Chasing Markets
- A Study of the Mozambican Cashew Industry

Authors:
Anna-Karin Luvö
Sophia Magnusson

Supervisor:
Anders Nilsson
**Preface**

*We would like to thank the Mozambican people for its hospitality and kindness. In particular, all of the people who took the time to meet with us and shared their experiences and expertise. We would like to express thanks to people outside of Mozambique who provided us with further information about the world market and the cashew industry. We are also grateful for the time spent in Mozambique with our colleagues with whom we travelled this wonderful country.*

*Finally, we would like to thank our supervisor Anders Nilsson, without his help and knowledge this thesis and our field study in Mozambique would not have been possible.*

*We wish you all the very best in the future,*

*Anna-Karin Luvö, Sophia Magnusson*
Abstract

In the spring of 2009 we spent five weeks in Mozambique performing a field study. Four of the weeks were spent in Nampula province in the northern part of the country, where most of the Mozambican cashew is produced. In the 1970s Mozambique was world leading in cashew kernel export, however, today the industry is a shadow of its former self. Since the end of the 1990s, the government along with other stakeholders, are trying to recuperate the industry. There are a great deal of obstacles to overcome to be able to compete with other large exporting countries such as India, Vietnam and Brazil. The main issue is the conditions of the trees; the majority of the trees are over forty years old and therefore have a low cashew yield. In addition, poor maintenance of the trees further decreases the production. Other problems are the infrastructure, in particular roads in poor condition, difficulties in locating markets and the income gap between the producer and end retailer.

During our research we have thought of a few recommendations which we feel would be worth looking into. We feel cheaper seedling should be available for the producers and nurseries should be put more locally for easier access. We also recommend spraying of the trees to be done more frequently. Furthermore a prerequisite for an expansion of the cashew industry is an investment in the infrastructure, to be able to transport the cashew from producer to processor and exporter. This would also improve life quality of the people in general. In addition, an investment in the poorest is necessary for the development of the country, a tool for achieving this could be better access to micro credits and village banks. To increase the income generated from Mozambican cashew kernels we recommend focusing the export on Fair Trade and possibly the organic market since they provide higher prices. A possibility to locating new markets would be an office, possibly in Europe, in order to be closer to the costumers. Another income generating market could be the market for by-products such as Cashew Nut Shell Liquid, cashew oil and juice and jam from the fruit.

Keywords: Cashew, Mozambique, Value chain.
Abbreviation List

ACA – African Cashew Alliance
CAS – Country Assistance Strategy
CNSL – Cashew Nut Shell Liquid
EPOPA – Export Promotion of Organic Products from Africa
FAO – The Food and Agriculture Organization of the United Nations
FLO – Fairtrade Labelling Organizations International
FOB – Free on board
INCAJU - Cashew Institute
MZN – New Mozambican Metical
NGO – Non Governmental Organization
PPP – Purchasing Power Parity
UCODIN - Government’s Division for Development Coordination
# Table of Contents

1. INTRODUCTION .......................................................................................................................... 1
   1.1 OBJECTIVE ................................................................................................................................ 1
   1.2 CHAMBERS DEPRIVATION TRAP ............................................................................................ 1
   1.3 THE VALUE CHAIN CONCEPT ............................................................................................... 4

2. METHOD ........................................................................................................................................ 6
   2.1 QUALITATIVE DATA .................................................................................................................. 6
   2.2 INTERVIEWS ........................................................................................................................... 6
   2.3 OBSERVATIONS ....................................................................................................................... 8
   2.4 WRITTEN DOCUMENTS ........................................................................................................... 8
   2.5 LIMITATIONS .......................................................................................................................... 8
   2.6 DISPOSITION .......................................................................................................................... 9

3. BACKGROUND ................................................................................................................................ 11
   3.1 THE PROCESS ......................................................................................................................... 11
   3.2 PRICES OF CASHEW ............................................................................................................. 13
   3.3 THE FALL OF THE MOZAMBIAN CASHEW SECTOR .............................................................. 15
   3.4 THE WORLD BANK ............................................................................................................... 16
   3.5 THE MOZAMBIAN CASHEW INDUSTRY TODAY .................................................................... 18
   3.6 REACHING THE POOR .......................................................................................................... 21

4. THE VALUE CHAIN ....................................................................................................................... 24
   4.1 MARKETING CHANNELS .................................................................................................... 24
   4.2 WEAKNESSES IN THE MOZAMBIAN CASHEW VALUE CHAIN ............................................ 27
      4.2.1 Markets ........................................................................................................................ 27
      4.2.2 Infrastructure ................................................................................................................. 27
      4.2.3 Income Gap .................................................................................................................... 28
      4.2.4 Unproductive Cashew Trees ......................................................................................... 30

5. WHAT DOES THE WORLD MARKET FOR CASHEW LOOK LIKE? ........................................ 32
   5.1 THE WORLD MARKET OF CASHEW .................................................................................... 32
   5.2 THE INDIAN CASHEW INDUSTRY ...................................................................................... 34
      5.2.1 Wage Comparison - Purchasing Power Parity .............................................................. 35
   5.3 THE FAIR TRADE MARKET .................................................................................................. 37
   5.4 THE ORGANIC MARKET ....................................................................................................... 38
   5.5 SWEDISH IMPORT OF CASHEW KERNELS ........................................................................... 39
   5.6 SWEDISH MARKET SURVEY ............................................................................................... 41

6. CASHEW BY-PRODUCTS .............................................................................................................. 42
   6.1 CASHEW JUICE .................................................................................................................... 42
   6.2 CASHEW JAM ......................................................................................................................... 43
   6.3 CASHEW NUT SHELL LIQUID ............................................................................................. 43
   6.4 CASHEW OIL ........................................................................................................................ 44
1. Introduction

In March of 2009 we went to Mozambique to, during five weeks, conduct field study for our thesis about the Mozambican cashew industry. We chose to focus on the cashew industry because the northern province of Nampula, where we concentrated most of our studies, is the main producer of cashew in the country, but also because we understood that Mozambique is putting a lot of effort into reviving its cashew industry. Our work is a close collaboration with the provincial government’s division for development coordination (UCODIN) who primarily works with coordination of and information about development efforts in the Nampula province.

1.1 Objective

As a tool for our research we have chosen the Value Chain concept with which we will be able to look at poverty and development on different levels of society and attempt to find out how peasants can escape the deprivation trap. We have during our research found a few issues on different levels of the cashew value chain. One of them being the low income the peasants receive for their cashew. Thus our overall objective is to examine how an increase in income can be achieved and how to improve the production and the productivity for a possible expansion of the cashew export and through that development for the people of Mozambique. A problem we discovered during our interviews are difficulties reaching the markets, our main objective is therefore to try to locate new markets for the Mozambican cashew.

1.2 Chambers Deprivation Trap

When travelling through northern Mozambique, visiting peasants and peasant associations we clearly noticed signs of what Robert Chambers in his book Rural development: Putting the last first calls “the deprivation trap”. In his book, he discusses rural poverty in form of five clusters that all affect each other and place people in a
vicious circle of poverty. The five clusters are Poverty, Isolation, Powerlessness, Vulnerability and Physical weakness. (Chambers, 1983, pp.111-114)

Figure 1. The Deprivation Trap

Poverty affects the other clusters immensely; it contributes to physical weakness through lack of food which leads to malnutrition and an inability to pay for medical care and medication when in need of it. It also contributes to isolation through lack of ability to pay for education, radio, a bicycle or other transport to look for work and to vulnerability through lack of ability to pay for occurring expenses. It also leads to powerlessness, as lack of wealth is synonymous with low status. (ibid)

Physical weakness contributes to poverty in several ways; through low productivity and cultivation of smaller areas; through lower wages to women and weak individuals and through fewer working hours or days. It leads to isolation as lack of time or energy aggravates attempts to take part in meetings and seek information. It emphasizes vulnerability by restricting an individual's chance to overcome a crisis through new activities and harder work, and adds to powerlessness through lack of time and energy for political activities or protest. (ibid)
Isolation affects poverty because services do not reach the poorest, illiterates can not read important information, and they also find it harder to attain loans. Physical weakness and isolation go hand in hand since rural areas can have a higher rate of migration of the strong to the city or other rural areas, something which is harder for the physically weak. It also emphasises vulnerability because remote areas are more prone to crop failure and less likely to have services to handle those kinds of situations. Land is also harder to obtain for illiterates and they are more often cheated of it. Isolation automatically means less contact with political leaders and legal advisers, in turn leading to powerlessness. (ibid)

Vulnerability relate to poverty through sales of productive assets or through mortgages. To physical weakness because when emergencies occur, time and energy need to replace money. It relates to isolation since times of difficulties can lead to more isolation through a need to relocate to an even more remote area or through fewer mutual relationships. It also relates to powerlessness through dependence on patrons. (ibid)

Powerlessness contributes to poverty through exploitation by the more powerful and limits access to state resources. It leads to weakness because of only meagre influence on government to provide services for the poor. It emphasizes physical weakness because labour obligations to patrons leave little time or energy for own production, and because relief food in times of famine may never be obtained when people are not able to demand what is in their right. Isolation relates to powerlessness through the inability of the powerless to attract government aid, schools or other services. Powerlessness also makes the poor vulnerable to unexpected demands for repayment of loans, threat of prosecution, fine or imprisonment, or to demands for a bribe. (ibid)

When talking to peasants in the communities we realised that all dimensions of the deprivation trap are present in their every day lives. Vulnerability is present to a high extent, for example are they from time to time hit by cyclones, such as in March last year when a cyclone hit the area and 1.5 million cashew trees were destroyed and many
families lost their homes. This meant a significant decrease in income during 2008 and new trees needs to be planted. Trees that will not produce nuts for a couple of years, leading to decreased incomes for the next years as well.

