

## CHALLENGES AND OPPORTUNITIES IN THE MARKETING AND PROCESSING OF CASHEW NUTS

THE CASE OF NAMPULA

BANCO DE MOÇAMBIQUE

DISCUSSION PROCEEDINGS - 46<sup>TH</sup> BM ADVISORY BOARD MEETING

Translation: Communications Office Nampula, November 5, 2021

## **OVERVIEW**

OPENING REMARKSv
OPENING SPEECH: BANCO DE MOÇAMBIQUEvii
WELCOME SPEECH: PROVINCIAL GOVERNMENT OF NAMPULAx
WELCOME SPEECH: MUNICIPAL COUNCIL OF NAMPULA CITYxiii
CHALLENGES AND OPPORTUNITIES IN THE MARKETING AND PROCESSING OF
CASHEW NUTS: THE CASE OF NAMPULAxvi

## **OPENING REMARKS**

The Banco de Moçambique (BM), held its 46<sup>th</sup> Advisory Board meeting (CCBM), from November 3 to 5, 2021, in Nampula city, Nampula province. The first two workdays were reserved for discussions related to the institution's internal management, and the third day, open to the general public for presenting a research topic of interest related to the aforementioned province and the country in general.

For the public session, the BM Advisory Board selected the theme "Challenges and opportunities in the marketing and processing of cashew nuts: the case of Nampula", given the potential of the cashew sector to boost the socio-economic development of Mozambique, and in particular, Nampula.

The presentation to the general public and subsequent debate was chaired by the Governor of the BM and was attended by internal and external guests. Distinguished external guests included the Governor of Nampula province, the Chairman of the Municipal Council of Nampula, representatives of cashew producers and processors, credit and research institutions.

These proceedings are a collection of the key remarks and discussions and consist of (i) the opening speech of the BM Governor; (ii) welcome speeches of the Governor of the Nampula Province and the Chairman of the Municipal Council of Nampula; (iii) the study: "challenges and opportunities in the marketing and processing of cashew nuts: the case of Nampula" presented by the Economic Research Department of the BM; (iv) summary of the audience's remarks during the debate; and (v) concluding remarks regarding the findings and recommendations of the study.

With these proceedings, the BM makes available to the key stakeholders and the general public, the study, its main recommendations and a summary of the discussions, with a view to find solutions to the challenges identified.



# OPENING SPEECH: BANCO DE MOÇAMBIQUE

Governor of the BM Rogério Lucas Zandamela

Nampula, November 5, 2021

Governor of the Nampula province,

Deputy Governor of the Banco de Moçambique,

**Chairman of the Nampula Municipal Council,** 

Former Governor of the Banco de Moçambique,

Board Members of the Banco de Moçambique,

Representatives of International Institutions,

Representatives of Public and Private Institutions,

Former Board Members of the Banco de Moçambique,

Representatives of Credit Institutions and Financial Companies,

Esteemed Advisors and Managers of the Banco de Moçambique,

**Distinguished Guests,** 

Ladies and Gentlemen,

Good morning!

It is with great honor and satisfaction that, on behalf of the Board of Directors of the Banco de Moçambique and on my own name, I welcome all attendants to this session of the forty-sixth Advisory Board meeting of the Banco de Moçambique.

I would like to send special regards to the Government of the province and the Municipal Council of Nampula city for the invaluable cooperation and hospitality throughout the preparation of this event.

Moreover, I extend my thanks to all that contributed to the materialization of this meeting, from the event organizing committee, service providers, to the citizens of Nampula city.

### Ladies and Gentlemen,

The activities of the forty-sixth Advisory Board meeting started two days ago, with internal discussions, which produced recommendations to improve the operations of our institution.

During these two days of our stay in this beautiful city, we interacted with economic agents, so as to better understand the local level of development.

As a result, it was possible to learn of the selfless work that the government and municipality have been developing, towards the improvement of the welfare of communities.

In addition, we had the privilege of visiting some local economic enterprises, namely a cashew processing plant and an oil and soap production unit.

From the visits, we were happy to find that, despite the negative impact of the COVID-19 pandemic on the business fabric, these enterprises have been contributing positively to local socio-economic development.

## Ladies and Gentlemen,

As usual, we reserve the third and final day of our Advisory Board meeting for open discussion with public input on a topic of interest to the local economy, in particular, and national, in general.

For these public sessions, topics are selected considering their relevance to the development of local communities in the host provinces of the Advisory Board meetings.

Thus, for this session, "Challenges and Opportunities in the Marketing and Processing of Cashew Nuts in Nampula".

In addition to bringing forth the case of the Nampula province, we expect to collect inputs and important lessons on economic policy options that can be implemented at the country level, in order to boost the cashew sector.

We are pleased to note that, as a result of the reforms that have been undertaken in the sector, the production of cashew nuts has been increasing.

However, the level of processing of cashew nuts has been declining, driven partly by the limited access to raw material by the industry.

As an example, the average total production in the last 5 years stood at about 140 thousand tons, but the cashew nuts acquired by the industry stood at 49 thousand tons, in the same period.

Data also indicates that exports at the formal level have not been increasing, and about 35 percent of raw cashew nuts serves the informal market.

These facts suggest that the problem of access to raw materials by the industry stems mainly from the weakness in the marketing system, which is worsened by limited access to bank financing.

The study prepared by our team, to be presented at this meeting, shall deepen these matters, so as to foster a discussion on concrete actions needed to maximize gains for all players in the cashew nut value chain, in Nampula and nationwide.

We are confident that the constructive and fruitful discussion in this light shall serve as the foundation for setting out guidelines for organizing the process of cashew-nut marketing and revitalizing the processing industry.

## Ladies and Gentlemen,

In conclusion, I would like to reiterate my welcome wishes to all attendants.

I hereby declare open the public session of the forty-sixth Advisory Board of the Banco de Moçambique.

Thank you!

## WELCOME SPEECH: PROVINCIAL GOVERNMENT OF NAMPULA

Governor of the Nampula Province

Manuel Rodrigues Alberto

Nampula, November 5, 2021

Rogério Zandamela, Governor of the Banco de Moçambique,

Board Members of the Banco de Moçambique,

Paulo Vahanle, Chairman of the Municipal Council of Nampula,

Teotónio Jaime dos Anjos Comiche, Chairman of the Mozambican Banking Association.

**Managers of Commercial Banks and Microfinance Institutions**,

**Distinguished Guests**,

Ladies and Gentlemen,

Our Nampula province has the honorable opportunity to host this crucial meeting for an institution that supervises the financial institutions operating in national territory, and is the main advisor to the government as regards the financial system.

In light of the forty-sixth meeting of the Advisory Board of the Banco de Moçambique, we would like to send a warm welcome to all participants and wish them a good stay in the most populous province of our homeland.

We welcome you all to the land of cashew nuts, which boasts the deep water port of our country and two international airports.

Welcome to a land with beautiful landscapes and beaches. The first capital of Mozambique, boasting great potential, on which we spoke in the previous meeting.

#### Ladies and Gentlemen.

The people of our province commends the wise decision of the Advisory Board of our central bank, well spearheaded by Dr. Rogério Zandamela, first, for the wise choice of having Nampula host the event, making it a true capital of the financial system of our country in these last three days and, second, for adopting excellent policies and strategies that strengthened our financial system, even during the COVID-19 pandemic.

We especially commend the Banco de Moçambique for taking the initiative to reach out to the government of the Nampula to reflect on a critical issue for the national economy and, above all, for the economy of our province and, therefore, for the lives of thousands of households.

We refer to the issue of marketing and processing of cashew nuts, for a province where about 83% or 19 of its districts are producers of this cash crop.

The increase in current volumes of production, marketing, processing of cashew nuts and the export of kernels is part of the great priorities of our Nampula province.

In this light, the province assumes the increase in the current production volumes of about 74,500 tons of cashew nuts, to previously levels that contributed to the achievement of 210,000 tons in 1972.

Thus, strategically the province has six public nurseries for the production of grafted seedlings in Nassuruma (Meconta), Mahile (Angoche), Nametil (Mogovolas), Liúpo, Chalaua (Moma) and Monapo (Nampula), with an annual production capacity of 2.2 million cashew seedlings.

Likewise, we have been placing efforts on spraying or treating cashew trees and subsidizing the cost of pesticides by 100%, with producers only paying for spraying services valued at MZN 45 per tree.

These government efforts contribute to the increase in productivity levels from 2 kg per untreated tree to 12 kg when treated and, therefore, the increase in marketed volumes from 67,338 tons, last year, to 74,500 tons of cashew nuts, in this campaign.

These efforts are also reflected in the increase in the quantities of kernels exported, where, as an example, in the last three years 3,089 tons were exported, in 2018, 5,584 tons, in 2019, 9,784 tons, in 2020, and until the third quarter of 2021 we recorded the export of 4,649 tons of Nampula production.

An incentive for producers is the fact the Government has set the reference price at MZN 43/kg, which could reach MZN 50/kg.

## Ladies and Gentlemen,

Unfortunately, of the 14 existing plants in our province, 7 have been shut down, and one of the main reasons is the shortage of raw material.

A shortage of raw materials caused, in part, by the smuggling of local production, allowing for the loss of jobs of our fellow citizens and the loss of foreign exchange.

For this reason, we wish to commend the Banco de Moçambique for wisely and timely choosing this theme for our province, which brings forth an opportunity to financially train our economic agents, especially our operators in the hotel industry.

## Ladies and Gentlemen,

We believe that our distinguished visitors will not miss the opportunity to visit or once more enjoy the beautiful landscapes of the Nairuco mountains, the Island of Mozambique (Ilha de Moçambique), and least the wondrous beaches, despite the ban on the lattermost.

We are counting on you all, today and always, especially on the festive season that is coming, so you may come to this province with your families to delight in our rich cuisine.

We would wrap up by reiterating our salutations and thanks to the Banco de Moçambique for the honor of having our province host the forty-sixth Advisory Board meeting, with the expectation that we will again host other events of our prestigious institution.

Thank you all for your prestigious attention.

KOSHUKURU!

THANK YOU!

## WELCOME SPEECH: MUNICIPAL COUNCIL OF NAMPULA CITY

Chairman of the Municipal Council of Nampula city

Paulo Vahanle

Nampula, November 5, 2021

Governor of the Banco de Moçambique,

Governor of the Nampula Province,

Members of the Board of Directors of the Banco de Moçambique,

Chairpersons of the Board of Directors and Executive Committees of Commercial Banks and Financial Institutions in attendance,

Secretary of the National Bank Employees Union,

Dear Guests,

Ladies and Gentlemen,

First of all, allow me to express, on behalf of the Nampula City Council, and my own name, our gratitude for your honorable presence in the, so considered, capital of the North and choosing this city to host the 46<sup>th</sup> meeting of the Advisory Board of the Banco de Moçambique, and welcome all participants, with renewed wishes of a blessed year of 2021.

I would take this opportunity to once again express our appreciation to our citizens for their cooperation and tireless support in light of our governance. This shall ensure that we reach our end goal of successfully overcoming our challenges.

I would address a special commendation to the authorities of the Banco de Moçambique which, even before a difficult economic situation, have been doing their best to restore macroeconomic and financial stability, consolidate the Metical and promote vigorous, sustainable and increasingly inclusive and fair economic growth.

We want to salute all economic agents of our city, for without them, we would not fulfill our election manifesto. So, to them, goes our appreciation.

## Ladies and Gentlemen,

Holding the Advisory Board meeting in Nampula city makes for a historic landmark for the citizens of this city, for it is not often that a central bank leaves the big city to discuss, with our 700 thousand citizens, the restoration of macroeconomic and financial stability, the consolidation of the Metical, and promotion of economic growth and development of our country.

In addition, we find that the Advisory Board is a body seeking technical counselling to effectively fulfill the institutional mission of guarantor of the Mozambican financial system, macroeconomic stability, among others.

We, for our part as rulers of this municipality, eagerly expect that this Advisory Board will set out political strategies concerning low-income population, and more.

The Nampula municipality would like the Banco de Moçambique to develop strategies that make it easier for bank customers to benefit from ever lower rates and with a view to better alignment between the rate movement of commercial banks.

## Dear Guests,

## Ladies and Gentlemen,

We expect the Banco de Moçambique to look at the stability of the Metical as a challenge, always in light of the currencies of our main partners.

We find that the Metical deserves respect, as the second most valued currency at the level of Southern Africa, after the Rand, and Nampula as well, as the capital of the North. We, the governors of this city, felt honored when we were informed of the need to erect the Metical Square in our city, which we look forward to.

By hosting the Advisory Board of the Banco de Moçambique, we feel involved in the fate of our beautiful homeland.

## Ladies and Gentlemen,

Allow to wrap-up by once again addressing welcoming wishes to all attendants, confident that we will once more benefit from a constructive debate, which will bring us more focus and challenges for the good of the population in general and the people of Nampula in particular.

