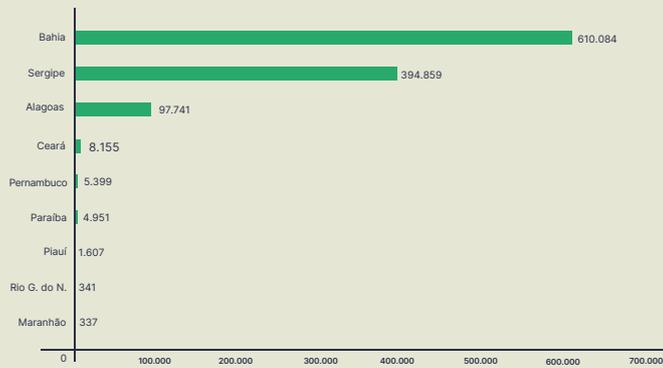
Sustained Growth: Between 2020 and 2023, the



value of orange production in Sergipe increased from R\$ 214.4 million to R\$ 368.6 million, representing a growth of approximately 71.91%.

This growth reflects not only increased productivity but also improvements in management practices and fruit quality.

Northeast: Orange Production (20223) (tons)



Source: IBGE – Municipal Agricultural Production (PAM), 2023.
Prepared by: Desenvolve-SE.

Orange Juice Exports

In 2024, the value of orange juice exports reached 141.3 million dollars. This performance represents a significant contribution to the Northeast’s exports, with Sergipe standing out as the main exporter of orange juice.

The Northeast’s total exports amounted to US\$141.79 million, meaning that Sergipe was responsible for approximately 99% of this value, highlighting its dominance in the sector.

Sergipe’s orange juice exports reaffirm the state’s position as a leader in the citrus sector, both in the Northeast and in Brazil. The combination of high productivity and strong export performance positions Sergipe as an emerging leader in citrus production in Brazil.

Peanut Production

Sergipe is the third-largest peanut producer in the Northeast and ranks second in average yield for the crop (1,766 kg/ha).

Peanuts are an important component of agriculture in the state and are part of the traditional culture—especially boiled peanuts, which are considered an intangible cultural heritage of Sergipe and are widely consumed during local festivals and events.

Northeast: Peanut Production (in tons) (2023)



Source: IBGE. Municipal Agricultural Production (PAM), 2023.

Northeast: Average Peanut Production Yield (kg/ha)(2023)



Source: IBGE – Municipal Agricultural Production (PAM), 2023.
Prepared by: Desenvolve-SE.

Peanut production in Sergipe has shown significant growth over the years, despite challenges—especially climatic conditions.

Between 2019 and 2023, the production value increased by 204.4%.

This substantial growth reflects not only an increase in the quantity produced but also a rise in the market value of peanuts, which can be attributed to several factors:

Increased Demand: Boiled peanuts are a popular delicacy in Sergipe, especially during local festivals.

Improvements in Agricultural Practices: Investments in irrigation have led to higher productivity and improved product quality.

Product Appreciation: Higher prices and growing demand in both regional and national markets.





Sugarcane harvest



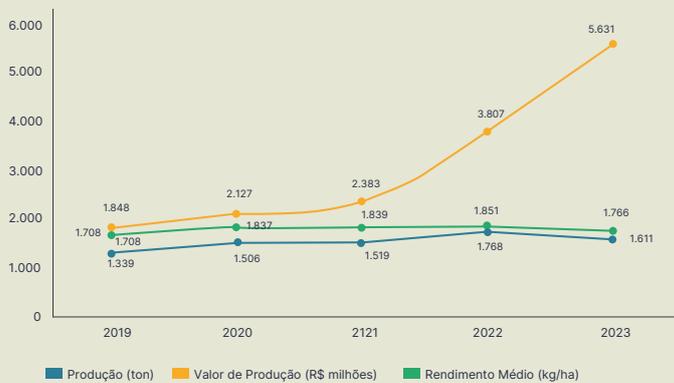
Corn plantation



Orange plantation

With a total production of 1,611 tons and a significant production value of R\$ 5.631 million in 2023, Sergipe positions itself as one of the leading peanut producers in the Northeast.

Sergipe: Peanut Production, Production Value and Average Yield (2019-2020)



Source: IBGE – Municipal Agricultural Production, 2023
Prepared by: Desenvolve-SE.

Milk Production

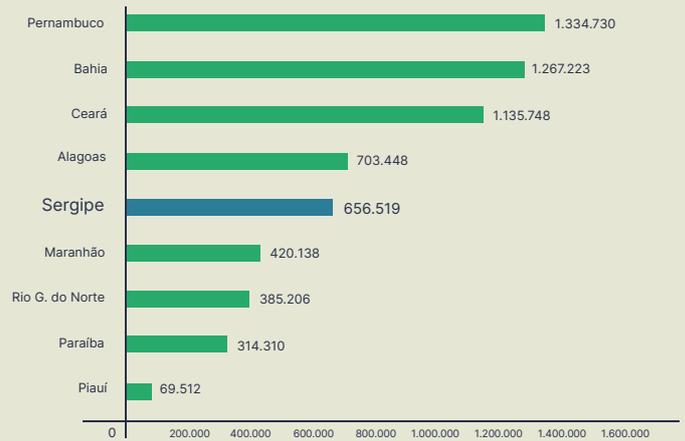
Milk production is a significant economic activity in the state, generating jobs and income for producers and workers in the dairy industry, which includes the production of cheese, yogurt, butter, and other dairy products.