We also heard of rice crops failing because of irregular rainfall. This in turn leads to further poverty leading to difficulties paying for medical care or other necessities which in turn may lead to physical weakness. These peasants were all located tens of kilometres away from the village centre, making it difficult to reach necessary services or markets for their cashew. In addition to this, the roads were in extremely bad condition. The members of the peasants associations we visited told us how they gained strength as they became members of the association, now for the first time local politicians listened to them. This is a very positive change but we have to remember that there are still individuals not able to join an association.

When discussing earnings with the cashew peasants we could also see signs of inequality. We were told how the peasants in the associations now receive an increased income, when new companies doing business directly with the associations have emerged. That in turn increases the income for cashew growers not in an association, when a neighbour earns 8-9 MZN/kg they do not wants to sell their cashew for 5 MZN/kg. But still the percentage they receive of the price the consumer in the USA or Europe pays is exceptionally low.

### 1.3 The Value Chain Concept

A value chain is a sequence of processes, from input for a specific product, to production and finally to consumption. All steps of the process are taken in to account, including boundaries between national and international parts of the chain. Three or more of the following actors are usually included: producers, processors, distributors, brokers, wholesalers, retailers and consumers. The partners in the chain usually work together to identify objectives, they share risks and benefits and invest time, energy and resources for the value chain to work successfully. (Regional Economic Development)
Value chain promotion is the development of each stage to enhance the competitiveness of the industry. For example, introducing new processing technology can ensure quality production, however efforts has to be put in at all stages of the chain, it has to be possible to distribute and market the products, thereby giving an impact on the development of the industry as a whole. (ibid)
2. Method

2.1 Qualitative Data

Qualitative research dominates in development studies. However a study often combines features of both qualitative and quantitative methods (Mikkelsen 2005:141). A field study is a systematic study in everyday life, which emanate from interaction with and observation of those you study in the field (Aspers 2007:229). The data from qualitative analyses often come from fieldwork. During the fieldwork one spends time in the setting in which you study. Qualitative findings grow out of three kinds of data collection; firstly *in-depth open-ended questions*, second *direct observation* and finally *written documents*. Interviews with people give direct quotations about peoples experiences. Data from observations provides detailed description of people’s activities and behaviour. Document analysis offers an opportunity to study different texts from a variety of books, records and reports (Patton 2002:4f).

In our thesis we use a combination of qualitative methods and quantitative methods. Qualitative methods facilitate study of issues in depth and detail. Quantitative methods, on the other hand, require the use of standardized measures. The advantage of a quantitative method is that it is possible to measure the reactions of a great many people to a limited set of questions thus facilitating comparison and statistical aggregation of the data. Qualitative approaches, conversely, typically produce a wealth of detailed information about a much smaller number of people and cases (Ibid pp. 14).

2.2 Interviews

A semi-structured interview is where the interviewer has a clear list of issues to be addressed and questions to be answered. However, the interviewer is prepared to be flexible in the layout of the interview. A focus group discussion can also be used to interview a group. The discussion in a focus group is triggered by a stimulus which can
be a shared experience, interest and/or background or it can be given by the interviewer at
the beginning of the session (Denscombe 2007:176f).

The material used in this thesis was generally gathered through interviews during a field
study in Mozambique. A total of 45 interviews with different people and organisations
were performed. Some of the interviews were not connected to our subject as such, but
were still useful to us since it gave us better picture of the Mozambican society. The
interviews were performed during a 5 week journey to Mozambique, where we spent 4
weeks in the Nampula province in the north of the country and one week in the capital,
Maputo. The first week in Nampula we met with UCODIN. UCODIN has developed a
development plan for the province where they have identified the needs for development
and the existing resources. The first week we also met with many other companies and
different NGOs. We met with IKURU a company which is partly owned by peasant’s
associations, and financing bodies. The company supports the associations in their
development and in turn the associations sell their products through IKURU. They
mostly buy cashew, sesame, soya, beans and peanuts from the associations. Two
interviews were performed with Amoder, one in Nampula and one in Maputo. Amoder is
a not-for-profit organisation which mostly deals with microfinancing to people in rural
areas since it is often hard for them to receive credits. Amoder is also part owner in
Ozivacaju, a company which processes cashew.

We also spent some time travelling around the province; we visited Namige a small town
in the district of Mogincual which have a couple of cashew processing factories. We
visited two factories in the district, in addition, we visited two peasant associations who
sell their cashew to IKURU which then are processed in the small factories. We also went
to Angoche, a town by the coast who used to be a big industrial centre for cashew
processing, however nowadays there only exists one industry, which we visited. We went
to Ilha de Mocambique and Pemba which is more tourist oriented, although in Pemba we
visited Cabocaju the only company in Mozambique that pack their cashew into consumer
packs before exporting to Europe.
The final week we were in Maputo and met with the Swedish embassy, INCAJU (cashew institute), the foreign ministry and the agriculture ministry to further discuss our results and the information we had gathered from our trip.

Additionally, we have performed interviews with a number of Swedish as well as foreign companies which trade and deal with cashew.

2.3 Observations

During our visit to Mozambique we got to visit four factories where they process cashew. In addition we also visited one sorting and packing central for cashew kernels. The processing industries where of different sizes, one of the places we visited was a larger factory with approximately 900 employees while two of the other factories only had 20-30 employees. The fourth factory in Pemba had a workforce of 90 people. In addition to the factories we visited two peasants’ associations where we could meet with the producers.

2.4 Written Documents

A number of secondary sources have also been consulted in the thesis in order to improve our knowledge of the cashew industry, both internationally and about Mozambique as such. Much information and many reports have been written about the cashew industry which was helpful in our study. There has been rather much written about the Mozambican cashew industry due to its size during the 1970s and the fall afterwards and the controversies surrounding it.

2.5 Limitations

One limitation to this study is that it is, to a big extension based on interviews performed in Mozambique. During all, but a few, interviews our supervisor interpreted from Portuguese into Swedish to us. The difficulty in having someone translating is that the
translator can forget translating something as well as us not taking part in the conversations as much as we would have liked to.

In our thesis we present a value chain for cashew at the end market, namely Sweden. The limitation to this is that we have only received prices from a few, and in most cases just one actor, in each step of the chain. Hence, the prices do not accurately represent the average price on the Swedish market. However, it gives you a good idea of what the end market looks like.

### 2.6 Disposition

In chapter three, a background is given about the production and process of cashew, as well as a summary of the Mozambican cashew industry from the 1970s up to today. In this chapter we go through what forces were behind the collapse of the industry also, how the industry is trying to recuperate today.

In chapter four we present the structure of the Mozambican cashew value chain. We also identify four main problems in the value chain; *markets, infrastructure, the income gap* and *unproductive trees*.

In chapter five we look at the market of cashew. The world market as a whole but we also take a look the Indian industry since it plays a huge role on the world market. In addition we look at the Fair Trade and Organic market, we also take a look at the Swedish market.

Chapter six deals with cashew by-products which can be used to further increase the income. There are many products which can be used and sold besides the cashew kernel including, cashew jam, butter and juice.

In chapter seven we give our analysis of our findings where we discuss our view of the different problems surrounding the cashew industry. We address the problems presented in chapter four as well as other issues concerning cashew production.
Finally, in chapter eight we give our concluding remarks and provide some recommendations to improve the cashew industry in Mozambique.
3. Background

3.1 The Process

The cashew, *Anacardium occidental*, originates from South America and was imported to Mozambique from Brazil in the 16th century. Portuguese-run plantations made Mozambique one of the world’s leading cashew producer for much of the 20th century. In the 1960s Mozambique produced about half of the world production of cashew. (TechnoServe 2008:8) In 1972 its production peaked when Mozambique produced 216,000 tons of raw cashew out of which 67,500 tons were exported and the remaining was processed, out of which 30,000 tons of kernels were exported (INCAJU, 2009)

The process of going from raw nut to an edible kernel involves many different steps. First the raw cashew is harvested from the cashew tree. It grows beneath the cashew fruit which resembles a pear, however, the fruit is most of the time discarded. When the raw cashew arrives at the factory they are in most factories in the country steam-roasted to make the shell brittle to be able to crack it. They use the shells as fuel in the steaming process (Site visit; Namige, Angoche, Pemba 8-20 April 2009).

After the cashew has cooled down they go into the cutting room. The workers use a cutter operated by a foot pedal and hand lever to shell individual nuts. The workers protect their hands from cashew nut shell liquid (CNSL) by using castor oil. Prolonged contact with CNSL can cause burning, change in skin colour and ruptures. After the cutting the kernels goes in to a
sauna like oven to further dry the kernels and make it easier to peel of the skin which surrounds the kernel. Peeling and sorting is predominantly done by women, while cutting is chiefly done by men. The peelers use a small knife to remove the skin from the kernel. After the kernels have been peeled they do a rough sorting. Afterwards the kernels are sorted in to different categories where more experienced sorters sort the kernels into 26 different categories of kernels, according to shape, size and colour. After the sorting the kernels are vacuum packed and exported overseas, except Cabocaju in Pemba which packs kernels into consumer packets before export (Site visit; Namige, Angoche, Pemba 8-20 April 2009).