Thank you!

Koshukhuro Vantjene!

## CHALLENGES AND OPPORTUNITIES IN THE MARKETING AND PROCESSING OF CASHEW NUTS: THE CASE OF NAMPULA

## TABLE OF CONTENTS

OPEN	ING REMARKS	V
OPEN	ING SPEECH: v	i
BANC	O DE MOÇAMBIQUEv	ii
WELC	OME SPEECH: PROVINCIAL GOVERNMENT OF NAMPULA	X
WELC	OME SPEECH: MUNICIPAL COUNCIL OF NAMPULA CITYxi	i
	LENGES AND OPPORTUNITIES IN THE MARKETING AND PROCESSING OF CASHEW : THE CASE OF NAMPULAxv	<b>/</b> i
EXEC	JTIVE SUMMARY2	3
ı.	INTRODUCTION	4
II.	LITERATURE REVIEW	6
2.1.	Overall situation of the production, marketing and processing of cashew nuts 2	6
2.2.	Some international references in the cashew nut sector	9
	Experience of the Ivory Coast and Tanzania in the production and marketing of w nuts	9
2.3.2	Experience of India and Vietnam in processing cashew nuts	0
III.	THE CASHEW NUT SECTOR IN MOZAMBIQUE	3
3.1.	Background of the cashew nut sector in Mozambique	3
3.2.	Legal and institutional framework of the cashew nut sector 4	0
IV.	CASE STUDY: MARKETING AND PROCESSING OF CASHEW NUTS IN NAMPULA 4	2
4.1 Namp	Challenges and opportunities in the marketing and processing of cashew nuts in oula	2
4.1.1	Key challenges in marketing and processing4	2
4.1.2	Key opportunities in marketing and processing4	4
4.1.3	Measures proposed to maximize marketing and processing gains 4	5
V.	FINAL REMARKS AND DISCUSSIONS POINTS 4	Q

VI.	DISCUSSION POINTS	. 48
VII.	BIBLIOGRAPHIC REFERENCES	. 49
ANNE	XES	. 51
AUDI	ENCE REMARKS	. 59
CONC	CLUDING REMARKS	. 64
Figures		
Figure 1:	Structure of the value chain of nuts produced in Africa - 2018	27
Figure 2:	Measures taken to boost the cashew value chain in select countries	32
Figure 3:	Value added at each stage of the cashew nut	37
Figure 4:	Nampula province	42
Figure 5:	Harvest and marketing period for raw cashew nuts	44
Charts		
Chart 1:	Cashew nut production worldwide in tons (1961-2019)	26
Chart 2:	Worldwide production, processing and consumption of cashew nuts in 2018	27
Chart 3:	International trade in raw cashew nut (volume) between 2014 and 2018 in	28
Chart 4:	International kernel trade (volume) between 2015 and 2019 (%)	28
Chart 5:	Cashew nut production levels (1961-2000)	33
Chart 6:	Cashew nut production in Mozambique (tons) and average price (MZN)	34
Chart 7:	Employment trends in the cashew industry (2011 - 2020)	37
Chart 8:	Weight in total exports of agricultural products (2011-2020) in %	38
Chart 9:	Tax contribution and loss of revenue (2006-2021) in USD million	38
	0: simulation of the effect of the increase in the surcharge for the exporter and ee fund	46

## Tables

Table 1: Role of cashew value chain players	36
Table 2: Manufacturing units and processing capacity in 2021 (tons)	39
Table 3: Cashew nut distribution by purpose (2005-2020)	40
Table 4: Summary of the institutional framework of the cashew sector	41
Table 5: Proposed actions to maximize gains in the cashew value chain in Nampula/Mozambique	46

## **LIST OF ACRONYMS**

ACA – African Cashew Alliance

ACIANA – Commercial, Industrial and Agricultural Association of Nampula

AFD – French Development Agency

AICAJU - Cashew Industrialists Association

AMPCM – Mozambican Association for the Promotion of Modern Cooperatives

BM - Banco de Moçambique (Central Bank of Mozambique)

BMM - Commodity Exchange of Mozambique

EU - European Union

FAO – Food and Agriculture Organization

IAM – Mozambique Kernel Institute

IRPC - Corporate Income Tax

IRPS - Personal Income Tax

MADER – Ministry of Agriculture and Rural Development

MIC – Ministry of Industry and Commerce

OMR - Observatory of the Rural Environment

TME – Tanzania Mercantile Exchange Plc

UNCTAD - United Nations Conference on Trade and Development

USA - United States of America

VAT – Value Added Tax

#### **EXECUTIVE SUMMARY**

In light of the labor-intensive nature, the cashew sector boasts great potential for the socio-economic development of Mozambique, especially for the Nampula province. It is estimated that about 1.4 million Mozambican families are involved in cashew production and 14,300 workers employed in processing. The Nampula province contributes with about 50.0% to the country's production.

As a result of the reforms undertaken in the sector, production tends to increase, especially in the last three years, contrasting with the fall in processing and the industry shutdown. While in 2018/19, 142 thousand tons of raw nuts were produced, in 2020/21, the figure amounted to 145 thousand tons, enough to supply the installed processing capacity of 116 thousand tons. However, if in 2017/18 about 41.0% of the production was processed, in 2020/21 only 25.0% was for the industry, and the end of a significant part of the production (45.0%) was unknown. In fact, only 36.0% of the installed capacity in the Country and 26.5% of the installed capacity in the Nampula province is used.

In this context, this study set outs to contribute to the debate on maximizing the cashew value chain in Mozambique, and especially in Nampula, in light of marketing and processing.

From the documentary analysis, including the review of international experiences, combined with the field survey, results suggest that the main challenges are related to the weakness of the marketing system, which provides for smuggling and limits access to raw materials by industry. In fact, the absence of specific licensing for marketing raw nuts, in a setting of direct sales by producers and poor oversight, favors the existence of clandestine traders. This distorts market rules and drive up raw cashew nut prices. There is also limited access to financing by the industry, especially from national capital.

The study proposes the organization of the marketing system, the strengthening of the existing guarantee fund and a greater involvement of commercial banks in financing the industry. Specifically, the suggestion is to introduce specific licensing for players in the cashew nut value chain and the transition to an auction system as the only method of selling cashew nuts. To strengthen the guarantee fund, it is proposed to increase the surcharge on the export of raw cashew nuts and introduction of kernels with testa, in addition to the mobilization of resources from partners.

#### I. INTRODUCTION

The Banco de Moçambique (BM) held its 46<sup>th</sup> Advisory Board meeting in November 2021 in the Nampula province. As usual, the last day of the sessions is reserved for presenting the results of a public interest survey for discussion with various players, which include representatives of the government, financial institutions, academia, the business sector, the media and the general public.

In the public sessions, since 2017, the BM prioritizes topics relevant to the development of the local communities of the province hosting the Advisory Board meeting and with impact on national socio-economic development. In 2020, at the 45<sup>th</sup> Advisory Board meeting, held in Chimoio city, the theme of discussion was "Artisanal and small-scale mining as a driver of growth in the Manica province: challenges and perspectives" was discussed. Following the same principle, for the 46<sup>th</sup> meeting of the Advisory Board, the BM's Board of Directors has selected the theme "Challenges and opportunities in the marketing and processing of cashew nuts: the case of Nampula".

This theme and the Nampula case study stem from the cashew sector's potential to boost the country's economy, especially in Nampula. The sector has great potential to boost Mozambique's socio-economic development by generating inclusive rural employment and contributing to the collection of foreign exchange and tax revenues. In 2020, about 1.4 million Mozambican families were involved in cashew production and 14,300 workers employed in processing. The focus on Nampula is due to its role as the largest producer of cashew nuts in the country and the possession of the largest share of processing. The province contributes about 50.0% of total production and 81.0% of the country's processing capacity.

However, despite the trend towards increased production, recently, its domestic processing tends to reduce, with part of the production going without destination mapping. Between the campaigns of 2017/18 and 2020/21 the production of cashew nuts increased from about 130 thousand tons to about 145 thousand, enough to supply the installed processing capacity of 116 thousand tons. However, in the same period, the cashew nuts absorbed by the industry decreased from 41.0% to 25.0%, before an increase in cashew nuts for unknown purposes from about 13.0% to about 45.0%. In Nampula, only 26.5% of the installed processing capacity is used.

The overall objective of this study is to contribute to the debate on maximizing the gains of the cashew sector in Mozambique, and in Nampula in particular, with a focus on marketing and processing. In specific terms, the study analyzes the strengths and weaknesses of the cashew marketing and processing chain in Nampula.

**Methodologically, the study combines documentary analysis and field survey.** Semi-structured interviews were conducted with key players in the cashew value chain, including government authorities at the central and provincial level, associations of exporters and processors. In Nampula, about 80.0% of the existing plants were visited, and some of them were shutdown. The study also revisited previous research focusing on Mozambique, as well as the experiences of other countries in promoting the cashew sector.

Results show that the key challenges of the sector are related to the weakness of the marketing system. The generality of the marketing license and the weak supervision and interinstitutional coordination provide the presence of clandestine traders and smuggling, limiting access to raw materials

-

<sup>&</sup>lt;sup>1</sup> At the central level, the interviews covered the Mozambique Kernel Institute (IAM), the Mozambique Tax Authority (AT) and the Mozambique Commodity Exchange (BMM).

by the industry. The understanding of high credit risk in the sector by banks, coupled with the meager guarantee fund, exacerbate the problems for processors.

The study proposes the organization of the marketing system, the strengthening of the existing guarantee fund and a greater involvement of commercial banks in financing the industry. It is especially suggested as follows:

- the introduction of a specific licensing for cashew value chain players;
- the transition to an auction system as the only method of marketing cashew nuts in the country, to improve the traceability of produced cashew nuts, the implementation of the reference price, the quantity and quality of the cashew nuts supplied to the industry; and
- the increase in the raw cashew nut export surcharge and the introduction of the kernel surcharge, for promoting domestic processing and strengthening the guarantee fund. The increase in the surcharge also improves competition between exporters and processors of raw cashew nuts.
- the selection of commercial banks to finance the industry through a call for tenders for the granting of credit lines covered by the guarantee fund.

Previous studies on the subject have focused on specific aspects related to employment (Kanji, 2004), employment and gender equality (Kanji *et al.*, 2004), production (Grobe-Rüschkamp and Seelige, 2010), socio-spatial dynamics of production (2012), legislative reform (Aksoy and Yagci, 2012) and competitiveness factors (Abbas, 2014, Antonio and Griffith, 2017 and AFD, INCAJU and NITIDAE, 2020). This study differs from the former not only for assessing the challenges and opportunities of the sector in the current context, but also by focusing on operational aspects that condition the good performance of marketing and processing.

In addition to this introduction, the study comprises six more chapters. Chapter II presents the overview of the sector at global level and highlights some experiences at global level. Chapter III provides the general picture of the cashew sector in Mozambique, and Chapter IV focuses on the challenges and opportunities in the marketing and processing of cashew nuts in Nampula. The following are the final considerations and questions for discussion in chapters V and VI, respectively, before the bibliographic references in VII.

#### II. LITERATURE REVIEW

This chapter tackles the world panorama of cashew nut marketing and processing and experiences of some countries in the production, marketing and processing of cashew nuts.

## 2.1. Overall situation of the production, marketing and processing of cashew nuts

Global cashew production has been increasing over time, with African countries increasing their share. Cashew nuts are produced by at least 46 countries, including African, Asian, Latin American and Caribbean (UNCTAD, 2021). In 2019, global production stood at 3.96 million tons (FAO, 2021). The African continent, represented by 20 countries, contributed 58.9% of production – Figure 1.

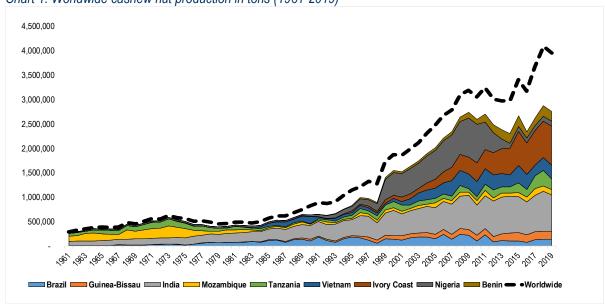


Chart 1: Worldwide cashew nut production in tons (1961-2019)

Source: FAO (2021)

Despite Africa's increasing weight in world production, Mozambique's contribution remains relatively stable. As can be seen in Chart 1, over the past 20 years, while the Ivory Coast, Benin and Tanzania have expanded their production share, Nigeria has experienced a significant drop, against a background where Guinea-Bissau and Mozambique have seen inexpressive increases in their contribution.

