THE CONTEXTUAL ANALYSIS OF CASHEWNUT INDUSTRY IN SOUTHERN TANZANIA AFTER MARKET LIBERALIZATION

Dennis. C. Rweyemamu¹

ABSTRACT: This study examines the performance of cashewnut industry in Southern Tanzania under the current policies of market liberalization. It looks at the activities in the crop output market. Since the inception of liberalization to the cashew sector in Tanzania, stakeholders are expressing divergent views as to how the markets for both inputs and outputs have performed. The specific objectives of the study were to assess production performance of cashewnuts after liberalization, identify institutional changes that have taken place, and assess the behavior of market participants and how they influence prices and marketing costs. The study also aimed at assessing whether the market structure has changed following liberalization and ultimately identifies points of intervention that could improve performance of the cashew industry. The study was based on secondary sources of information where various documents and reports were reviewed as a basis for making assessment. The study found that, liberalization measures to-date have led to strong private sector activity in cashew purchase and export. However, the partially liberalized industry still suffers from significant weaknesses that impair the production and marketing system, resulting from both market failure and government interventions. The output market is only partially competitive. As for inputs, there is lack of demand caused by failure of the market for seasonal credit. Government interventions in terms of the structure of levies and activities of input trust funds are also responsible for reinforcing some of the difficulties.

INTRODUCTION

In Tanzania, there appears little immediate prospects for rural industrialization or other nonfarm engines of growth, so smallholder agriculture is likely to remain the major source of rural growth and livelihood improvement for sometime (World bank 1997). Within this context, export crops have a key role to play. Development of smallholder export crop production has the potential to bring direct benefits to a large number of farm households within a given district or region. Even households that do not benefit directly may reap indirect benefits through increased demand for hired labour (often a valuable source of income for the poorest).

Export crops are defined as those cash crops, which are often traded on international commodity markets and/or are grown primarily for export markets (Shepherd and Farolfi, 1999). Export crops are handled through reasonably concentrated marketing systems and production even by smallholders relies on the use of some purchased inputs (eg improved seeds, inorganic fertilizers and crop protection chemicals). Their domestic price is closely linked to world market price (mediated through domestic exchange rate).

Cashewnut has become one of the major agricultural export cops in Tanzania and was the largest foreign exchange earner in the year 2000 (BOT, 2000). The crop is grown mainly in the coastal regions, with nuts grown in the south widely regarded as being of superior quality. Currently almost all cashew nuts are shipped raw for processing. Before liberalization, the cashew

Economic and Social Research Foundation ESRF), Box 31226, Dar es Salaam, Tanzania.

industry in Tanzania, particularly at farm level, was constrained by several factors. These included: inefficient and untimely supply of inputs, over-reliance of farmers on loans for the procurement of inputs, frequent changes influenced by political decisions, lack of technical package, lack of storage facilities, transport problems and competition with other crops such as maize for resources. Liberalization aimed at providing competition and promoting efficiency. Stakeholders are expressing divergent views as to how the cashew markets for both inputs and outputs have performed since liberalization. Research on the industry performance is timely and of paramount importance so as to provide an in-depth understanding of the changes for much more sound formulation of marketing policies.

OBJECTIVES OF THE STUDY

General Objective

The general objective of this study was to assess the performance of cashewnut industry after a decade of liberalization.

Specific Objectives

- Assess production performance of cashewnuts after liberalization;
- Identify institutions that support market exchange and institutional changes that have taken place since liberalization;
- Asses market participant's behavior and how they influence prices and marketing costs;
- Assess whether market structure has changed following market liberalization and identify effects on market performance; and
- Identify points of intervention that could improve performance of the cashew industry in general.

METHODOLOGY

This study is largely based on secondary sources of information. Various documents and reports on cashew production and marketing in Tanzania were reviewed as a basis for making an assessment of the performance of export crops in general and cashew industry in particular after

market liberalization. Information was obtained from the Cashew Board of Tanzania (CBT), Ministry of Co-operatives and Marketing, and other project reports. In addition, interviews with "key informants" in Mtwara were conducted including traders, farmers, Cashew Board of Tanzania officials, district and regional government officials, primary society officials and financial institutions.

