

# CEPPAG

## Technical Note No. 04

November 2017

### Monitoring price incentives for Cashew Nuts in Mozambique

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#### OVERVIEW

**MAFAP indicators reveal that the policy and market environment does not provide stable and sustained price incentives for cashew nut farmers in Mozambique, in particular for the raw segment of the value chain.** Until 2013, an export tax on raw cashew nuts has led to price disincentives for farmers while creating price incentives to actors along the processing segment of the value chain. From 2013 onwards, however, the depreciation of the Metical dominated the effect of the export tax, creating price disincentives for both producers and processors. The depreciation of the Metical offset the implicit protection arising from the export tax in the processing segment and worsened the disincentives to farmers. The reason behind this scenario is that the depreciation of the Metical was not fully reflected in the farm gate prices in local currency due to poor competitiveness and supply chain inefficiencies.

**Ensuring adequate incentives for farmers and traders is key to promote formal trade, increase production and improve export volumes.** Currently, less than 50 percent of the cashew nut produced domestically is traded in formal markets by farmers, with this share declining in recent years. Results also suggest that, in recent years, there have been price disincentives for cashew nut producers in both the raw and the processed formal segments of the market.

**Government interventions such as i) price support policies, ii) export tax reductions based on ex-ante assessment, iii) increased investment geared towards reducing market access costs; and iv) promoting farmers' organizations are recommended.** These interventions are likely to ensure a greater degree of price protection for farmers, improve information about prices and promote a better price transmission from international to domestic markets. Tax reduction and improved market access could also reduce costs for both buyers and traders, generating higher incentives for cashew nut (raw or processed) to be traded in formal markets.

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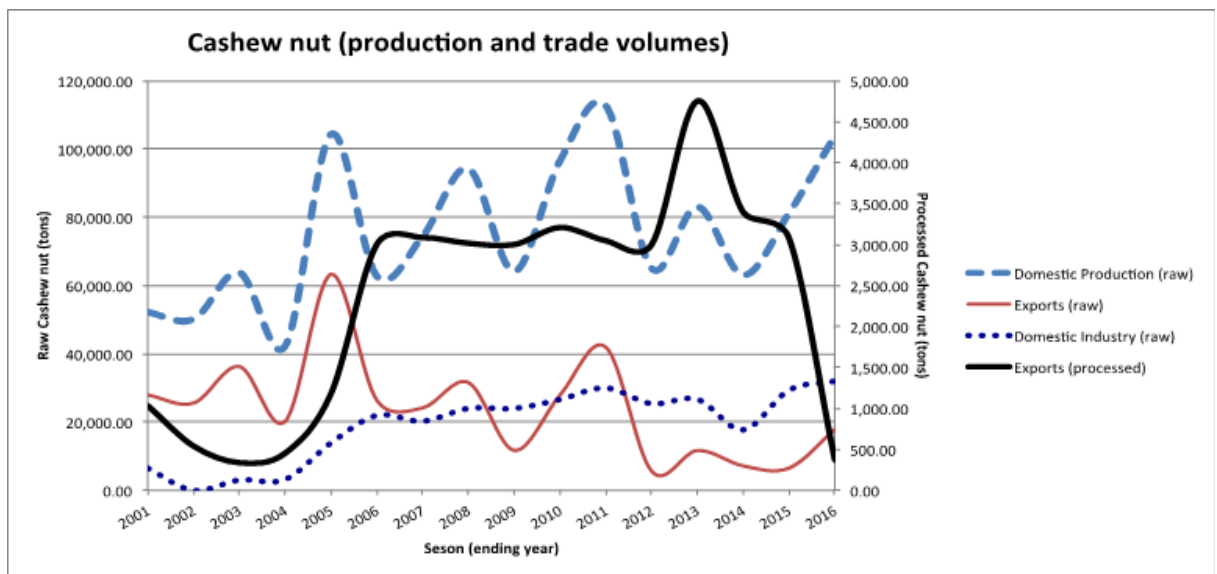
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This technical will soon be published by FAO as "FAO. 2017. Monitoring price incentives for cashew nuts in Mozambique, by Popat, M., Tostão, E., Fontes, F., and Chiziane, O., MAFAP, Rome".