The main processing centers are in Asia, which, alongside Europe and America, constitute the largest consumers. Asia leads the processing of cashew nuts in the world, with a weight of 91.0%, and India and Vietnam account for 46.0% and 45.0%, respectively. Turning to consumption, these countries absorb 61.0% of global cashew nuts, followed by North America (21.0%) and Europe (17.0%).<sup>2</sup> In turn, Africa consumes and processes relatively low levels – up to 5.0% of its production, as shown in Chart 2.

<sup>-</sup>

<sup>&</sup>lt;sup>2</sup> The change in the consumption structure, from a standard held by the US and EU until 2012, to the current hegemony of India, with a weight of 42.0%, is associated with factors such as i) the maximization of the use of cashew nuts for health, ii) the use of cashew nuts as part of Indian culture, and iii) the increase in income (Antonio and Griffith, 2017).

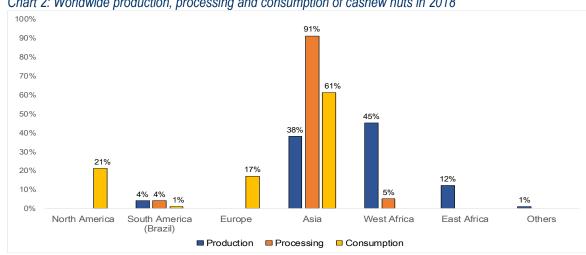


Chart 2: Worldwide production, processing and consumption of cashew nuts in 2018

Source: ACA (2018)

In light of its weak processing capacity, Africa markets mostly raw cashew nuts, limiting its yields, despite more than half of the world's production coming from the continent. According to UNCTAD (2021), between 2009 and 2018 world trade in raw cashew nuts more than doubled, increasing from 872 million kg to 2.1 billion kg. The income generated also increased significantly, partly reflecting the increase in the price in the international market. However, African countries retain a small share, since most of the processing carried out on the African continent is primary and adds, on average, 30.0 - 35.0% of value to raw cashew nuts, and the remainder of the value chain is completed outside the continent, especially in India and Vietnam, where raw cashew nuts are exported, - Figure 1.34 In fact, at the level of international trade, African countries are the main suppliers of raw material (raw cashew nuts), accounting for 90.0% of exports made between 2014 and 2018, while India and Vietnam account for 98.0% of imports of this product in the period referred to - chart 3.

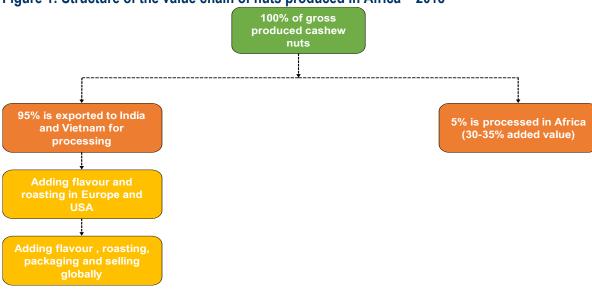
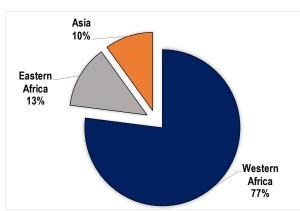


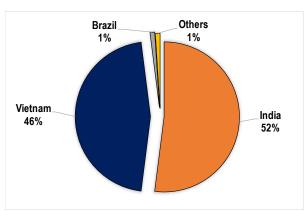
Figure 1: Structure of the value chain of nuts produced in Africa – 2018

<sup>3</sup> India and Vietnam are the main importers of unprocessed cashew nuts and carry out primary and secondary processing. Another part of the final processing, such as adding flavor, roasting and packaging, takes place in Europe and the USA. <sup>4</sup> ACA (2018) identifies poor access to finance, volatility in unprocessed cashew nut prices and the absence of favorable policies as the factors responsible for the decline in cashew nut processing in Africa.

Source: ACA (2018)

Chart 3: International trade in raw cashew nut (volume) between 2014 and 2018 in Exports Imports

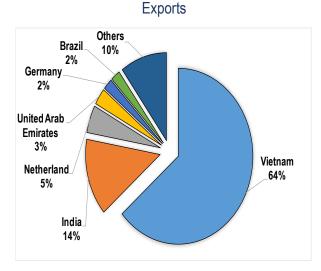


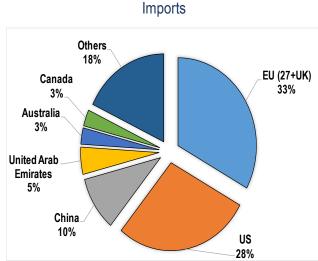


Source: UNCTAD (2021)

Consequently, kernel marketing, which has greater commercial value, occurs outside the African continent. Vietnam and India are the main kernel exports, accounting for 78.0% of total exports between 2015 and 2019, while the US and the EU are the greatest imports, together accounting for 61.0% of global kernel imports in the period.

Chart 4: International kernel trade (volume) between 2015 and 2019 (%)





Source: UNCTAD (2021)

## 2.2. Some international references in the cashew nut sector

This section highlights the good practices of the Ivory Coast and Tanzania in production and marketing, respectively, and India and Vietnam in processing, enlightening the main factors that contributed to their relative success in these areas.

## 2.3.1 Experience of the Ivory Coast and Tanzania in the production and marketing of cashew nuts

The emergence of the Ivory Coast as one of the world's largest producers of cashew nuts stemmed from the incentives adopted by the government, coupled with the stance of its partners, in a context of favorable market conditions. After starting production of cashew nuts in 1959, as part of a strategy to combat soil erosion and fires, the country achieved the status of the world's largest producer in 2019, surpassing India. To this end, government measures made their contribution, especially:

- The adoption of subsidies and exemption from taxes and duties on the export of locally processed cashew nuts, in addition to the favorable price in the international market. For example, in 2016 the government introduced, for 5 years, a subsidy of EUR 0.6 per kg of locally processed and exported cashew nuts (Oxford Business Group, 2021); and
- Investment in research and development of high-yield seeds and technical assistance provided by non-governmental organizations to small producers (ACA, 2019). The assistance consists in conveying best practices for I) pruning, grafting and maintenance of plantations; ii) harvesting, drying and storage of cashew nuts; and iii) the management of fertilizers, insecticides and other inputs. These practices, associated with the existence of quality certification services and cooperativism, have allowed the negotiation of favorable prices for local producers and the improvement in yields (Kone, 2010 and ACA, 2019).

To maximize domestic processing, the Ivory Coast adopts strict measures to regulate value chain players. In marketing, the raw cashew nut is sold by producers to duly licensed cooperatives, intermediaries and processors. In addition to these measures are added (Kone, 2010) and ACA (2019):

- Specific licensing to producers, intermediaries, processors and exporters;
- The prohibition of purchase before the launch of the marketing year, except for processors; and
- The prohibition of export by land borders.

Tanzania's experience also points to the preponderance of government measures to boost production and marketing, through the organization of the sector allied to the adoption of incentives. In marketing, stands out the adoption of an auction system (Fitzpatrick, 2012):

In 2007, an auction system was institutionalized as the only method of selling cashew nuts, in order to organize the marketing process. Since then, the primary organizations (cooperatives), whose members are farmers, started to buy the raw cashew nut from their members on credit. The cashew nut is transported by the Cashew Council to certified warehouses, where it is stored in batches by cooperative. In turn, cooperatives receive certificates of deposit which serve as collateral for credit obtained from select commercial banks. Lots are auctioned weekly by the Cashew Council for certified buyers (exporters and processors) and these pay the amount of the purchase via the bank, which is responsible for distributing the amount to the parties involved in the business.<sup>5</sup> It is understood that this system minimizes the

*29* 

<sup>&</sup>lt;sup>5</sup> The Cashew Council also advises the government in formulating policies and strategies for the sector, and registers value chain players (farmers, cooperatives, processors and exporters). The Council grants licenses for the purchase and export of cashew nuts and appoints inspectors.

- number of intermediaries, improves the quality of raw cashew nuts and producer price, as well as the registration and control of the cashew nuts marketed by government authorities;
- Organization of participants in trade unions or unions of cooperatives. Cooperative unions represent the primary companies of the Cashew Council and play a preponderant role throughout the process: i) assisting primary companies in acquiring inputs (pesticides, jute bags, pallets, etc.), ii) facilitating loans and transfers of values to primary companies (for the acquisition of the cashew from producers), iii) supporting the identification and registration of raw cashew nuts for warehouses and iv) interacting with the storage system, including the sealing of consignments; and
- Identification of financial service providers. Two financial institutions were selected, which, through state guarantees and certificates of deposit, grant credit to primary organizations (producer cooperatives) for purchasing cashew nuts from producers, and to processors for purchasing raw materials and capital investments.

In general, the auction system made it possible to increase the price to the producer and to segregate the quality of the cashew nuts sold. With the certification of value chain players and their integration into the auction system, the anticompetitive behavior of buyers was reduced and sales before the marketing year were minimized, and as a result, the price and quality of the marketed cashew nuts was improved. In addition, formalization of cross-border trade was improved (Noel and Venkatakrishnan, 2014 and TME, 2016).

## 2.3.2 Experience of India and Vietnam in processing cashew nuts

India was a pioneer in the processing of cashew nuts and remains the largest processor, despite new countries entering the market. India currently processes around 2 million tons/year. Processing is dominated by small and medium-scale plants, with a still low level of mechanization and automation. It should be noted that India has the advantage of having domestic consumption growing, and about 50.0% of the cashew nut processed in the country is marketed in the domestic market.

The increased demand for kernels in the international market in the sixties led India to develop systematic and integrated approaches to promote processing. In this context, the following government wagers on the promotion of the industry stand out:

- Tax measures:
  - ✓ Reduction of the duty on the import of raw cashew nuts in general (from 5.0% to 2.5%) and total exemption for 15 African producing countries, except for the Ivory Coast, Nigeria, and Ghana; and
  - ✓ Increase in the surcharge on the importation of broken kernels (45.0%, recently increased to 70.0%) (ICRA, 2018).

However, the weak focus on technological modernization, coupled with high labor costs, contributed to the stagnation of processing in India. The volatility of prices in the international market, as well as the deterioration of the terms of trade for India, associated with increased demand for quality standards by the main kernel markets, as well as high labor costs and low levels of innovation, contributed to the stagnation of processing and loss of the position of the largest kernel exporter in favor of Vietnam.

In contrast, Vietnam's increased weight in the processing of cashew nut and its byproducts is mainly due to its commitment to technological innovation. Vietnam is currently the second-largest cashew processor in the world, as a result of the capacity created by the local industry over the past three decades. In this country, all components of the cashew nut, namely the false fruit, the kernel, the testa

and shell, are processed.<sup>6</sup> For this purpose, the country currently has just over 1,000 cashew nut processing units, after about 3 plants in the 90s, of which 50.0% of large and medium size and 50.0% of small size. This gives the country a processing capacity of 1.2 million tons per year, that is, about 40.0% of the total processed cashew nut in the world (Rondan, 2021). Among the main factors that explain the developments in cashew nut processing, stand out the technological innovation brought forth by local players, especially in the husking, which made it possible to replace imports of machines from China, India and Italy. The innovation also covered the cooking of the raw cashew nuts, which is usually carried out by steaming, as well as the roasting, adding flavors and packaging of the kernel (ANTECH, 2020 and Rondan, 2021).

Technological innovation has enabled the improvement of efficiency and yields in eight of the nine stages of raw cashews and has made Vietnam a center of technological innovation for processing, having enabled i) the reduction of the cost of equipment acquisition by 40.0 – 50.0%, ii) the reduction of broken kernels to 10.0%, iii) the improvement of the quality of the processed cashew nuts and the design of national brands with international standards, iv) the increase in employment and v) the continuous innovation, given the greater interaction between processors and equipment suppliers (ANTECH, 2020 and Rondan, 2021). Currently, the country produces and exports specialized machines, including for cashew nut grading, metal detection, drying, color and size separation, among others, used in the cashew nut processing line.

The government boost was also essential to the transformation and hegemony of processing in **Vietnam.** The government of Vietnam introduced the following measures:

- Tax incentives on the import of raw cashew nuts. Customs duties are set at 5.0% for the importation of raw cashew nuts, against the 30.0% charged for the importation of cashew nuts with primary processing;
- Establishment of agreements for the purchase of raw materials from producing countries, such as the Ivory Coast, and free trade agreements with the European Union;
- Adoption of quality certification services, support for branding and product promotion in key markets; and
- Funding incentive. Development and commercial banks provide credit lines with affordable interest rates for agribusiness. Interest rates for large processors range between 5.0-7.0% and between 10.0-12.0% for medium-scale processors. Processors use export (buy/sell) contracts as collateral for mobilizing up to 85.0% of the required funding.

Summarily, international experience shows that organizing the sector and the provision of incentives by the government are crucial for maximizing gains in the sector. Annex 1 shows the measures taken in the marketing and processing of cashew nuts by some African countries. Figure 2 summarizes the main measures implemented along the cashew value chain for select countries.

techniques and creation of cashew nut production associations.