CASHEW LIBERALIZATION

iberalization was introduced to the cashew sector in 1991/92 following several years of experience with liberalized staple food crop marketing. Cashew marketing liberalization was not a decisive, once-for-all change, but took place over several seasons however. Administrative uncertainty and obstruction meant that private-sector involvement in crop purchase during the 1991/92 season varied considerably between regions. All nuts purchased by the private sector during that year had to be sold to TCMB for export. In the following season, private sector participation in the export of nuts was permitted, a demand made by the traders if they were to continue to purchase nuts from farmers (Jaffee, 1995). The process of market liberalization was then hampered by the intervention of local government administrations, which took advantage of the revival of cashew production to increase revenue through the imposition of local levies.

From 1996 to 2000, the structure of the marketing system has been relatively stable. TCMB has been transformed into the Cashew Board of Tanzania (CBT), with more limited licensing, market information and strategic planning functions, reflecting the new realities of liberalization. The remaining co-operative unions compete sporadically with private traders in purchasing nuts, although from a weak position, due to their lack of creditworthiness with local banks. Primary societies however still play an important role as all cashew has to be brought from farmers at official buying points, generally primary society godowns.

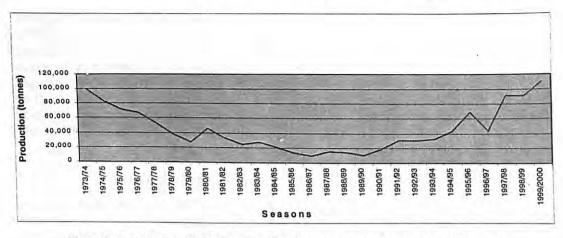


Figure 1: Total Cashew Production Trends for Southern Tanzania 1973/74 - 1999/2000

Source: Cashew Board of Tanzania (CBT)

Note: Southern Tanzania refers to Mtwara, Lindi and Ruvuma regions.

Production trends indicate that from the 1973/74 season cashew production began a precipitous decline reaching the lowest level of 9,261 tonnes in 1986/87. From the 1987/88 season, production had begun to increase (more rapidly in the 1990s). Production was particularly high during the seasons 1997/98, 1998/99 and 1999/2000.

The 2000/2001 Cashew Crisis

The cashew nut industry in the world, and Tanzania in particular, is suffering a major glut. It is now oversupplied by more than 170,000 tonnes. The world's demand is estimated at around 463,000 metric tonnes, while supply stands at more than 633,000 tonnes (CBT, 2001). Tanzania holds most of the excess supply and this has spawned a crisis in the local cashewnut industry.

During the 1999/2000 season, Tanzanian farmers produced over 121,000 tonnes of cashewnuts, worth Tshs 70 billion to farmers and making cashew the country's top foreign exchange earner. Raw cashewnuts price soared to Tshs 800-900 per kilo, encouraging farmers to invest in inputs and labour (including replanting) in the expectation that the price would remain high the following year. Unfortunately, the world market price shrunk from USD 1,100 a tonne in September 2000 to USD 400 in February 2001. This price collapse came as a shock.

When the marketing season began in October 2000, CBT set an indicative price of Tshs 540 per kg just as in the previous season. However, buyers came offering (justifiably) between Tshs 360 -460 per kg. Since this was also the election period, the issue of cashewnut prices was an appealing theme in the zone. Some of the potential candidates promised in their speeches to stabilize the price and urged farmers not to sell their crop at a low price and instead wait for higher prices. Thus, it was only the poor farmers who eventually sold their cashew in the early months of the season. They did so against the advice of local political leaders, because they were desperately in need of cash. While most farmers continued to wait for prices to go up, CBT revised the indicative price from Tshs 540 to Tshs 460 in December 2000, and finally to Tshs 360 in January 2001. Traders withdrew and left many farmers with unsold produce.

Up to mid-February 2001, there were between 40,000 and 60,000 tons of unsold cashewnuts still lying in the villages in the southern zone. By then, the rains were threatening to spoil the nuts because of storage problems. Many people were unable to pay school fees for their children, and there were looming dangers of food shortages because over the years people had reduced food production as a result of reliance on cashewnut

sales. Many farmers had failed to pay their workers. Some poorer farmers were under threat of losing their farms for failure to pay back loans owed to sulphur blower owners and operators. Many farmers thought it would be difficult for them to do any cashew husbandry in 2001/2002, since there was no rationale in toiling for a crop that had no market.