The predominant sizes of kernels are named 180, 240, 320 and 450, depending on the numbers of pieces per kilo. The kernels can be further divided into $WW$ ($white$ $wholes$), $SW$ ($Scorched$ $Wholes$). $WW$ 320 are the most popular among cashew kernels and highest in terms of availability, worldwide, $WW$ 180 is the largest and finest kernels available (Costa, Interview) Whole kernels give a higher value when exported. The whole kernel yield can reach 80% if shellers are appropriately trained according to Technoserve, this yield has so far not been reached in Mozambique while in India such yield is commonly reached (Horus, 2005).

Generally, cashew kernel yields range from about 20 to 24 percent. Thus, one metric ton of raw cashews can yield between 200 and 240 kg of edible kernel, wholes and pieces, after processing, depending on country of origin (RRF Cashew Brochure).

The producers i.e. the peasants planting cashew in Mozambique primarily consist of small producers rather than large plantation. The average number of producers in Mozambique was 945,000 in 2005, average production per producer was 74 kg of raw
Cashew in 2005 (GTZ, 2008). The average yield of cashew per ha in Mozambique is well below both India and Viet Nam (1000 kg/ha). A system of producer organization is beginning to form in the country; however, it is still on a low level. The absence of organizations leads to the producers having insufficient information about current cashew trends and prices. In addition they are isolated with their buyers and do not have sufficient bargaining power (Horus, 2005). To overcome this, individual peasants can go together to form an association, which enables the farmers to sell their raw nuts together. The associations can then form a forum to further increase their influence. The associations we visited in Namige expressed a sense of “becoming someone” when they formed an association, now they have some chance to influence buyers. Also the fact that they can become a legal organization improves their chance to influence (producer association, interview). The peasants sell their cashew either on their own or through the organization to a buyer who either exports the raw cashew to India or have them processed in the country and later exported as cashew kernels.

3.2 Prices of Cashew

Cashew kernels are, as stated above, sold in different categories, the reference point being the price of WW 320 (the most common cashew sort). The price for WW 320 remained between $4.96-5.84/ kg from between 1988-1997. The top price was reached in 1999 at $6.6/kg. The price then dropped sharply from 2000 and on, and reached bottom price in 2002 at $3.85/kg. Figure 3.1 displays the fluctuations in cashew prices from 1988-2009.

Source: Horus. 2005, Cirad’s Market News Service and Commodity Online
The price has been recovering since 2003 and in 2004 the price was at $5.62/kg at the end of the year (Horus, 2005). In May 2005 the price for WW 320 was between $5.51-5.73/kg, in March 2006 the price had dropped to $4.18-4.29/kg, in May 2007 it had increased somewhat to between $4.51-4.62/kg (Cirad’s Market News Service) The most current price available is at $4.4-4.85/kg, March 2009 (Commodity Online) (See figure 3.1).

The price of cashew is mainly determined by the supply of raw cashew. For instance, in 2000 the price of cashew kernels decreased sharply partly due to the increase in the Brazilian and Vietnamese crops. In addition, the behavior of some actors can determine the price in the way that price can be artificially influenced by exporters or traders seeking higher prices, through the spread of information on the expected harvests. The price of substitute products, such as almonds also have an affect on cashew prices. It is estimated that a 20% difference in almond price can lead to rise or fall in demand for cashew kernels, since a number of consumers will switch from one nut to the other according to price changes (Horus, 2005). Depending on price; supermarkets will decide to increase or decrease shelf space given to cashew; processors will use more or less cashew kernels in their nut mixes or they will modify their cashew kernel grade; consumers will purchase other nut products, approximately 20% of consumers are price sensitive however there are of course consumers who will not substitute no matter the price (ibid).

The impact of price is mostly felt among processors and supermarkets, end consumers do not see much fluctuation in the retail price. If prices drop processors increase their use in cashew and supermarkets increase their purchase without transmitting the drop in price to the end-consumer. If the price is high both processors and supermarkets reduce their use and purchase of cashew kernels (ibid).
3.3 The Fall of the Mozambican Cashew Sector

Production of cashew in Mozambique peaked in 1972 and started to fall after that. In 1972 there were 11 factories with a capacity to process 150,000 tons of raw cashews. The factories employed more than 17,000 workers. At this time cashew was the main export product and represented some 26% of Mozambique’s total export revenue. In addition it was the main source of income for almost one million rural households, about 60 per cent of the rural population at that time (INCAJU 2009).

It was, however, the civil war which started in 1982-83, which caused the biggest impact on the production (Hanlon 2008:36). The civil war displaced 4.5 million people which disrupted agricultural activities, most cashew trees were left abandoned, and trading activities ceased, there were simply no buyers. The war also destroyed many of the important transport infrastructures. There are a number of additional reasons to why the commercialization and production of cashew plummeted. Firstly, many Portuguese industry owners as well as Indian traders left the country, which disrupted the rural marketing network. Secondly, official farm-gate prices were fixed well below market levels, to benefit local processors. This further depressed the peasants’ incentives to take care of their trees, harvest the cashew and sell them in the market. Third, the promotion of collective farming and the creation of communal villages in major cashew producing areas, like Nampula, moved people away from their machambas (farm plots) making it difficult for the peasants to take care of the trees (INCAJU 2009). The colonial government had allowed raw cashew to be exported to India but by independence the new government banned the export of raw nuts to protect the local industry, as production had already fallen below the capacity of the existing 13 factories. Cashew production slowly recovered from its all time low in 1983 and in 1992 production exceeded the remaining processing capacity therefore the ban was lifted and replaced with an export quota and export tax on raw cashew (Hanlon 2008:37).

After the export ban was lifted only a limited amount of raw cashew could be exported. A 60 per cent tax on the difference between the FOB and factory gate prices on raw cashew and in addition a quantitative restriction of 10,000 tons was imposed. The quota was
subsequently lowered to 30 per cent in 1992/93, in 1993/94 the export tax remained the same but the quota of 10,000 tons was loosened and in 1994/95 it was lifted. In 1995/96 the export tax was reduced to 20 per cent of the FOB value. In Figure 3.2 one can see the export tax of cashew and the proposed value from both the Mozambican government and the World Bank (McMillan 2003:107f).

3.4 The World Bank

In the early 1990s the World Bank pushed for privatization of larger companies, and by 1999 virtually all government-controlled parts of the economy had been privatized. In 1994 the World Bank commissioned a study of the cashew industry which was released in mid-1995. It said that the Mozambican cashew industry was so inefficient that the only choice was to liberalize exports of raw cashew. The processing industry claimed that the report had not talked to anyone in the industry and that the data was based on the worst possible year – the transition year from state to private ownership. The report argued that free export of raw cashew would lead to such a huge income for peasants that this would more than compensate for any industrial jobs lost. In 1995 a World Bank’s Washington-based country operations director was in Maputo to discuss the details of the CAS (Country Assistance Strategy). Allegedly, she stated that the World Bank would refuse to submit the CAS World Bank executive board if ministers did not accept a free market in raw cashew. Because this would have halted the flow of aid the ministers caved in (Hanlon 2000:34f).

In 1997 the World Bank came in to heavy pressure because of their imposed condition. Hence, they ordered a new study, and suspended the demand for further cuts in the export duty on raw cashew from the then level of 14 per cent. The new study was carried out by international consultants Deloitte & Touche and released in September 1997. The new study state that the previous policy should be abandoned, it argued that the preceding policy will dismantle the processing industry. The key points of the new study were; firstly that Indian subsidies make the competition unfair for Mozambique. Secondly, Mozambique earns an extra $130 per ton by processing its own cashew kernels, in
contrast to earnings from exporting raw cashew; finally it concludes that peasants did not gain anything from liberalized exports since any extra profits were all held by traders. (Hanlon 2000:34). Privatization had revived the industry but the new policy began to bite and factories closed. The export duty was pushed up to 18% in 1999/2000 but it was too late, more than 10,000 people had lost their jobs. (Hanlon 2008:39)

According to Hanlon (2008:40) the World Bank failed to acknowledge four important issues. First, that cashew is a crop with a much slower response to market signals since it is a tree crop. Second, the World Bank wanted to support rural peasants but failed to acknowledge the level at which urban wages went back to rural areas since most factories were situated in towns with rural hinterlands. Third, the World Bank failed to see the gender differences. Half of the employed were women and they were more seriously affected when they became unemployed. Lastly, the World Bank ignored both the physical and political impacts of the recently terminated civil war.
3.5 The Mozambican Cashew Industry Today

Today there are 23 plants processing cashew in Mozambique, 11 in Nampula Province (INCAJU 2009). Mozambique had in 2001/02 only four small factories. Hanlon (2008:43) argues that both the technical and managerial structures in the cashew industry have changed since before independence. In the colonial era the industry used highly mechanized kernel crackers and hand labour for cleaning and sorting. Many argued that mechanized cleaning breaks to many kernels. Today Mozambique use a manual cutter operated by a foot pedal which was developed in India and then imported to the factories. The simpler technology means that virtually all operations in the factory – cutting, cleaning, and sorting – are done manually. In general, the total output per worker is about 3 tones of kernels per year.

Cashew production has increased the last couple of years (see Table 3.1 and Figure 3.3). In 2000/01 the marketed output was merely 52,000, ton last season 2007/08 the output was almost the double at 96,000. In 2003/04 the largest production in a long time was recorded (104,000 tons). The reason for this is stated to be good weather conditions (INCAJU 2009).

