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**Case Study on Cashews**

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**All-Africa Review of Experiences with Commercial Agriculture**

**CASE STUDY ON CASHEWS**

*FIRST DRAFT*

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## Cashew

Cashew is a high value tree crop that is well suited to being grown in several parts of Africa. The tree can grow in fairly poor soils (it does best in well-drained sandy loam soils) and with relatively little rainfall, as long as there is a clear dry season of two-four months. These attributes, plus the facts that little capital is required for cashew establishment and that low nut perishability minimises the coordination requirements for post-harvest activities, have given cashew the reputation of being a “poor man’s” (i.e. smallholder) crop (Jaffee, 1995).

The cashew tree produces two main edible products: cashew nuts and cashew apples. The latter, which hang beneath the nut, are used by the fruit drink industry in Brazil, but in Africa have not been commercialised and are generally left for children to eat within the cashew orchards. Cashew nuts are the world’s second most widely traded dessert nut after almonds. They are in increasing demand as a healthy snack food in high income economies, as well as being an important ingredient in many Asian (e.g. Indian, Chinese, Thai) dishes.

Within the nut’s shell, the cashew nut kernel is surrounded by a highly corrosive liquid known as cashew nut shell liquid, which has industrial uses, including as a component of medicines, brake fluids, paints and varnishes (Jaffee, 1995). The presence of this liquid adds complexity to the processing of raw cashew nuts, which needs to strike a balance between careful cracking of the nut, so as to maximise the out-turn of whole kernels<sup>1</sup>, and protection of human skin, which is damaged if it comes in contact with the liquid. In general, careful cracking of the nut is better achieved by manual cracking, whilst health and safety concerns are more readily satisfied by mechanised processes.

Although Sub-Saharan Africa (SSA) is a major supplier of cashews, accounting for 31% of world nut production during 2000-2004<sup>2</sup>, the story of SSA’s cashew industries is on balance a disappointing one. SSA is the only major producing region in the world without a significant processing industry. There has been considerable success in raising raw nut production in four countries (Côte d’Ivoire, Tanzania, Guinea-Bissau, Benin) over the past decade, but limited success in particular in Mozambique, which has a long history of cashew production. Finally, this success in raising raw nut production has coincided with a massive increase in production in Vietnam. Together, these production increases have halved world prices over five years, thereby depressing the returns to African (and other) producers who have invested in cashew orchards.

We consider the issues of supply development and cashew nut processing below, with specific reference to Mozambique and Tanzania. However, the experience of SSA’s cashew industries has to be understood in the context of developments within the global cashew market, to which we turn first.

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<sup>1</sup> Kernels are graded according to whether they are wholes or broken, white or scorched (due to the use of roasting in some shelling processes) and by size categories. As a high proportion of cashew nuts are eaten “out-of-hand” – other nuts also have common uses that involve them being ground into paste or used for confectionary purposes – there is a high price differential between wholes and broken (Jaffee, 1995).

<sup>2</sup> Statistics in this case study are derived from the FAOSTAT database unless otherwise stated.

## The World Market for Cashew Nuts

Figure 1 shows cashew nut production trends in the four main producing countries or regions – India, Vietnam, Brazil and SSA - over the past four decades. Between them, these four have accounted for over 90% of global production over this period. Until 1980 SSA – and, in particular, Mozambique and Tanzania – was the main cashew producing region in the world. However, it lost this position due to a combination of policy neglect (both countries) and civil conflict (Mozambique), leaving India as the world's biggest producer through the 1980s and into the early 1990s. Since the mid-1990s production has rebounded dramatically in SSA, especially in the four countries noted above. However, this performance has been eclipsed by that of Vietnam, which only entered cashew production in the early 1980s, but has now grown to be the world's largest supplier.

