

Commodity Value Chain Brief No.1

Cashewnut

Key Messages:

- The central problem to all the challenges in the cashew industry is connected to failure of the market and institutions.
- Re-institutionalization of the cashew value chain with deliberate attempts centered at improving farm level productivity and expanding commodity marketing options is vital.
- As already projected, accelerating the design and implementation of the fundamentals for commodity exchange market to replace the warehouse receipt system and the blind auction system is critical.
- Investigating socio-economic, political and institutional factors that led to the dysfunction of the installed cashew processing factories that never became operational would be useful in designing strategies for future cashew industry development.
- Deliberate effort to strengthen and empower local institutions from the cashew farming community to district and regional levels will help provide ownership and implementation of policies and procedures that originate from higher level organs such as the Ministry and Cashewnut Authority of Tanzania.

1. INTRODUCTION

Cashew is the second largest foreign exchange earner after tobacco and it generates income for about 750,000 farmers and 2.2 million other beneficiaries. The cashew industry in Tanzania is also endowed with a great potential in producing top quality cashew in Africa during the season when only 20% of the world cashew is in the market. Despite this potential, cashew production, processing and marketing sub-sectors are all underdeveloped with more than 90% of the total cashew produced being exported mainly to India in its raw form. According to Fitzpatrick (2012), lack of value addition to the raw cashew costs the economy heavily about 45,000 new jobs and US\$ 110 million are lost every year through exporting unshelled cashews. These setbacks are exacerbated by a number of factors related to inefficient institutions and market failures. The negative impacts of these setbacks that occur along the chain greatly affect small scale cashew farmers' welfare whose 80% of household income comes from cashew. With the intent to develop farmers' welfare and achieve long term goals of Tanzania Development Vision 2025, cashew value chain must be re-instituted, and this requires deliberate policy solutions.



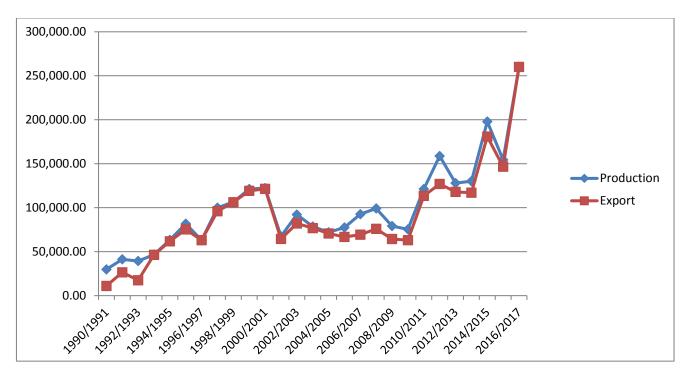
2. CASHEW PRODUCTION

Over the past five decades, cashew production in Tanzania has been characterized by varying production levels and changing agricultural policies and administrative system of the sector. These are connected to *ujamaa* policy, market liberalization and interventionist policy of cashew marketing under Warehouse Receipt System (WRS). Presently, cashew production in Tanzania is challenged by inefficient, untimely and inadequate input provision, lack of sound and accessible credit facilities, constrained information, and poor institutional arrangements associated by weak value chain coordination and increasing costs of transactions. Untimely and insufficient input supply has been a long time cry for cashew farmers in Tanzania. This problem has in most cases been exacerbated by deliberate attempts and misconduct by contracted suppliers, long bureaucratic procedures and limited government financing. Monopoly features are also evident as there is only one importer of sulphur which is mainly used as a pesticide in cashew trees. Other challenges are related to limited access to relevant information, low technological adoption due to few numbers of extension workers and inaccessible credit facilities.

The span of cashew production in Tanzania is also threatened by increased planting and cultivation of sesame and cassava in the Coast and Lindi regions whereas the area under sesame cultivation has increased from 139,890 ha in 2008 to 630,000 ha in 2013 (FAOSTAT, 2015). All these factors affect the quality and productivity of cashew thus impoverishing cashew farmers. According to the Bank of Tanzania (2015), during the 2014/2015 season raw cashew production levels reached 190,200 tons from 145,900 tons for the season 2013/2014 due to good weather and timely utilization of pesticides. As Figure 1 shows, cashew production for 2016/17 is estimated at 265,000 tons. There is great potential in increasing production further; but this will be possible if importation of inputs is done in a competitive manner as now there is only one supplier who can manipulate the market environment.