## COMMODITY CONTEXT: PRODUCTION AND MARKET TRENDS



Source: Data from INCAJU (2016a)

Cashew nuts are an important export commodity for Mozambique. During the 2000-2016 period, cashew nuts, tobacco and cotton accounted, on average, for more than half of the total value of Mozambican agricultural exports, making cashew nut one of the main agricultural export commodities (FAOSTAT, 2017). On average, during this period, cashew nuts accounted for approximately 17 percent of the total value of agricultural exports. During this period, a higher share was only found in the case of tobacco, which is the main agricultural export commodity in Mozambique and accounted for approximately 28 percent of the total value of agricultural exports (FAOSTAT, 2017). In addition to this, cashew nut also represented an important source of household income for about 40 percent of farmers - mostly in Northern Mozambique - who generate income from this crop (Große-Rüschkam & Seelige, 2010; FAO, 2014).

As shown in Figure 1, data from the National Cashew Institute (INCAJU, 2016a) suggests an overall upward trend in cashew nut production since 2000. However, the increase in production has been modest and volatile over time. In addition to this, Mozambique's current raw cashew production levels remains modest compared to some of the biggest cashew nut exporters, such as India, Vietnam and Brazil (MAFAP, 2014).

Many factors are underlying the relatively low levels of reported cashew nut production in Mozambique. Some of the main drivers include factors such as insufficient rainfall, a weak extension network, suboptimal agricultural practices by farmers, and relatively low farm gate prices (Große-Rüschkam & Seelige, 2010; USAID, 2004). Trade statistics shown in Figure 1 also highlight the low levels of cashew nut traded in formal markets either domestically (purchased by the domestic industry) or internationally (as exports). Just under 50 per cent of the total cashew nut produced in Mozambique is traded in the formal market (INCAJU, 2016b; FAO, 2014; João & Machava, 2013), with the rest being either consumed by farmers themselves

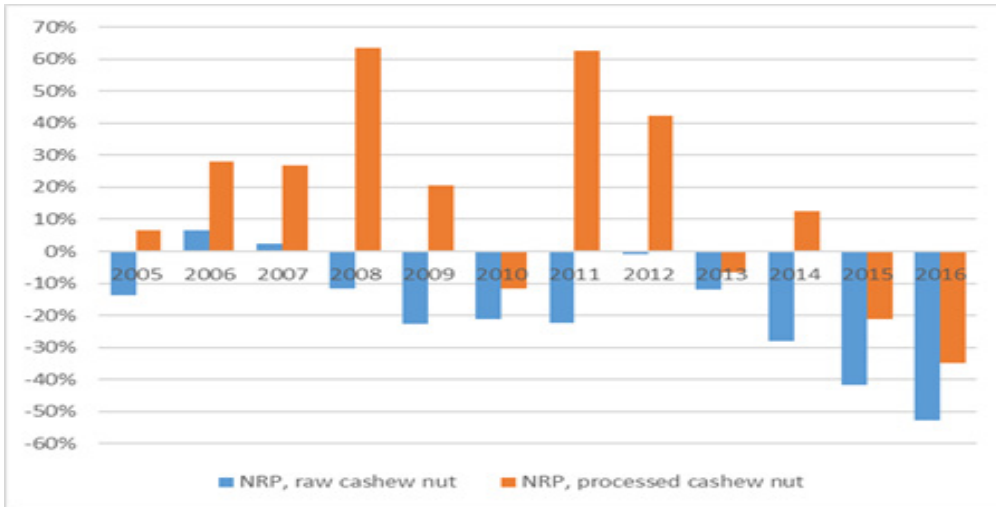
This, however, suggests that current policies have not created sufficient incentives for farmers to trade their produce in the formal market. As a result, over the years, Mozambique’s cashew nuts exports have declined. As Figure 1 shows, there has been a sharp reduction in raw cashew nut exports while the levels of cashew nut processed domestically have remained relatively stable. Accordingly, between the 2011/12 and 2015/16 seasons, the domestic industry absorbed, on average, 33 percent of the total production. Raw exports, on the other hand, accounted only for 12 percent of total domestic production. Nonetheless, it is worth mentioning that a certain proportion of the cashew nut production processed domestically is exported to bigger markets such as the US and Europe (INCAJU, 2016b; Große-Rüschkam & Seelige, 2010).