Figure 1

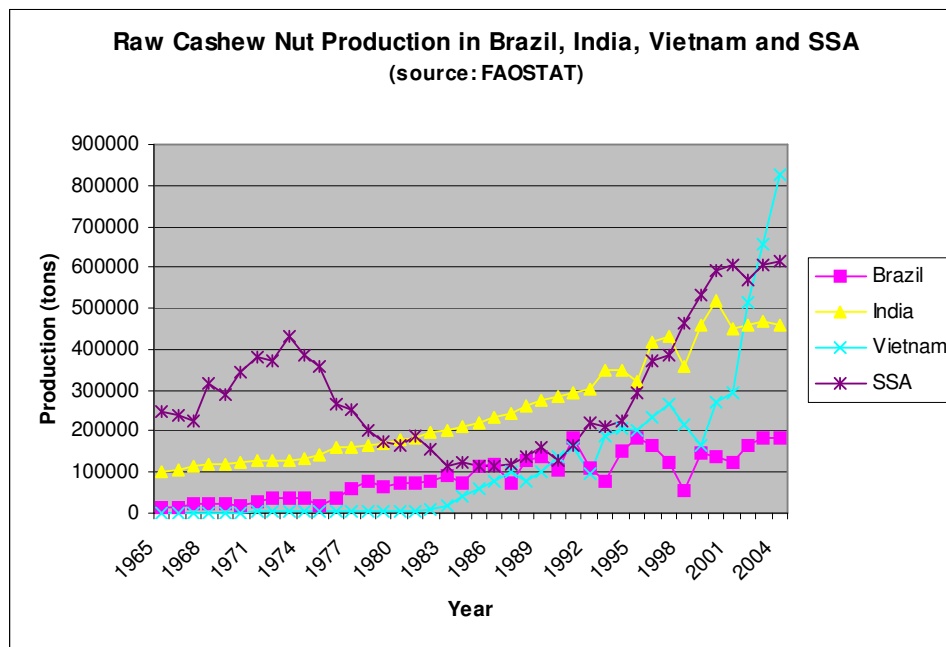


Figure 2 shows market shares for cashew kernels. There are two main factors differentiating the trends in Figure 2 from those in Figure 1. The first is that India, in particular, has a significant domestic market for cashew kernels, whereas even the regional market for cashew products in SSA is extremely small. The second is that, whilst Mozambique supported a cashew nut processing industry until around 1980, for a few years challenging India as the world's major supplier of cashew kernels, this industry has since collapsed and SSA is now the only major producing region to export the majority of its cashews in raw nut form.

Figure 2

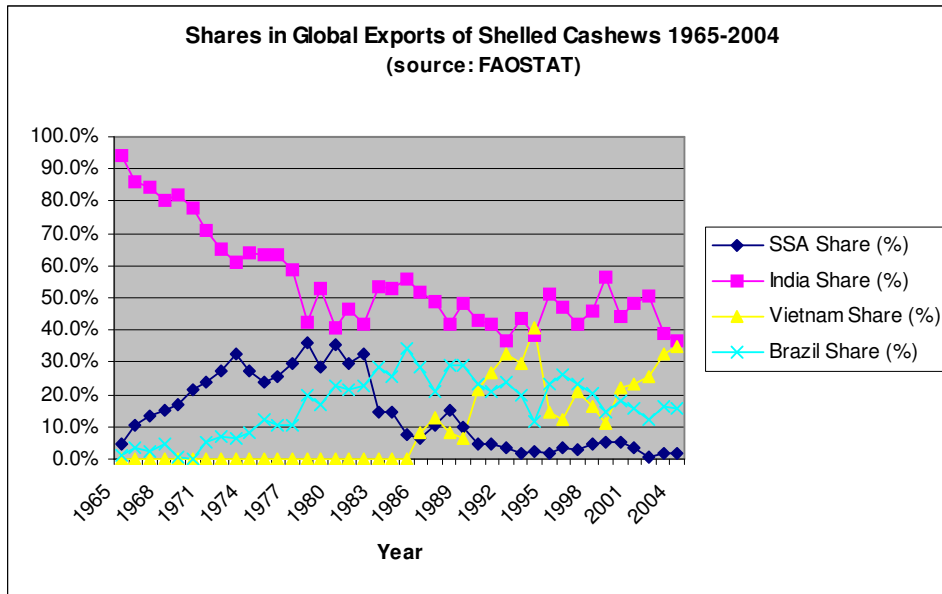
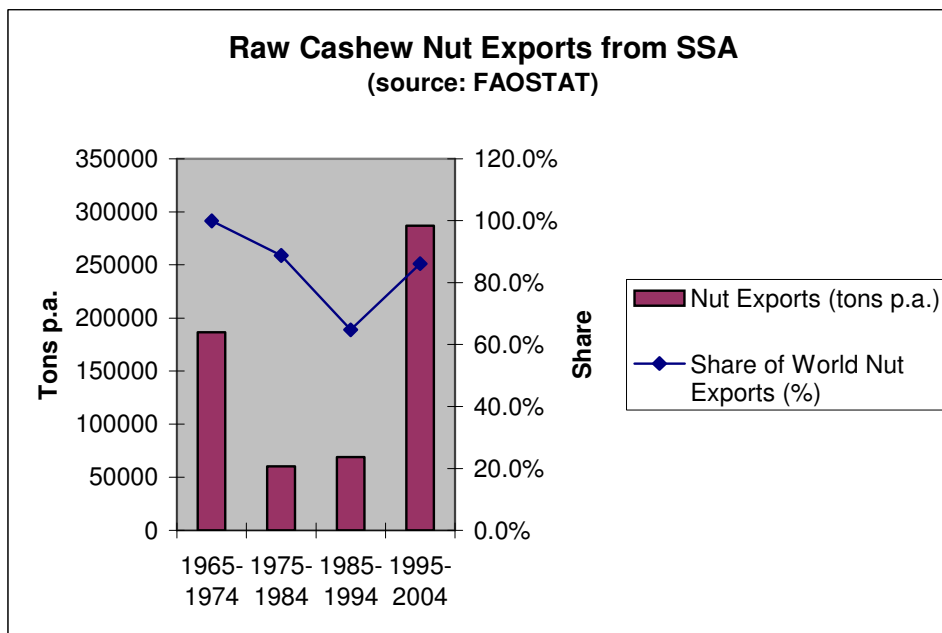