Table 3.1 Cashew Production in Mozambique 2000-2008

<table>
<thead>
<tr>
<th>Season</th>
<th>Marketed Output (Metric Tons)</th>
<th>Raw Export (Metric Tons)</th>
<th>Processing (Metric Tons)</th>
<th>Total Export Revenues (US Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/01</td>
<td>52088</td>
<td>27846</td>
<td>6275</td>
<td>24138</td>
</tr>
<tr>
<td>2001/02</td>
<td>50177</td>
<td>25592</td>
<td>2500</td>
<td>11761</td>
</tr>
<tr>
<td>2002/03</td>
<td>63818</td>
<td>36289</td>
<td>3000</td>
<td>15214</td>
</tr>
<tr>
<td>2003/04</td>
<td>42285</td>
<td>20217</td>
<td>3200</td>
<td>10008</td>
</tr>
<tr>
<td>2004/05</td>
<td>104337</td>
<td>63346</td>
<td>13870</td>
<td>44787</td>
</tr>
<tr>
<td>2005/06</td>
<td>62821</td>
<td>26349</td>
<td>21943</td>
<td>19912</td>
</tr>
<tr>
<td>2006/07</td>
<td>74397</td>
<td>24176</td>
<td>20280</td>
<td>24243</td>
</tr>
<tr>
<td>2007/08</td>
<td>96540</td>
<td>30522</td>
<td>24000</td>
<td>33995</td>
</tr>
</tbody>
</table>

Figure 3.3 Cashew Production 2000-2008


Hanlon (2008:43) cites that the cashew industry needs experienced hands-on management.

The Cashew Promotion Institute (INCAJU) began its work in 1999. It is a public institution which deals with the cashew value chain. In 1999 a cashew law was passed at the parliament stating that the tax on FOB (Free on Board) export price on raw cashew should be between 18-23 per cent. The tax revenues should be divided between two areas; 80 per cent of the revenues should go to cashew production i.e. research, nurseries and extension services; 20 per cent should go to cashew processing. A Cashew Master Plan 2000-2005 was developed with an emphasis on cashew value chain. The value chain includes (see figure 3.4) research, production and distribution of seedlings, integrated pest management and extension services (INCAJU, 2009).
The outcome of the Cashew Master Plan 2000-2005 is reportedly satisfactory. In 2007 about 1.5 million seedlings were produced in 34 nurseries. In the last five years, approximately 6.3 million seedlings have been distributed. Four certified cashew clones were developed replanting and propagation. In 2007, 3.4 million trees were sprayed which can increase productivity up to 12 kg/year/tree. The processing industry today employs more than 6,000 workers half of the employment lost in the 1990s (ibid).

Furthermore, the marketed output of raw cashew production has increased (table 3.1 and figure 3.3) from 52,088 tons in 2000/01 to a little less than the double, 96,540 tons, in 2007/08. The processing industry also increased its capacity from less than 2,000 tons/year in 2001/02 to more than 34,000 tons/year in 2007/08. A second Cashew Master
Plan (2009-2013) is also under preparation by INCAJU, where the goal is to distribute 1.5 million seedlings per year and to spray in average 6 million trees per year. In addition the new master plan states that one has to find a niche market and concentrate on market diversification in order to be able to compete with the large cashew exporting countries such as India and Brazil. In 2005, a Mozambican brand name was introduced, for cashew kernel export – *Zambique* (ibid).

Mozambique is also attempting to catch up with West Africa, the largest producers of cashew on the continent, through agreements and incentives in the industry. Most of the producers of cashew in Mozambique are small-scale producer spread across large areas. This leads to difficulties when trying to implement programs to improve incomes for the rural population. The processing industry, both small and medium-scale, use labour intensive methods, but they could benefit from partial mechanization in sections like peeling and grading. To create incentives for processors, a proposal for “payment for productivity” is being discussed between producers and the government and an agreement between processors and the national cashew workers union, is to be signed shortly. It is meant to improve workers welfare through numerous non-wage measures, including guarantee of minimum safety and hygiene conditions and assurance of transparency in factory operations. This together with introduction of quality systems in some factories will facilitate international certification of processing units, an important step for the reputation of the Mozambican cashew industry (African Cashew Alliance).

### 3.6 Reaching the Poor

Of Mozambique’s population 70% is living in rural parts of the country predominantly surviving on subsistence farming. The income per capita in Mozambique is $340, well below the sub-Saharan average of $754. However since the end of the civil war in 1992 Mozambique’s economy has grown substantially, with an average economic growth of 9% between 1997 and 2003. During that period the population living below the poverty line fell from 69 to 54%. (UNICEF)
Despite this economic recovery, Mozambique is still among the 20 poorest countries in the world, ranking 175 of 179 on the 2008 Human Development Index. Half of the adult population is living in poverty and 58% of the children are living below the poverty line. (ibid)

Poverty reduction efforts and other social advances have not benefited the population equally. Inequalities in income, education, health, nutrition and access to safe water and sanitation are present between rural and urban areas, between men and women and between those who are educated and those who are not. (ibid)

To sustain the decrease of the population living below the poverty line numerous projects are undertaken, such as micro credit loans. But to be approved for micro credit one has to be able to leave something as security, for this reason micro credits often does not penetrate down to the most needing. For these people village banks can be an option. A village bank is a number of people forming a group saving money together; they elect a president and a secretary and keep the money everyone save each week in a box. An organization helps them start it up by training a community trainer who sells notebooks and boxes provided by the organization. The money for the sales goes to the organization, with the community trainer receiving a commission. The village bank also receives $15 as help to start up. In Nampula province the organizations SNV, OPHAVELA and Facilidade together provide assistance for village banks. The village bank has four different accounts; savings, fines (for not attending meetings and late payments), emergency social fund and interest. When the village bank has grown it can join a savings and credit cooperative made up by village banks from the district. The money is transferred to the cooperative with a representative from each village bank in

---

**Mozambique in Numbers**

<table>
<thead>
<tr>
<th>Population:</th>
<th>20.5 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children under 18:</td>
<td>10 million</td>
</tr>
<tr>
<td>Income per capita:</td>
<td>US$ 340</td>
</tr>
<tr>
<td>People living below the poverty line:</td>
<td>54%</td>
</tr>
<tr>
<td>Under-five mortality rate:</td>
<td>168/1,000 live births</td>
</tr>
<tr>
<td>National HIV and AIDS prevalence:</td>
<td>16%</td>
</tr>
<tr>
<td>Literacy:</td>
<td>66% for men 33% for women</td>
</tr>
</tbody>
</table>
the cooperative’s board. When borrowing from the village bank there is a 10% interest rate and in the cooperative there is a 5% interest rate for borrowing and 3% for savings. (O’Reilly, Shipembere, Interview)
4. The Value Chain

4.1 Marketing Channels

The marketing channel for cashew kernels includes five types of operators; trading houses, brokers, importers, processors (roasting and packing) and distributors in the consumer country. (Horus, 2005)

Trading houses represent 65-70% of white kernel import, they sometimes import through brokerage firms. The term trading house is used to describe all various types of international traders including those who specialize in importing. (ibid)

Brokerage firms are either small traders working on small margins with low-risk exposure or large trading houses situated mainly in London, Rotterdam and Geneva (European market). These firms have a good view of the market and organize the deal between seller and buyer for a commission of approximately 4 to 6 cents/kg. (ibid)

Importers are dependent on brokers for their supplies, and sell to the roasters. They buy in large quantities and sell in small batches in order for the processer to avoid having to carry a large stock. (ibid)

The processors roast, add flavour and pack the kernels and finally they sell the kernels under their own brand or under contract with large retail outlets. Most processors purchase their kernels from importers or trading houses. (ibid)

The final actor is the retailer, which is represented by two different channels; The Multiples, chains of large surface area stores which generally control more than 80% of the retail food market in Europe. Secondly, Wholesalers and grocery stores which include small retail outlets such as the corner shop or retailers on proximity markets. (ibid)
4.2 The Mozambican Cashew Value Chain

Mozambique used to export between 15 000 and 30 000 tons of processed cashew kernels in the 1970s, but these exports have since then decreased dramatically (Horus, 2005), to a volume of around 3000 tons in 2008 (Amos, Interview). Today Nampula province is the province that produces the most of Mozambique’s cashew, with 40% of the country’s production and has together with Cabo Delgado 69% of the country’s processing capacity. Inhambane produces 21% and has with Maputo and Gaza 22% of the Mozambican processing capacity. (Blidh, 2009)

For people who want to begin to grow cashew or needs to replant trees, the only one, except for a few NGOs, distributing seedlings is INCAJU through their nurseries. They are also the ones providing spray for pest or diseases (Amos, Interview). When buying the cashew, companies like IKURU, provides sacks for the peasants and picks up the cashew from them after they have gathered it from all the members of their association (IKURU, Interview). Some processing factories put a scale outside their factory and let producers living nearby bring their cashew, weigh it and sell it directly to the factory (Molta, Interview). Another way is selling the raw cashew to small scale traders who travel around villages buying up raw cashew from peasants and selling it further to traders or processors. There is usually a close connection between these small-scale traders and larger ones who often pay for the cashew in advance (Blidh, 2009). Some of the raw cashew is then sold to India while the rest is processed and later exported to whole sale dealers in the USA or Europe. They in turn sell it further to companies who pack and put their own brand on the kernels, sell them to retailers and in the end they end up with costumers. (See figure 4.1)
Figure 4.1 The Mozambican Cashew Value Chain

Consumer

Retailer

Processor (International level)

Distribution (International level)

Processing (National level)

Distribution (National level)

Production

Input

Consumers

Supermarket/ Shop

Processor

Wholesale dealer, Europe/USA

India (Raw cashew)

Exporter

Small scale processor

Medium scale trader

Medium scale processor

Small scale trader

Producers

Seedlings: INCAJU, NGO

Pesticides: INCAJU
4.2 Weaknesses in the Mozambican cashew value chain

When we examined the Mozambican cashew value chain we acknowledged four problems to be especially challenging: markets, infrastructure, income gap and unproductive trees.

