1. Background

- The fruit powder of the baobab (Adansonia digitata L.) and derived products (Fig 1) are getting increasingly popular on both local and international markets due to particular nutritional properties (e.g. high content in Vitamin C, minerals).
- By adding value to the resource through processing baobab has the potential to generate needed income and improve livelihoods.
- So far production levels of baobab fruit powder in Southern Africa are far below its potential [1].
- More information on the sustainable commercialisation of baobab resources in all its facets (social, environmental, economic) is needed.

The current paper presents preliminary results of an ongoing research project on the baobab processing sector development in Southern Africa.

2. Methods

- The sectoral innovation system approach [2] provided the basic theoretical framework for the analysis, for which concepts have been reviewed.
- Data originated from 7 semi-structured interviews from enterprises processing and exporting baobab fruit powder from 5 different countries in Southern Africa (Malawi, Zimbabwe, South Africa, Mozambique, and Tanzania) as well as experts in the natural products industry in Southern Africa (snowball sampling).
- Interviews were transcribed and analysed using qualitative content analysis in terms of sector development and structure as well as coopetition dynamics [3] amongst the processing enterprises.

3. Selected preliminary results and discussion

a) Dynamic development of the baobab processing sector in Southern Africa

- The baobab processing and exporting industry is still relatively young, first companies with aim to export baobab founded in the early 2000s.
- 2008/9: Acceptance of baobab fruit pulp as food ingredient by the EU and US -> increasing export of baobab fruit powder (currently magnitude of several hundred tons per year)
- This development facilitated due to efforts of Phytotrade Africa (trade association of natural products industry in Southern Africa)
- Currently production quantities way below the maximum production capacity (demand as limiting factor)
- Perceptions on future developments:
  - Internationally: despite recent stagnation exporters are positive demand for powder will continue to increase, particular in new markets such as Asia or the Middle East
  - Locally: particular emphasis is put on potential in local markets (both for powder and consumer products) due to increasing awareness of value of local resources and lower marketing efforts required

References


3. cont’d

b) Sector overview: Main agents and influencing factors

- The following figure (Fig 2) illustrates key innovation system components and interactions in the baobab processing and exporting industry in Southern Africa.

Fig 1: Products derived from baobab available on international markets

Fig 2: The baobab processing and exporting industry in Southern Africa

- National: Flexibility of harvesting permits, licensing and derived products (e.g. NGO’s)
- Exporting and importing countries: food safety standards, fair trade regulations, labelling, etc.
- Environmental and health bodies (e.g. IMO, FAO, Ecocert, HACCP)

- NGOs: Local NGOs already active in baobab communities can provide useful links between baobab suppliers and processors. Baobab processing enterprise sometimes derive from NGOs (spin-off).

- Research Institutes: e.g. research regarding technology development, ecological enquiries concerning baobab trees, health benefits of baobab, etc. through local and overseas universities.

- Cooperation dynamics

- Financial assistance e.g. via grants from development organisations, charities and foundations (e.g. Comic Relief, bank loans, trade promotion organisations (e.g. SIPP)).


- Certification: Certifications such as organic, fair-trade, vegan, halal, facilitated through a variety of certification bodies (e.g. IMO, EcoCert), food safety standards (HACCP, ISO 22000).

- 5. Conclusion

The baobab processing and exporting industry in Southern Africa is a small, yet highly sophisticated industry with a multitude of different agents involved, including several thousand harvesters. Organic certification as well as quality of the baobab powder (regarding physical, chemical, and biological parameters) are the most important factors for export. The influence of supply chain organisation (from harvesting to processing) as well as processing technologies in use on product qualities are key areas for future investigation. Furthermore, the role of baobab processors and exporters not involved with Phytotrade needs to be assessed, in particular regarding matching quality standards and ethical considerations.