In 2023, Sergipe produced 656.519 million liters of milk, a significant increase compared to 2022 (502.625 million liters). This represents approximately 30.6% growth in production.

The production value of milk in Sergipe was R\$ 1.4 million, reflecting a meaningful contribution to the local economy and the increased market value of milk.

The state accounted for 10.95% of the total production value in the region, standing out as an important producer in the Northeast context.

Northeast: Milk Production (in thousands of liters)



Source: IBGE. Municipal Livestock Survey, 2023
Prepared by: Desenvolve-SE.

Industrialized Milk Production

Sergipe has a strong industrial vocation in the dairy sector.

5th largest milk producer in the Northeast (656.519 million liters in 2023).

2th state with the highest level of milk industrialization in the region.

The high volume of industrialization relative to production indicates that Sergipe has developed an industrial capacity that goes beyond its own milk production.

Positive economic characteristics:

- ✓ Adds value to the product and generates jobs in the processing industry.
- ✓ Good logistical infrastructure for milk collection and processing.
- ✓ Competitive advantages that attract milk from other regions to be processed in Sergipe.



Honey Production

Beekeeping in Sergipe has evolved significantly in recent years. Honey production data from 2020 to 2023 show a consistent increase in the volume produced. Production nearly doubled between 2020 and 2023, with an 88% increase.

In 2020, production was 84,944 kg, followed by successive increases in the following years: 99,020 kg in 2021, 135,264 kg in 2022, and 159,786 kg in 2023.

Even with the drop in production value in 2023, the consistent growth in volume produced indicates a strengthening of beekeeping activity in the state, suggesting investments in production capacity and a possible increase in the number of producers involved in the sector.

Sergipe: Honey production (kg) and Production Value (R\$) (2020-2023)



Source: IBGE – Municipal Livestock Survey, various years
Prepared by: Desenvolve-SE.

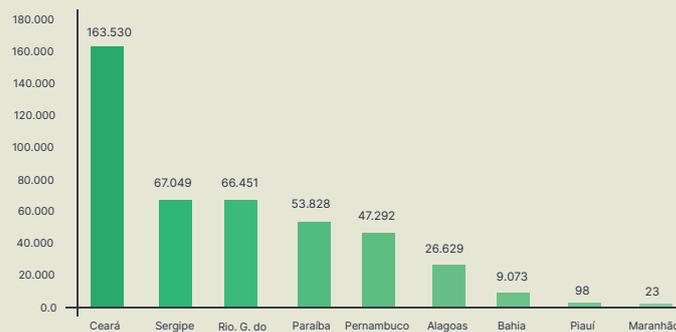
Sweet Potato Production

Sergipe stands out as the second-largest sweet potato producer in the region, with a production of **67,049 tons** in 2023.

A set of variables contributes to production in Sergipe:

- ✓ Favorable climatic conditions.
- ✓ Agricultural policies through incentives, technical assistance programs, and research investments
- ✓ Efficient farming practices.

Northeast: Production of Sweet Potato (2023) (tons)



Source: IBGE – Municipal Agricultural Production, 2023.
Prepared by: Desenvolve-SE.

Sweet potato production in Sergipe grew from **51.5 thousand tons in 2019 to 67.0 thousand tons in 2023**, representing an increase of 29.9% over the period.

The production value also showed significant growth, rising from **R\$ 59.4 million in 2019 to R\$ 135.2 million in 2023**. This increase represented overall growth of approximately **127.4%**, reflecting not only the rise in production volume but also the product's higher market value.

The **average yield per hectare** increased considerably, from **13.5 kg/ha in 2019 to 18.0 kg/ha in 2023**. This improvement in average yield indicates better agricultural practices and the adoption of technologies that enhance productivity.

Sweet potatoes are an important crop for farmers in Sergipe, contributing significantly to income generation in rural areas.

Sergipe: Main Bioeconomy Products



Sergipe Observatory: Profile of Agriculture in Sergipe, 2022. Dec/2023.





Milk production



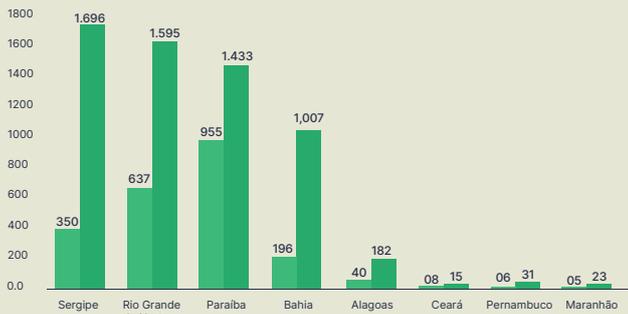
Bee honey production

Peanut and sweet potato production

Mangaba: An Investment Opportunity

Sergipe stands out as a promising hub for bioeconomy investments, especially in the mangaba production chain. In 2023, the state not only produced 350 tons of the fruit, but also generated a production value of R\$ 1.696 million, positioning itself as the leader in production value in the Northeast and the third in quantity produced in the region.