4.2.1 Markets

When Mozambique today is trying to recuperate its cashew industry, several of the different factories and exporters we talked to expressed difficulties locating new markets for their cashew kernels (Cuamba, Cabo Caju, Interview). Of the traders and factories we have spoken to, most of them rely on only one trading partner for their cashew export, for both raw cashew and processed kernels, putting them in an extremely vulnerable position and that level of the Mozambican cashew value chain in a state of monopsony. Carlos Costa, President of African Cashew Alliance (ACA) mentions another problem for the Mozambican export of raw cashew. As noted before, Mozambique relies on a single buyer for its raw cashew, India, who increasingly prefers higher quality West African raw cashew, meaning the demand for raw cashews from Mozambique is declining. (African Cashew Alliance)

4.2.2 Infrastructure

When travelling through the Nampula province in northern Mozambique we clearly noticed the inferior infrastructure. Something our interviewees testified to as well (Massonda, Interview). Particularly during rainy seasons it is difficult for companies to pick up their purchased crops and for their technicians to reach the peasants they are to advise (IKURU, Interview).

Infrastructure and roads in particular is essential for the Mozambican cashew growers. An improvement of roads would generate growth and reduce poverty by lowering transportation costs and stimulating development of markets. This in turn encourages
peasants to increase production and provides them with opportunities to do so by making it easier for them to obtain inputs and to sell their produced commodities. It would also make it easier for children to attend school, for people to reach health centres and to travel to jobs in non-agricultural sectors. Road improvements would also contribute to social equality and national integration for the people of poorer areas. Further it would give Mozambique a strategic role as transport provider for neighbouring landlocked countries, opening up for possibilities for external markets. (World Bank, 2001)

There are still areas of Mozambique that are not connected to either the north or the south with paved roads of any kind. This is why it is critical to not just prioritise primary roads but secondary and tertiary as well, especially in rural areas. A problem with better roads is however the spread of HIV/AIDS. It is well understood that better quality roads contribute to the spread of HIV/AIDS, in particular road workers, truckers and people living nearby and using the roads are at high risk. The rapid spread of HIV/AIDS in Southern Africa means that road programs today need to be accompanied by measures to prevent the spread of HIV/AIDS. (ibid)

4.2.3 Income Gap

The world cashew export business is today dominated by middlemen; they control prices and quality requirements (FAO). Of the incomes earned during this export process the producers get between 5.9-8 % of the consumer value and the exporters between 19.56-34.87%. The rest end up outside of Mozambique (Our own calculation).

The Mozambican cashew producer earns on average $0.3/kg for raw cashew. Five kg of raw cashew is needed for one kg of kernels, giving the peasant $1.5/kg kernels (Amos, Interview). The processed kernels are then exported for a price of $4.9/kg for regular kernels and $7.28/kg for fair-trade kernels to a wholesaler (Raposo, Interview). A processing company then buys the cashew kernels in bulk for the price of $7.5/kg, and either adds flavour and puts it in consumer pack or keeps it in bulk. The processing company then sells it in bulk to a supermarket for $10/kg kernels who then in turn sells it
in bulk to the consumers for $19.16/kg. For packaged kernels the supermarket pays on average $14.05/kg and sells it to the consumer for $25.05/kg on average. (ICA, Interview). Thus the peasant earns 7.8% of kernels sold in bulk and 5.98% of packaged kernels, a substantial income gap between the peasants and retailers within the value chain. (However there are prices for processing after the kernels have been exported that are not presented here.) In table 4.1 and figure 4.2 one can see the difference in income between regular kernels in bulk and consumer pack, but also Fair Trade kernels in consumer pack.

Tabel 4.1 Cashew prices for the different actors in the cashew value chain. US Dollar/kg

<table>
<thead>
<tr>
<th></th>
<th>Producer</th>
<th>Broker</th>
<th>Exporter</th>
<th>Processor International (Sweden)</th>
<th>Retailer (Sweden)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>1.5</td>
<td>4.9</td>
<td>7.5</td>
<td>10</td>
<td>19.16</td>
</tr>
<tr>
<td>Consumer pack</td>
<td>1.5</td>
<td>4.9</td>
<td>7.5</td>
<td>14.05</td>
<td>25.05</td>
</tr>
<tr>
<td>Fair Trade</td>
<td>1.5</td>
<td>7.28</td>
<td>29.06*</td>
<td>31.7</td>
<td>42.22</td>
</tr>
</tbody>
</table>

*Estimated Broker Price Sweden

Figure 4.2 Gross value of sales for different actors
4.2.4 Unproductive Cashew Trees

One of the reasons for low production of raw cashew in Mozambique is that the existing trees are old and sometimes infested with powdery mildew (*Oidium anacardia*) and the Helopeltis insect. Two of INCAJU’s tasks are producing more seedlings in nurseries and spraying and maintaining old trees (Horus, 2005).

An average tree without any maintenance produces approximately 3 kg per season, by just keeping the area clean around the tree increases the yield up to 7 kg. Spraying against Oidium can further increase the production to 11 kg per tree. INCAJU have major spraying campaigns and covered 3 million trees in 2006 and 3.7 million in 2007 respectively. However, spraying is only a short term solution (ibid).

Since 2000 INCAJU has distributed more than 6 million seedlings. The goal is to replace the existing trees with newer varieties that can withstand disease and give a higher production (Hanlon 2008:47). After initial planting a cashew tree generally produces for up to 60 years (Brad 2008:28). There are roughly 29 million cashew trees in Mozambique with an extremely low yield. The average yield of cashew trees in Africa is 350-500 kg/ha compared to India and Viet Nam which produces approximately 1,000-1,500 kg/ha.

It seems likely that it is more important to invest in and focus on increasing the quantity and quality of the raw cashew, rather than focusing on upgrading existing trees, in order to eventually receive a higher production, due to the fact that many of the existing trees are too old. (African Cashew Development Project 2009) According to Tanzanian research maximum, productivity of a tree is reached at 15 to 20 years and declines quickly afterwards. In East African countries 50% of cashew trees are over 40 years old, 10% are between 20 and 40 years old and only 40% are less than 20 years old (Horus, 2005).

Even though the seedlings and spraying are subsidized to some extent, many peasants simply don’t have sufficient money or access to credit to make use of it. Seedlings from nurseries cost, at a subsidized price, 10 New Mozambican Metical (MZN) ($0.38) instead of 15 MZN ($0.57). In the district of Mogincual the seedlings are, however, free, because
of the cyclone in March 2008, which destroyed 1.5 million trees in the surrounding districts. After the cyclone there were still about 8 million trees in the Nampula Province, about 30 per cent of all the cashew trees in Mozambique (Interview INCAJU). In addition to finance for new seedlings the incentives to acquire new trees decreases since the peasants have to wait three years until the tree has reached an age were some cashew can be obtained. What is more, knowledge about the advantages of new clones is insufficient (Horus, 2005). Spraying costs are $1 per tree which would be a good investment if it could increase the cashew yield from 3 or 7 kg to 11 kg. But if peasants have many trees it is difficult to get credit for spraying (Hanlon 2008:47). Peasants also need to apply 3-4 pesticide sprayings per season (Technoserve 2008:28).
5. What does the World Market for Cashew Look Like?

5.1 The World Market of Cashew

Worldwide demand for cashew is steadily increasing. The increase is mostly concentrated in North America and Europe. Cashew kernels are consumed both due to the health benefits and the taste of the kernel. Cashew kernels are consumed as snack food, bakery products and in many curry dishes. Main consumers in the world market are the United States with 34% followed by Europe 21%. Besides the main market there is a very limited local market for cashew kernels within Africa. Worldwide production of raw cashew has increased steadily at about 7% per year the last decade. Viet Nam has become the largest producer; it has reached its leading position through fast growth as a result of the government’s efforts to promote the cashew industry. After Viet Nam, West Africa is the second fastest growing producer. (GTZ 2008:14ff).

India and Viet Nam accounts for 45-50% of world production of raw cashew and almost 100% of raw cashew imports. Africa accounts for 35-40% of world production and almost 100% of world export of raw cashew. Almost all raw cashew is processed in India, Viet Nam and Brazil (in that order). Less than 2% of world production is processed in Africa (Horas, 2005). Hence, there is a huge opportunity to increase processing of cashew in Africa instead of exporting so much raw cashew. African production has been rising in conjunction with the increasing demand for raw cashews from India and more recently Vietnam.

Cashew kernel export from Viet Nam has increased from 80 million kg in 2003 to 153 million kg in 2007. Thus, Viet Nam has almost doubled its export of kernels in four years, the main reason for this is explained in part by some Indian traders processing in Viet Nam rather than in India, a result of labour problems and the availability of processing in India. The rapid growth of the Vietnamese industry in production, raw cashew imports, and processing capacity have been the underlying factors in Vietnam’s export surge (RRF Cashew Brochure 2008).
The three biggest exporters of cashew kernels are; Viet Nam (153 million kg in 2008), India (112 million kg 2008) and Brazil (51 million kg 2008) (RRF Cashew Brochure 2008). Mozambique used to export between 15,000 and 30,000 tons in the 70s and has dropped to levels of 3,200 tons (2000) 1,000 tons (2001) and 540 tons (2002) (Horus, 2005). However, according to FAO, in 2006 Mozambique had once again increased its export numbers to 2,200 tons (Faostat).

