Comissão Europeia

MARCH 2026

VALUE CHAIN ANALYSIS FOR DEVELOPMENT

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

Value chain analyses help to inform discussions on public policy and investment decisions. These analyses provide an understanding of how agricultural development aligns with market dynamics and assess the impact of the value chain on smallholders and the wider economy.

This methodological tool, developed by the European Commission, aims to assess the extent to which the value chain contributes to inclusive growth, as well as its level of social and environmental sustainability.

Value chain context

Guinea-Bissau's macroeconomic structure shows a significant and growing role for agriculture. Nominal GDP rose from USD 1.2 billion (2015) to USD 2.2 billion (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 proportion of rural employment; according to gender-disaggregated data, male employment in agriculture fell from 61.6% (2015) to 55.7% (2019),
whilst female employment rose from 70.2% to 74.3% (2019), suggesting a high feminisation of agricultural employment.

The cashew industry dominates the rural and external economy: a World Bank sector report (June 2019) indicates that 95% of export earnings 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 tonnes (National Cashew Agency/ANCA), with an estimated 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 constitutes 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, revitalise 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, the financing of a rural development programme is being considered, focused on cross-cutting support for agricultural value chains, particularly the rice sector, but without neglecting other sectors capable of promoting sustainable and inclusive growth. This is the case with fruit 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 reconcile their own 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 based mainly on family-run and small-scale farming systems. Annual net mango production is estimated at around 11,750 tonnes, although post-harvest losses remain high, at approximately 33% of the total produced. These losses are due to phytosanitary problems (fruit fly) and limitations in storage, transport, marketing and processing.

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

Mango marketing takes place mainly through informal networks, where 'bideras' play a key role in the collection, transport and sale of the fruit in local and urban markets. Mangoes are often transported on public transport to consumption centres, particularly to the capital.

The domestic market is the main destination for production. Approximately three-quarters of mangoes are sold in Bissau, whilst around 25% are sold in rural markets. Exports to regional markets are limited and take place informally. Production is mainly concentrated 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 organisation of the chain, market access and phytosanitary issues, particularly the presence of the fruit fly.

