

## Update on the VCA4D study of the mango value chain in Guinea-Bissau

As análises da cadeia de valor ajudam a sustentar um diálogo informado sobre políticas públicas e decisões de investimento. Estas análises permitem compreender a forma como o desenvolvimento agrícola se ajusta às dinâmicas do mercado e avaliam o impacto da cadeia de valor no que se refere aos pequenos produtores e na economia em geral.

Esta ferramenta metodológica desenvolvida pela Comissão Europeia tem por objectivo avaliar a dimensão da contribuição da cadeia de valor para um crescimento inclusivo, assim como o grau de sustentabilidade em termos sociais e ambientais.

### Value chain context

Guinea-Bissau's macroeconomic structure shows a significant and growing share of agriculture. Nominal GDP rose from 1.2 billion USD (2015) to 2.2 billion USD (2024), and the agricultural sector (agriculture, forestry, and fisheries) increased from 35.2% of GDP (2015) to 42.2% (2024).

Agriculture accounts for a large share of rural employment; according to gender-disaggregated data, male employment in agriculture decreased from 61.6% (2015) to 55.7% (2019), while female employment rose from 70.2% to 74.3% (2019), suggesting a high degree of feminization in agricultural employment.

The cashew industry dominates the rural and foreign economies: a World Bank sector report (June 2019) indicates

that 95% of export revenues come from cashews and that 75% of rural households are involved in its production, creating a structural exposure to price and climate shocks. According to the FAO (2022), in 2021, 231,000 metric tons (National Cashew Agency/ANCA), with an estimated cultivation area of between 520,000 and 530,000 hectares and relatively low productivity (433–442 kg/ha).

In this context, the mango value chain in Guinea-Bissau represents an emerging agricultural sector with the potential to contribute to the country's economic diversification. In an economy heavily dependent on cashews, mangoes emerge as a complementary crop that can boost rural incomes, revitalize local markets, and open up opportunities for processing and export.

### European Union Intervention

As part of the cooperation between the European Union and Guinea-Bissau, funding is being considered for a rural development program focused on cross-cutting support for agricultural value chains, particularly the rice sector, though it will not overlook other sectors with the capacity to promote sustainable and inclusive growth. This is the case with fruit production sectors which, although underdeveloped, have the potential to diversify agricultural production and improve producers' incomes, complementing rice and cashew production. In this regard, mango and lime production are among those best able to align their specific characteristics with the opportunities offered by growing demand from the domestic market, as well as from regional and international markets.



## Functional analysis

Mango production in Guinea-Bissau is primarily based on family-run and small-scale farming systems. Annual net mango production is estimated at around 11,750 metric tons, although post-harvest losses remain high, at approximately 33% of total production. These losses are due to phytosanitary problems (fruit fly) and limitations in storage, transportation, marketing, and processing.

The production structure is characterized by four main types of producers: large, medium, small, and family-run, with the latter being the most numerous.

Mangoes are marketed primarily through informal networks, where “bideras” play a key role in collecting, transporting, and selling the fruit in local and urban markets. Mangoes are often transported on public transportation to consumption centers, particularly to the capital.

The domestic market is the main destination for production. Approximately three-quarters of the mangoes are sold in Bissau, while about 25% are sold in rural markets. Exports to regional markets are limited and take place informally. Production is concentrated mainly in three regions: Oio (46% of production), Cacheu (27%), and Bafatá (11%).

The functional structure of the value chain is shown in Figure 1. In recent years, there have been significant changes in the value chain, including the disappearance of the main producer-exporter (Frutas e Legumes), the emergence of processing initiatives (juices, jams, dried mangoes), and the establishment of an industrial company dedicated to fruit processing. However, significant challenges remain regarding the organization of the chain, market access, and phytosanitary issues, particularly the presence of the fruit fly.

