

Use of wild edible plants in the forest reserves of Teso-Karamoja region, Uganda

Samuel Ojelel^{1,2*}, Patrick Mucunguzi², Esther Katuura², Mary Namaganda², Esezah Kakudidi² & James Kalema²

¹Save A seed for the Future (SAFE), P.O. Box 703 Soroti, Uganda;

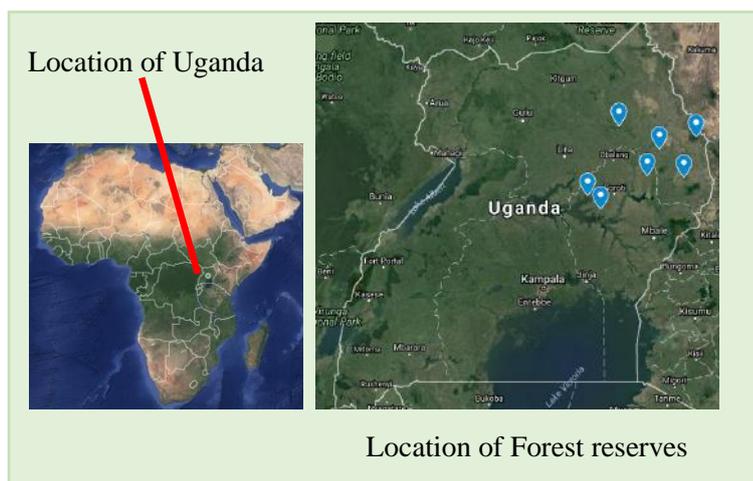
²Makerere University, College of Natural Sciences, Department of Plant Sciences, Microbiology and Biotechnology; P.O. Box 7062 Kampala, Uganda

Co-founder of Save A seed for the Future (SAFE) and Head of Environment department. He holds a BSc in Conservation Biology and MSc. Botany from Makerere University. At present, he is also a PhD (Botany) fellow and Assistant Lecturer at Makerere University's Department of Plant Sciences, Microbiology and Biotechnology

samojelel@gmail.com



Geographic and demographic information



Country	Uganda
Province	Teso-Karamoja
District	Katakwi, Serere, Kaberamaido, Moroto, Abim, Napak & Nakapiripirit
Size of geographical area	1,241.8 Km ²
Number of indirect beneficiaries	239 Persons (Men: 112 persons), (Women: 127 persons)
Dominant ethnicity	Nilo-Hamites

Ecosystem Types

X	Forest	X	Grassland		Agricultural		In-land water
	Coastal	X	Dryland	X	Mountain		Urban/peri-urban

Important species in the site

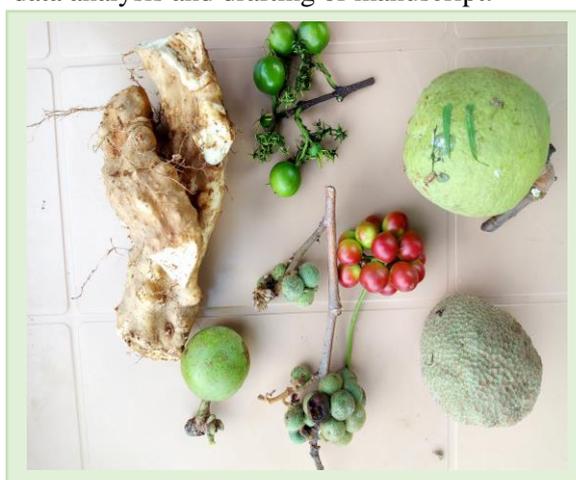
English common name (Local name)	Scientific name	Description
Shea tree (Ekungur, Yao)	<i>Vitellaria paradoxa</i>	This is a deciduous, small to medium-sized tree (15-25 m) whose seeds provide Shea butter.
Desert date (Ecomai, Ekoreete, Thoo)	<i>Balanites aegyptiaca</i>	This is a slow growing, evergreen or semideciduous, multi-branched, spiny shrub or tree. Its fruit and leaves are edible.
Mango (Emiebe)	<i>Mangifera indica</i>	<i>Mangifera indica</i> is a large evergreen tree to 20 m tall with a dark green, umbrella-shaped crown. It is among the most economically and culturally important tropical fruits.
Tamarind (Cwa, Apedur)	<i>Tamarindus indica</i>	This is a large evergreen tree up to 30 m tall. The seedpod of the tamarind is widely used for food with a wide range of medicinal applications and other uses.
Carrisse (Aimuria, Ekamuriei,	<i>Carissa spinarum</i>	This is a much-branched spiny, evergreen shrub or small tree. It is gathered from the wild for food and medicine.