<sup>&</sup>lt;sup>6</sup> For the cashew sector revolution in 1990, Vietnam adopted strategies similar to those of the Ivory Coast and Tanzania described in the previous section. In fact, in addition to importing cashew nuts adaptable to the agro-ecological conditions of the country (from South America), it also bet on the distribution of fertilizers and insecticides, transmission of production

Figure 2: Measures taken to boost the cashew value chain in select countries

### **PRODUCTION**



Photo: Cashew plantation in Ivory Coast – KONE (2010)

- Producer organization associations and/or cooperatives
- Fostering and replanting of cashews distribution of seedlings, fertilizers and pesticides, subsidized by the Government
- Adoption of incentives subsidies and tax exemptions
- Technical assistance harvesting and cashew treatment techniques
- Research variants adaptable to agroecological conditions
- Certification services for cashew nut quality

#### **MARKETING**



Photo: Cashew nuts marketing warehouse Government of Tanzania (2021)

- Group sales implying i) aggregation of production in warehouses and ii) sales in auction by quality batches. This system would improve quality, quantity and price
- Marketing control systems registration and licensing of stakeholders, issue of receipts and buy/sale forms, inspection of marketing and exports
- Pricing policy (minimum or benchmark) regarding quality, need for producer yield and industry sustainability
- Financing mobilizing partners to finance the marketing year, for the industry and certified exporters
- Establishment of group purchasing organizations associations and/or cooperatives
- Provision of quality and marketing certification services
- Other measures include: i) surcharge on the import of unprocessed cashew nuts, ii) preferential rights to the supply of the local industry, and iii) prohibition to export unprocessed cashew nuts through land borders

## **PROCESSING**



Photo: Cashew nut processing in Vietnam – The Wall Street Journal (2017)

- Existence of local providers of equipment and technical assistance – allows for innovation and lowers the costs for procuring equipment
- Investing in research and technological innovation and infrastructure (power, water and access routes)
- Subsidies and access to financing (guarantees) for the procurement of raw material and equipment
- Tax incentives in the procurement of equipment and during the first years of operations
- Adoption of facilities and/or preferential rights to the procurement of raw materials by the local industry
- Preferential trade agreements for selling kernels
- Certification services for quality, hygiene, health and safety

#### III. THE CASHEW NUT SECTOR IN MOZAMBIQUE

## 3.1. Background of the cashew nut sector in Mozambique

The production and processing of cashew in Mozambique dates from the colonial era, and the country has reached record levels of production. As shown in chart 5, in 1961 the country already produced cashew nuts, and in 1973 reached a peak production of 240,000 tons (FAO, 2021)<sup>7</sup>. In 1961 was also installed the first processing plant in the country and Africa, the country passing to export cashew nut kernels, thus breaking the monopoly of India.

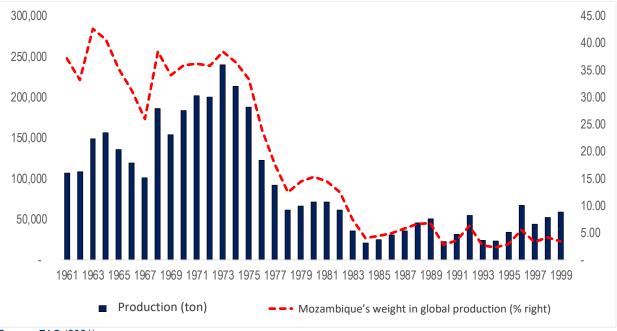


Chart 5: Cashew nut production levels (1961-2000)

Source: FAO (2021)

With the end of the colonial era and the outbreak of the civil war, cashew production declined, creating a raw material deficit for the then emerging processing industry. In the period between 1974 and 1995, cashew nut production decreased, as a result of the departure of the colonial power and the less favorable post-independence government policies (e.g., the nationalization of plants and communal resettlement), as well as the civil war.

To solve the deficit problem, the government introduced protection measures that created new challenges and forced the liberalization of the sector. The deficit of raw material for the then existing processing plants it led the government to implement several measures, with emphasis on strengthening protectionist measures, in order to limit the export of raw cashew nuts and setting minimum and later reference prices.<sup>8</sup> As a result of these measures, the country began to generate a surplus of unprocessed cashew nuts.

<sup>&</sup>lt;sup>7</sup> Between 1961 and 1973 each family was obliged to produce cashew nuts in its field, which was traded in the canteen via exchange with products of interest to peasant families.

<sup>&</sup>lt;sup>8</sup> In 1973, there were 14 processing plants (OMR, 2014; UNCTAD, 2021).

The liberalization of raw cashew nut exports has worsened the sector's crisis. To solve the problem of surpluses, in 1994 the World Bank proposed the liberalization of raw cashew nut exports (prohibited since 1975), assuming that this measure would contribute to the increase in producer prices, which in turn would stimulate the treatment and expansion of cashew trees and provide for increased employment. However, the crisis in the sector has worsened, as the liberalization of unprocessed cashew nut exports has led to an increase in the number of formal and informal intermediaries. As a result, producer's incomes have reduced, difficulties for the acquisition of raw material by industry have increased, unemployment has increased, and the country is no longer the second-largest exporter of kernels (AFD, INCAJU and NITIDAE, 2020).

To revitalize production and processing, the government introduced significant reforms in the cashew sector in the 90s. Among them stand out:

- The creation of the Cashew Development Institute (INCAJU) in 1997, with the mandate to promote the planting and treatment of cashew tree and the cashew processing industry and its byproducts.
- The approval of the Cashew Law in 1999, which, among other measures, reintroduced the surcharge of 18.0% on exports of raw cashew nuts, as an incentive for processing at the domestic level. The revenues resulting from the surcharge are distributed in 20.0% for the installation insurance of processing Industries and 80.0% for financing projects in the production area (e.g., seedlings and treatment). The law also laid down the need for satisfying the national industry and prohibited the export of unprocessed cashew nuts by industrialists.

As a result of the reforms, the country has improved its production capacity. According to the IAM (2021), the average productivity level per cashew tree increased, in the last decade, from about 3 kg/untreated cashew trees to about 12 kg/treated cashew trees, due to the integrated management of the cashew tree and the intensification of production and distribution of seedlings. Consequently, the production level of cashew nuts increased from 62.8 thousand tons in the 2005/06 marketing year to 144.9 thousand tons in 2020/21 — chart 6.



Source: IAM (2021)

The increase in production also increased the sector's contribution to the national economy, despite the still limited value aggregation. The cashew value chain in Mozambique involves at least seven players in four stages, from production to export – Table 1. According to Technoserve (cited by Grobe-Rüschkamp and Seelige, 2010: p.19), only 18.0% of the value added in the value chain is paid up in the country, while roasting and packaging for final consumption (42.0% of the value added), as well as the distribution and retail sale of processed kernels (40.0% of the value added) take place abroad — Figure 3. Even so, it is estimated that about 1.4 million Mozambican families are engaged in cashew production and, in 2020, the sector employed 14,300 workers in the processing industry — Chart 7. On the other hand, between 2011 and 2020 this crop contributed, on average, about 6.0% to the total exports of agricultural products — Chart 8. It is estimated that between 2006 and 2021 the state collected a cumulative amount of about USD 80 million in revenues resulting from the surcharge on the export of raw cashew nuts - Chart 9.

Table 1: Role of cashew value chain players

PHASE	ENTITY IN CHARGE	ROLE
	Individual producer	Production and sale of unprocessed cashew nuts
Production	Producer associations	Production, aggregation and sale of unprocessed cashew nuts
Marketing	Local traders (stockists)	Purchase of cashew nuts from producers/association of producers, aggregation, temporary storage of unprocessed cashew nuts and sale to processors or exports.
(purchase, collection and transport)	Intermediaries (brokers)	Purchase of cashew nuts from producers/association of producers/stockists temporary aggregation and storage of unprocessed cashew nuts Inspection and quality control Sale to processors and/or exports
	Commercial banks	Financing for the purchase of unprocessed cashew nuts
Droccoing and	Primary processing units	Screening, peeling and grading of cashew nuts Export of unprocessed cashew nuts and primary kernels
Processing and exports	Secondary processing units	Screening, peeling and grading frying, salting and adding flavors Export of secondary kernels
Exports	Exporters of unprocessed cashew nuts	Purchase of cashew nuts to producers/associations of producers/storage temporary aggregation and storage of unprocessed cashew nuts Inspection and quality control Exports

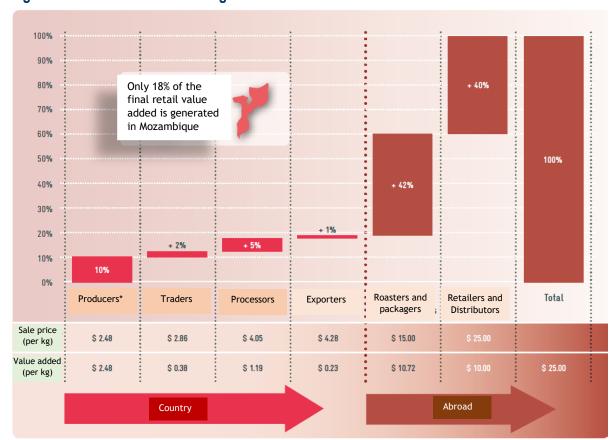


Figure 3: Value added at each stage of the cashew nut

Technoserve (extracted from Grobe-Rüschkamp and Seelige, 2010)

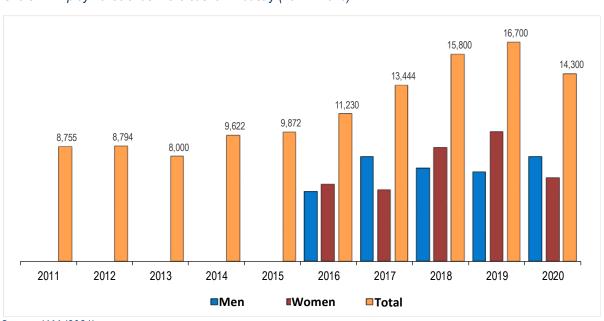


Chart 7: Employment trends in the cashew industry (2011 - 2020)

Source: IAM (2021)

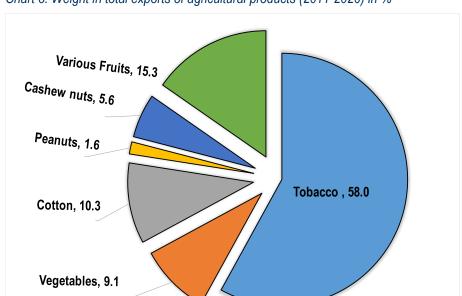
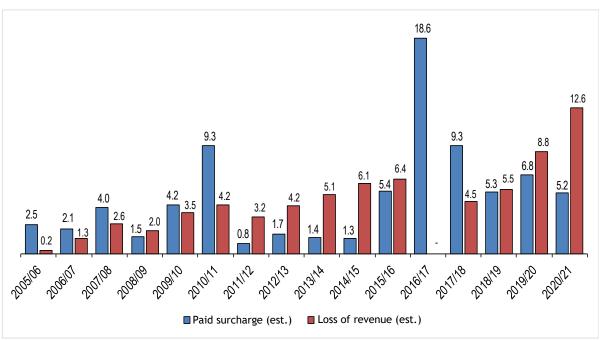


Chart 8: Weight in total exports of agricultural products (2011-2020) in %

Source: BM (2021)





Source: IAM (2021)

Note: the estimates of tax contribution and loss of revenue were made on the basis of the declared quantities of "exports" and "other", respectively, subtracted by 5.0% from the loss of moisture. The average prices in USD/ton in the 2005/06 to 2020/21 marketing years and the current surcharge of 18.0% were considered.

The availability of raw materials has also driven the expansion of the processing industry, given that it is already partly paralyzed and/or underutilized. In 2000, the government introduced small semi-mechanized cashew nut processing plants in rural areas, especially in the northern region of the country, making up a total of 29 manufacturing plants in 2010. However, the country currently has 17 plants and 5 small processing units, with an estimated installed capacity of 116 thousand tons. Only 14 of these processing units are operational, with an effective capacity of only 42 thousand tons – Table 2.