## MAIN POLICY DECISIONS AFFECTING THE COMMODITY

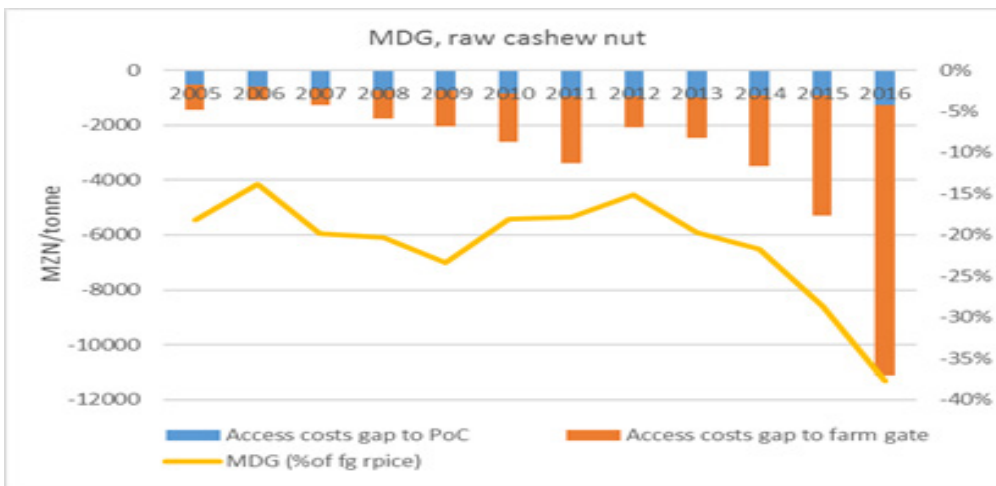
Trade	<ul style="list-style-type: none"> <li>Domestic cashew nut processing agents are protected against a low supply of raw cashew nuts by the export taxes, which range from 18 to 22 percent and have to be paid by exporters prior to shipment (GoM, 1999). Export taxes are adjusted by the Government based on the analysis of indicators of domestic production, demand from the domestic industry as well as international market trends (GoM, 1999).</li> <li>Quality is an important aspect for raw cashew nut exports. Therefore, the out-turn test is compulsory for the raw cashew nut to be exported (GoM, 2003).</li> </ul>
Domestic market	<ul style="list-style-type: none"> <li>The Government of Mozambique also protects domestic processors through establishing option contracts that give to the local industry the right to buy raw cashew nut at the best FOB price offered to exporters (GoM, 1999).</li> <li>Cashew nut trade is only allowed during the marketing period, which is announced every year by the Government (GoM, 2003).</li> </ul>
Inputs subsidies and other support services	<ul style="list-style-type: none"> <li>In 2010/2011 INCAJU has started a program named IPDM (Intensification, Production and Distribution of Cashew Nut Seedlings) (INCAJU, 2017a). According to INCAJU, this program was designed to last 3 years. Its main purpose was to increase the total area under cashew nut cultivation, production, productivity as well as quality. However, while the program was supposed to last only three years, according to the institution’s annual reports for (INCAJU, 2015; 2016b), INCAJU still produces and distributes cashew nut seedlings to farmers.</li> <li>INCAJU is responsible for the phytosanitary measures applied to cashew nut plantations (INCAJU, 2016b; 2017b).</li> </ul>
Post-harvest and processing support	NA
Agricultural infrastructure development	NA
Exchange rate policy	NA
Other policies	NA

