A value chain analysis for baobab (Adansonia digitata) in Senegal

Mady CISSE1, Timothee GALLY2, Ben BENNETT3

1 Ecole Supérieure Polytechnique - Université Cheikh Anta Diop de Dakar, BP 5085, Dakar-Fann, Sénégal
2 Montpellier SupAgro - Institut des Régions Chaudes, BP 5098, 34093 Montpellier Cedex 05, France
3 Natural Resources Institute, University of Greenwich, Central Avenue, Chatham Maritime, Kent, ME7 3RU, United Kingdom

HE AFTER project, African Food Tradition Revisited by Research, involves seven African countries (Benin, Cameroon, Egypt, Madagascar, Senegal, Ghana and South Africa) and four EU countries (France, Portugal, Italy and the UK). The aim of this project is to identify and characterize the African food technology know-how of ten traditional products, and share this information in developing countries and particularly with the EU; in order to help local products and technologies to become competitive on national and international markets. The baobab value chain analysis we set up is a part of the WP5, which the aim is to study the current and future markets, products and consumers in Africa and EU.

Method

The key actors and processes of baobab products have been identified by a survey. The value chain information has been used to build SWOT and GAP analyses for existing and re-engineered AFTER products, as well as a marketing mix. The work builds upon the AFTER surveys and the literature search (Cleve & Nottage, 2010). The main results were obtained thanks to follow-up interviews with key value chain actors.

Value chain analysis was chosen for its good ability to locate possible upgrading opportunities for baobab products in local and European markets.

Product description

The Baobab (Adansonia digitata L.) is a tree that grows wild in Senegal. Its fruit, locally called “monkey bread”, is consumed in various forms. It is a fruit rich in dietary fibers, minerals, vitamin C and total phenolic.

Baobab pulp is a semi-processed food. The pulp is ground and sieved to obtain a powder, which is sun dried. It is used to develop other food-by-products, such as beverages or soups.

The baobab pulp is sold in plastic sachets powdered to avoid water rehydration.

The classification occurs from 1 to 6, which means the first place where the product is sold to the sixth place (in terms of quantity). It means not classified, then not sold.

The competing products are blended juices, natural cloudy juices, drink powders (flavoured and colour), and instant powders.

The marketing mix (IPA of Marketing) is a list of possible products identified from baobab and classified from the point of view of the Price, the Description of the Product, the Place where it would be best to provide it to the consumer, and how it might be Promoted.

Marketing Mix

The marketing mix is the total of the required activities to bring the product from conception to final consumption, including all the different intermediate phases.

The value chain mapping is a convenient way to see the relationships between actors and identify the potential problems and opportunities, as well as obtaining an overall view of the system.

Value chain research conclusions

• Fruit pod’s processors can also be producers. After this primary stage, the product can be easily moved to processors and handlers. Some retailers supply local markets directly. In this case, they are often the producers.
• After processing, retailers bring products to the consumers. The enterprise likes’ processors (FIVS, ESTIVIAL, FRUITES...) work with organizations such as AAEPEX or ASEPPEX, promoting the products export. They can also work with the retailers to facilitate the export after supplying local markets.

Costs to the market’s entering of products

The lack of knowledge about the owners of the baobab trees, the volume trade of juices and syrups, or the informal distribution of baobab products is a limit to the improvement of market’s entering.

Mainly due to an arborescent processing, many problems concerning the food safety and working speed are encountered.

Prices

It is important to know the prices of the different existing baobab products, in order to precisely locate the target markets of potential new products, and to obtain the best competitiveness.

Table 2: Gap strategy of baobab products (traditional and re-engineering process)

<table>
<thead>
<tr>
<th>Traditional products</th>
<th>Re-engineered products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streed market (small scale)</td>
<td>Pop</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Mini-market</td>
<td>4</td>
</tr>
<tr>
<td>Sugar-market</td>
<td>6</td>
</tr>
<tr>
<td>Export market</td>
<td>1</td>
</tr>
</tbody>
</table>

References

Survey results: quality attributes for Group 3, deliverable number D1.2.3. C. NDAYE et al., August 2011.
Results of nutritional quality review for Group 3, deliverable number D1.2.3. M. CISSE et al., September 2011.