Tropentag, September 18-21, 2016, Vienna, Austria



"Solidarity in a competing world fair use of resources"

The Baofood Project: Enhancing Local Food Security and Nutrition in Eastern Africa with the Baobab Tree

KATHRIN MEINHOLD¹, YAHIA OMAR ADAM², MUNTHALI CHIMULEKE³, ESTHER EVANG⁴, JENS GEBAUER¹, TSIGE-YOHANNES HABTE⁴, KATJA KEHLENBECK¹, MICHAEL KRAWINKEL⁴, FLORIAN KUGLER¹, TARIG ELSHEIKH MAHMOUD⁵, NYORI JEREMIAH MBUGUA⁶, DAGMAR MITHÖFER¹, KAVOI MUTUKU MUENDO⁶, ANTHONY MAINA NJIRU⁷, WILLIS OMONDI OWINO⁶, FREDAH KARAMBU RIMBERIA⁶, EL AMIN SANJAK², MARTIN SCHÜRING⁸, MUNEER ELYAS SIDDIG^{2,5}, ARTHUR STEVENS⁹, MOHAMED EL NOUR TAHA⁵, ANDREAS TRIEBEL¹⁰, DIETRICH DARR¹

¹Rhine-Waal University of Applied Sciences, Fac. of Life Sciences, Germany
²University of Khartoum, Fac. of Forestry, Sudan
³Mzuzu University, Fac. of Environmental Sciences, Malawi
⁴Justus-Liebig Universität Gießen, Germany
⁵University of Kordofan, Gum Ararbic Research Center, Sudan
⁶Jomo Kenyatta University of Agriculture and Technology, Kenya
⁷Wild Living Resources, Kenya
⁸ttz Bremerhaven, Germany
⁹PhytoTrade Africa, United Kingdom
¹⁰Baobab Social Business gGmbH, Germany

Abstract

The baobab tree (Adansonia digitata L.) is found throughout the drier parts of sub-Saharan Africa. Particularly though the use of its highly nutritious fruits, but also its leaves and other parts of the tree it can make a positive contribution to family nutrition and food security — either directly or indirectly though income generation. The latter pathway is receiving increasing attention, following the acceptance of baobab fruit pulp as a novel food ingredient in both the US and Europe. In addition, baobab food products are of significant and increasing importance in a number of local African markets. These growing markets may offer additional income opportunities for baobab producers throughout Africa. However, in Eastern Africa, particularly Kenya and the Sudan, the opportunities baobab trees offer to improve local nutrition and livelihoods have largely been neglected.

The BAOFOOD project, which is funded by BMEL under its "Research Cooperation for Global Food Security and Nutrition" and runs from 2016 to 2019, aims at promoting the domestication, market development, processing and consumption of baobab for the improvement of food security, nutrition and rural livelihoods in these target countries. Addressing the identified bottlenecks of inconsistent quality in plant materials, lack of cultivation and processing technologies or underdeveloped market chains research activities will touch on all parts of the value chain. The geographical range of baobab as well as phenological variations are being assessed in order to preserve and protect the baobab tree as a natural resource while simultaneously developing viable recommendations for the sustainable cultivation and domestication of these trees. The nutritional value of baobab

Contact Address: Dietrich Darr, Rhine-Waal University of Applied Sciences, Faculty of Life Sciences, Marie-Curie-Str. 1, 47533 Kleve, Germany, e-mail: dietrich.darr@hochschule-rhein-waal.de

fruit and leaves are being analysed and the effect of baobab products on the food supply and the economic situation of local populations investigated in order to predict how increased commercial use will impact the project region. Extensive target group and market analyses in Kenya and Sudan are planned to explore the market demand and potential for new baobab-based products. The ultimate goal is to then produce those products with the most demand and potential in a local pilot production facility.

Keywords: Baobab (*Adansonia digitata*), food security, Kenya, nutrition, Sudan, underutilised plant species