Table 2: Manufacturing units and processing capacity in 2021 (tons)

NAME	LOCATION	TYPE		ACITY	NOTE	YEAR
			Installed	Effective		
Condor Nuts	ANCHILO - NAMPULA	PLANT	12.000	-	Shutdown	2021
Condor Caju	NAMETIL - NAMPULA	PLANT	7.000	-	Shutdown	2021
Olam (3 Units)	MONAPO-NAMPULA	PLANT	18.000	-	Shutdown	2021
Caju Ilha	LUMBO - NAMPULA	PLANT	7.500	-	Shutdown	2021
Caju Ilha	ANGOCHE - NAMPULA	PLANT	7.500	-	Shutdown	2021
Korosho	NAMPULA-CITY	PLANT	10,000	10.000	Operating	
Mocaju	MURRUPULA - NAMPULA	PLANT	3,000	2,000	Operating	
Sunny Moz Int	REX - NAMPULA	PLANT	3,000	2,000	Operating	
Indo África	MECUA - NAMPULA	PLANT	2,000	2,000	Operating	
Indo África (Khan)	MECONTA - NAMPULA	PLANT	5,000	3,000	Operating	
Cn Caju	NACALA PORTO	PLANT	10,000	6,000	Operating	
Dml Cashew, Lda.	ANGOCHE - NAMPULA	PLANT	10,000	-	Shutdown	2019
Agrico Marketing	MONAPO-NAMPULA	PLANT	6,000	1,550	Operating	
Korosho	CHIURE - CABO DELGADO	PLANT	6,000	6,000	Operating	
Condor Anacardium	MACIA - GAZA	PLANT	8.000	8.000	Operating	
TOTAL			115,000	40,550		
Adpp	ITOCULO - NAMPULA	SMALL PLANT	50	35	Operating	
lcs, Lda	MOGINCUAL - NAMPULA	SMALL PLANT	365	365	Operating	
Sumaila Caju	MOGINCUAL - NAMPULA	SMALL PLANT	300	300	Operating	
Cashew Processing	MARRACUENE - MAPUTO	SMALL PLANT	300	300	Operating	
Unildy Lda	BOBOLE - MAPUTO	SMALL PLANT	200	200	Operating	
TOTAL			1,215	1,200		

Source: IAM (2021)

The industry faces difficulties in accessing raw material, with a significant part of unprocessed cashew nuts being traded in the underground market. Table 3 shows the distribution of the cashew nuts produced between the 2005/6 and 2020/21 marketing years. It can be seen that, despite the prioritization of domestic processing, the industry acquired, on average, only 33.0% of the total unprocessed cashew nuts produced in the period, and 24.0% was exported while unprocessed.<sup>9</sup> On the other hand, about 43.0% circulates between the informal market, producers and others not identified. The significant weight of unprocessed cashew nuts marketed for unspecified purposes (24.0%) indicates weakness in the marketing and surveillance system in the sector.

\_

<sup>&</sup>lt;sup>9</sup> The main corridors of informal sale of cashew nuts are: Nacala (Meconta), Beira (Muxungue and Inchope), Limpopo (Macia) and Maputo province and city.

Table 3: Cashew nut distribution by purpose (2005-2020)

	PRODUCTION	INDUS	TRY	EXPO	ORTS	INFOR	MAL	PROD OWNE		ОТНІ	ER
PERIOD	Volume (ton)	Volume (ton)	Weig ht (%)	Volume (ton)	Weight (%)	Volume (ton)	Weig ht (%)	Volume (ton)	Weight (%)	Volume (ton)	Weig ht (%)
2005/06	62.821	21.943	34.9	26.349	41.9	4.397	7.0	7.539	12.0	2.593	4.1
2006/07	74.397	20.280	27.3	24.176	32.5	5.208	7.0	9.300	12.5	15.434	20.7
2007/08	94.314	24.000	25.4	31.607	33.5	6.602	7.0	11.789	12.5	20.316	21.5
2008/09	64.150	24.013	37.4	11.720	18.3	4.491	7.0	8.019	12.5	15.908	24.8
2009/10	96.557	26.616	27.6	27.923	28.9	6.759	7.0	12.070	12.5	23.190	24.0
2010/11	112.753	30.000	26.6	42.000	37.2	7.893	7.0	14.094	12.5	18.767	16.6
2011/12	65.093	25.400	39.0	5.595	8.6	4.556	7.0	8.137	12.5	21.405	32.9
2012/13	83.141	26.657	32.1	11.700	14.1	5.820	7.0	10.393	12.5	28.571	34.4
2013/14	63.081	17.717	28.1	7.188	11.4	4.416	7.0	7.885	12.5	25.875	41.0
2014/15	81.240	29.351	36.1	6.493	8.0	5.687	7.0	10.155	12.5	29.554	36.4
2015/16	104.179	34.390	33.0	22.596	21.7	7.293	7.0	13.022	12.5	26.879	25.8
2016/17	139.089	47.993	34.5	69.873	50.2	9.736	7.0	17.386	12.5		
2017/18	129.643	53.717	41.4	34.271	26.4	9.075	7.0	16.205	12.5	16.375	12.6
2018/19	142.104	64.887	45.7	24.334	17.1	9.947	7.0	17.763	12.5	25.172	17.7
2019/20	143.398	45.505	31.7	33.251	23.2	15.306	10.7	6.291	4.4	43.046	30.0
2020/21	144.823	35,888	24.8	26.795	18.5	17.327	12.0	202	0.1	64.610	44.6
AVERAGE	100.049	33.022	33.0	25.367	24.0	7.782	8.0	10.641	11.0	23.237	24.0

Source: IAM (2021)

# 3.2. Legal and institutional framework of the cashew nut sector

The marketing and processing of cashew nuts are governed by a set of standards and institutions, created to provide an adequate functioning of the cashew value chain and maximize the gains for the country. Annexes 2 and 3 summarize the legal and institutional framework of the sector. Therein stand out the Law No. 13/99, of November 1, Cashew Law, and the respective regulation - Decree No. 78/2018 of December 6. Among other things, this legislation lays down (i) the principle of fixing the reference price for the purchase of unprocessed cashew nuts from the producer and (ii) the fixing of the surcharge on the export of unprocessed cashew nuts. In turn, Law No. 03/1993, of June 24, Investment Law, and its regulation, and Law No. 04/2009, of January 12, which approves the Tax Benefits Code, provide for various benefits and tax incentives, between general and specific, which vary according to the nature of the economic activity and region of implementation of the project in the country.

**Strict compliance with standards remains a challenge.** If, on one hand, Law No. 13/99 lays down, for example, the principle of exporting surplus as to domestic processing capacity, the shutdown of processing industries on account of access to raw materials denotes non-compliance with the Law. Similarly, the legislation lays down the obligation for exporters of raw cashew nuts and kernels to present to the IAM the single document proving the export operation and the quality certificate issued by competent entities (IAM and Intertek Testing Services Lda.). According to the IAM, this obligation is breached by clandestine traders. Table 4 summarizes the institutional framework of the cashew sector.

	institutional framework of the cashew sector	
INSTITUTION	BRIEF DESCRIPTION	OVERALL CHALLENGES
MOZAMBIQUE KERNEL INSTITUTE (IAM)		
	treatment of cashews (pesticides, subsidized by 100%) and (ii) technical assistance to producers, through its network of rural extension workers.	Ensure the availability of raw material for the national industry in adequate quantity and quality.
MOZAMBIQUE COMMODITY EXCHANGE (BMM)	Public Institute created in 2012 and supervised by the minister who oversees the area of Commerce. It aims to establish a competitive agricultural and commodity trading system, in a sustainable and integrated manner, that ensures and boosts the role of value chain players, in the national and international market.	Improve BMM operational autonomy
CASHEW INDUSTRIALISTS ASSOCIATION (AICAJU)	AICAJU is an association that aggregates cashew processors at the national level and acts as a spokesperson with government authorities, regarding the implementation and search for solutions to the concerns and constraints that condition the development of the industries operating in this sector.	Bet on secondary processing and use of cashew nut bylaws.
COMMERCIAL, INDUSTRIAL AND AGRICULTURAL ASSOCIATION OF NAMPULA (ACIANA)	ACIANA aggregates traders and exporters of unprocessed cashew nuts operating specifically in Nampula provinces and acts as a spokesperson with government authorities, in defense of the interests of its members.	

#### IV. CASE STUDY: MARKETING AND PROCESSING OF CASHEW NUTS IN NAMPULA

The previous chapters described the panorama of the cashew sector in the world and in Mozambique. This chapter examines the strengths and weaknesses of the cashew value chain in Nampula in the light of that panorama, and the semi-structured interviews carried out, focusing on marketing and processing — see Annex 4 on the institutions and contact persons. The emphasis on Nampula is due to its role as the largest producer of cashew nuts in the country and the possession of the largest share of processing. The province has a cashew park of about 15 million trees, occupying the 1st position in the production of cashew nuts and contributing 50.0% of the country's production and 81.0% of the processing capacity — see Annex 5. Cashew is produced almost throughout the Nampula province (19 districts), with emphasis on Mogovolas, Mogincual, Angoche and Moma – Figure 4.

MALAW

Mandimba

Nampula

Namp

Figure 4: Nampula province

Source: Nampula Provincial government (2021)

The production of raw cashew nuts is ensured, fundamentally, by small subsistence producers, however, there are some producers with a market vision that are betting on the repopulation and expansion of their production areas with the support of the IAM<sup>10</sup>.

# 4.1 Challenges and opportunities in the marketing and processing of cashew nuts in Nampula

# 4.1.1 Key challenges in marketing and processing

The marketing of cashew nuts in Nampula follows a set of rules and procedures that, theoretically, should make raw material available to the industry and provide gains to all value chain players. In order to guarantee the quality of the cashew nut, the official marketing of the raw cashew nut takes place between October and January, usually from the production areas. For this purpose, every year, by September 15, the Cashew Technical Council analyzes the forecast of production for marketing, from

-

<sup>&</sup>lt;sup>10</sup> In Nampula, IAM has five seedling production nurseries, which are distributed free of charge to producers.

which the need for raw material for the industry is deducted, and the surplus assumed as available for export, in accordance with the regulation of the Cashew Law. Before the launch of the marketing year, the purchase and export of unprocessed cashew nuts is prohibited and the reference price to the producer is defined, which takes into account the conditions of the domestic and international markets. In the 2020/21 marketing year, for example, a reference price of MZN 37,00/kg was set (IAM, 2021).

Currently, eight processing plants operating in the province are paralyzed due to weaknesses in the process of marketing and enforcement of standards, which lead to the proliferation of clandestine traders and limit access to raw materials by industry. In Nampula, the marketing of cashew nuts is carried out by several initial and intermediate traders who, based on a generic marketing license, purchase cashew nuts directly from various points of sale. These practices make supervising the process difficult, which, combined with the porosity of the borders and the meager number of tax authorities, allows the presence of clandestine traders. For example, there have been reports of cases of export of unprocessed cashew nuts by industrialists, substantiated false declarations to customs authorities, for example, declaring export of beans in place of cashew nuts. The illegal traders, in turn, distort market rules by charging unreferenced cashew nut purchase prices and making purchases before the start of the marketing year. As a result, the incentive for producers selling cashew nuts to the industry declines, industries face unfair competition, given their cost structure, and only relatively low-quality raw cashew nuts become available to industry.

To boost the marketing process of cashew nuts, in the 2020/21 campaign the IAM, in coordination with the BMM and the Mozambican Association for the Promotion of Modern Cooperativism (AMPCM), organized a pilot auction for selling raw cashew nuts in the Mogovolas district. The auction set out to reduce information asymmetries between producers and buyers regarding the price and quality of cashew nuts, improve the traceability of cashew nuts and maximize the gains for all cashew value chain players. As a result of the auction, the average selling price for the producer increased from MZN 37.00/kg to MZN 47.00/kg, the quality measurement of the marketed cashew nut improved and the average price of the cashew nut sold outside the auction increased from MZN 37.00/kg to MZN 45.00/kg (BMM, AMPCM & IAM, 2020).

However, the coexistence of the two marketing systems (direct sales and auction) minimized the auction gains, considering the small quantity (200 tons) of cashew nuts aggregated for this purpose. The hybrid marketing system makes it susceptible to marketing before the start of the marketing year and allows buyers to entice producers to sell the cashew nut outside the auction, as was the case in the pilot auction. This fact suggests the need for raising the awareness of producers and organizing them into associations (registration, bank accounts, etc.), and transitioning to a marketing system that favors auctions as the method of sale for most of the raw cashew nuts produced in the country.

In addition to the marketing challenges, the national industry also faces cash difficulties for the procuring raw materials, given the limited access to bank credit. Cashew processing is characterized by the need to ensure the stock quality and quantity during the marketing period, which demands high cash flows and the use of financing. If, on the one hand, the guarantee fund is meager, considering that it is financed by 1/5 of the amount of the export surcharge, the option for bank credit is onerous and limited. For example, for the marketing year 2021/22, AICAJU requested the state USD 15,000,000.00 (fifteen million US dollars) for the acquisition of 81,000 tons of cashew nuts. However, the guarantee fund covers only 8.0% of this amount, and hence it is only accessible to small processors. Using bank credit is limited by the perception of high risk in the sector by bankers, which is also due to the fragility of the marketing system. In fact, poor quality control of marketed cashew nuts, the proliferation of many middlemen and informal and clandestine traders and the volatility of the price of cashew nuts in the international market represent sources of risk exposure for commercial banking.

