

Promoting Rural Development in Northern Uganda (PRUDEV)



National Market Study for Shea Products in Uganda

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Implemented by



National Market Study for Shea Products in Uganda

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1 Executive Summary

The consultant was engaged to undertake a study to better understand the current and potential market for Shea *Nilotica* products in Uganda and provide recommendations on how Ugandan Shea stakeholders can improve their access to local and/or regional markets. The study was informed by the fact that private sector players involved in the shea subsector in Uganda (collection of shea nuts, small scale and large-scale processing of shea products, and marketing of products) are not utilizing their full potential to tap into local, national and/or regional market opportunities for shea products.

The range of occurrence of the shea tree extends from South Sudan, Uganda and stretches about 5000 kilometers to Senegal in West Africa (Chalfin, 2004; Okullo et al., 2010). The trees grow in the wild. They mature and start fruiting at 15-20 years, and continue fruiting for nearly 400 years, however yields declining in aging plants between 200 and 400 years (Ferris, Collinson, Wanda, Jagwe & Wright, 2004). There are two subspecies with different distribution and different characteristics of fruits and products: *Shea Vitellaria paradoxa* subspecies *Nilotica* is native to East Africa (incl. Uganda); *Shea Vitellaria paradoxa* subspecies *paradoxa* is the dominant variety in West Africa.

UEPB estimates that Uganda can produce on average 30,000 to 35,000 MT annually of shea butter products. In comparison to that, in 2019 approximately 13,598 MT of raw nuts were purchased by five processors from collectors, traders, and cooperatives. Approximately 438,769 kg of cosmetics, food and hair care products were produced in Uganda in 2018.

A significant share of the Ugandan shea products (raw and processed) are being exported. According to URA statistics 2019, shea products (oils and their fractions- fractionated shea) accounted for 47.6% (\$332,240) of the total value of fixed vegetables and oil exports to EU, USA, India and Asia. Uganda has developed and implemented a National Export Strategy for Shea Butter Products (2019-2023)¹.

However, the Shea sub sector has adopted an integrated industry development approach, targeting not only global, but also regional, and domestic markets. UEPB estimates that 40% of shea butter products are consumed locally. Bi-laws and approved ordinances are in place at local government levels for environmental conservation in which shea tree is prioritized. The development has led to an enhanced awareness of the Uganda Shea products and facilitation of local and export market linkages. Recently, large firms and SME are investing and producing shea butter products for domestic market.

Shea butter production in Uganda is still small compared to West Africa (Ferris et al., 2004), but has attracted interest from private investors and community-based organizations. The drivers for investment in Ugandan shea sector seem to be the anticipated growing global markets, especially for shea butter derived cosmetics and other skin care products. Ugandan shea butter is highly valued on the international cosmetics related markets.² It is also promoted as an organic product

¹ The process of developing the National Export Strategy was led by a UNDP project together with the Uganda Export Promotion Board in 2018-2019.

² Ugandan shea butter has an oleic content of 56-60% compared to 44-50% in West African shea butter.

because it grows naturally and is collected in the wild. However, there is limited evidence about organic certification of Ugandan shea products and limited transparency from the processes on the traceability system used.

Most Ugandan private firms emerged in the last five to ten years. Most of these private firms are engaged in shea butter production using the hot press or cold press method, and in small scale manufacturing of shea butter cosmetics, soaps, and ointments. However, private firm owners and employees still have low entrepreneurial skills and allocate limited resources to enhance capabilities.

In Uganda, most of the investments in Shea butter production and value addition are financed by shea collectors, traders and processors themselves through informal savings and micro credit. Of recent, some financial opportunities were put in place through Ugandan government programmes like Women Economic Empowerment Programme, Youth Livelihood Programme which could support farmers, women groups and small firms involved in shea butter business.

2 Introduction

2.1 Background

The shea tree grows wild in northern Uganda and Southern Sudan. The shea tree is perennial and starts bearing its first fruits when 10 to 15 years old. Full production is attained when the tree is about 20 to 30 years. It then produces nuts for up to 200 years. The shea fruit consists of a thin and nutritious pulp that surrounds a relatively large, oil-rich seed from which shea butter is extracted. The fruits take four to six months to ripen. According to results from Focus Group Discussions (FGD) and Key Informant Interviews (KII), the average yield is 15 to 20 kilograms of fresh fruit per tree, with optimum yields up to 45 kg. Each kilogram of fresh fruit gives approximately 400 grams of dry seeds.

Shea oil plays a significant role in household food and income security of northern Uganda, especially in the districts of Lira, Katakwi, Kitgum and Kotido. The crop is a particularly important source of income for rural women and youth and interviews revealed that women processors rated Shea oil as the highest source of income generation. According to them, Shea oil provides more income than brewing and farming. The money made through Shea is also clearly for the women, whereas much of other woman's labour (e.g. production of seasonal crops) goes into products that are sold by the head of the family. In the shea producing districts, women groups, SMEs, cooperatives are involved in processing of shea butter. While for subsistence purposes hot-pressing is the most dominant processing method, for commercial uses, the processing of shea nuts is mainly done by cold-press method. Cold Pressing involves extracting oil and nutrients from the shea nut using an expeller press.