The fall of about 70 percent in the export price of cashew is the major cause of the current crises in the industry. This factor alone would have seriously dented farmers' income from cashew which soared tremendously in the 1999/2000 season. However, the impact of the price collapse is made much worse as a result of partial market failure and government interventions, factors discussed in the next section.

Cashew Buying Chain

Since the onset of liberalization, more than 40 companies participated in cashew export. However, the list of traders involved in export showed considerable changes from year to year. There is evidence of a core group of not more than a dozen companies dominating cashew exports. These core companies are either foreignowned or owned by Tanzanian-Asian businessmen with good international trading contacts.

Companies well established in crop trading within the country usually send their own employees and trucks to purchase nuts in the villages. These companies are almost invariably based in Dar es Salaam. Foreign-based companies, with less experience of purchasing crops at village level in Tanzania, are more likely to appoint agents to purchase nuts on their behalf. However, exporters may also buy nuts from smaller companies that do not have the capital or the contacts to arrange export deals themselves.

At village level, buyers (whether employees of exporters, their agents or smaller buying companies) deal with primary societies. The society's godowns are generally the official buying points for cashew. In return for time, effort and use of facilities, the societies receive a commission of 5 percent of the value of the nuts bought.

From Table 1, the percentages of recorded exports by the largest five exporters shows clearly the dominance of a core group of companies in the export of cashew nuts. Trends also show a steady increase in exports although the number of exporters in the industry has been relatively stable throughout the period of liberalization.

Buyers are organized under the Cashewnut Association of Tanzania (CAT), while farmers do not have their own organization. Most of the primary societies that exist are organizations of some influential individuals within the village,

Table 1:	Cashew Nut Exporters	1992/93 to	1999/2000
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Season	Number of	Tonnes of Nuts	Tonnes Exported by	% of Recorded
	Exporters	Exported	5 Largest Exporters	Exports by Largest 5
1992/93	15	29,461	16,246	55
1993/94	17	46,276	30,882	67
1994/95	18	53,398	37,151	70
1995/96	17	63,388	38,000	60
1996/97	15	63,032	41,150	65
1997/98	16	95,960	71,638	75
1998/99	20	106,149	45,284	43
1999/2000	27	119,134	72,120	61

Source: CBT (2001)

ward and division authorities which act as middlemen for the private buyers. The Cashewnut Board of Tanzania is supposed to regulate the cashew industry, setting indicative prices in consultation with producers and buyers. It is also supposed to supervise crop purchasing and protect farmers against unfair trading practices while at the same time assuring quality control. In practice however, the board performs only a few of these regulatory roles.

IMPERFECTIONS IN THE CASHEW MARKETING SYSTEM

Lack of Competition

Dorward et al., (1998) reveal that in the earlier years of liberalization, there was a fair degree of price competition between buyers at the village level, although there were serious imperfections in the functioning of the competitive model. In 15 out of the 16 villages surveyed during the 1995/96 buying season, a minimum of two and maximum of eight traders visited a given village. A slightly lower figure (between one and eight) was recorded for the 1996/97 season. During both seasons, traders regularly raised prices within a given village to acquire the desired supply of nuts in the face of competing purchases from other buyers.

During the last three seasons, there is a widely held perception that small groups of traders are colluding to fix the price paid to farmers for their cashew. A survey conducted for the 1999/2000 season showed evidence of traders dividing themselves and operating in different villages thus offering remarkably similar prices. Thus, while it may look like prices are determined by the market, in essence, producer prices are set by the big buyers sitting in Mtwara, who in turn have agents in the field. Lack of a significant degree of competition is therefore one of the imperfections of the liberalized cashew marketing system

Lack of Market Information

Lack of market information is also an important factor in as far as imperfections in the functioning of the competitive model are concerned. Farmers

are usually unable to negotiate prices with traders who come to their villages. They can only decide whether to sell at the price offered. They have to reach this decision without knowing the f.o.b. price, or traders marketing costs, and are wary of the price information supplied to them by the traders.