Figure 3 shows that SSA has supplied the majority of the world's raw (unshelled) nut exports throughout the period considered in this case study. The share supplied by SSA fell during the 1980s, when the sectors in both Mozambique and Tanzania were in decline, but has risen again during the past decade to just over 86%. On the demand side, India has been almost the sole buyer of raw nuts during this decade, accounting for 95% of global imports of raw cashew nuts during 1995-2004.

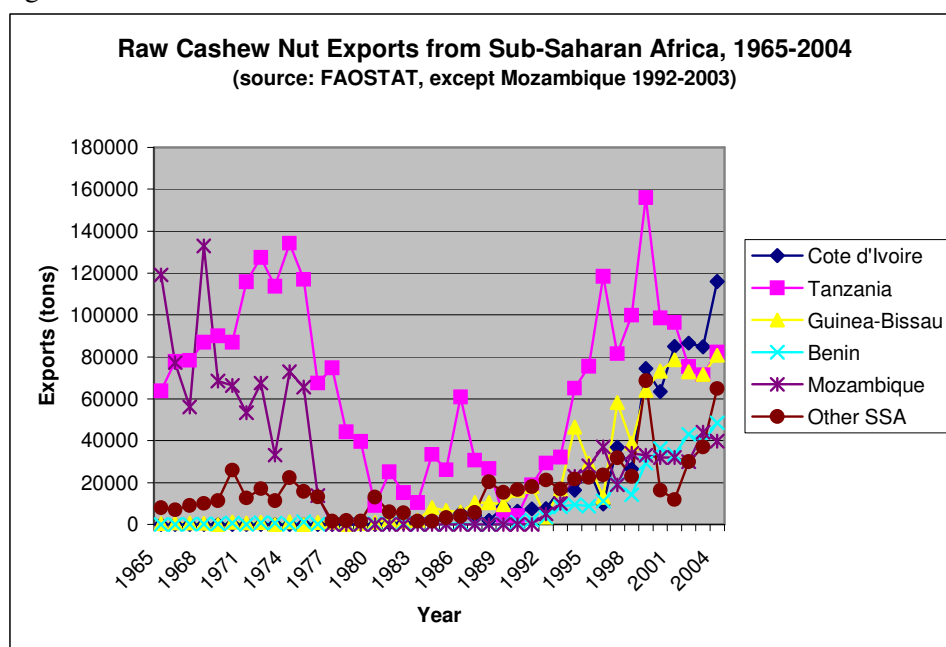
Figure 3



SSA is thus heavily dependent on India as the market for its raw cashew nuts. On the other hand, referring back to Figures 1 and 2, India has only been able to maintain its leadership in the world market for cashew kernels in the face of the growing challenge from Vietnam by supplementing its domestic raw nut supply with rising imports from SSA.

Figure 4 shows export trends in the main cashew producing countries within SSA over the past four decades<sup>3</sup>. The dominance of Mozambique and Tanzania until the late 1970s, plus the spectacular collapse in both countries, is clearly seen. The figure also shows that the rise in SSA's cashew nut production and export since the early 1990s has been largely driven by Côte d'Ivoire, Tanzania, Guinea-Bissau and Benin, although the 2004 figures suggest that some other countries (e.g. Ghana) are also building their production base. As was the case in Vietnam, in Côte d'Ivoire, Guinea-Bissau and Benin major commercialised cashew production activity only commenced in the 1980s.