Figure 1. Production and Export of Cashewnuts from 1990/91 to 2016/17 (Tons)



Source: Cashewnut Board of Tanzania 2016

3. CASHEW MARKETING

Cashew marketing involves all processes of ownership transfer. These are transporting raw or processed cashew from the farm or point of production to storage, auctioning, and to the point of export. However, this node is very narrow due to little value addition with less than 10% of the total raw cashew being processed internally. Currently, marketing of raw cashew is coordinated by the WRS and managed by the Cashewnut Board of Tanzania (CBT). From the year of its introduction (2008) to 2015, WRS had managed to increase raw cashew production from 79,000 tons to 190,200 tons and farm gate prices from TShs. 685 per kg to TShs. 1,250 per kg in 2014/2015 crop season. Farm gate price is now TShs. 3,000 per kg (Figure 2).

However, the system as a whole is highly challenged by market failures caused by lack of perfect and unbiased information (which is currently sourced from the Indian Commodity Exchange), and increasing administrative and market access costs such as cash distribution cost, warehouse fumigation and weighing, 5% district levy, and TSh. 20 per kg union levy. These costs erode the returns of increased farm gate prices, because after the introduction of the WRS the share of farm gate price as a percentage of FOB



price and auction price has been declining (MAFAP, 2013. p122). Moreover, 15% export tax on raw cashew export is borne by producers by depressing farm gate prices because having one dominant market destination with buyers who have oligopsony tendencies and receiving import subsidy from their government (India) tends to suppress farm gate prices. Thus, this tax was imposed to stimulate local processing which incidentally did not turn out to be the case (Mitchell and Baregu, 2011).

Lack of transparency in the auction system and within primary cooperative societies is among the factors that contribute to underdeveloped or impoverished cashew farmers. Blind auctions are highly connected to vested interests between the industry's officials and the buyers while closed bidding reduces the possibilities of obtaining new buyers and acquiring much higher prices. The cooperative societies involved in the process also are not transparent because their accounts are not audited and are not member-based because only 25% of cashew farmers are members of these cooperatives.

In the 1970s, in a drive to boost local processing of cashew, the Government built several factories in the main cashew producing areas with their processing capacities ranging from 5,000 tons to12,000 tons and with a total annual capacity of 116,000 tons (Table 1).

Table 1. Factories Built by the Government of Tanzania in 1970s

S/No	Name of Factory	Location	Installed Capacity (Tons)
1	Southern TZ Project – Newala I	Newala	10,000
2	Southern TZ Project – Newala II	Newala	10,000
3	Southern TZ Project – Lindi	Lindi	12,000
4	Southern TZ Project – Masasi	Masasi	10,000
5	Mtwara Cashewnut Company	Mtwara	10,000
6	Tunduru	Tunduru	12,000
7	Southern TZ Project – Mtama	Mtama	5,000
8	Southern TZ Project – Nachingwea	Nachingwea	5,000
9	Tanita I	DSM	12,000
10	Likombe Cashewnut Factory	Mtwara	10,000
11	Kibaha Cashewnut Factory	Kibaha	10,000
12	Tanita II	DSM	10,000
	Total processing capacity per annum		116,000

- In 1990s the Government decided to sell all of the twelve factories to private firms. Currently, only a fraction of these privatized factories remains operational. These firms process the cashew at the 1st and 2nd processing stages based on their processing capacities.
- Currently, there are 40 small, medium and large-scale factories in Tanzania operating at 43.6% capacity utilization.



Average conversion ratio is four kg of raw cashewnut to one kg of kernel. Tanzania cashewnut has
the out turn ratio of greater than 20 kg per 80 kg bag for STD grade and less than 20 kg per 80 kg
bag for under grade (UG).

Coordination failures and delays occur due to involvement of more than one coordinating ministry and unplanned political interventions. The process also lacks competition as it sidelines private buyers and embraces fewer and powerful buyers who create oligopsony market structures. Moreover, the procedure of setting indicative prices is inefficient as it uses the rational producer cost structures which are not appealing as the rationality of production varies across individuals.