# 4.1.2 Key opportunities in marketing and processing

The Nampula province and the country in general provide favorable agro-ecological conditions for planting cashews, as well as advantages for marketing cashew nuts — annex 6. Among the opportunities for marketing stand out:

- The increased demand for kernels, associated with nutritional and health needs, and the demand for cashew nut byproducts for industrial purposes;
- The fact that Mozambique is part of a small group of countries that make the raw cashew nuts available to the market, at a different time than most countries that market this product - Figure 5:
- The existence of preferential trade agreements with a range of countries in the region and the main markets for the final consumption of secondary kernels, coupled with the taste preference for Mozambican kernels - see Annex 2; and
- The privileged location of the country along the coast and with access to port infrastructure, which
  reduces transport costs.

Mar Setp Oct Nov Dec India Vietnam Benin Guinea-Bissau **Ivory Coast** Nigeria Togo Mali Ghana **Burkina-Faso** Senegal Gambia Brasil Mozambique Tanzania Kenya Indonesia

Figure 5: Harvest and marketing period for raw cashew nuts

Source: ACA (2012)

Note: the figure above shows the start and end of marketing years in various countries. It notes that five countries (including Mozambique) make raw cashew nuts available between the months of October and February.

The country also presents several opportunities in the field of cashew processing – annex 6. The emphasis lies in opportunities in the following fields:

 Secondary processing, namely roasting and adding flavors and others. As mentioned, only 18.0% of the value chain is aggregated in the country, with 5.0% corresponding to primary processing. In contrast, roasting and adding flavors adds 42.0% of the value and takes place abroad, thus making for an opportunity for the country. In Nampula, only one plant uses cashew nuts for oil and fuel production; and Production of equipment, packaging and other inputs. Given the dependence of the national
industry on imported equipment and inputs, investments in this area also constitute an
opportunity that would make it possible to reduce costs for plants in the acquisition of jute bags
and packaging for kernels.

# 4.1.3 Measures proposed to maximize marketing and processing gains

The study identifies the weakness of the marketing system as the main obstacle to the leverage of the processing industry, because it promotes clandestine trade and limits access to raw materials. This fragility is also associated with limited access to finance by industries. Table 5 systematizes these challenges and outlines proposals for measures to mitigate them. The proposed actions comprise:

- Specific licensing of value chain players. In addition to the annual registration by the IAM of
  traders holding generic licenses, it is proposed that the IAM will proceed to carry out the specific
  licensing for the cashew value chain players and exclusively for their intervention in the chain
  (producer, trader, exporter and processor), subject to specific requirements by player. The
  process sets out to improve the traceability of the cashew nut and the control of its handling and
  reduce sector informality.
- Gradual transition to an auction system as the only method for selling cashew nuts. This measure is primarily aimed at organizing the marketing process, reducing the number of intermediaries and facilitating supervision. The adoption of the auction as the only method for selling unprocessed cashew nuts, in parallel with the specific licensing, improves traceability and lowers informality levels. The auction also reduces the asymmetries regarding the quality and price of the cashew nut, thus ensuring a balance price and quality of the raw material for the processor, and gains for all players in the value chain. Annex 7 presents a proposal for a model auction.
- The strengthening of the guarantee fund and greater involvement of commercial banks. Concerning the guarantee fund, it is proposed to increase the export surcharge from 18.0% to 25.0% and to introduce the surcharge for kernels with testa, from 10% to 15%. The simulation of the effect of the increase in the surcharge on the exporter and allocation to the guarantee fund shows that an increase in these magnitudes would make it possible to strengthen the guarantee fund by about USD 3.6, without making exports unfeasible chart 10. Even so, the proposed surcharge level is below that practiced by the Ivory Coast, Tanzania and Benin see annex 1. The aggravation of the surcharge also improves the competitiveness between the processor and exporter in determining the price at auction and promotes domestic processing. As a complementary measure to the strengthening of the guarantee fund, the selection by public tender by the IAM of commercial banks for financing the sector, based on the guarantee fund as collateral, is suggested. This measure sets out to ensure more competitive interest rates for the sector see annex 8.

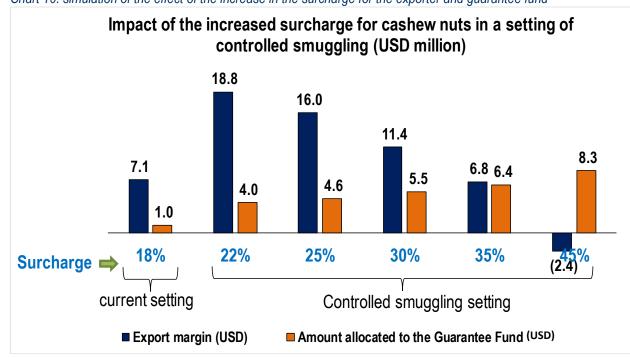


Chart 10: simulation of the effect of the increase in the surcharge for the exporter and guarantee fund

Source: Estimates based on IAM data (2021)

Notes: Assumptions: i) average purchase price from producer (MZN 39.57/kg), ii) average export price of unprocessed cashew nuts (USD 1,141/ton), iii) quantity produced (144,8 thousand tons), all referring to the 2021 campaign, iv) intermediate costs (e.g., logistics) were abstracted from the estimates, and v) greater control of marketing with the implementation of the auction system, which, in a first phase, would allow the industry to absorb 41.0% of the unprocessed cashew nuts produced in the country, the remainder being exported using the formal channels.

Table 5: Proposed actions to maximize gains in the cashew value chain in Nampula/Mozambique

Challenge	Characterization	Proposed action	Entity in charge
1.1 Organizing the marketing process	Marketing is adversely affected by:  ✓ General marketing license, which provides for the acquisition of unprocessed cashew nuts by any value chain player, including clandestine traders, and distorts the rules of the market (price, campaign period, among others)  ✓ Fragility of institutions results in weak supervision and institutional coordination:  ■ Purchases before the launch of the marketing campaign  ■ Non-observance of the principle of export surplus in respect of domestic processing capacity	1.1.1 Structuring the value chain  ✓ introducing specific licensing for cashew value chain players (producers, traders and processors)  1.1.2 Organizing marketing  ✓ moving to an auction system as the only method for selling cashew nuts  ○ organizing producers into associations/ cooperatives;  ○ mandatory registration and certifications to engage in the cashew business  ○ setting up fixed marketing posts (warehouses);  ○ issuance of sales documents (invoice, receipt and vouchers)  ○ disseminating relevant information to sector stakeholders	IAM, BMM

2.1 Securing financing for the domestic industry	In addition to the weakness of the marketing system, processing is adversely affected by:  ✓ Meager guarantee fund: the fund is financed only by the export surcharge for unprocessed cashew nuts, as currently kernels with testa, are not taxed; and ✓ High perception of bank credit risk stemming from (i) the weakness of the trading system and (ii) price volatility in the international market.	2.1.1 Strengthening the guarantee fund  ✓ Increase the surcharge on the export of unprocessed cashew nuts from 18% to 25% (which allows for an income of USD 3,6 million to the fund); and  ✓ Introduce surcharge for kernels with testa (between 10.0-15.0%)  2.1.2 Have the IAM launch a public tender to select commercial banks to finance the sector using the guarantee fund  ✓ sets out to ensure more competitive interest rates for the sector	IAM, commercial banks
--	--	---	-----------------------------

#### V. FINAL REMARKS AND DISCUSSIONS POINTS

Cashew is an important source of income for close to 25.0% of the Mozambican population or 1.4 million families and with great potential to leverage the economy. However, the potential of the sector is underutilized, with part of the industry shutdown.

The documentary review and semi-structured interviews carried out suggest that the weakness of the marketing system is the main challenge, as it promotes informality and smuggling, thus limiting access to raw materials by the industry. Processing is also affected by the limited access to financing, given the meager guarantee fund and the perception of high credit risk by banks.

The study brings forth the following:

- The organization of marketing by introducing specific licensing for cashew value chain operators and the gradual transition to the auction system as the only method for selling cashew nuts;
- Strengthening the guarantee fund by increasing the surcharge on raw cashew nuts exports and taxation on the exports of kernels with testa; and
- At the same time, selecting commercial banks to finance the sector by a call for tenders, using the guarantee fund.

#### VI. DISCUSSION POINTS

- Can transitioning to the auction system, as the only method for selling cashew nuts, solve the issue with smuggling and industry access to raw material?
- Are there other alternatives to address the weaknesses of the marketing process?
- How to improve the sector's access to financing?

#### VII. BIBLIOGRAPHIC REFERENCES

- ABBAS, M. "Competitiveness of the Cashew Subsector in Mozambique", Working Paper, Rural Environment Observatory (OMR), Maputo, 2014;
- ACA. "African Cashew Alliance: Growing the African Cashew Industry Issue No. 7". Ghana, 2019; available atwww.africancashewalliance.com, Accessed April 20, 2021;
- ACA. "African Cashew Alliance Annual Report 2018". Ghana, 2018; available at www.africancashewalliance.com, Accessed April 20, 2021;
- ACA. "African Cashew Alliance: Highlights of the Cashew Industry". Red River Foods, Virginia, 2012; available at www.africancashewalliance.com, Accessed May 12, 2021;
- ADZANYO, M., FITZPATRICK, J., PAL, S. and WEYORI, R. "Cashew Processing Guide Number 2: Opportunities and Challenges in Cashew Processing in Africa". The Competitive Cashew Initiative, Gana, 2019;
- AFD, INCAJU and NITIDAE. "Competitiveness of the Cashew Nut Industry in Mozambique" Mozambique, 2020;
- ANTECH. "The Technology of Cashew Nut Processing in Vietnam", 2020. Available at <a href="https://antechindustry.com/technology-of-cashew-nut-processing-in-vietnam/">https://antechindustry.com/technology-of-cashew-nut-processing-in-vietnam/</a>, Accessed May 28, 2021;
- ANTONIO, L. and GRIFFITH, G. "The Cashew Value Chain in Mozambique: Analysis of Performance and Suggestions for Improvement". International Proceedings on Food System Dynamics 8 (1), 208-221, 2017;
- AKSOY, M. and YAGCI, F. "Mozambique Cashew Reforms Revisited", Policy Research Working Paper 5939, 2012;
- BANCO DE MOÇAMBIQUE. "Balance of Payments Data", 2021; available at <a href="https://www.bancomoc.mz/fm\_pgLink.aspx?id=222">https://www.bancomoc.mz/fm\_pgLink.aspx?id=222</a>, Accessed May 17, 2021;
- MOZAMBIQUE STOCK EXCHANGE, MOZAMBICAN ASSOCIATION FOR THE PROMOTION OF MODERN COOPERATIVISM AND MOZAMBIQUE KERNEL INSTITUTE "Report on the organization and holding of the first edition of the in-person cashew nut auction". Maputo, 2020;
- FAO. "Cashew Nut Production Statistics" 2021; available at <a href="http://www.fao.org/faostat/en/#data/QC">http://www.fao.org/faostat/en/#data/QC</a>, Accessed April 25, 2021;
- FITZPATRICK, J. "Advocating for effective regulation of the cashew nut Industry in Tanzania". African Cashew Initiative, 2012;
- FREI, V. M. and PEXINHO, D. M. "Cashew production in Mozambique and socio-spatial dynamics" Federal University of Uberlândia-ISSN1983-487X, XXI National Meeting on Agrarian Geography, 2012;
- KERNEL INSTITUTE. "Information and statistical data relating to the cashew Sector in Mozambique". 2021:
- ICRA. "Indian Cashew Processing Industry", 2018; available at <a href="https://www.icraresearch.in/Research/DownloadResearchReport/209">https://www.icraresearch.in/Research/DownloadResearchReport/209</a>, Accessed May 28, 2021;
- KANJI, N. "Corporate Responsibility and Women's Employment: The Case of Cashew Nuts". Taylor & Francis, Ltd. on behalf of Oxfam GB. Gender and Development, Vol. 12, No. 2, Trade, pp. 82-87, 2004; available at <a href="https://www.jstor.org/stable/4030618?seq=1#metadata\_info\_tab\_contents">https://www.jstor.org/stable/4030618?seq=1#metadata\_info\_tab\_contents</a>,

Accessed April 24, 2021;

- KANJI, N., VIJFHUIZEN, C., ARTUR, L., and BRAGA, C. "Liberalization, gender, and means of sustenance: cashew nuts in Mozambique" Summary report, 2004;
  Available at <a href="https://pubs.iied.org/sites/default/files/pdfs/migrate/9554PIIED.pdf">https://pubs.iied.org/sites/default/files/pdfs/migrate/9554PIIED.pdf</a>, Accessed April 23, 2021;
- KONE, M. "Analysis of the Cashew Sector Value Chain in Côte d'Ivoire". African Cashew Initiative, 2010;

  Available
  athttp://www.africancashewinitiative.org/files/files/downloads/aci\_cote\_d\_ivoire\_gb\_150.pdf,
  Accessed May 26, 2021;
- NOEL, K. and VENKATAKRISHNAN, V. "Warehouse receipt system for cashew nuts marketing and its contribution to the small scale farmers in Masasi District, Mtwara Region, Tanzania". *International Proceedings of Commerce, Business and Management*, Vol. 3, No.6, 2014;
- OXFORD BUSINESS GROUP. "As world's top exporter of cashews, Cote d'Ivoire stands to benefit from economic opportunities", 2021.
  - Available at <a href="https://oxfordbusinessgroup.com/analysis/cashing-world%E2%80%99s-top-exporter-cashews-country-stands-benefit-host-economic-opportunities">https://oxfordbusinessgroup.com/analysis/cashing-world%E2%80%99s-top-exporter-cashews-country-stands-benefit-host-economic-opportunities</a>, Accessed May 25, 2021;
- RONDAN, G. "Cashew Producers & Farming in Vietnam for sourcing & exporting", 2021.

