

## **Cashew Processing**

In Mozambique, cashew nuts can be produced along the entire coastal area, which extends around 2 000 km, stretching inland approximately 200 km. The coastal zone of the provinces Cabo Delgado, Nampula, Zambezia and Inhambane, Gaza and Maputo are the most important areas of production. There are approximately 26 million of cashew trees. About 37% of the cashew trees are located in Nampula Province in the North, where 40% of the total production is marketed. The other three important provinces are Gaza and Inhambane in the South and Zambezia Province in the center.

There are approximately 2 million farmers involved in the production and collection of cashew nuts, for which this cash crop is the main source of income. In general, the areas where this crop is produced have poor soils and erratic rainfall, being therefore areas with low potential for the production of food crops, however some other crops can be produced in an inter-crop system, such as groundnut and cassava.

Although, raw cashew nut production in Mozambique has been declining over the last decades, the economic importance of the crop to the country's trade balance and its potential of future development, explain why this is valuable crop for Mozambique.

### *Types of cashew cultivated. Developments concerning the improvement of cultivars.*

The Mozambique cashew tree resource is composed mostly by a common tree variety whose gestation period lasts roughly 5 to 6 years. Efforts are being presently underway to introduce new varieties, particularly the Brazilian dwarf variety in order to replace gradually the old trees with more productive varieties with a lower gestation period.

### *Main factors influencing production and harvesting performance*

Considering the present yields per tree are very low (about 1.5 kilos per tree) a large extension program is being implemented, led by INCAJU.

There are several factors influencing negatively cashew production such as:

- Great incidence of diseases;
- Uncontrolled fires that destroy every year a portion of the trees;
- Weak use of best cultural practices such as pruning, budding, grafting and spraying;
- Weak extension network to support small holder producers;
- Insufficient economical incentives to cultivation and maintenance of cashew trees, due to relatively low prices offered to small holder producers;
- Lack of credit for the small holder producers as financial institutions consider them as high risk group;
- Very weak research program to introduce improvements in cashew production;
- Weak structure of the rural communities and the producers' organizations;

- In most of the cases unavailability of labor to handle cashew cultivation, due the fact they are allocated to other crops, mostly food crops;
- Limited technology to process the cashew fruit that diminishes the overall economic yield of the trees.

In spite of, the constraints, there exist several opportunities for Mozambique to re-launch production. Some of them are:

- Good agro-climatic conditions for cashew production;
- Mozambique's longstanding experience with the crop
- Existence of a significant population of trees, despite their age;
- Possibilities to expand the cultivation areas, as land is still available;
- Existence of a strategy to develop the sub-sector integrating all stakeholders, approved by GoM (Government of Mozambique);
- Existence of international market that in the last decade has increased steadily;
- Possibility to increase yields and profitability of the sub-sector introducing new technologies;
- Experience coming from other producer countries in recovering and expanding cashew production.

### **Processing**

The cashew industry in Mozambique has a long tradition. Because of the simplicity of some operations, cashew processing can be done by unskilled people and, in certain areas where better skills are needed, women generally perform better than men.

Despite this long tradition, the cashew industry is presently facing several problems that obliged some enterprises to close, provoking massive dismissal of workers, most of them without any severance payment.

Processing units in Mozambique use mainly four types of technologies to decorticate and extract the oil (CNSL) from the shell. These include manual shelling with hammer, semi-mechanical cutting, mechanical cutting and impact shelling. The final stages in all these processes follow in quick succession, are labour intensive, and do not vary much from factory to factory.

### **Production and trade policies**

INCAJU has taken the responsibility for the policies to be pursued within the cashew sub-sector based on two strategies: recovery of cashew trees through integrated treatment of diseases and introduction of new plants to increase the number of plants to replace the old ones.

However in spite of the government's efforts to increase production, the results are still far away from the expected ones.

It seems to be caused by the failure to implement specific policies to promote improved quality and demand. In fact most of the activities envisaged in the INCAJU Master Plans either were not implemented (consistent control quality system, relaxed seasonal labor regulation) or are still facing some difficulties to be enforced (loan guarantee funds for new processors, and trade regulations).

There is presently a tax (18% on FOB value) on the export of raw nuts which is intended to protect domestic processors. However, despite the export tax on raw nuts, the existing processing industry has been unable to operate profitably, largely because it was created within a fundamentally different economic context where it was highly subsidized, had a conscripted work force and paid controlled producer prices. The industry has simply been unable to adjust to the present economic reality of liberalized prices and a more free and independent work force.

### **Prospects for cashew business in Mozambique**

The fundamental problem of the cashew sector in Mozambique has been the declining volume and quality of cashew nuts produced in the country. Mozambique has found itself in a vicious cycle wherein producers receive prices for their nuts that are too low to justify investments in better care of existing trees and/or planting of new trees. Yet at the same time, the prices paid by existing processors are too high for them to make adequate profits and returns on their investments.

As a result of this, most of the local processing plants have closed, raw nut buyers for factories in India have become increasingly powerful, often to the point of being able to control the market to obtain supplies of nuts at even lower prices.

In light of the present state of the cashew processing industry in Mozambique, it seems wise to promote a strategy involving the downsizing and decentralization of processing. Smaller and more decentralized processing units would be able to buy cashew nuts directly from producers, reducing or eliminating margins of intermediaries, and would be able to effectively promote improved cultural practices and replanting of cashew trees among producers.

These kind of units can be the foundation to get back the reputation that this industry enjoyed in the past, concentrating on:

1. establishing linkages with nearby small holders and producer associations to provide technical assistance in improving quality and volumes of cashew nut production;
2. establishing a network of franchisees operating small shelling plants, and providing them technical assistance in designing, building, financing and operating their plants;
3. marketing cashew kernels, through both retail and wholesale channels;
4. quality control at both the central and franchisee plants, in other to assure maximum yields of whole white kernels.

The benefits of this strategy will derive from:

- 1) Use of suitable low cost buildings, thereby lowering the required investment in buildings;
- 2) The possibility of designing factory layout and processes to achieve maximum efficiency;
- 3) The possibility of buying direct from producers in order to eliminate trader margins, reduce total transport costs, and improve quality control;
- 4) The possibility of working directly with producers to improve quality and volume, through the demonstration of improved cultural practices and sale of seedlings of improved varieties;
- 5) The promotion of rural growth by providing new jobs, hence increase the income of the small holders and functioning has an incubator for new entrepreneurs.