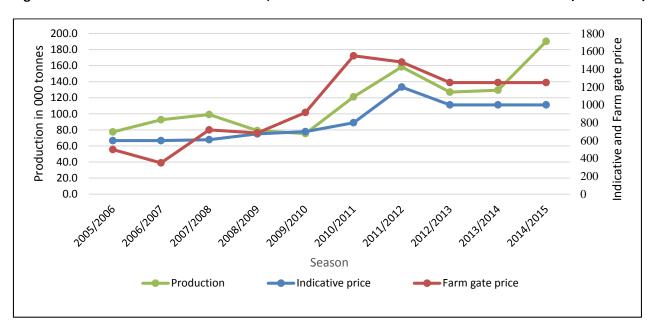


Figure 2. The Trend of Cashew Production, Indicative Prices and Farm Gate Prices from 2005/06 to 2014/15

Some of these challenges can be addressed if value added products are increased and market channels or linkages are diversified. With a credit on the quality and seasonal advantage, Tanzania can capture the global demand for cashewnut which is increasing by 9% per year.

Currently the bill for introducing Commodity Exchange (CE) in Tanzania is under discussion; if successful, this system is expected to clear the challenges of the WRS, an opaque auction system, with high transaction costs. This system is projected to support delivering complete market information, support price discovery and increase the breadth of commodity sales and prices which will convert to increase farmers' returns. However, the history of commodity exchange in Africa especially for Kenya, Uganda,



Zambia, Zimbabwe and Malawi is mixed as most of these CEs failed to succeed due to a number of reasons (Rashid et al. 2010). Tanzania stands to learn from these countries' experiences.

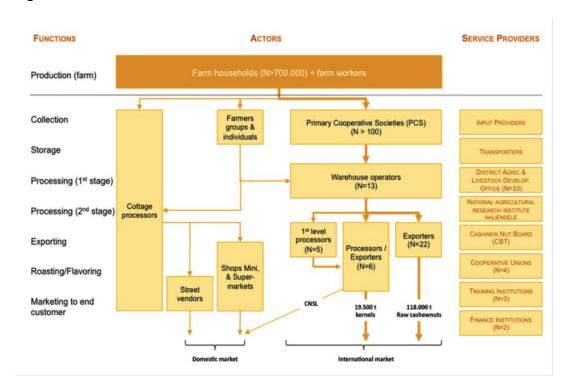
Small scale farmers will also benefit if the government allows farmer and private buyers to participate in various niche markets (fair trade and organic cashew) where ready markets are available and more profitable than conventional cashew (Krigbaum, 2015).

4. CASHEW PROCESSING

Tanzania has a long history and experience of processing cashew but this sub-sector has failed to exploit its potential and acquire its potential position due to a series of problems. A number of processing factories remain idle due to unfriendly policy and macroeconomic environment connected to insufficient labor, power/energy, highly vested political interests and unsupportive raw cashew marketing system which subjects processors into competition with well supported and powerful traders.

5. VALUE CHAIN

Figure 3. Cashew Value Chain



Source: UNIDO (2011).



High added costs of packaging and borrowing are also noted as disincentives to cashew processing initiatives. Presently, cashew processing is the most important sub-sector to stress upon, and if well supported it will create a trusted and ready market for farmers, decrease market transactions by eliminating oligoponistic structures, and generate about 45,000 new jobs. The government can trigger and hasten cashew processing investment if prudent incentive structures such as tax free importation of machinery, allowing processors to purchase raw cashew outside the WRS, and supporting farmer groups to undertake full or small scale semi-processing activities are in place (Krigbaum, 2015). However, investment support in cashew processing must also be well coordinated with lower and higher nodes of the chain by ensuring that prospective potential markets are well targeted.

Currently, the CBT – as supported by the Cashewnut Industry Development Trust Fund (CIDTF) has set up funds to construct three cashewnut processing factories in Tunduru, Mkuranga and Mtwara that will be able to process 30,000 tons of raw cashew per annum. This strategy aims to achieve 100% processing by the year 2020. This is highly ideal and questionable following the failure of CBT Multi-Year Development Plan of 2007/2008 to 2010/2011. In the move to install three processing factories, CBT will need to answer challenging questions of i) How will Tanzania capture the market without a check on price by India with 31% global market share of cashew exports? ii) Can Tanzania compete with India, Vietnam and Brazil who import cashew to achieve economies of size? iii) How can the new establishments survive when the world's leading investor (OLAM) quits the industry? iv) Where will the funds come from, and how is sustainability assured in the future with changing market conditions? These questions require immediate policy attention to establish resilience and the industry's sustainability conditions.