  Available at <a href="https://movetoasia.com/en/vietnam/sourcing-manufacturing/cashew/">https://movetoasia.com/en/vietnam/sourcing-manufacturing/cashew/</a>, Accessed May 27, 2021;
- UNCTAD. "Commodities at a Glance: special Issue on cashew nuts". United Nations, Geneve, 2021;

  Available at <a href="https://unctad.org/system/files/official-document/ditccom2020d1\_en.pdf">https://unctad.org/system/files/official-document/ditccom2020d1\_en.pdf</a>, Accessed May 5, 2021;
- TANZANIA MERCANTILE EXCHANGE PLC (TME). "Warehouse Receipt System a key Pillar for Tanzania Mercantile Exchange", Dar es Salaam, 2016.
- TECHNOSERVE in GROBE-RÜSCHKAMP, A. and SEELIGE, K. "Analysis of the Cashew Value Chain in Mozambique". African Cashew initiative, 2010;

Available at

http://africancashewinitiative.org/files/files/downloads/aci\_mozambique\_port\_150.pdf, Accessed April 14, 2021.

# **ANNEXES**

Annex 1: Main measures taken in the cashew sector in select African countries

Country	Marketing	Processing
Benin	<ul> <li>Prohibition of exports by land borders (smuggling)</li> <li>Surcharge on the export of unprocessed cashew nuts (USD 0.13 per kg)</li> <li>Minimum price of USD 0.73 per kg</li> </ul>	Only processors are allowed to purchase unprocessed cashew nuts before the launch of the marketing year
Burkina Faso	<ul> <li>Surcharge on the export of unprocessed cashew nuts (USD 0.045 per kg)</li> <li>Compulsory export license</li> <li>Minimum price of USD 0.68 per kg</li> </ul>	
Ivory Coast	<ul> <li>Prohibition of exports by land borders (smuggling)</li> <li>Surcharge on the export of unprocessed cashew nuts (USD 0.23 per kg)</li> <li>Compulsory purchase and export license</li> <li>Minimum price of USD 0.68 per kg</li> </ul>	<ul> <li>Prohibition of purchase before the launch of the marketing campaign, which is allowed only to processors</li> <li>15.0% of the surcharge channeled to the promotion of the industry</li> <li>Subsidy for processors (USD 0.73 per kg of exported kernels)</li> <li>Granting of guarantee for financing</li> <li>Customs exemptions, for 5 years, for the procurement of equipment by new manufacturing units;</li> <li>Exemption from Company Income Tax in the first year, reduction in 50.0% and 25.0% in the second and third year, respectively</li> <li>VAT exemption on costs incurred during the industry implementation stage (for 4 years)</li> <li>Priority access for investors to industrial areas and infrastructure agri-industrial parks</li> </ul>
Ghana		<ul> <li>10 years of tax exemptions for processors in special economic zones</li> <li>Customs exemptions on the purchase of equipment, parts, and accessories</li> </ul>
Guinea- Bissau	<ul><li>Compulsory purchase and export license</li><li>Minimum price of USD 0.66 per kg</li></ul>	
Nigeria		<ul> <li>Refund of 30.0% of FOB value of kernel exports</li> <li>Customs exemptions on the purchase of equipment, parts, and accessories</li> </ul>
Kenya	<ul> <li>Prohibition of exports by land and sea borders</li> </ul>	Prohibition of the export of unprocessed cashew nuts
Tanzania	<ul> <li>Surcharge on the export of unprocessed cashew nuts (USD 0.15 per kg) + 15.0% if the industry is not satisfied</li> <li>Joint purchase: need for license, government-controlled auctions</li> <li>Minimum price of USD 1.43 per kg</li> </ul>	<ul> <li>Surcharge on the export of unprocessed cashew nuts (USD 0.15 per kg) + 15.0% if the industry is not satisfied</li> <li>Customs exemptions on the purchase of equipment, parts, and accessories</li> </ul>

Source: compiled by the authors based on ACA (2019) and Adzanyo et al. (2019)

Annex 2: Summary of the Legal and Institutional Framework

	STATUS	SOURCE
Sector policy	Cashew Law - Law No. 13/99, of November 1 Cashew Law Regulation - Decree No. 78/2018, of December 6	
Strategic Objectives	Promotion of production and industrialization of the sector	Cashew law and its regulations
Price regulation	Producer reference purchase price approved by the competent authorities (on a proposal from the Technical Council)	Cashew law and its regulations
Protectionist Measures	Cashew nut - 18.0% surcharge Kernel - no measure	Cashew law and its regulations
Tax Incentives	VAT - exemption on imports of class K equipment and accessories; Company Income Tax (IRPC) / Personal Income Tax (IRPS) - reduction by 50%; Tax credits - investment in training, new technologies, infrastructure, etc.; Accelerated depreciation and repatriation of capital	Investment law Tax benefits code
National Brand	There is no national brand for the promotion of cashew / kernels.	
Exchange Rate Regime	Flexible exchange rates.	
Trade Agreements	Bilateral: Zimbabwe, Malawi, Indonesia; Regional: SADC, SACU, United Kingdom, United States (AGOA); Multilateral: EU (Economic Partnership Agreement-EPA); Other preferential accesses: Canada, Chile, Iceland, Norway, Morocco, Switzerland, Montenegro, Turkey, Armenia, Russia, Kazakhstan, India, China, Thailand, Republic of Korea, Japan, Taipei, Australia and New Zealand, etc.	Ministry of Industry and Commerce Agency for the Promotion of Investment and Exports World Trade Organization

Source: prepared by the authors from various legislation.

### **Annex 3: Cashew Sector Legislation**

- Cashew law, approved by Law No. 13/99, of November 1;
- Regulation for the promotion, production, marketing, processing, and export of cashew, approved by Decree No. 78/2018, of December 6;
- Legal provision that sets up the Mozambique Kernel Institute, approved by Decree No. 50/2020 of July 1;
- Legal provision that sets up the Cashew Development Institute, approved by Decree No. 43/97 of December 23;
- Investment law, approved by Law No. 03/93 of June 24;
- Regulation of the Investment Law, approved by Decree No. 43/2009, of August 1;
- Mozambique Tax Benefits Code, approved by Law No. 04/2009, of January 12;
- Quality Certification for export of Cashew Nuts and Kernels, Circular issued by the Tax Authority (AT) with reference No. 16/AT/DGA-GDG/413.1/2021; and
- FOB reference prices for cashew nut export in February 2021, Service order issued by the Tax Authority with reference No. 03/AT/DGA/411.2 / 2021.

## **Annex 4: Institutions and Contact Persons**

The field study was conducted in June and July 2021. Semi-structured interviews were conducted with the institutions listed below, with emphasis on the marketing and processing of cashew nuts in the Nampula province. They highlight seven processing plants in operation and two factories shut down in 2021, in Anchilo, Nametil, Lumbo and Angoche. The field study also included interviews with a group of producers (in the Liupo District), for they are one of the main players in the marketing process.

# a) Institutions

- Delegation of the Mozambique Kernel Institute;
- Delegation of the Agency for Investment and Export Promotion;
- Provincial Directorate of Industry and Commerce;
- Delegation of the Tax Authority of Mozambique; and
- Provincial Economic Activity Services.

### b) Associations

- Cashew Industrialists' Association; and
- Commercial, Industrial and Agricultural Association of Nampula.

## c) Plants visited

- Indo África located in Meconta;
- Korosho located in Nampula city;
- CN Caju located in Nacala Porto;
- Mocaju located in Murrupula;
- Sunny located in Nampula (Rex);
- Agrico Marketing located in Namialo; and
- Small plant located in Liupo.

### d) Contact Persons

- Condor Nuts meeting with the representative in Nampula; and
- Caju Ilha meeting with the representative in Nampula.

Annex 5: Geographical Cashew Production Distribution on average 2012-2021

# Cashew Geography (2012-2021)

# **Mozambique Cashew Production Data**

Total producers  Total cashews  Total cashews  Total cashews  42 million of which: 72.8% in the active production stage; 13.4% old and 13.7% in the growth stage, especially.  Average producer prices (MZN/ kg)  Average producer prices (MZN/ kg)  Average producer yield (MZN)  Average producer yield (MZN)  Average producer yield (MZN)  Contribution to average production over the last 10 years  North  North  67%  Total producers  1.4 million households  IAM (2021) - Preliminary data from IECAJU (2017)  IAM (2021) - Preliminary data from IECAJU (2017)  IAM (2021) - Preliminary data from IECAJU (2017)  IAM (2021) - Colliminary data from IECAJU (2018)  IAM (2021) - Colliminary data from IECAJU		PRO	DUCER INFORMATION	SOURCE / COMMENTS
Tete    Average producer prices (MZN/ kg)   2011 (MZN 19/ kg)   2018 (MZN 63/ kg)   2021 (MZN 8.21 billion)   2018 (MZN 8.21 billion)   2018 (MZN 8.21 billion)   2018 (MZN 5.73 billion)   2021 (MZN 63/ kg)   2021 (MZN 63/		Total producers	1.4 million households	IAM (2021)
producer prices (MZN/ kg)  Average producer yield (MZN)  Average producer yield (MZN)  Contribution to average production over the last 10 years  North  Producer prices (MZN/ kg)  2011 (MZN 19/ kg)  2018 (MZN 8/2)  2011 (MZN 2.14 billion)  2018 (MZN 8.21 billion)  2018 (MZN 8.21 billion)  2018 (MZN 8.21 billion)  2019 (MZN 5.73 billion)  Contribution to average producer prices  Predominantly corn, beans, cassava, peanuts, cotton, tobacco  Predominantly corn, beans, cassava, peanuts, cotton, tobacco  Frei and Pexinho (2012)  Other income sources  Informal trade, fishing, hunting, service provision  Found in the field study	Nampula  Sofala  3%  Contribution to average production over the last 10 years  North	Total cashews	active production stage; 13.4% old and 13.7% in the growth stage,	Preliminary data from
Average producer yield (MZN)  Sofala 3%  Contribution to average production over the last 10 years  Average producer yield (MZN)  Other crops grown by farmers  Other income sources  IAM (2021) - calculated based on data on the marketed cashew nuts and average producer prices  Predominantly corn, beans, cassava, peanuts, cotton, tobacco  Frei and Pexinho (2012)  Other income sources  Informal trade, fishing, hunting, service provision  Found in the field study		producer prices	2018 (MZN 63/ kg)	, , ,
Contribution to average production over the last 10 years  North  North  Contribution to average production over the last 10 years  Other income sources  Other income sources  Informal trade, fishing, hunting, service provision  Frei and Pexinho (2012)  Informal trade, fishing, hunting, service provision		producer yield	2018 (MZN 8.21 billion)	calculated based on data on the marketed cashew nuts and average producer
North 67% Other income sources Informal trade, fishing, hunting, service provision Found in the field service provision		grown by		Frei and Pexinho
/ 📥 \ 🤍 Center 470/				
Harvest period October - February ACA (2012)	Inhambane South 16%	Harvest period	October - February	ACA (2012)
Cashew nut marketing period October - February IAM (2021)	Gaza 9%	marketing	October - February	IAM (2021)
Productivity of cashews  Average yield: IAM (2021) treated cashew - 12 kg untreated cashews - 3 kg		•	treated cashew - 12 kg	IAM (2021)
Average cashew ages  The average age of productive cashews is 20-25 years  Average cashew cashews is 20-25 years				IAM (2021)

Source: IAM (2021), Kanji et al. (2004), Frei and Pexinho (2012) and field visits.