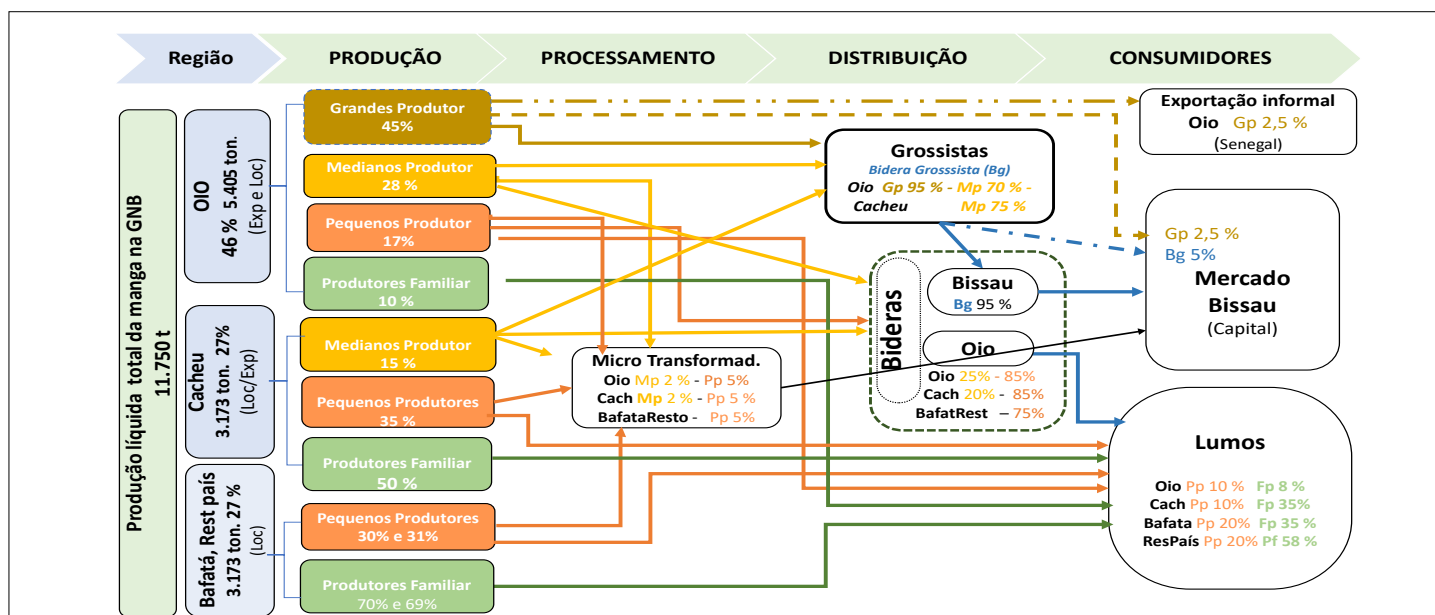


Figure 1: Functional diagram of mango value chains in Guinea-Bissau

## Environmental Analysis and Agroforestry Systems

Mango production in Guinea-Bissau takes place primarily in agroforestry systems, in which mango trees are integrated with cashew plantations and other crops.

These systems help maintain tree cover, improve soil fertility, and reduce the risk of erosion. In addition, they promote biodiversity and can increase the resilience of agricultural systems to climate change.

Since production relies on agricultural practices that make minimal use of chemical inputs, the direct environmental impact of cultivation is relatively limited compared to more

intensive horticultural systems. However, post-harvest losses, phytosanitary problems, and logistical constraints continue to pose significant challenges.

Strengthening agroforestry practices and improving orchard management could simultaneously contribute to enhancing both the environmental sustainability and productivity of the sector.

## Economic analysis

From an economic perspective, the mango value chain generates benefits for the stakeholders involved, although its contribution to the national economy remains relatively limited.

The annual value added generated by the value chain is estimated at approximately 4.524 billion CFA francs, equivalent to roughly 7 million euros, which represents about 80% of the total value of mango production.

At the macroeconomic level, the chain accounts for approximately 0.4% of national economic growth and about 1.2% of agricultural GDP. In terms of employment, it is estimated to support about 1,347 jobs, many of which are informal or family-based. A significant proportion of the value added is captured by urban traders, particularly in the Bissau market, which is the country's main trading hub.

Table 1 presents the main economic indicators of the mango value chain.

The economic indicators analyzed include the distribution of net operating profit among stakeholders and the distribution of value added along the chain. These indicators help identify how the economic value generated is distributed, which stakeholders capture a larger share of the benefits, and where imbalances in the chain's structure may exist.