The aspect of the liberalized marketing system that most concerns farmers is price instability. On average, between 1995/96 and 2000/2001, minimum prices were only about 70% of maximum prices (about 50% in the 1995/96 season). With little market information available at village level, farmers have to gamble when to sell their nuts. Prices usually start low, climb to a peak, and then fall off again towards the end of the season. The first week of the season presents a particular challenge to poorer farmers with pressing debt obligations. A low price may prevail in a given village for several weeks and farmers have no way of knowing how long it will take until another trader arrives to offer a higher price

Poor Access to Capital

One of the structural imperfections weakening competition in the domestic cashewnut market is poor access to capital. The sums of money required to buy even a small consignment of nuts are large and therefore access to credit is important. Most small traders do not have adequate collateral cover to be able to secure bank loans. Their entire business and/or their domestic security including their houses may have to be put on line if they want a loan. Collateral in turn has to be insured against damage (an additional, often considerable cost attached to the loan). Despite loan procedures being lengthy and cumbersome, banks also charge up to 30% interest rates making the loan package unattractive to small traders. Larger traders on the other hand, do not seem to depend on domestic bank borrowing for the purpose of cashew purchasing. Their access to external borrowing gives them a significant competitive advantage over local traders who not only are limited to the amount of capital they can obtain from domestic banks, but also have to take money on stiff conditions. The much superior means of acquiring funds by the larger traders means that smaller traders will continue to suffer a severe handicap in terms of competition in the cashew market unless solutions can be found to improve their access to credit.

Increased Government Levies

The level of government levies on cashew sales is undoubtedly the most sensitive issue surrounding cashew marketing. The local government levies are intended to serve a variety of purposes including general budgetary support for the district administration. These levies account for a significant proportion of the council revenues. For example, figures provided by Liwale District Council suggest that over the period January – November 1999, the levy on cashew purchases received directly by the district council accounted for 40% of total council receipt. However, these levies have significant negative impacts on the cashew industry.

Before a trader can commence the purchase of cashew nuts in a given district, he has to pay the relevant levies, calculated on a per kilogram basis, according to the quantity of nuts to be purchased. The farmer is the one who bears the burden of these levies since every shilling charged reduces the price received by the farmer by the same amount. The precise level and mix of these levies varies from district to district, but was typically around Tshs 70 to Tshs 100 in the 1999/2000 season.

Traders are also required to pay levy on a minimum of 100 tonnes of nuts at a time. At a levy of Tshs 70 per kilo, 100 tonnes worth of levy amounts to Tshs 7,000,000. This amount effectively prevents many small traders from engaging in cashew nut purchase, given their disadvantaged access to capital. Several local entrepreneurs, who were buyers in their own right in the early years of liberalization, now work as agents of larger companies for this reason.

Cashew Processing

In the late 1970s and early 1980s, twelve cashew nut processing factories were constructed in Tanzania. During the time of their construction, production was still high, and together they had a capacity of processing 113,000 tonnes of nuts per year. In the mid 1980s, apart from the falling. supply of nuts, the factories themselves were found to be uneconomical to operate. High costs of imported fuel, spare parts and packing materials, combined with a low proportion of whole kernels (as opposed to "brokens") delivered by the factories, meant that they could not match the Indian processing margins. These processing factories were able to obtain at best 20-30% whole kernels, which resulted in very low prices on the world market. Manual processing in India can achieve recovery of 85-90% whole kernels. Another technical problem is that these factories function best when supplied with nuts of a reasonably uniform large size. The current grading system for nuts, however, places no emphasis on kernel size. Most of the factories have therefore lain dormant for most of the time since they were constructed, whilst most of Tanzania's cashew nuts have been exported unprocessed to India.

Currently, there is only one cashewprocessing factory in Tanzania that is operational. This is the Premier Cashew Industries Ltd based in Dar es Salaam owened by Abbasi Exporters. This factory employs "manual processing" technology similar to that used in India and therefore has been able to overcome the technical problem of broken kernels. This factory processes 5,000 tonnes of cashew per year (still a very small proportion of the total amount exported to India). The government is keen to revitalize these factories, so as to reduce dependence on Indian processing factories and has therefore sought to find companies that will operate the factories on a lease hold basis. However, there has been no success to that effect. Prospective lessees are reluctant to take over the factories due to not only the technical problems already mentioned but also terms under which private investors might take over these factories. For example, it was reported that one investor allegedly faced numerous demands from authorities including that he takes on all existing staff (at the time idle and unpaid) despite massive over staffing. In the end, he exported his nuts unprocessed.