PRICE INCENTIVES INDICATORS

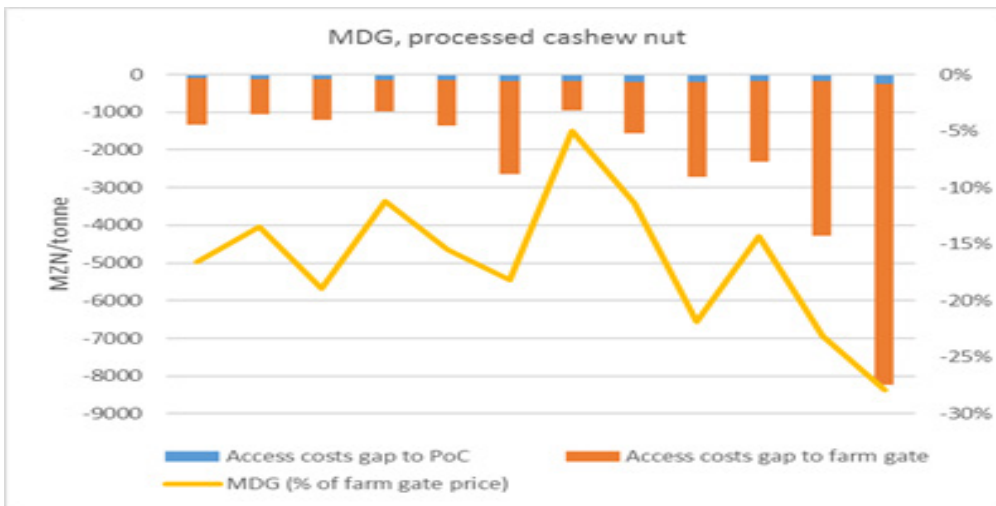
NRP at farm gate, raw and processed cashew nut



MDG for raw cashew nuts



MDG for processed cashew nuts



## INDICATORS INTERPRETATION

**MAFAP indicators reveal that the policy and market environment over the period 2005-2013 period created price disincentives for cashew nuts producers in the raw segment but some incentives in the processed segment. However, between 2013 and 2016, producers in both segments, processed and raw, have faced increasing price disincentives as the significant depreciation of the Metical was not reflected on producer prices, likely due to poor price transmission and/or market inefficiencies.**

Farmers in the raw and processed segments sell raw cashew. However, between 2005 and 2013, both segments effectively faced an opposite structure in terms of incentives. The Nominal Rate of Protection (NRP) for cashew nuts farmers in the raw segment has been negative throughout the entire period, with the exception of the years 2006 and 2007. The underlying reason for this was that the sector policy framework is set to foster domestic cashew nut processing. One key difference between the two segments is the existence of an export tax on raw cashew nuts, which is not applied on processed cashew nuts. As a result, it operates as a de facto protection for the domestic processing industry. Processors also benefit from a preferential buying policy, which favours them over traders and, as a result, represents an additional incentive for domestic processors.

Since 2013, Mozambique's national currency has suffered a very large depreciation against the USD. This has led to a very large increase in the international price expressed in local currency. However, this increase has not been fully reflected in higher farm gate prices, leading to an increase in the price gap for both segments. In turn, this caused a large negative NRP. Possible reasons for this increasing price gap include the fact that farmers typically lack access to market information and tend not to be organized in farmers' associations, which decreases their bargaining power.

Farmers usually sell their produce at the place of production to either processors directly or to intermediate traders. Without a clear Government intervention to increase farmers bargaining power and access to price information (e.g. price setting, promoting farmers' organizations etc.), farmers are likely to be price takers. This allows buyers to pay lower prices to farmers. Furthermore, since most farmers are not organized in associations – especially during the marketing period – this may limit the bargaining power of farmers.

For the raw cashew nut segment, the same drivers apply and are important in determining the farm gate prices received. However, unlike in the processed cashew nut segment, the Government's export taxes on raw cashew has a more severe and direct negative impact on farmer price incentives in this segment. Since farm gate prices do not vary significantly between the two segments (since raw cashew is sold in both cases), the lower marketing costs in the raw cashew nut segment lead to lower farm gate prices compared to equivalent reference prices. This factor partly explains why the NRP indicators are lower for the raw cashew segment.

suggest that the export tax does not seem to be the key in promoting domestic processing over exports of raw cashew nuts.

