CHALLENGES (OBSTACLES) AND WAY FORWARD

All the surveys conducted in the shea belt of Uganda show that the shea tree is very important to the lives of the people. There are, however, challenges that have to be surmounted to achieve the ultimate goal of this work:

- Funding: There work was previously funded by the EU INNOVKAR (Innovative Tools and Techniques for Sustainable Use of the Shea Tree in the Sudano Sahelian zone) project (INCO-CT-032037) undershort term funding.
  There is need for more and continued funding for this work.



Felling of shea trees for charcoal is common

- **Economic Livelihoods**
  The shea belt of Uganda is home to the most economically depressed people in the country, Due to lack of alternative livelihoods, some people are turning to cutting shea nut trees for charcoal. There is urgent need for extension agencies to double efforts in sensitization work in the area.
- Cooperatives and extension work With the vibrant shea butter trade on the world market, government should encourage farmers to organize themselves to produce for the high demand on the world mar-ket. (This is already happening in West Africa which dominates world trade in shea butter).



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FAMINE FOODS FOR UGANDA

Working towards domestication of the shea tree National Forestry Resources Research Institute, Uganda



THE SHEA TREE

THE SHEA TREE INTRODUCTION AND USES

The shea tree (scientifically called Vitellaria paradoxa) is known by several local names in Uganda: Ekungur (Teso), Komure (Kakwa), Kinakongole (Lugwere), Awa (Madi), Yao (Luo), Komoro (Lugbara).



It is a tree species that grows in the following districts of Uganda: Abim, Adjumani, Agago, Alebtong, Amolatar, Amudat, Amuria, Amuru, Apac, Arua, Budaka, Bukedea, Dokolo, Gulu, Kaabong, Kaberamaido, Kapchorwa, Katakwi, Kitgum, Koboko, Kole, Kotido, Kumi, Lamwo, Lira, Moyo, Nakapiripirit, Nakasongola, Napak, Nebbi, Ngora, Nwoya, Nyadri, Otuke, Oyam, Pader, Pallisa, Serere, Soroti, Yumbe, and Zombo.



Shea nuts are a source of oil that is used in cooking, butter that is used as a base for cosmetic and medicinal ointments, as a hair cream, for soap, as an illuminant and even for waterproofing. This tree is therefore important for food, medicine and income, especially, for the wom-en who sell shea oil on the local market.



THE POTENTIAL OF SHEA TREES IN UGANDA

Ugandan shea butter is very similar to olive oil due to its high oleic acid content. This makes it more liquid at room temperature and henceparticularly suitable forcosmetic products such as creams and lotions. Current shea nut production in Uganda is however affected by a decline in shea tree populationsand irregular flowering/fruiting.

Ugandan shea products have therefore only been able to compete on the local market due to insufficient and intermittent supplies.

With improved production, Uganda can fetch up to US$ 118 million per year.



Shea tree propagation at NAFORRI

Shea trees in Uganda occur in types that are characterized by:

- high annual fruit yield
- fruits with sweet pulp
- fruits with high pulp content
- fruits with low pulp content
- nuts with high oil content
- high fruit yield



NaFORRI green houses where propagation work is being conducted

To domesticate trees for: (i) nutrition focus must be directed at trees with high and sweet pulp content that can be eaten as nutritional supplements, (ii) commercial purposes focus must be directed at high fruit yielding tree and those with high oil yielding nuts.

The National Forestry Resources Research Institute (NaFORRI) is working towards the establishment of Different shea tree types are being tested at NaFORRI conservation stands of shea butter trees in Uganda. The National Forestry Resources Research Institute is also working towards improvement of shea nut production in Uganda by developing propagation protocols for this important tree species. In collaboration with Makerere University and Ngetta Zonal Agricultural Research Institute (NgeZARDI), NaFORRI



Propagation protocols are being developed at two levels: seed and vegetative. Seed propagation has been perfectedat NaFORRI with over 70% success rates. Different shea tree types are being tested for genetic variability and there is a possibility of developing individuals with a reduced rotation (fruiting) age (possibly 4-5years). Differences among the different shea types, once unraveled, will point to useful characteristics for domestication.