Item	2017	2019
Net mango production (t)	9.000	11.750
Production value	5,6 milhões €	8,7 milhões €
Financial profitability	8% e 91%*	0% e 50%
Contribution to GDP	0.56%	0.4%
Contribution to agricultural GDP	0.83%	1.2%
Contribution to public finances	2.7% do VA	6% do VA
Contribution to the trade balance	-115.3 milhões CFA	-132,5 milhões CFA
Value added	Concentrado	Concentrado
Impact of governance	0	0
Impact on employment	770 empregos	1.347 empregos

Indicators from the economic analysis of the mango value chain for 2017 and 2025 \*minimum and maximum figures according to stakeholders

## Social Analysis

Social conditions in Guinea-Bissau reflect a structural context of poverty that has been widely documented. The analysis conducted in the 2017 VCA4D study, based on six key domains, identified significant challenges.

Although no formal update was conducted in 2025, the mission's observations indicate that these conditions have

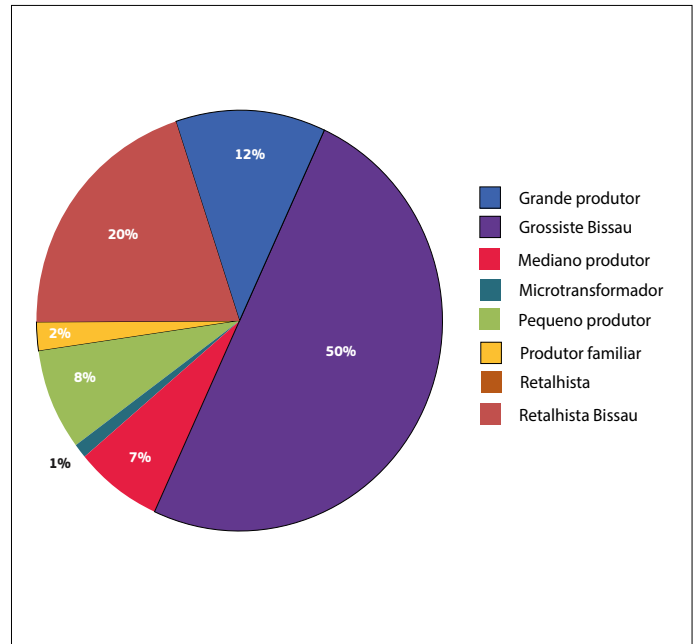


Figure 2: Distribution of net operating profit among stakeholders

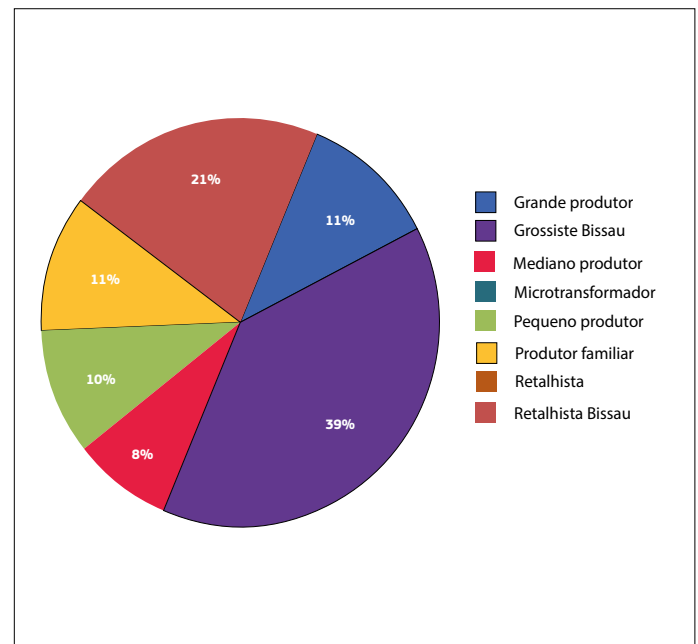


Figure 3: Distribution of value added

remained largely unchanged over the past decade. In some areas, such as food security, social inclusion, and living conditions, there are signs of deterioration, particularly in rural areas. However, this situation is closely linked to the country's ongoing political and institutional instability, which hinders the implementation of effective public policies. In this sense, the mango value chain reflects social challenges that cut across Guinean society.