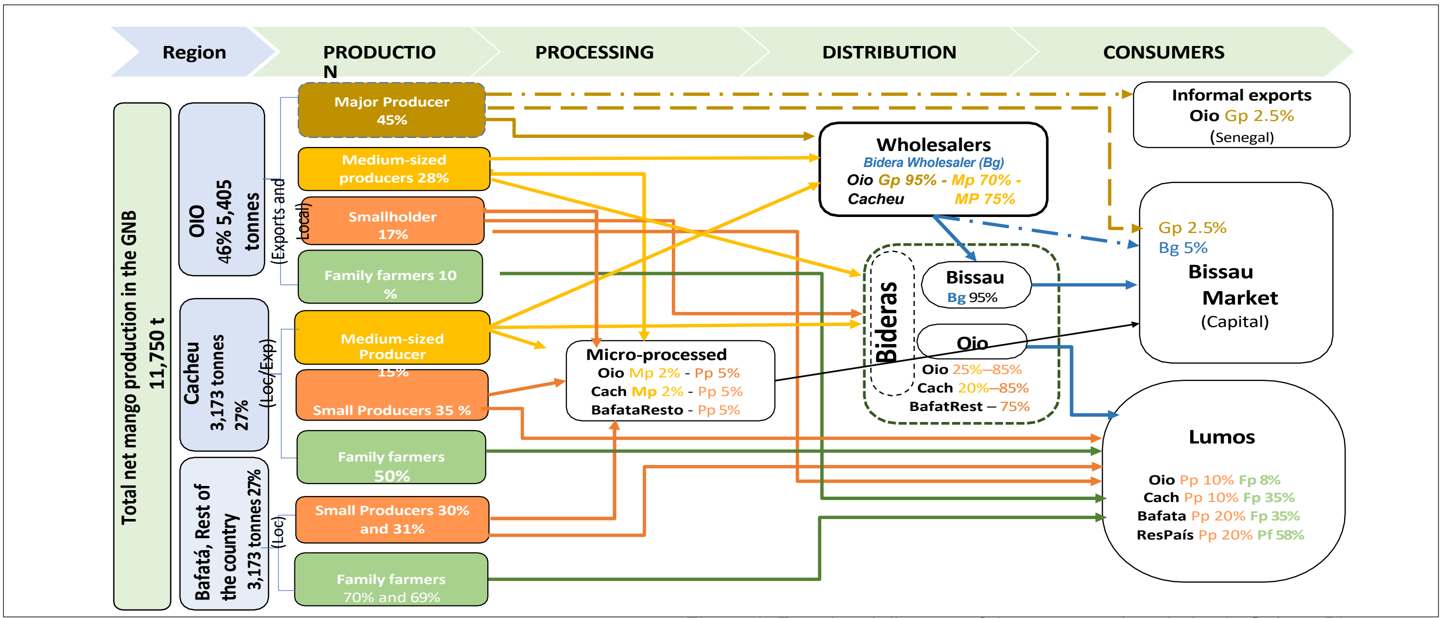


Figure 1: Functional diagram of the mango value chains in Guinea-Bissau

Environmental analysis and agroforestry systems

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

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

As production is based on agricultural practices with low use of chemical inputs, the direct environmental impact of cultivation is relatively limited compared to more intensive horticultural systems. However, post-harvest losses, plant health issues and logistical constraints continue to pose significant challenges.

Strengthening agroforestry practices and improving orchard management could simultaneously contribute to improving 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 chain is estimated at around 4.524 billion CFA francs, equivalent to approximately 7 million euros, which represents around 80% of the total value of mango production.

At the macroeconomic level, the chain accounts for approximately 0.4% of national economic growth and around 1.2% of agricultural GDP. In terms of employment, it is estimated to provide around
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 market in Bissau, which is the country's main trading hub.

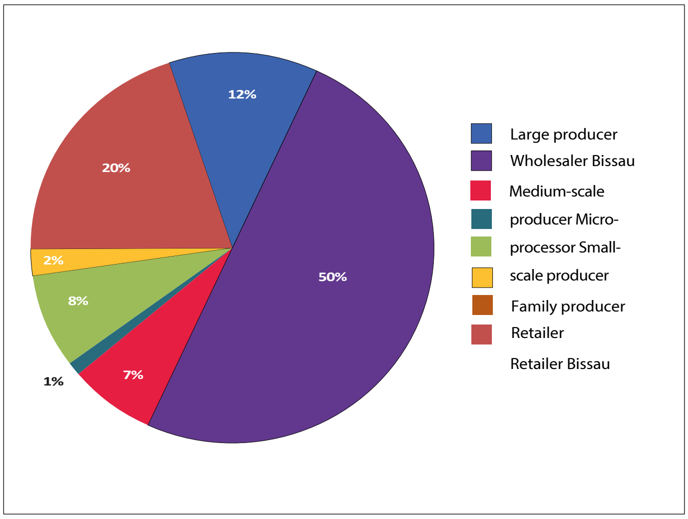


Figure 2: Distribution of net operating profit among stakeholders

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

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

Item	2017	2019
Net mango production (t)	9,000	11,750
Production value	€5.6 million	€8.7 million
Financial profitability	8% and 91%*	0% and 50%
Contribution to GDP	0.56%	0.4%
Contribution to agricultural GDP	0.83%	1.2%
Contribution to public finances	2.7% of GVA	6% of GVA
Contribution to the trade balance	-115.3 million CFA	-132.5 million CFA
Value added	Concentrate	Concentrate
Governance impact	0	0
Impact on employment	770 jobs	1,347 jobs

*Indicators from the economic analysis of the mango value chain 2017 and 2025 *Minimum and maximum according to stakeholders*

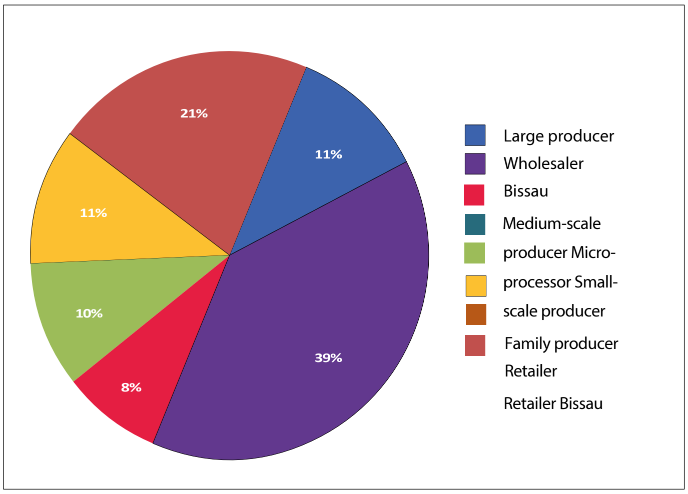


Figure 3: Distribution of value added

Social analysis

Social conditions in Guinea-Bissau reflect a structural context of poverty, which is widely documented. The analysis carried out in the 2017 VCA4D study, based on six key domains, identified significant challenges.