Taking care of the above, Fitzpatrick (2012) projected that 100% processing over five years will generate an inflow value of US\$ 750 million to the economy which is a 3% of the national GDP. In this process the country will lose only US\$ 74 million which was coming from export levy on raw cashew. Under supportive conditions, first stage/ small scale processing can also be supported to increase the scale of local processing.

Institutions

The cashew industry is governed by a number of institutions including primary cooperative societies, cooperative unions, the Tanzania Warehouse Licensing Board (TWLB), CBT, the Ministry of Industry Trade and Investment (MITI) and the Ministry of Agriculture Livestock and Fisheries (MALF). The involvement of large number of institutions on the same crop increases the chances of seeking rents and increasing



institutional charges/levies which erode farmers' price margins. The coordination of these institutions is also characterized by adverse relationships which mostly exist within and across primary societies and cooperatives, and between warehouses and traders. These relations are in most cases fueled by imperfect information, deliberate violation of systems' rules and regulations, and political interferences. Lower nodes of the chain, mostly the farmers, are highly unaware of critical information. Information must be transparent and facilitated across all the players to ensure that market conditions are known prior to the commencement of the season. This also calls for a new mechanism to reinforce the stated rules of cashew handling and property right exchange.

6. PROFITABILITY

- Total cost of cashewnut production per-kg for farmers currently stands at Tsh. 976.42. The access costs from farm gate to the point of competition was Tshs.269 per kg.
- The indicative price of TSh. 1,200 per kg would thus recover farmers' production costs (as opposed to indirect administrative costs) and leave a margin of about 23%. (Akyoo and Mpenda, 2014).
- If a bonus was to be paid, then the profit margin would be even higher.
- Cashew profitability for the farmer is averaged at 23 per cent while that of the trader is 15 per cent

7. POLICY ISSUES

The following policy issues need attention:

- Diversify the market to break overdependence on the Indian raw cashew export market by building internal processing capacity and exploring alternative markets. The major global kernel markets are in USA and many European countries like the Netherlands and Germany and have to be pursued accordingly when considering building internal processing capacity. The diversification move should, however, proceed gradually in consideration of the existing low processing capacity in the country. A three-tier processing model (small→ medium→ large) may prove effective, i.e. recognizing stage-wise processing of raw cashew by processors of different scales. Some large scale processors in Mtwara have indicated that they are supportive of this model (Akyoo and Mpenda, 2014).
- The CBT must fully enforce WRS regulations to ensure there are consequences for transgressions. Only a depoliticized CBT can deliver this.



• The cashew industry is currently a playground for many players such as researchers, scholars, civil rights groups, media houses, etc. The industry is thus bombarded with several interventions and/or policy advices that could be conflicting at times. There ought to be a well thought out way by all cashew stakeholders to sieve the multiplicity of advices in order to identify pertinent ones in terms of their reliability, compatibility and effectiveness. The industry should be keen not to fall into the fallacy of false authority trap.

Policy recommendations

In a move to upgrade the cashew value chain in Tanzania, the central goal should first target how to support and develop about 400,000 small scale cashew farmers who have remained poor for decades. To build a vibrant and successful cashew industry in Tanzania the following policy options are recommended:

- 1. Ensure efficient and effective input provision by supporting CBT to monitor and enforce strict rules and regulations guiding timely procurement and distribution of inputs and information flow.
- 2. Support farm level productivity improvement through competitive input provision, introduce high yielding cashew trees in low density farms, and improve extension services to support provision of relevant information and better farm management practices.
- 3. Cooperative unions should be reinstituted to be member/farmer-based and frequently audited.
- 4. If passed, the necessary conditions for CE operation must first be ensured, these include physical infrastructure and financial resources, supportive legal framework and political tolerance.
- 5. To increase farmers' profit margins, CBT should allow production and marketing of non-conventional cashew outside the WRS and usual auction process. This should be instituted by making sure that this chain is more rewarding with relatively less costs and higher prices.
- 6. With efforts placed on increasing cashew processing, CBT and the MITI should:
 - a. Support small and medium scale processing by capacitating farmers' groups and primary societies to operate their own factories.
 - b. Ensure good market conditions are set for the projected installation of processing factories.

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