Figure 4



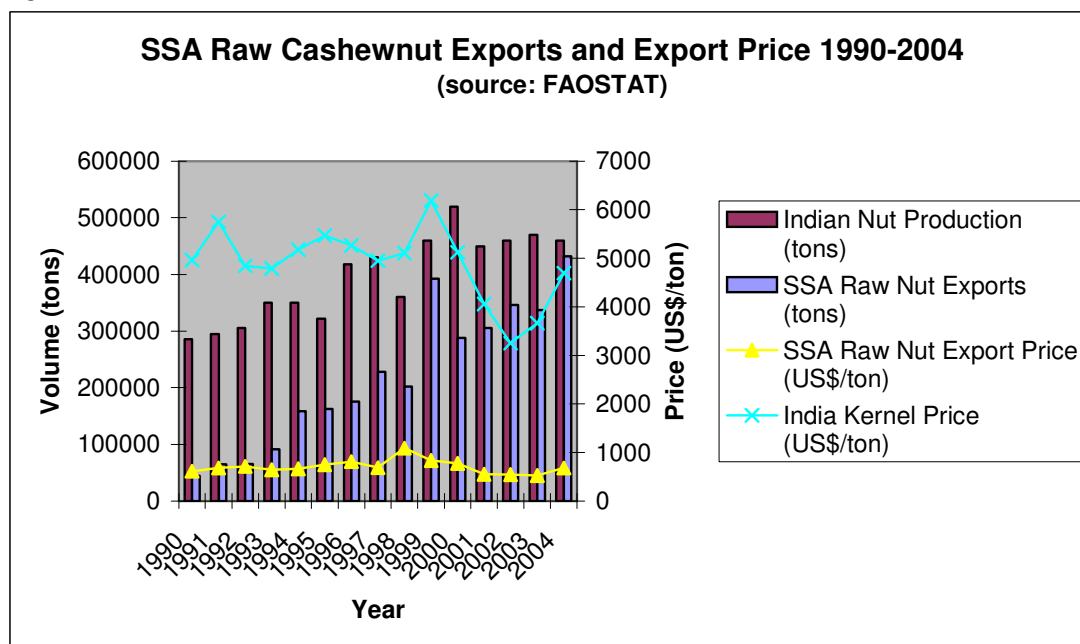
Finally, Figure 5 shows what has happened to world cashew prices in the last 15 years, as SSA – but also Vietnamese – cashew production has grown. Rising demand for cashews kept prices buoyant until 1999. However, the doubling of world exports of cashew kernels since then (from 164,000 tons in 1999 to 299,000 tons in 2004) has caused export prices to halve (in India's case, from a peak of US\$6187 per ton in 1999 to US\$3251 per ton in 2002)<sup>45</sup>.

<sup>3</sup> According to FAOSTAT, there were no nut exports from Mozambique between 1992 (when a ban on nut exports was lifted) and 2001. However, other sources record such exports. In Figure 4, the data for Mozambique for 1992-2003 are thus taken from Figure 3 of McMillan *et al.*, 2003.

<sup>4</sup> Figure 5 only shows the prices that Indian exporters have received for their cashews. During 1995-99 Indian exporters on average received a price premium of around 23% over prices received by Brazilian and Vietnamese exporters. By 2000-04 this premium had been reduced to only around 8%.

<sup>5</sup> Comparing the average price received in the two five-year periods 1995-99 and 2000-04 indicates a less dramatic drop: from a mean of US\$5449 per ton during 1995-99 to a mean of US\$4097 per ton during 2000-04.

Figure 5



Predictably, prices of raw cashew nut exports from SSA to India have also fallen dramatically during this period. As shown in Figure 5, the price of raw cashew nut exports from SSA peaked a year earlier, in 1998, due to a poor harvest in India, and has since also halved (from US\$1090 per ton in 1998 to US\$523 per ton in 2003). That SSA production (Figure 1) and exports (Figures 4 and 5) continued to grow so strongly between 1998 and 2001, despite the falling price, has much to do with the lags between planting decisions and harvesting inherent in tree crop production.

### *The Cashew Industries in Mozambique and Tanzania*

In this section we examine how national policy and private investment decisions in Mozambique and Tanzania have interacted with the global market story told above. The experience of cashew sector reform in Mozambique, following the disastrous decline of the late 1970s and early 1980s, has attracted particular attention as a “*cause celebre* for the anti-globalization movement” (McMillan *et al.*, 2003, p2). We consider debates about whether or not Mozambique (and Tanzania) should have done more to resuscitate their cashew processing industries in the 1990s and also draw lessons about the requirements for stimulating a supply response from smallholder cash crop producers.

#### *Mozambique*

As already seen in Figures 2 and 4, not only did Mozambique and Tanzania dominate SSA’s raw cashew nut exports during the 1960s and 1970s, but Mozambique also developed a processing industry that briefly challenged India’s dominance of the global market for cashew kernels in the early 1970s. In 1970 this processing industry comprised 14 mechanised factories with a total processing capacity of 150,000 tons of raw nuts. These factories were

supplied by Portuguese and Asian traders within a highly regulated market in which the government set prices at each stage of the chain and priority was given to ensuring that the factories received as many raw nuts as they were able to process. In 1973 these factories operated at virtually 100% capacity and 149,800 tons of raw nuts were processed for export out of total national nut production of 240,000 tons (McMillan *et al.*, 2003).