Although no formal update was carried out in 2025, the mission's observations indicate that these conditions have remained broadly unchanged over the last 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 sector reflects social challenges that are widespread across Guinean society.

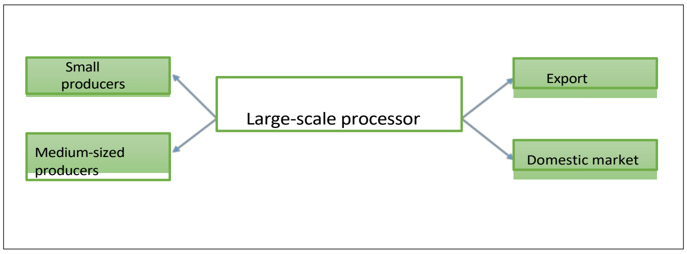
Value chain development scenarios

Value chain development scenarios

The study proposes four development scenarios that outline 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 organisation within the sector.

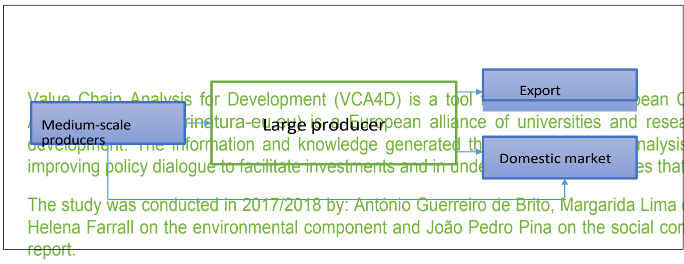
Scenario 1: Development through an industrial processing operator

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 throughout the year. The company would act 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.



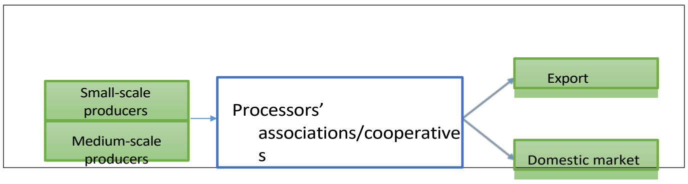
Scenario 2: Development of commercial production geared towards the export of fresh mangoes

This scenario promotes the development of the largest existing plantation, which has modern facilities meeting international quality and certification standards. The aim 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 requires significant investment and advanced logistical capabilities.



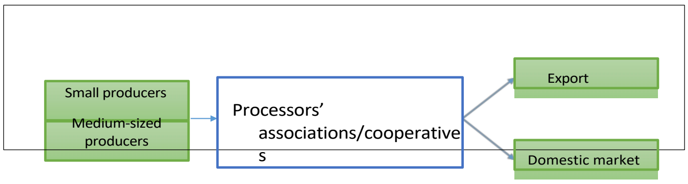
Scenario 3: Strengthening small and medium-sized producers

This scenario focuses on a more inclusive approach based on strengthening small and medium-sized producers through improvements in orchard management, producer organisations, and collective harvesting and marketing systems. With relatively modest investment, this model could generate between €4 and €6 million 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 tonnes of mangoes per year into derived products. This model would help to reduce post-harvest losses, generate local employment and boost added value 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 combining 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) is a tool [illegible]ean Commission / DEVCO and implemented in partnership with Agrinatura. A[illegible]rinatura-eu.eu) is a European alliance of universities and research centres involved in agricultural research and capacity-building for development. The information and knowledge generated th[illegible]nalysis are intended to support EU Delegations, as well as their partners, in improving policy dialogue to facilitate investments and in unde[illegible]es that may result from these actions.

The study was conducted in 2017/2018 by: António Guerreiro de Brito, Margarida Lima de Faria, Gustavo Saldarriaga, Emanuel Ramos, with the collaboration of Helena Farrall on the environmental component and João Pedro Pina on the social component, both associated with ISA. The authors are linked to the original report.