The increase of cashew kernel import has been dramatic the last couple of years, see figure 5.1. According to FAO total world import of shelled cashew kernels in 2000 was 160,100 tons and by 2006 it had increased to 298,800 tons an increase with 87% in 6 years. The import for USA in 2000 was 81,500 tons and in 2006 the import for processed cashew was 115,100 tons, an increase of 41%. The European Union imported 45,800 tons in 2000 and by 2006 it imported 109,600 tons which shows an increase of 139% (Faostat).
Cashew kernels were up until the 90s almost exclusively exported to developed countries. However today, new markets for processed cashew have emerged, particularly, China, the Arabian Peninsula and the Russian Federation. Consumption is increasing rapidly in the Asian population and the demand is growing, as a consequence there is a competition of already existing markets hence Europe and the US are seeking new sources of supply. In the coming years the market for cashew will increase by 5-8 %. An estimation of world demand by 2015 shows that between 540,000 and 760,000 tons of processed cashew needs to be processed and exported. Nevertheless, the estimates imply a world demand in excess of the production of raw cashew (Horus, 2005).

Apparent consumption increased tremendously in the European market. Cashew consumption is apparently an upward trend; the reasons for this are the increased interest in kernels in general due to its nutritional effects and increased purchasing power in many new markets such as Russia and Eastern Europe. Consumption of cashew kernels, however, remains low in Europe compared to the US consumption per capita, which was 320 grams per annum compared to 105 grams per annum for Europeans in 2002. The low level of cashew consumption nonetheless, suggests that cashew kernel consumption in Europe has a huge potential for increase the coming years. In Europe cashew is almost always consumed as a snack, salted and roasted alone or in a mix with other nuts, 90% is consumed as snack. Cashew has long been considered a luxury product but a change is underway (Horus, 2005). The number of brands available for the consumer is also increasing. Only in Sweden there are at least 14 different brands for cashew, and probably many more, if one includes mixed nuts.

5.2 The Indian Cashew Industry

India is one of the world’s largest producers of raw cashew with a production of 330,000 tons in 2003. Since 1999 India’s share in the world production has been between 25 and 35 %. This however is not sufficient to sustain the Indian cashew industry and therefore India imports a large amount of raw cashew. They imported 435,000 tons in 2003 (Horus, 2005) of which 20,217 tons was imported from Mozambique and in 2008 that figure had
risen to 30,522 ton of raw cashew. (INCAJU, 2009) Unlike Mozambique, India has a large domestic market for processed cashew kernels, estimates of the domestic production sold locally is 75,000 tons (Horus, 2005). The Indian cashew production, also unlike Mozambique, is heavily regulated. Kerala province produces 50% of the Indian raw cashew where producer prices and marketing are controlled. The state Cashew Development Corporation and Cashew Workers Apex Industrial Cooperative Society have monopoly on acquiring raw cashew. They fix prices and distribute raw cashew to processing factories through a network of harvest and storage cooperatives. The state is said to be making a great loss on this, a loss that is written off, representing a subsidy to peasants and processors. The domestic market for processed cashew kernels is also highly protected through a 40% tax on imported kernels. (McMillan, Horn, Rodrik, 2003) The total world export of cashew was 220,000 tons in 2003 of which 99,000 tons came from India, 49% of this was exported to the US, 30% to Europe, 14% to the Middle East and 7% to the Far East, mainly to Japan (Horus, 2005).

### 5.2.1 Wage Comparison - Purchasing Power Parity

Per capita GNI and GDP differences between developed and less developed countries (LDC) are exaggerated when using official foreign-exchange rates to convert LDC national currencies into US Dollar. It does not measure the relative domestic purchasing power of a different currency. Therefore Purchasing Power Parity (PPP) is used to calculate a common set of international prices for all goods and services produced, valuing goods and services at US prices. Hence PPP defines how much of a foreign country’s currency is needed to purchase the identical number of equal goods and services in the local market as $1 would buy in the US (Todaro, Smith 2009).

Wages in the processing industry differ between India and Mozambique; in India the fastest workers earn 70 rupees a day which is equivalent to $1.47, (Lundbäck, 2008) whereas in Mozambique the fastest worker earns 52 MZN a day, equivalent to $2.21 (Molta, Interview). The Indian cashew processing industry has 14% less in expenses than
Mozambique, much because of lower wages. In figure 5.2 differences in minimum wages between Mozambique and India is presented.

![Figure 5.2 Increases in Minimum Wages, India-Mozambique (US Dollar/day)](image)

Source: Paycheck, Afikagrupperna

In Figure 5.3 one can see the difference between the minimum wages per day in India and Mozambique compared in PPP. Through this we can see that the differences in wages are not as evident as thought.

![Figure 5.3 Minimum Wages/day (PPP) India-Mozambique](image)

Source: IMF
5.3 The Fair Trade Market

A global survey was released in 2009 by GlobeScan, it was commissioned by FLO with a sample size of 14,500 people in 15 countries. The survey demonstrates that support for Fairtrade is on the rise. Among those surveyed, almost three quarters of shoppers believe it is not enough for companies to do no harm, but that they should actively support community development in developing countries. ‘Active ethical consumers’ make up more than half the population (55%) in the countries surveyed. These shoppers have higher expectations of companies’ social, economic and environmental responsibilities. These attitudes are fuelling support for Fairtrade as more consumers identify with its values. Half of the public (50%) in the fifteen countries surveyed are now familiar with the Fair Trade Certification Mark, or in North America the Fair Trade Certified™ label. Of these people, nine out of ten (91%) trust the label. 64% of all consumers believe that Fair Trade has strict standards, a quality that also closely correlates to consumer trust. Almost three quarters of shoppers (72%) believe independent certification is the best way to verify a product’s ethical claims. Sales indicators show more people are shopping for Fair Trade. Sales were up in 2008 (as compared with 2007) by 24% in Austria, by 40% in Denmark, by 57% in Finland, by 22% in France, by 75% in Sweden, by 43% in the UK and by 10% in the US (FLO Fairtrade Labelling Organizations International).

There are currently some companies selling Fair Trade cashew in Mozambique. One processing company, called Ozivacaju in Nampula province sells Fair Trade kernels through IKURU. The volume for 2008 was 60 tons, which is likely to double next year according to the Dutch NGO SNV (SNV 2008). To be able to create a Fair Trade supply chain a company called FairMatch Support, has been involved. FairMatch Support is a Dutch based organization, specialized in developing and implementing new sustainable supply chain concepts. FairMatch is linking producers from developing countries to Western end markets and vice versa. They operate in a network of local partners in Africa and Asia. FairMatch Support has been running a cashew program in Africa for the past two years. This program has been extended and expanded in a joint program of GTZ,
Fair Trade is based on a partnership between producers and consumer, it offers producers a better deal and improved terms of trade and offers consumers a way to reduce poverty through their every day shopping. If a product carries the Fair Trade mark it means that traders and producers meet Fair Trade standards. Most products have a Fair Trade price which is the minimum price that must be paid to the producers. Furthermore the producers get an additional Fair Trade premium which is to be invested within the local community. There are minimum requirements for producers of Fair trade cashew. Firstly, workers within the processing units must be adequately protected from cashew nut shell liquid (CNSL). The workers must in addition receive protective garments and oils from the employer. The employer is also responsible for ensuring that employees are trained in the use of protective garments and oils and that the workers use them correctly. (FLO Fairtrade Labelling Organizations International) The current Fair Trade minimum price for conventional cashew kernels is 7.28 $/kg and for organic cashew kernels 7.71 $/kg. The premium for both organic and conventional is 0.22 $/kg (FLO Fair Trade Minimum Price). The amount of Fair Trade Premium that a Fair Trade organization receives will depend on the quantity of Fair Trade products that have been sold. The Fair Trade Premium is paid separately from payments for the product and the company does not own the Premium and the premium is intended to be used for the benefit of the workers, their families and their communities (FLO Explanatory Document).

5.4 The Organic Market

In Northern Europe the consumption of organic products is most widespread. The most optimistic estimates show a potential for a 15% increase in cashew kernel consumption over the last future years However in some European countries, e.g. France, organic consumption is far less widespread and an increase in these countries is less anticipated (Horus, 2005). According to a market study of the European market for organic cashew prepared for EPOPA, the European organic cashew market was assessed at 850 – 900
tons in 2001. This is equivalent to 1.4 - 1.5% of the European cashew market. Cashew traders expect that the organic cashew segment will continue to grow, at a pace of 15% for the coming years (Grolink).

Organic cashew cannot be produced in Mozambique in general due to the spraying of trees against the mildew disease. However in EPOPA (Export Promotion of Organic Products from Africa)\(^1\) it states that "sulphur spraying against powdery mildew is allowed in organic agriculture" (EPOPA) Hence, it could possible to grow organic cashew in Mozambique if one were to use sulphur spraying. On the other hand, some reports argue that excessive sulphur spraying has led to negative environmental consequences in Tanzania (Horus, 2005). In addition the new trees which are planted through INCAJU are more tolerant to pest and diseases and might therefore not need any spraying at all.