For a number of reasons, however, 1973 turned out to be the peak year for cashew production and processing in Mozambique. At Independence in 1975 many of the Portuguese traders left Mozambique whilst many Asians moved to towns and ceased buying cashew. The new government not only continued to regulate the cashew marketing chain, but, through a state organisation called Caju de Mozambique, also took over ownership of the processing factories. In 1978 the export of raw nuts was banned to support the processing industry. However, production incentives decreased as producer prices became depressed, then in 1982 the outbreak of civil war disrupted all activities still further.

Reform of the cashew sector in Mozambique commenced with the 1987-90 Economic Recovery Programme. During these years the cashew nut producer price (still a fixed price) was raised significantly in real terms, a trend that continued during the 1990s (when the fixed price was replaced by a minimum price, which was then also abandoned in 1998/99). Over the period 1986-1998 the producer price was raised from US\$0.25 to US\$0.55 (McMillan *et al.*, 2003). The state trading company ENACOMO that had handled all cashew kernel exports was privatised in the late 1980s and the number of exporters rose from three in 1990/91 to eleven in 1995/96. The processing factories were privatised during 1991-94 and new factories were also subsequently built. To the disappointment of the investors who had bought the privatised processing factories<sup>6</sup>, the export ban on raw cashews was also lifted in 1991/92. Initially it was replaced by an export quota of 10,000 nuts per annum and an export tax of 60%, but the quota was repealed in 1994/95 and the tax was progressively reduced to 14% by 1996/97 in the face of opposition from processors.

Pressure on the Mozambican government to reduce the export tax came particularly from the World Bank, which took the view, based on a 1995 consultancy report<sup>7</sup>, that the country's processing factories were fundamentally non-viable in the global marketplace and that retaining the export tax to depress the raw nut price faced by these factories simply reduced the income of up to a million smallholder cashew producing households. According to McMillan *et al.*, 2003, the issue assumed such prominence in relations between Mozambique and the World Bank that it took up an unjustified amount of time of both respective Presidents.

In 1999 a law was passed stipulating that the export tax would be set annually in the range 18-22%. However, even with this degree of continuing support, 14 of the 18 factories operating in 1997 had closed down by 2001, although two new ones did also open during this period. Meanwhile, although the producer price did rise significantly during the 1990s, the supply response from producers was less than expected (Figure 4). Thus, the anticipated welfare gains from the reductions in export tax were not realised. McMillan *et al.*, 2003 argue that the

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<sup>6</sup> With one notable exception, these were Mozambican investors (Cramer 1999). McMillan *et al.*, 2003 report that they paid very low prices for their assets.

<sup>7</sup> As a result of the heated controversy over cashew policy in Mozambique, a further three consultancy reports, covering basically the same ground, were commissioned in 1997, 1999 and 2001. Some of the findings of the 1997 study by Deloitte and Touche are summarised below. All four reports are referenced in McMillan *et al.* (2003); the first two are also discussed by Cramer (1997).

benefits from the reductions in the export tax were at best marginal, although their aggregate analysis understates the importance of cashew income to households in particular areas. They further argue that the benefits were reduced by the limited degree of price transmission through the cashew supply chain to producers, with intermediate buyers capturing a large share of the price increases, and by a terms of trade loss as Mozambique switched from selling cashew kernels into a competitive world market to supplying raw nuts to a monopsonistic buyer (India). Moreover, the benefits were largely offset by the fact that few of the workers previously employed in the cashew factories found alternative employment.

### *Tanzania*

Tanzania's cashew production first peaked a couple of years after Mozambique's, in the mid-1970s. The reasons for the subsequent decline were in this case almost entirely policy-induced. Cashew production, concentrated in southern Tanzania, had originally been stimulated by multinational trading companies, but during the 1960s control of the marketing system was assumed by the state. Local cooperative societies bought from producers and sold the raw nuts onto regional cooperative unions, which in turn sold them to the Cashew Nut Marketing Board for export. Under these arrangements marketing margins gradually increased and the producer price was depressed. The devastating impact for cashew producers was compounded by the government's policy of "Ujamaa" villagisation in the early-mid 1980s, which resettled rural communities away from their fields in new villages that could be more readily serviced with schools, health facilities, water and roads. Under the combined impacts of these policies, many cashew orchards were simply abandoned, allowing the fungal powdery mildew disease to become endemic on untended trees.