In regard to price incentives arising from market inefficiencies, the Marketing Development Gap (MDG) indicator displays negative values which have become larger in recent years. This highlights that inefficiencies along the value chain arising from high transport, processing costs and traders’ margins, have largely affected farm-gate prices, particularly in the most recent years (2013-2016). As such, the MDG values suggest that addressing the causes of the market inefficiencies between the farm gate and the point of competition (which differs among the two segments, mainly on the processing costs) could have resulted in higher prices for farmers by about 20 percent for raw cashew and 15 percent for processed cashew on average during the analysed period. As pointed out earlier, farmers’ low bargaining power and market concentration hinder competition and could lead to higher margins for traders to the detriment of farmers.

**Driving Factors**

Policy	Sector Performance
<ul style="list-style-type: none"> <li>○ Liberalized prices at farm gate level</li> <li>○ Option contracts for domestic processors to buy raw cashew nut from exporters</li> <li>○ 18 to 22 percent export tax on raw cashew nut</li> </ul>	<ul style="list-style-type: none"> <li>○ Volatile exchange rates</li> <li>○ Market power concentration and information asymmetries</li> <li>○ Supply chain inefficiencies and high market access costs</li> </ul>

**POLICY IMPLICATIONS AND RECOMMENDATIONS**

**Policies focused on supporting farm gate prices are key to ensure that farmers are protected against the impact of volatile international prices and exchange rates. Other Government interventions to promote exports at competitive prices and reduce market power asymmetries and market inefficiencies are also important.**

The existing export tax on raw cashew nuts, together with the requirement to supply the domestic industry prior to exporting cashew nut, creates implicit incentives for farmers to sell their produce to the processed segment at the expense of the raw segment. However, these policies have consistently penalized farmers in the last decade. This holds particularly true in years where the national currency depreciates against the US dollar, as was observed during the 2013-2016 period. Indeed, the price gap has increased following recent exchange rate movements, thereby harming farmers.

To overcome these issues, one alternative for the Government would be to establish a price floor during the marketing season. Farm gate prices would then be more in line with international prices and farmers would be, at least partly, shielded from extremely volatile international prices and sudden exchange rate movements. A second policy suggestion is to

promote exports through the gradual reduction of export barriers. This allows exports to become more competitive internationally while simultaneously ensuring some level of protection of the domestic industry in the short- and medium-term. These higher incentives could also help to reduce informal trade of cashew nuts.

Finally, interventions that promote market power equity along the value chain, as well as policies aiming to reduce access cost (farm gate to market and market to border) are recommended. Examples of such policies include promoting and establishing farmers' organizations/associations, reducing information asymmetries, as well as improving market infrastructures such as roads linking the main production areas to the points of competition.

### **FURTHER ANALYSIS**

Potential additional research to be undertaken in support of policy reforms for the cashew nut sector in Mozambique include:

- a. In depth assessment, through ex-ante analysis, on the potential implications of raw cashew nut export taxes reduction or removal;
- b. Analysis to inform the possible implementation of a floor price mechanism for cashew nuts;
- c. Cost-benefit analysis of improved market access infrastructures;

### **DATA SOURCES**

Benchmark price: INCAJU

Domestic price at point of competition: NA

Domestic price at farm gate: INCAJU

Access costs: Doing Business (World Bank) (data only for 2013); Field visits (data only for 2013); Technoserve (Correia, 2015)

### **ADDITIONAL INFORMATION**

This analysis is the result of partnerships established in the context of the MAFAP programme with the Ministry of Agriculture and Food Security of Mozambique (MASA) and the Center for Studies of Agro-food Policies and Programs (CEPPAG) and was produced with support and contributions from the Mozambique Cashew Nut Institute (INCAJU).

Recommended citation: FAO. 2017. Monitoring price incentives for cashew nut in Mozambique,

by Popat, M., Tostão, E., Pernechele, V. and Fontes, F., MAFAP, Rome.

Recommended citation: FAO. 2017. Monitoring price incentives for rice in Mozambique, by Popat, M., Tostão, E. MAFAP, Rome.



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