### 5.5 Swedish Import of Cashew Kernels

Swedish imports of Cashew kernels have increased substantially, with an increase of 2135% over a period of only eight years, from 159 tons in 2001 to 3395 tons and in 2008 (SCB). It is both plain cashew kernels and mixes of spiced nuts that increase and today they sell more than crisps and cheese doodles together. They are a very important segment of retailer’s sales (Bynerts, 2008). Sweden imports most of its cashew kernels from brokers in Holland, but with a few hundred tons coming from Vietnam, India, Brazil and Germany each year (SCB). The financial crisis has slowed down the growth since last year, however several importers describe the last four years as an explosion even with the financial crisis. The Swedes have truly discovered cashew kernels, they have been promoted heavily for its health benefits and that is one reason for the increase, but the taste and increased choice is also a large part of it. (Bynert, 2008)

---

\(^1\) The EPOPA programme was a programme from the Swedish International Development Cooperation Agency, Sida. It was implemented in Tanzania by two consultancy companies, Agro Eco and Grolink.
Table 5.1 Swedish import of cashew kernels (Import in tons)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Arab emirate</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>191</td>
<td>103</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
<td>3</td>
<td>10</td>
<td>43</td>
<td>20</td>
<td>22</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>The Ivory coast</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>93</td>
<td>74</td>
<td>81</td>
<td>123</td>
<td>174</td>
<td>306</td>
<td>298</td>
<td>231</td>
</tr>
<tr>
<td>Great Britain</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>33</td>
<td>35</td>
<td>166</td>
<td>310</td>
<td>292</td>
</tr>
<tr>
<td>Iran</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Italy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>119</td>
</tr>
<tr>
<td>Lebanon</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>49</td>
<td>63</td>
<td>54</td>
<td>227</td>
<td>503</td>
<td>1210</td>
<td>2209</td>
<td>2311</td>
</tr>
<tr>
<td>Norway</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Spain</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Syria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>0</td>
<td>0</td>
<td>65</td>
<td>12</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Thailand</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>17</td>
<td>28</td>
<td>43</td>
<td>128</td>
<td>238</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>159</strong></td>
<td><strong>166</strong></td>
<td><strong>226</strong></td>
<td><strong>459</strong></td>
<td><strong>788</strong></td>
<td><strong>1762</strong></td>
<td><strong>3192</strong></td>
<td><strong>3395</strong></td>
</tr>
</tbody>
</table>

Source: scb
5.6 Swedish Market Survey

We have been in contact with a couple of Swedish nut-selling companies, unfortunately only four companies could answer our questions so it is an inadequate representation of the whole Swedish industry. However, we will summarize the survey since it gave some interesting results. All of the companies in question buy from European wholesalers mostly from Belgium, but also from UK and Germany. The origin of the kernels is often South Asia, mostly India, but also Viet Nam and Indonesia. One company also buys Brazilian cashew nuts. In addition, one company buy cashew which originates from Honduras and is bought through a Fair Trade dealer in Belgium. Unexpectedly, one of the companies buys second grade kernels from Mozambique, they have up to date bought a batch of 40 tons via a company in Belgium. The volume of cashew kernels, the companies buy range from 100 kilo to 1000 tons.

All of the interviewed buy in bulk and pack either themselves or through a packing company in Sweden or in Northern Europe. A couple of the companies sell both roasted and plain kernels, the roasted and salted kernels are most popular, however, some only sell plain kernels. All of the respondents were positive to buying cashew from Mozambique, provided that the quality of the kernel meets their standards. In general it seems that the companies would prefer to buy in bulk and not consumer packs. One of the reasons stated for this, is that flavour and quality remains better when a Swedish bag is used for consumer packs. Only one company had Fair Trade kernels, which were bought from Honduras through a Belgian dealer. However, many of the other companies had organic cashew kernels and several of them were interested in Fair Trade, but did not carry it in their selection at the moment.
6. Cashew By-Products

During our field studies in Mozambique we heard of possible uses for other parts of the cashew than the kernel, such as families making cashew juice, from the cashew fruit, for their own consumption. Hence we wanted to research the possibility of commercializing these by-products.

6.1 Cashew Juice

The cashew kernel is not the only edible part of the cashew tree. The cashew fruit is a fruit with a pleasant but rough taste which is perfect for juice making. It has a red, orange or yellow colour when it is ripe. The fruit is rich in vitamin C (262 mg/100 ml of juice), five times more than in an orange. The cashew fruit is also rich in sugars, calcium, iron and phosphorous. Besides this, it is considered to be an excellent source of energy. The fruit has a very delicate flesh and has to be picked carefully by hand. (FAO)

Cashew juice is quickly becoming one of the more popular juices, especially in America but the juice is soon to be introduced in Europe. At the time of writing cashew juice was number four on Amazon.com’s list of best selling juices. The process of making cashew juice includes the following steps, after harvest, the fruit needs de-pulping which can be done either by machine or by hand, and then the pulp is compressed. To produce a natural juice it needs to be pasteurised but otherwise it is also possible to use preservatives. A product that shares a common environment with cashew is coconut; a possibility is therefore to produce cashew juice and coconut water in one factory. For a factory with all the needed machinery and to meet export standards a starting capital of $3-5 million is needed. For a factory, producing exclusively for the local market, it would probably be cheaper. Another option would be for an already existing juice maker to start producing cashew juice, buying the fruit from the Mozambican growers. Another option is to export the pulp. All that is needed is a factory where the fruit is de-pulped and a freezing room. The process can be made by hand so an expensive machine does not have to be purchased, furthermore, the factory would be more labour intensive. The pulp is then exported frozen. The fruit is very delicate and needs to be used soon after harvest which
is why it is important for the factory and the freezing room to be located in close proximity to the Cashew fields (Veloso, Interview).

### 6.2 Cashew Jam

Since the Cashew fruit is rich in vitamin C, calcium and iron it can increase the nutritional health of rural communities at the same time as it can add value to the product and create employment if used for products like cashew jam or juice. (GTZ, 2008)

Making cashew jam is not an expensive process if one is located in a cashew growing area, since the main ingredient, the cashew fruit, is most often thrown away once the nuts are separated from the fruit. (Swatson, Interview)

<table>
<thead>
<tr>
<th>Cashew Jam Recipe (3kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 litres of cashew juice</td>
</tr>
<tr>
<td>1 litre of pineapple/orange juice</td>
</tr>
<tr>
<td>2.5 kg of sugar</td>
</tr>
<tr>
<td>50 g of pectin</td>
</tr>
<tr>
<td>3 g of ascorbic acid</td>
</tr>
<tr>
<td>3 g of potassium meta-bisulphate or 4 g of sodium benzoate</td>
</tr>
</tbody>
</table>

First immerse the fresh apples in cold water and wash them. Then cut them in pieces and put the pieces in a screw press extractor to squeeze out the juice, mix the juices and boil for 30 minutes. The next step is to add sugar and pectin and boil for another 90 minutes for the jam to gel. Then add the ascorbic acid and the preservatives (potassium meta-bisulphite or sodium benzoate). Lastly remove scum from the jam and fill pre-sterilized jars.

### 6.3 Cashew Nut Shell Liquid

The shell of the cashew nut contains a dark liquid, that if it comes in contact with the skin can cause injuries, known as cashew nut shell liquid (CNSL). It is contained in between the outer skin of the nut and the harder inner shell (FAO). CNSL has many industrial uses, including automobile and airplane brake fluid, adhesives, paints and varnishes, insecticides, electrical insulation, and anti-microbials. (Organic cashew nuts)
6.4 Cashew Oil
Cashew oil is made from the cashew kernels; the kernels are pressed with either a hydraulic press or a mechanical press with a slowly rotating screw. Since it is rich in vitamine E and unsaturated acids it is suitable as ingredients in skincare products. It is used in day creams, anti-wrinkle creams, and tired and dry skin care treatments. It can also be added to hair care products, in hand or lip balms, as massage oil, and in sun and after-sun care products (Africajou).

The cashew oil is also perfect for culinary use. It is rich in essential fatty acids with 80% unsaturated fatty acids, it is also very high in vitamin E and sterols and it is known to reduce cholesterol levels. (ibid)

6.5 Cashew Butter
Cashew butter is made of grinded cashew kernels and is most often used as a sandwich spread but can also be used to make soups, sauces, and dips. There is a demand for the butter; however it does not sell as well as other nut butters (Futtersnutbutters). Processors in Burkina Faso have had some success with cashew butter and sell the butter on local markets for the price of $0.20 for about 0.25 litres. (GTZ, 2008)
7. Analysis

7.1 Developing Mozambique and the Industry

The systems in place to develop Mozambique and help the poor out of the deprivation trap with micro credits and peasants associations are all excellent tools and worth investing further in. However we feel there needs to be more intensive efforts for the poorest. If the country is aiming to revive its cashew industry but also to develop the country in general it makes sense to involve the poorest as well; an enormous workforce who could contribute immensely to the country, within the cashew industry as well as in other industries. Significant is that cashew is as a high value product and could therefore generate higher incomes than other crops and by that have a larger impact on the quality of the lives of many poor.

When travelling around the countryside of Northern Mozambique we met with two producer organizations in Namige, the district of Mogincual. These producer organizations were typical organizations that can be found throughout the country. The benefits of joining an organization include that the individual producers becomes someone in the sense that the organization is legalized and in addition it is an easier way to find buyers. Consequently, we find it important to increase the number of organizations and to further assist them through different extension services.

The effort to restore the Mozambican cashew industry is a significant one. Although without an investment in roads as well, an investment in cashew is meaningless. People have to be able to transport their cashew to markets, companies need to be able to pick up their purchase and export needs to be transported to the harbour. As well as improved conditions for the cashew industry there are other benefits of improved roads as well, it would mean easier access to non agricultural work, health care and schools.