Ironically, the drastic decline in production coincided with major investment in ten cashew processing factories by the World Bank and bilateral donors. These mechanised factories, with a combined capacity of 113,000 tons of nuts per year, were ready for operation in 1980, by which time annual raw nut production had fallen to around a quarter of this level (Jaffee, 1995). Several of the factories, therefore, never entered service and, whilst there were some kernel exports in most years during the 1980s, peak export activity of 6671 tons occurred in 1981.

Recovery of the Tanzania cashew sector began with two technical assistance projects, funded by the Italian and UK development administrations respectively, to identify the best ways of tackling powdery mildew disease. Resistant tree lines were identified, but the most important activity was the promotion of sulphur spraying to combat the fungus. Sprayers were made available in production areas and sulphur supplies were distributed to producers – on a cash basis in Lindi and Mtwara regions, but using a far superior passbook system in neighbouring Tunduru District (Poulton, 1998) – through local administrations, funded out of levies on cashew marketing activities. Liberalisation of the cashew market commenced in 1991, once the major technical innovations had been tested and dissemination had begun, and the higher prices and prompter payments for cashews provided producers with the necessary incentives to revive their cashew orchards.

### *To Process or Not to Process?*

As indicated above, this has been a particularly contentious issue in Mozambique, but has also been an issue in Tanzania, where most of the processing capacity has lain idle since 1980.

Cramer, 1999 notes that the global cashew industry does not conform to the standard picture of processing concentration in OECD countries due to either tariff escalation or dominance of the global market by vertically coordinated multinational corporations. Instead, the basic unresolved question in both Mozambique and Tanzania has been whether local factories can compete with the cashew processing industry in India. Clearly, they have been unable to do so so far, even with some protection through the export tax in Mozambique. If there is little prospect of them competing without support, then policy makers have to weigh up the costs and benefits of providing ongoing support to the domestic processing industry.

Available literature highlights several critical determinants of competitiveness. The first of these is the choice of processing technology. The prediction of basic economics, that more labour-intensive production methods are more appropriate in low wage economies such as Mozambique and Tanzania, is borne out by experience. As of 2003, all fully mechanised factories bar one had closed down in Mozambique; the remaining factories, including the two newest, relied on semi-mechanical or manual processing methods (McMillan et.al., 2003). More recently, Olam, one of the world's largest cashew trading firms, has opened a factory in northern Mozambique based on manual processing (Joe Hanlon, *pers.comm.*).

One of the disadvantages of mechanical factories that is often cited is that they need to process large volumes of raw cashews to break even. According to Cramer, 1999, the 8000 ton plant at Xai-Xai in Mozambique – the one processing factory at the time of his field work in 1997 to have international shareholding – required a 20,000km<sup>2</sup> catchment area to source sufficient supplies. This led to huge transport costs in a country with very poor road infrastructure. However, large factories also economise on high quality managerial input, which is scarce in Mozambique (and Tanzania). Despite using manual processing, the Olam factory in northern Mozambique is apparently a large one for this reason, suggesting that the issue of size can be separated from that of processing technology and that the question of optimal size remains to be solved (Joe Hanlon, *pers.comm.*). On the other hand, it is difficult to separate the question of optimal size from that of raw material supply. Cramer, 1999 and McMillan et.al. (2003) are agreed that this is a critical issue for the competitiveness of processing in Mozambique, even if the Tanzanian experience indicates that it is, at best, a necessary but not sufficient condition for a successful processing sector. It is discussed in more detail below.

Finally, access to capital is an issue especially for domestic firms, given Mozambique's under-developed financial sector.

If Mozambican and/or Tanzanian factories cannot compete with Indian processors, the costs and benefits of ongoing policy support, e.g. through an export tax, need to be considered<sup>8</sup>. In

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<sup>8</sup> As pointed out by the 1997 Deloitte and Touche consultancy report on the Mozambican sector, all other major cashew processing industries enjoy policy support. Cashew producers and processors in Kerala, which accounts for 50% of Indian production, receive support through periodic subsidies to the monopsony parastatal processing company. In addition to this, Indian processors are able to cross-subsidise export sales of cashew kernels from sales on the large domestic market, which is protected by a 40% import tariff. Raw nut exports from Brazil are prohibited, except under exceptional circumstances, whilst both Vietnam and Indonesia impose taxes (20% and 30% respectively) on the export of raw nuts. These facts are not sufficient argument alone for protecting an industry in east Africa; the benefits of support should still be seen to outweigh the costs. However, they do indicate that all the other countries either perceive there to be national benefits from supporting a domestic processing industry or have processing lobbies that are sufficiently powerful politically to secure that such protection is provided.

the case of an export tax, the cost of support is largely in terms of its impact on smallholder incomes through the producer price of raw nuts, an impact that McMillan et.al. (2003) claim has actually been quite limited in Mozambique. Against this cost can be set a range of benefits, including employment (mainly of women) in processing factories and additional tax receipts for the government in a country with a low tax base. There may also be a number of dynamic benefits. Thus, McMillan et.al. (2003) note that most of the Mozambican cashew processing factories that have now closed were located in small towns, where they were the main source of formal employment. The importance of supporting small town development as growth poles for the surrounding countryside is increasingly recognised. A second possible dynamic benefit arises from the incentives provided by specific asset investment in processing for upstream investment in the raw material supply chain. These incentives are discussed below. However, we note that they depend on the structure of the raw material output market.