Shea nut fruits

General introduction

Teso-Karamoja region is located in North Eastern Uganda. Teso experiences a humid and hot climate with rainfall between 1000-1350 mm per annum while Karamoja is comprised of semi-arid lands with variable, unpredictable and sparse rainfall ranging from 500-800 mm per annum. This region is located in the Somali-Masai Regional Centre of Endemism. This region suffers from food scarcity almost annually. In early 2017, it was among the most food insecure areas in the country (IPC 2017¹). The region also faces high rates of deforestation (Drichi 2003²). In addition, armed conflicts dominated this area up to early 2000's. This project sought to establish an inventory and use of wild edible plant species in and around eight forest reserves. We administered semi-structured questionnaires to 240 respondents between November 2017 and May 2018. Focus group discussions (8-12 members) per forest reserve and collection of plant voucher specimens was undertaken. The voucher specimens were identified at Makerere University Herbarium. This was followed by data analysis and drafting of manuscript.



Wild edible fruits and tuber



Using oxen to plough the land in Teso

¹ IPC. Uganda-Current Acute Food Security Situation: January–March 2017. Integrated Food Security Phase Classification. 2017. www.ipcinfo.org. Accessed on 30 March 2017

² Drichi, P. National Biomass Study. Forest Department, Kampala, Uganda. 2003:230p.

Contribution to Aichi Biodiversity Targets' Strategic Goal E

		Breakdown Target	How did you measure the outcome?	Result
Strategic Goal E	TARGET 17	Submission of NBSAPs to Secretariat by (end of) 2015		
		NBSAPs adopted as effective policy instrument		
		NBSAPs are being implemented		
	TARGET 18	Traditional knowledge, innovations and practices of indigenous and local communities are respected		
		Traditional knowledge, innovations and practices are fully integrated and reflected in implementation of the Convention ...		
		... with the full and effective participation of indigenous and local communities	Number of local people who participated directly and indirectly in our activities	240 people (an average of 30 per forest) living in and around the forest reserves directly participated in the ethnobotanical studies. This excludes the leaders who act as gate keepers in each of the districts, sub-counties, villages and forest reserves surveyed.
	TARGET 19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved	Documentation of Wild edible plants and associated Indigenous Knowledge	Draft manuscript titled " Wild edible plants used by communities in and around selected forest reserves of Teso-Karamoja region, Uganda " with 100 wild edible plant species. We are on the look-out for resources to publish a handbook of these wild edible plants
		Biodiversity knowledge, the science base and technologies are widely shared and transferred and applied		
	TARGET 20	Mobilization of financial resources for implementing the Strategic Plan for Biodiversity 2011–2020 from all sources has increased substantially from 2010 levels	Access to resources for conducting ethnobotanical surveys	Secured a PhD scholarship for Samuel Ojelel from the German Academic Exchange Service (DAAD) and research equipment (in-kind) from IDEA WILD.

Relations to other Aichi Biodiversity Target & SDGs

Please indicate the Aichi Biodiversity Targets other than the targets your working group focuses and SDGs that your activities contribute to if any. Use “●” and “■” to indicate the “direct” or “indirect” contributions to the targets.

CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

Strategic Goal A				Strategic Goal B					
Strategic Goal C			Strategic Goal D			Strategic Goal E			

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

Any difficulties you found during your assessment

We faced logistical constraints during the survey of forest reserves which delayed our activity schedule. In some places, we had difficult access due to the poor and non-motorable road network. We also continue to face a challenge of limited capacity to mobilize resources to implement our programs effectively.

Key messages for the CBD in planning for the post-2020 Targets

In cognizance of the difficulties above, we strongly appeal to IPSI to continue their support to members. This will bolster their capacity and aggregate to contribute to effective management of Socio-Ecological Production Landscapes and Seascapes (SELPS). It is also paramount to document the success stories, lessons and challenges encountered. This review shall inform the formulation of post-2020 targets. There needs to be a platform for continuous engagement among stakeholders in order to share knowledge and experiences. These platforms can include but not limited to online discussion foras and conferences.