

Policy Brief No. 4, July 2023



by decision of the German Bundestag

Fostering Sustainable Commercialisation of Wild Food Resources: Lessons Learnt from the Case of Baobab

Kathrin Meinhold and Dietrich Darr

Key Message

- Only a few wild food resources are (sustainably) commercialized, although many have the potential to contribute positively to our diets and help safeguard our food systems.
- Baobab can act as an important case study, having transitioned from subsistence to retail, with a variety of innovative products nowadays being marketed.
- The baobab case demonstrates, that such a transition requires relatively high knowledge and subsequently resource needs – as in comparison to agricultural products many processes need to be newly developed.
- Commercialisation initiatives of wild food resources should ideally by planned long-term, not threaten the resource base, and ensure adequate, fair benefit distribution.

What is the issue?

Wild food resources, such as fruits, nuts, mushrooms, or berries have always played an important role for human

livelihoods. However, with the start of the domestication of plants and animals for food approx.12,000 years ago, the role of wild food resources in our diets slowly decreased – to a level that nowadays most of our food resources come from only few cultivated sources, with only three crops (wheat, corn, and rice) providing





Figures: The raw products: baobab fruit (left) and extracted fruit pulp (right)

almost half of the world's calorie supply. In recent years, however, with the consequences of these developments becoming more apparent, e.g. in terms of biodiversity loss, climate change, or negative health implications, there is a renowned interest in the potential of wild food resources. Due to their often-special nutritional composition and functional properties, wild food resources can enrich our diets; they can help safeguard our agriculture, by diversifying our food systems and making these less vulnerable to pests and diseases, or by being more resistant to climate change; plus, they can boost the livelihoods of small-scale farmers and local producers by providing an income opportunity. However, despite their potential being more and more recognized, fostered by growing trends for more natural and ethically sourced products, as well as functional, high-quality, and health-promoting foods, this is by far not exploited yet. Only a few wild food resources are being commercialized on a broader scale. Products derived from the baobab tree (Adansonia digitata L.) can be regarded as an exception in this regard, which has transitioned in the last 2-3 decades from sole traditional to widespread use in local, national, as well as international markets. Baobab resources are still primarily collected from the wild or from farmland and homesteads, with no plantations existing to date, nevertheless, levels of commercialization are generally on the rise. Several hundred tons of baobab fruit powder is being exported every year from sub-Saharan Africa to Western markets, focusing especially on high-value niche markets, such as organic or Fairtrade. Numerous food products have been developed based on baobab, exploiting its special

nutritional composition such as its high content of Vitamin C, minerals, especially Calcium, dietary fibers, or phytochemicals such as polyphenols. Thus, baobab provides an excellent case study to derive lessons that may foster sustainable commercialization of wild food resources more generally.

Research approach

This study aimed to better understand how such a transition from subsistence use to widespread commercialization can occur, and which factors contribute to such a development. This was achieved by utilizing a case study approach and mixed-method data collection, especially focussing on actors who pushed baobab commercialization in the very beginning.



Figure: Selected baobab products available on international markets

Key Findings

- In order to foster baobab commercialization, initially especially **mobilization of** (financial) **resources** as well as the **generation and diffusion of knowledge** about the resource was necessary;
- **Knowledge needs** particularly referred to processing technologies, nutrient composition, quality control, the resource base, or application possibilities;
- Main actors involved in fostering baobab commercialization were processing entrepreneurs and development organizations → bottom-up approach;
- **Food quality standards** shaped developed innovations that stemmed from all categories (product, process, organizational, and marketing innovations)
- Effective **supply chain organization**, e.g. via collection points and centralized processing, was the most important innovation to achieve the quality needed for retail.

Policy Recommendations

In order to support the sustainable commercialization of wild food resources...

- ... ideally long-term support and investments is necessary. Substantial human and financial resources are needed to foster sustainable commercialization; thus, one should focus on priority species only and think beyond typical project timeframes.
- ... underlying institutional frameworks and enabling environment need to be strengthened; especially concerning support of entrepreneurs focussing on socially and ecologically responsible wild food commercialization and developing strategies and methods concerning quality aspects of wild food resources.
- ... monitor ongoing developments, to ensure that commercialization initiatives do not start to threaten the resource base of the species and that adequate, fair benefit distribution from the extracted resource, particularly towards the involved communities, occurs.

This brief was prepared by Kathrin Meinhold and Dietrich Darr.

Contact

Dr. Kathrin Meinhold Faculty of Life Sciences Rhine Waal University of Applied Sciences kathrin.meinhold@hochschule-rhein-waal.de