A second set of arguments for investing in domestic processing focuses on the dangers and disadvantages of dependence on India as the sole or dominant buyer of raw cashew nuts from Africa. Here it seems that the balance of argument has changed considerably since 1999.

Firstly, McMillan et.al. (2003) argue that Mozambique suffered a terms of trade loss through dependence on India as a monopsony buyer of raw nuts. However, this assertion is countered by their own observation that Indian public policy creates incentives for Indian processors and importers to pay attractive prices for raw nuts from Africa. Cramer (1999, p1255) claims that, "International prices for unshelled cashew nuts are basically set by fluctuations in Indian demand and these in turn depend on trends in the proportion of Indian industrial demand met by domestic growers". However, this has almost certainly changed since 1999, as African raw nut supplies have become increasingly important to Indian processors. Admittedly casual inspection of the data underlying Figure 5 suggest that raw nut prices are driven by international kernel prices and that, as world prices have fallen since 2000, Indian processing margins have fallen at same time<sup>9</sup>.

Secondly, there were worries during the 1990s that Indian policy was aiming for self-sufficiency in raw cashew nut supplies, thus making African dependence on the Indian market unwise. In fact, as Figure 5 shows, India has become increasingly dependent on raw nut imports from SSA, which in 2004 comprised almost 50% of all nuts processed in India.

It is not possible within a desk review of this nature to reach a firm conclusion on such a fiercely contested topic as the desirability of supporting processing investment in Mozambique and Tanzania. However, a persuasive case is made, at least for Mozambique, that additional investment in increasing both the quantity and quality of raw nut supply is a precondition for a successful processing industry.

### *Raw Materials Supply*

As shown in Figure 4, cashew production in Côte d'Ivoire, Tanzania, Guinea-Bissau and Benin has grown faster than that in Mozambique in recent years. Thus, the reasons for the disappointing supply response in Mozambique since liberalisation should be sought in aspects

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<sup>9</sup> Using FAOSTAT data, on average the price of a ton of Indian kernel exports was 6.6 times that of a ton of raw nut imports during 1995-99 and 6.8 times during 2000-04. Based on these same figures and assuming a kernel out-turn ratio of 24% throughout, the gross margins for Indian processors were US\$1888 per tons of kernels exported during 1995-99 and US\$1573 during 2000-04.

of the Mozambican policy and institutional environment. McMillan *et al.*, 2003 show that the real producer price of cashews increased five-fold between 1984 and 1998 (Figure 2). It has fallen since, reflecting the trend in the export price, but the producer share of the f.o.b. export price has continued to rise, partially compensating producers for the fall in world price.

McMillan *et al.* explain the disappointing supply response to these trends in producer price in terms of farmers' uncertainties to commit to increasing cashew production. Reviving abandoned or neglected cashew orchards requires a one-off input of labour (for pruning etc) and possibly ongoing capital inputs (if trees have become afflicted by powdery mildew disease, as in Tanzania). Jaffee, 1995 argues that the establishment of new cashew trees is not particularly capital-intensive. Moreover, the land can be inter-cropped with food crops until a tree canopy has been established. Nevertheless, planting new trees is a long-term decision and involves a commitment of land, plus an initial labour input. Thus, smallholder households will only plant new trees if they are confident of the medium-long term future of the local cashew sector. McMillan *et al.* argue that they require credible signals of commitment from other players in the sector if they, too, are to invest.

In Tanzania, there were credible signals from both the public and private sector by the early 1990s. The first signal from the public sector was the research effort into combating the problem of powdery mildew disease. Private traders were then quick to respond to the opportunities created by output market liberalisation (Jaffee, 1995). There was less of a private sector response to the need for sulphur inputs, but local governments stepped in here with input trust funds (admittedly only serving those with capital to buy inputs on cash) and the Tunduru passbook system - again signals of commitment, even if the former suffered from very poor management and accountability (Poulton, 1998). One area that had not received much attention was the grading of raw nuts at primary purchase. Having consignments of relatively equal size nuts makes an important difference to the efficiency of mechanised processing factories, such as those installed (but idle) in Tanzania. This was apparently not an issue for traders exporting raw nuts to India, where the efficiency of hand shelling is much less sensitive to variations in nut size, hence there was little pressure for the introduction of more thorough grading. However, the absence of thorough grading in turn reinforced the economic case against reviving the processing factories.