The tree problem is not exclusive to Mozambique, but is a reality in most of Africa and especially in East Africa. The main problem is old trees and the lack of maintenance of
existing trees. Given that the trees are so old, that one can only gain a certain amount of yield per tree by maintenance, it is better to concentrate on rejuvenating the trees by planting new seedlings. On the other hand, one needs to take care of the existing trees while new trees are growing, since it takes three to five years for them to be productive. One of the reasons for planting new kinds of trees is that some clones are more pest resistant, therefore, one would save money on spraying less trees. Also to be able to compete with other cashew producing countries, such as India and Viet Nam, Mozambique needs to increase its yield per ha. Today both India and Viet Nam produces close to 1000 kg/ha while Mozambique remains at less than half that number. Furthermore, the peasants would benefit if the seedlings were even more subsidized than the 5 MZN at the moment. We propose a system which could encourage peasants to buy more seedlings by using a system where it is cheaper to buy several plants. For instance, 10 seedlings are 10 MZN a piece but 11-50 seedlings cost 8 MZN, and 51-100 is 6 MZN. Preferably, this would not apply to large plantations buying a couple of hundred plants, however they would receive some discount.

7.2 The Market for Cashew

One of the aims with our work was to research how incomes for cashew peasants could be increased. The price paid for the cashew is low; however we have found that it would be difficult to increase the price the producer receive, since it is the same worldwide. Another reason for this is that it is the final actor in the chain, the retailer, who gains most percentage of the end price. In order for the Mozambican peasant to earn more, the producers, traders, processors have to increase their price. However, one way of increasing income would be to increase Fair Trade production and explore the possibilities for organic cashew since it would increase the price. Measures can also be taken to add to the country’s income by increasing production and productivity. Mozambique can also decrease the export of raw cashew and process more within the country and increase its cashew kernel export. We have also looked into the possibility of packing in consumer packs in Mozambique and through that having more of the value chain remaining within the country. When discussing this with companies in Sweden we...
have however not found an interest in purchasing consumer packs directly from Mozambique, for two main reasons. Firstly they feel the quality of the kernels are better if packed in the companies own approved bags. Secondly there will be heavier environmental effects if the export is made in consumer packs since as large amounts can not be shipped at once.

In order for the Mozambican cashew to easier enter the European market we find that it would be necessary to be closer to the market. For example creating a sales office in the Netherlands or Great Britain, where one sales person from Mozambique who knows the industry and one additional project manager is employed. The task of the employees at the European office would be to travel around and market Mozambican cashew. Because, to be able to find new clients for a country as Mozambique, who is so far away from the market and perhaps perceived as an inconsistent supplier of kernels, it would make a better impression to promote the commodities firsthand. On top of this it would be a good idea to promote Mozambican cashew as a quality product, to further strengthen the Mozambican brand name in Europe.

One of the things we have noticed when looking into the cashew industry is that Fair Trade and organic cashew is becoming increasingly popular. Not just products like cashew but on an everyday basis, people are conscious about the origin of products and more often purchase Fair Trade and organic items. Nevertheless, the market for Fair Trade cashew is not an enormous one, but it has grown substantially in the last couple of years. So to process Fair Trade cashew seems like the way to go. Organic produce is slightly more common, at least in Northern Europe. Hence, if it was possible to grow organic cashew by using new tree sorts or approved pesticides it would further open up for new markets. One, of the advantages of selling Fair Trade cashew, among other things, is the premium which goes back to the producers and is to be used within the community. On the other hand, the producers are the only ones gaining from the Fair Trade Premium and the exporters receive extra money by selling Fair Trade kernels. However, the workers in the processing factories do not gain any extra money by processing Fair Trade kernels. In reality a worker at a factory could process both Fair
Trade and regular kernels without knowing the difference, and without obtaining any extra salary, this due to the fact that some factories process kernels for different exporting companies. In our opinion, when this is done Fair Trade loses some of its purpose, when the workers of the processing industry do not get part of the Fair Trade advantages, but receives minimum wage, regardless of the type of kernel exported.

7.3 Other Usages

We have also noted that the cashew kernel is the only part, in Mozambique, being used and sold. We have however found that there are many uses for CNSL, oil made from broken kernels as well as the fruit from which both jam and juice can be made. These are all products that easily could generate income for the people of Mozambique if they were produced and sold. The cashew juice is for example becoming increasingly popular, for people the cashew name is well known and because of this when being introduced to the fruit many are eager to try it and the juice is easily sold. Another juice that is popular both in America and Europe is Coconut water; a possibility is therefore to produce both juices in one factory, since coconuts and cashew share a common environment. If Mozambique finds it is too expensive to begin producing cashew juice and the existing juice companies have no interest in producing it, we have found that there is an interest, from the juice producers we have been in contact with, in purchasing frozen pulp from Mozambique.
8. Conclusion

The overall objective of this thesis was to examine how the peasants can receive a higher percentage of the consumer price and see how the production and the productivity can be improved for a possible expansion of the cashew export and through that increased income and development for the people of Mozambique. In addition, our main objective was to possibly locate new markets for Mozambican cashew. Through this we were aiming to find potential ways out of the deprivation trap for the Mozambican people.

We have found that it is difficult for the Mozambican people to receive a higher percentage of the consumer price. Due to world market price being the same worldwide and the retailer being the ones gaining most of the end price. However, we see a potential for successful increase in production as a result of efforts to rebuild the industry with new trees and spraying existing ones. In addition, there is a high capacity level among the processing factories which could be utilized to full potential.

Even though we were unable to locate any new markets for Mozambican cashew, we see a potential for Fair Trade and organic cashew in Europe. The last couple of years there has been an increased trend to buy both Fair Trade and organic, especially in Northern Europe. This could be something for Mozambique to explore since in our opinion this market is likely to continue to grow due to social and environmental awareness.

One way for Mozambique to escape the deprivation trap could be to increase the production and commercialisation in the country. The expansion of the cashew industry could be a good tool for this due to it being a high value crop, labour intensive and there is growing market for it. During our research we have come up with a few recommendations which we feel could be worth looking into;

- We find that investing in infrastructure, specifically roads, is crucial in order for the Mozambican cashew industry, as well, as Mozambique as a whole, to develop.
• A precondition for a higher cashew production is better trees. We feel that people need to have greater access to seedlings for the production to improve. We would like to see nurseries placed locally, in addition to seedlings being further subsidized. Due to the fact, that the yield of cashew can be substantially increased through spraying, we feel that spraying should be invested greatly in. In addition to higher cashew production the quality of the cashew will increase which in turn could increase demand and revenue.

• To be able to develop the entire country and its population, additional investing in associations is crucial. We find that further investment in village banks is needed to be able to reach the poorest people as well.

• Cashew by-products could also increase income for cashew peasants, since there is a lot that can be used besides the kernel. Today the fruit is seen as a waste product but can be used both in juice and jam. Technical assistance could help peasants and processors how to handle fruit and to produce CNSL and oil.

• Additionally, the growing market for Fair Trade and organic is something that should not be overlooked. We feel that Mozambique would gain from exploring the possibilities for organic cashew as well as increasing their Fair Trade export. The trees which are less prone to pest and diseases could be promoted to maybe be able to grow organic.

• During our study we found that Mozambique needs to be closer to its cashew market. For example could a European office of Mozambican cashew be established to promote their product firsthand and in that way locate a greater customer basis. Moreover, the Mozambican cashew needs to be promoted as a quality product, so that people can associate Mozambican cashew with high quality.

• We feel that the Nampula province could be promoted as the “cashew-province” and that more resources should be concentrated to that area. In addition to resources there needs to be an increased focus on education of the different steps of the value chain for all actors within the industry including farmers, associations and forums.
9. References

9.1 Literature


Hanlon, J, Smart, T. 2008 *Do Bicycles Equal Development in Mozambique?*


9.2 Web Based

Africajou. Natural oils


http://www.afrikanergrupperna.se/cgi-bin/afrika.cgi?d=s&w=1367&q=minimilöner (2009-06-01)


Cirad’s Market News Service.

Commodity Online.


Costa, C. Cashew news: Mozambique addresses cashew industry challenges as it seeks to expand in 2008.


EPOPA End Book Report.


Fairmatch.


FLO Fairtrade Labelling Organizations International.
Chasing Markets – A Study of the Mozambican Cashew Industry

http://www.fairtrade.net/home.html 2009-05-20

FLO Fair Trade Minimum Price.

http://www.fairtrade.net/fileadmin/user_upload/content/2009/about_us/150509_EN_FTMP_and_P_Table.pdf> (2009-05-20)

Futtersnutbutters. Cashews and cashew butter.


Grolink.


IMF. World Economic Outlook Database.


Organic cashew nuts. Cashew: all you ever wanted to know.


Paycheck, Minimum wages India.

http://www.paycheck.in/main/officialminimumwages (2009-06-01)

Regional Economic Development- Indonesian German Technical Cooperation. Value chain concept.


SCB. Statistiska centralbyrån.
9.3 Interviews

Amos, E. INCAJU (2009-04-24)
Costa, C, African Cashew Alliance (2009-04-28)
Massonda, M. District government (2009-04-13)
Molta, A. Miranda Industrial LDA (2009-04-09)
O’Reilly, C. Shipembere, R, SNV. (2009-04-23)
Peasants association, Namige, (2009-04-10)
Veloso, R. One Natural Experience (2009-05-12)
Cuamba, S. (2009-04-01)
Raposo (2009-04-22)
Cabo Caju (2009-04-20)

9.4 Reports


GTZ, 2008. Competitive African Cashew Value Chains for Pro-Poor Growth


9.5 Articles


Currency converter

Convertworld.com (2009-05-24) (1 USD = 7,57 SKR)