## Value Chain Development Scenarios

### Value Chain Development Scenarios

The study proposes four development scenarios that illustrate different pathways for strengthening the mango value chain in Guinea-Bissau. These scenarios are not mutually exclusive but represent different possible strategies for investment and organization within the sector.

#### Scenario 1: Development through an industrial processing firm

This scenario is based on the consolidation of an industrial company capable of processing large volumes of mangoes to produce pulp and other derivatives for export and to supply the domestic market year-round. The company would function as a central player in the chain, establishing supply agreements with local producers. This model would significantly reduce post-harvest losses and generate estimated annual revenues of between 8 and 12 million euros.



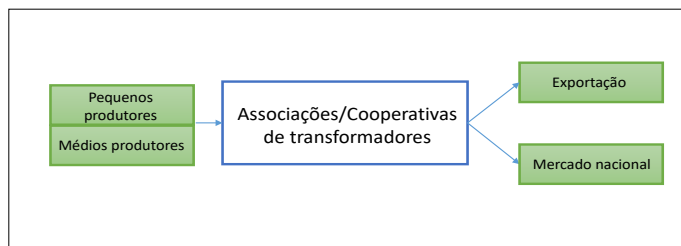
#### Scenario 2: Development of commercial production geared toward the export of fresh mangoes

This scenario promotes the development of the largest existing plantation, which features modern facilities that meet international quality standards and certification requirements. The goal would be to position Guinea-Bissau as a supplier of fresh mangoes to international markets. This model could generate estimated annual revenues of between 10 and 15 million euros, although it would require significant investments and advanced logistical capabilities.



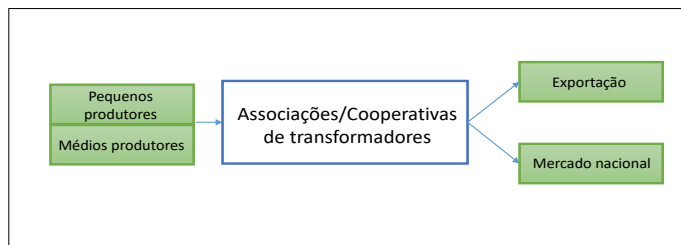
#### Scenario 3: Strengthening Small and Medium-Sized Producers

This scenario focuses on a more inclusive approach based on strengthening small and medium-sized producers through improvements in orchard management, producer organizations, and collective harvesting and marketing systems. With relatively modest investments, this model could generate between 4 and 6 million euros in annual revenue and improve rural livelihoods.



#### Scenario 4: Development of small and medium-sized local processing enterprises

The fourth scenario proposes the development of between 30 and 50 small processing units, capable of processing between 3,000 and 5,000 metric tons of mangoes per year into value-added products. This model would help reduce post-harvest losses, generate local employment, and boost value added in the region.



Taken together, these scenarios show that the development of the mango value chain can follow different paths, ranging from models driven by industrial investment to more inclusive approaches based on smallholders and small businesses. A balanced strategy that combines elements from these scenarios could help transform the sector into a driver of agricultural diversification and rural development in Guinea-Bissau.

Value Chain Analysis for Development (VCA4D) é uma ferramenta financiada pela Comissão Europeia / DEVCO e implementada em parceria com a Agrinatura. A Agrinatura (<http://agrinatura-eu.eu>) é uma Aliança Europeia de Universidades e Centros de Investigação envolvidos em investigação agropecuária e capacitação para o desenvolvimento. A informação e o conhecimento produzidos através da análise de cadeias de valor destinam-se a apoiar as Delegações da UE, assim como os seus parceiros, na melhoria do diálogo político para a viabilização de investimentos e ao entendimento das mudanças que possam advir dessas ações.

O estudo foi conduzido em 2025 por: Gustavo Saldarriaga, Emanuel Ramos e Midana Sambu, com a colaboração de Helena Farrall. Os autores estão vinculados ao relatório original.