## Annex 6: Analysis of favorable factors and constraints in the cashew sector in Nampula/Mozambique

### **Favorable Factors**

#### **STRENGTHS**

- > Experience in the production and processing of cashew nuts
- The government's commitment to the cashew sector (promotion, research, etc.).
- > Established institutional and legal framework
- Availability of land and favorable agro-ecological conditions
- > Cashew plantations and industries already established
- > Low cost of unprocessed cashew nuts and labor
- > Sufficient production to supply local industry
- > New investments in production and processing
- > Outlet facilities (ports)

## **Opportunities**

- Increased consumption of kernels (health/nutrition) and use of cashew nut byproducts (other purposes, including industrial)
- > Existence of preferential trade agreements (new markets)
- > Investors interested in secondary processing
- > Preference of some markets for Mozambican cashew nuts
- > Existence of providers of improved varieties and cashew nut processing equipment

#### **Unfavorable Factors**

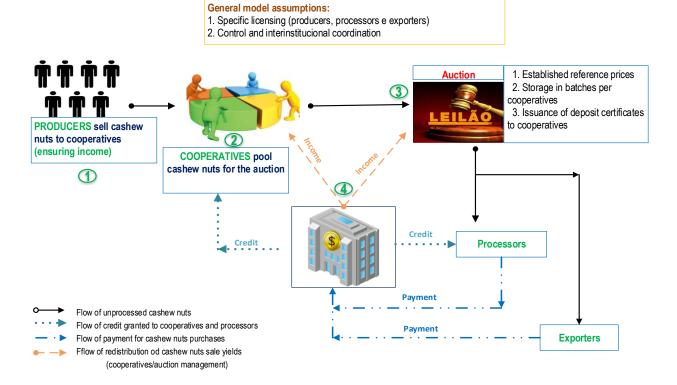
#### **WEAKNESSES**

- Aged cashew parks, diseases and plagues affects quality
- > Poor grip on the market (producers) and low literacy (industry workers)
- > Poor organization of producers in associations/cooperatives
- > Bureaucracy, corruption and high operating costs (industry)
- > No marketing system for unprocessed cashew nuts
- Poor control and supervision in marketing (clandestine operators and illicit exports)
- > Excessive dependence on Asian markets (India and Vietnam)
- Inadequate complementary industries (packaging) and lack of suppliers of equipment, technical assistance and accessories
- > Low processing (mainly secondary and byproducts)
- > No bank financing lines suitable for the sector

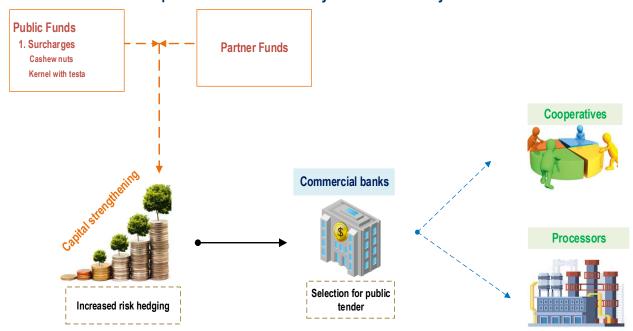
#### **THREATS**

- > Protectionist barriers in some markets (India and China)
- > Excessive volatility of international cashew nut and kernel prices
- Strong competition from traditional processors (India and Vietnam) no interest in investing in a technological production center in Africa
- > Imposition of very strict quality standards by the end market
- > Increased competition new producers with subsidy packages
- Climate shocks (affect production and outlet)
- > Terrorist attacks (Cabo Delgado) abandonment of cashews

# Annex 7: auction-based marketing system



# Annex 8: measures to improve access to finance by domestic industry



# **AUDIENCE REMARKS**

NAMPULA, NOVEMBER 5, 2021

#### COMMENTS FROM ENEAS COMICHE

# CHAIRMAN OF THE MAPUTO MUNICIPAL COUNCIL AND FORMER GOVERNOR OF THE BANCO DE MOÇAMBIQUE

The cashew sector has always been under the government's sights. In fact, one of the national reconstruction projects, carried out by the government is financed by the AfDB, concerned the rehabilitation of the sector. We must bear in mind that the collapse of the cashew industry was due to the imposition of the Bretton Woods institutions, that led to the liberalization of the export of cashew nuts in 1995. This failure prevented similar situations from occurring in other sectors, such as the sugar industry, where protectionism remained. Boosting the cashew sector requires involving the academia, for the promotion of research and better management, so as to ensure increasing production and productivity. Interventions, research and support initiatives to the sector should focus on cashew nut processing.

# COMMENTS FROM TOMÁS SALOMÃO

## CHAIRMAN OF THE BOARD OF DIRECTORS OF STANDARD BANK MOZAMBIQUE

The study presented is an important starting point, for it draws attention to a sector that is relevant to the balance of payments, to the income of rural families, to industrialization and employment generation, but is chaotic. I suggest sharing the study with relevant institutions, in particular the state, to find solutions to the problems identified. I visited a plant at the border region between Botswana and Zimbabwe, which received cashew nuts smuggled from Mozambique. This study confirms that the cashew sector in Mozambique requires structural measures to revert the current situation, with the involvement of all players, for the smuggling network is large. There are different interests, so we should be bold, brave and firm, so as to take the necessary measures.

# **COMMENTS FROM SALIM VALÁ**

# CHAIRMAN OF THE BOARD OF DIRECTORS OF THE MOZAMBIQUE STOCK EXCHANGE (BVM)

Cashew nut is a strategic and traditional product in the country, which rural families know and with which they work for several decades. This study boasts the merit of presenting concrete proposals for the problems identified in marketing and processing, which in my perception require an intersectoral approach. Some of the advanced solutions seem feasible, with the necessary involvement and appropriation by key institutions. The gradual transition to the auction system as the only mode of sale of the cashew nut is prudent, since it will be necessary to create conditions for its effectiveness. Research and extension activities are important for increasing production. Within the institutional concern, it is important to work with farmers, traders and processors, and that state has an important role in guiding these key players. The Mozambique Stock Exchange is open to working with the Mozambique Kernel Institute and the Commodity Exchange so that industries may benefit from instruments available for financing.

## **COMMENTS FROM SANTOS FRIJONE**

# REPRESENTATIVE OF THE MOZAMBIQUE KERNEL INSTITUTE (IAM)

In the current context, where the formal commercial network is almost non-existent, informal traders play the important role of ensuring the marketing of cashew nuts in rural areas. The issue of less incentive for producers to sell cashew nuts to processors is problematic. The low quantity of cashew nuts made available by individual producers led to a ban on direct sales by some countries.

In Mozambique, for the last 20 years, two months have been reserved for the industry to supply raw material, only then, will the Cashew Committee authorize the export of cashew nuts. We welcome the study's recommendations globally, with the following comments:

- The implementation of auctions should be gradual. In fact, it is a medium to long-term solution, for the foundations for the operationalization of auction have not yet been created, especially the organization of producers; and
- The surcharge increase, as a measure to strengthen the guarantee fund is questionable, especially in a
  context in which the level of collection is low and only allows for the financing of the small industry. Even
  if we doubled the surcharge, the value would remain meager for financing the large industry.

The BM likely has some of the solutions to the marketing problem, as is the case of presence of clandestine traders who enter the country with foreign currency and benefit from better exchange rates, which allow them to purchase cashew nuts above at a price higher than the reference price, and in light of interest rates, for even with the IAM guarantee, which covers up to 80% of capital, commercial banks charge high-interest rates (10 - 15%), including the BNI.

# **COMMENTS FROM MOHAMED VALÁ**

# REPRESENTATIVE OF THE MINISTRY OF INDUSTRY AND COMMERCE (MIC)

The auction system can be implemented with mutual institutions, but the necessary conditions should be created. Meanwhile, in the short to medium term, this measure can coexist with others, as is the case of cooperativism (example of the Ivory Coast). It is necessary to tackle other market opportunities for Mozambique kernels, such as China, which expressed interest. However, it has yet to follow-up on it on account of COVID-19. Other measures may include introducing the marketing carnet and greater involvement of local structures in the control of marketing. The departure of OLAM, a group that has no financial problems, shows that there are problems in the sector and that greater vigilance is needed over players.

# COMMENTS FROM YUNUSS ABDUL GAFAR REPRESENTATIVE OF THE CASHEW INDUSTRIALISTS ASSOCIATION (AICAJU)

The experience of other countries, such as the Ivory Coast, shows that the organization of producers in associations/cooperatives allows better intermediation and control of marketing, and can be replicated in Mozambique. Considering the sector's specificities, the industry needs support, albeit in respect of financing rules. Facilities should be found for the business sector in general, for example by reducing unnecessary logistical costs incurred in the process of exporting goods.

# COMMENTS FROM TIAGO JOÃO MANHENGUE REPRESENTATIVE OF THE MUSSA BIN BINQUE UNIVERSITY

The problem in the cashew sector is not production, but marketing, where smuggling rules the market. In this context, the introduction of auctions in the marketing of cashew nuts will allow greater control, but the implementation of this measure requires some time, for it is related to other initiatives. There are carnets for marketing agricultural products, but are not being used properly. For example, traders with carnets for soybean/boer beans are marketing cashew nuts. We should direct our efforts to domestic processing of cashew nuts for greater aggregation of value and generation of jobs. There is a need for greater intervention by local authorities and greater control of the export process, such as the strengthening of agricultural product taxation at inspection posts, not just forestry.

# COMMENTS FROM JAHAMO CALIMA USAID REPRESENTATIVE

The work carried out by USAID is also based on the assumption raised by the study, namely the issue of the weak link between the various players in the cashew nut supply chain (processors, producers, service providers), which has contributed to the low quality. In addition, the volume of cashew nuts that reaches processors falls short of expectations and smugglers disrupt the marketing chain. The solution found in the project was to facilitate the direct link between industrialists and service providers, and of the latter with producers. The main advantage of this principle is that producers have a guaranteed market and service producers will have improved credit recovery rates.

# COMMENTS FROM MARCO ABALROADO ACCESS BANK REPRESENTATIVE

The hardships of banking in setting out the risk in the agricultural sector, due to a lack of track record, makes it less attractive for making investments. It is fundamental to create cooperative associations and initiatives such as auctions, which make it possible to better organize and obtain information and data for the creation of risk matrices. Nowadays, with greater value chain organization and control, we can look at the commodity itself as financing collateral. Banking needs to focus on the specialization of cadres for the agricultural sector to better evaluate and support projects in the sector.

# COMMENTS FROM JOÃO MACARINGUE MYBUCKS REPRESENTATIVE

The marketing complexity requires integrated intervention. We cannot bring up marketing without talking about production. The study presents clearly the problems in marketing and their implications for the industry. Informality takes place in all agricultural crops, not just in the cashew sector. This is because we are not organized to access the production zones, and thus the population sells to anyone willing to buy. We need an overview of the role of main sector stakeholders.

# COMMENTS FROM EMILIANO AGOSTINHO PRESIDENT OF THE ASSOCIATION OF ULUTI PRODUCERS (MOGOVOLAS)

The producers are unmotivated because the industrial developers pay a low price, which causes the population to sell the cashew nut clandestinely. There is a lack of funding for local producers and traders. There must be greater involvement of local authorities in control and greater coordination with communities.

# COMMENTS FROM SOARES ASSUATE REPRESENTATIVE OF THE CARI COOPERATIVE (MONAPO)

The sector is facing night thefts of cashew nuts, which is one of the causes of early harvest and low quality of cashew nuts. Producers should be made aware and surveillance should be improved. The local population also intends to obtain certification for the marketing of cashew nuts.

# COMMENTS FROM ANDRÉ RAIMUNDO REPRESENTATIVE OF THE MORRENO AGRICULTURAL COOPERATIVE (MONAPO)

Cooperativism is a good and viable initiative. With the support of partners at the Mozambican Association for the Promotion of Modern Cooperativism - AMPCPM and processors, the association of which it was part of became the Morreno Agricultural Cooperative, which participated in the pilot auction and had good results.

# **CONCLUDING REMARKS**

## Overall, participants suggest that:

- The main problem of the cashew sector lies in marketing, where the presence of illegal traders facilitates smuggling, and tackling this requires an intersectoral approach, and involvement of government authorities and active involvement of national operators;
- The gradual transition to an auction system in the marketing of cashew nuts will allow for greater control
  and balance in earnings for all value chain stakeholders. However, the necessary conditions for
  implementation have to be set up. One of the main challenges is setting up associations/cooperatives,
  which would allow better intermediation and control of sales:
- There is a need for greater intervention by government authorities in supporting players in the cashew value chain, as well as in strengthening the control of the export process, including the use of marketing booklets and placing inspectors for agricultural produce at inspection points;
- There is a need to direct efforts to domestic processing of cashew nuts to ensure greater value aggregation and job creation; and
- Better organization of marketing will enable information and data to be obtained for the establishment of risk matrices and thus an objective assessment of the risk of the cashew sector by banks.