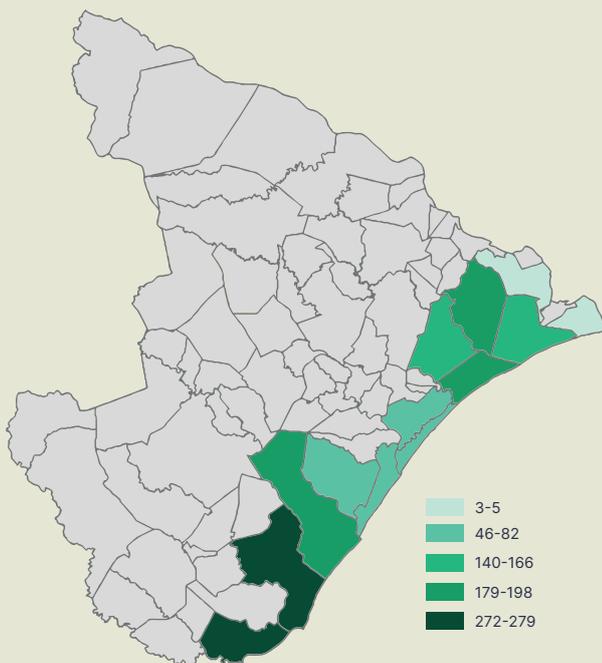
Mangaba Production (ton) and Value (R\$) (2023)



Source: IBGE/PEVS - Plant Extraction and Forestry Production (2023).
Prepared by: Desenvolve-SE/Market Intelligence

In Sergipe, natural mangaba tree areas are located along the state's coastline, present in thirteen municipalities: **Aracaju, Barra dos Coqueiros, Brejo Grande, Estância, Indiaroba, Itaporanga d'Ajuda, Japoatã, Japarutuba, Neópolis, Pacatuba, Pirambu, Santo Amaro das Brotas, and São Cristóvão.**

Mangaba Production Map (2023)



Source: IBGE/PEVS - Production of Plant Extraction and Forestry (2023)

According to Embrapa, 1,697 families are involved in mangaba extraction, distributed across 52 rural communities: Villages (44), Settlements (6), Farmstead (1), and Neighborhood (1). This territorial capillarity demonstrates the socioeconomic importance of mangaba in rural Sergipe, covering 13 of the state's 75 municipalities. It is noteworthy that in all mapped communities, mangaba appears as an income-generating activity (primary in 75% of cases and secondary in 25%).

Mangaba production in the state shows economic indicators that demonstrate the potential of this native crop for developing a sustainable and competitive bioeconomy.

Sergipe accounts for **15.9% of regional production volume**, while concentrating **34% of the total value generated by the sector**. This performance reveals the state's ability to add value to the product, with an average price of R\$ 4.84 per kilogram in 2023—significantly higher than the regional average of R\$ 2.72/kg.

Between 2019 and 2023, the unit value of mangaba in Sergipe grew 118%, rising from R\$ 2.22/kg to R\$ 4.85/kg. This appreciation occurred even with fluctuations in production volume, indicating strengthening demand and recognition of the quality of the local product.

The sector presents favorable characteristics for attracting investments:

- ✓ Native product with natural competitive advantages
- ✓ Market in a process of structuring and appreciation
- ✓ Low dependence on external inputs
- ✓ Potential for developing higher value-added products, such as cosmetics
- ✓ Alignment with global trends in nature-based solutions
- ✓ Productive and economic inclusion of women farmers and community associations



Mangaba, rich in phenolic compounds—which give it various beneficial properties such as antioxidant and anti-inflammatory action and potential in the prevention of chronic diseases, diabetes, and obesity—has vast potential for the food and pharmaceutical industries. Its use of biological resources aligns perfectly with the principles of the bioeconomy, which seeks to promote the transition to a low-carbon economy with regenerative agricultural practices and the valorization of extractivism.

Investing in mangaba in Sergipe means betting on a crop deeply rooted in the region, with the capacity to generate positive socioeconomic and environmental impacts.

Opportunities range from adding value and knowledge to this sociobiodiversity production chain, improving production and processing practices, to developing new products with associated technologies.

Mangaba represents a concrete opportunity for developing nature-based value chains and biodiversity conservation, combining environmental preservation, income generation, and economic competitiveness—fundamental pillars of the new green economy.





Governor
Fábio Cruz Mitidieri

Vice governor
José Macedo Sobral

State Secretary
Jorge Araújo Filho

CEO of Desenvolve-SE
Milton Arthur Vasconcelos de Andrade Cruz





DESENVOLVE-SE
AGÊNCIA SERGIPE DE DESENVOLVIMENTO



SERGIPE
GOVERNO DO ESTADO