As of 1996, most of the increase in production in Tanzania since liberalisation had come from revival of abandoned cashew orchards, rather than planting of new ones (Poulton, 1998). Some promotion had begun of grafting of improved planting material onto old cashew stock (topworking), which allows harvesting of cashews from the improved planting material with a shorter lag than with entirely new planting. However, the technical assistance stopped before this had got far. Nevertheless, subsequent production trends suggest that replanting has since increased. In Mozambique, available evidence suggests that almost all production increases in the 1990s came from revival of existing orchards (McMillan *et al.*, 2003). This is consistent with the observation that there has been less investment in research in Mozambique than in Tanzania and that a less competitive output buying system has emerged (in turn apparently a function of licensing requirements, limited access to credit for small-scale buying enterprises and perhaps also the more dispersed nature of production<sup>10</sup>).

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<sup>10</sup> In the mid-1990s less accessible production areas and/or areas that had traditionally produced less cashew faced less competitive output markets than the more accessible zones in southern Tanzania (Poulton, 1998)

In theory, the signalling of credible commitments to cashew producers can come from two sources<sup>11</sup>. Firstly, as in Tanzania, the state can signal its commitment to cashew industry development by providing basic public goods (such as research and extension), plus facilitating input supply if required, leaving private buyers simply to compete for cashew output. The public goods provision can then be funded through levies on these output marketing activities. Alternatively, it can allocate cashew development concession areas to private companies (probably with international shareholding, given the large capital required to develop a concession area), leaving them to provide planting material, technical advice, inputs and, if necessary, credit to smallholder households. In the cotton case study we emphasise the need to set clear “rules of the game” for the allocation of such concessions and, if the allocation process is unlikely to generate much effective competition between firms, to establish pricing formulae to ensure that producers are paid a fair price. This would be even more important in the case of cashew, given the specificity of investment in tree crops.

Unfortunately, neither route has been pursued in Mozambique. The state has not been active in promoting cashew, whilst processing and export companies have been separated from the producer base by multiple levels of intermediaries. Part of the reason for the lack of clear strategy has been the ongoing debate over the export tax, which has produced “considerable, lasting policy uncertainty for all concerned” (Cramer, p1253). McMillan *et al.*, 2003 and Hanlon, 2000, amongst others, are highly critical of the role of the World Bank in this, concluding that coherent policy cannot be achieved by aid conditionality.

### ***Lessons from the Cashew Case***

Rights and wrongs of supporting processing investment in Mozambique through export taxation can still be debated. However, this is an example of a donor intervention in a sectoral policy debate contributing to a sense of policy uncertainty and unpredictability. In the absence of a clear sectoral strategy, the majority of the cashew processing factories eventually closed without raw cashew exports growing significantly.

Different strategies may have been feasible for E.African cashew development, but all needed a coordinated approach from all relevant stakeholders.

Importance of state and/or private sector making credible commitments if they are to encourage smallholder tree crop development.

### ***References***

- Cramer, C. (1999). "Can Africa Industrialise by Processing Primary Commodities? The Case of Mozambican Cashew Nuts." *World Development* 27(7): 1247-1266.
- Hanlon, J. (2000). "Power without Responsibility: The World Bank and Mozambican Cashew Nuts." *Review of African Political Economy* 27(83): 29-46.

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<sup>11</sup> There are direct parallels between the reasoning here and the discussion of the roles of the state under different market structures within the cotton case study. However, the duopolistic market structures that have served the Zimbabwean and Zambian cotton sectors well are unlikely to work in cashew sectors, because of the temptation to free-ride on extension and dissemination of planting material where there is a 3-4 year lag between dissemination of planting material and the first harvesting.

- Jaffee, S. (1995). Private Sector Response to Market Liberalization in Tanzania's Cashew Nut Industry. Marketing Africa's High Value Crops. S. Jaffee and J. Morton. Dubuque, Kendall Hunt: 153-198.
- McMillan, M., K. Horn and D. Rodrik (2003). *When Economic Reform Goes Wrong: Cashews in Mozambique*. mimeo, Tufts University
- Poulton, C. (1998). The Cashew Sector in Southern Tanzania: Overcoming Problems of Input Supply. Smallholder Cash Crop Production Under Market Liberalisation: A New Institutional Economics Perspective. A. Dorward, J. Kydd and C. Poulton. Wallingford, CAB International: 113-176.