CONCLUSION, POLICY IMPLICATIONS AND RECOMMENDATIONS

Summary of Findings and Policy Implications

The output marketing system suggests that liberalization measures to date have led to strong private sector activity in cashew purchase and export. Liberalization appears to be one of the key factors responsible for the revival of the cashew industry. Nominal producer prices increased and as a result, production of the crop also increased. However, although the private sector is responsible for buying the vast majority of nuts from farmers, the partially liberalized industry still suffers from significant weaknesses that impair the production and marketing system. The output market is only partially competitive raising concern that farmers may be receiving disadvantageous prices for nuts. Market failures are caused by a combination of factors including high information costs/lack of market information (for both farmers and traders) and scarcity of capital at the lower levels of the marketing chain. The consequences of these shortcomings include both sub-optimal cashew production (efficiency impacts) and an undue share of benefits from cashew production (equity impacts).

Given limitations in terms of budget constraints, poorly developed management structure, lack of accountability, and political interference, the state at all levels (national, local and parastatal) is frequently not in a position to remedy market failures. This creates a major dilemma in terms of marketing policies. Should market failure be left unaddressed by the state and instead focus on removing obstacles to private sector development? Will the competing private market agents eventually seek ways of overcoming market failure? Should efforts be concentrated on reforming state organs such that they emerge better able and equipped to perform their desired functions?

Recommendations

Regarding the cashew industry in southern Tanzania, the government should encourage the development of conditions supporting general

market operations to avoid the excess of market and state failure. Within this broad guideline, a number of specific recommendations can be made:

- The government should ensure that all barriers to trader participation in cashew marketing activities are removed to increase the number of traders engaged in both input supply and output marketing. A more competitive marketing system is likely to be better for farmers' welfare than the current imperfectly competitive one. Several areas could be rectified. These include reduction of the minimum levy down payment for local traders and reduction in the number of permits required by traders to participate in nut purchase.
- Institutional innovation is needed to provide input credit to farmers through successfully enforcing interlocking contracts. This could be achieved through formation of traders associations (to identify and eliminate rogue traders and defaulting farmers), group lending or credit associations (to reduce the risk of default by farmers) and farmers' organizations (to increase farmers bargaining position with crop buyers and improve access of small farmers to input and output markets). Another challenge is to overturn the culture of loan default prevalent amongst farmers and primary society officials. This culture inhibits the expansion of seasonal credit provision.
- Provision of timely market information to farmers particularly those in remoter areas is also very crucial. Availability of timely market information is essential to help stabilize market shocks and provide equal opportunity to all types of market participants. Market information will strengthen the bargaining position of farmers and assist them in making more informed production and marketing decisions.
- More investments in transport infrastructure, communication networks, research and extension are needed. Transport infrastructure such as roads in the Southern zone will be essential to reduce the costs of cashew marketing and input delivery. While returns

- to investment in research are known to be very high worldwide, extension services are necessary for the diffusion of improved practices by farmers.
- As far as unprocessed cashew is concerned, the only market Tanzania has is India. Except for African cashew producers, all other countries have stopped exporting raw cashew to India. Instead they are processing the crop locally. India has set a goal of self-sufficiency in cashew production that could in the very near future close down the market for Tanzanian raw nuts. That would simply mean the demise of the cashew industry in Tanzania. The government should therefore consider seriously promoting the revival of cashew processing factories within the private sector. Obstacles standing in the way for private sector investment in rehabilitation of the cashew-processing factories should be overcome.
- At present, a few insiders generally dominate the primary societies with little accountability, technical capacity and creditworthiness to be able to offer marketing services to farmers. Very few are trusted sufficiently by traders to fulfil an effective intermediary role. These primary societies are important grass-root institution. They should be strengthened so that they could eventually provide a variety of market-related services to farmers such as acting as intermediaries between farmers and traders or with co-operative unions competing with traders.
- Given the fluctuations in the export price of cashew and its impact on farmers' welfare, there is a need to consider the possibility of establishing a price stabilization fund. However, the experience of many countries with stabilization funds is not very encouraging. They have often failed to achieve their objectives and are vulnerable to politically motivated plundering or simple embezzlement by the political elite. The type of price stabilization fund that should be put in place must be independent of state capture and should operate under the democratic oversight of farmers' associations.

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