Heavy friction and continuous pressure releases oil from the shea and the oil seeps through small openings that do not allow solid shea fibres to enter. Although cold pressing does not extract every trace oil in the same way that traditional processing does, the process does cut 3-5 hours off the extraction time. It is estimated that for every 100 kg of shea nut, they produce 10 litres of shea butter.

The most important traditional uses of shea butter are cooking, dressing hair, protection against weather and sun, as a rub to relieve joint pains, to heal wounds & swelling & bruising, skin problems such as dryness & dermatitis & to massage pregnant women & small children. Roots and root bark are ground to a paste and taken orally for treatment of diarrhoea and stomach-ache. The tree is much sought after for placing hives in traditional apiculture.

The shea butter cosmetics are being produced by several SMEs & large firms. Commercial enterprises dealing in shea butter products include Lira-based Guru Nanak Oil Mills Ltd., Covol Uganda Limited- Otuke, Wings of Time – Kampala, Nile Women Initiative- Moyo, Blessed Organic - Pader and Beads for Life, among others. Shea butter in Uganda is mainly used in the cosmetics industry for skin- and hair-related products (lip gloss, skin moisturizer creams and emulsions, and hair conditioners for dry and brittle hair). It is also used by soap makers, typically in small amounts (5-7% of the oils in the recipe), because it has plenty of unsaponifiables, and higher amounts result in softer soaps that have less cleaning abilities.

Although many Ugandans have not yet known about the shea butter cosmetics, the market is growing, especially among middle income Ugandans. Shea processing companies from Uganda

are beginning to commercialise their shea butter products nationally. However, so far this is only a small market, which attracts mainly international clients or Ugandans with relatively high incomes.³ But the market segmentation of the national market for high-end shea products should be explored further.

2.2 Objectives of the Study

The consultant was engaged to undertake a study to better understand the current and potential market for Shea Nilotic products in Uganda and provide recommendations on how Ugandan Shea stakeholders can improve their access to local and/or regional markets. The study was informed by the fact that private sector players from the Ugandan shea subsector (including actors involved in collection of shea nuts, small scale and large-scale processing of shea products and marketing of products) are not utilizing their full potential to tap into local, national and/or regional market opportunities for shea products.

More specifically, the study was meant to provide an analysis of the market segments; market outlook (domestic market and regional exports) and demand growth drivers. To that end, it was expected to estimate the current supply and demand as well as the potential demand growth for different types of shea products in Uganda and in other countries of the region (East Africa). Furthermore, it analysed the technical, business and political framework of the shea economy in Uganda, identifying “hidden” constraints to investment and private sector growth as well as the key technical and political constraints and bottlenecks for shea market developments.

The final intention was to provide recommendations for GIZ regarding potential (possible and feasible) entry points for TA interventions to support Ugandan shea stakeholders in unlocking their potential and accelerate the growth of the Ugandan shea industry towards national and regional markets.

In parallel to the present study, a similar analysis was conducted looking more specifically at the opportunities to link the Ugandan shea sector with international markets.

2.3 Study Questions

The study was implemented, using the following guiding questions:

- What is the current supply and the current demand for shea products in Uganda?
- What is the market outlook and what are demand growth drivers for shea products in Uganda?
- What are the current and potential key imported products and importers from other countries in the East African region?
- What roles do key stakeholders play in influencing the demand and supply side (aggregation, processing, trading, exporting, regulation, certification, promoters, other support players)?

³ For example, Guru Nanak Oil Mills Ltd. produces shea butter Mantra which is 100 percent shea butter and started selling it in Kampala supermarkets.

- What are the existing regulations for the local and for export markets? (certification, local by-laws, export standards, voluntary standards etc.)
- Where are gaps in the regulations?
- What is the potential to enhance sales and exports? (processes)
- What are the key limitations on Ugandan markets?
- How can potential partnerships improve the access to national and regional markets for shea products from Uganda?
- What are key recommendations to inform strategic interventions by different stakeholders from private and public sector?

2.4 Purpose and Methodology

The study aimed at collecting evidence-based information on the demand and supply side of shea products. The analysis was based on these and involved information and data from other sources. Different data collection methods were employed.

2.4.1 Primary Data Collection

Information was generated primarily through key informant interviews, focus group discussions with sector players from Northern Uganda (Acholi and Lango sub-regions, mainly in the districts of Lira, Gulu, Pader, Alaptongo, Otuke, Agago, Kiryandongo) as well as with processors and traders from areas around Kampala in central Uganda.

This study engaged over 120 respondents, including:

- Main actors: farmers organized in groups and cooperatives, nut collectors, local processors, local traders, medium size processors, exporters; and
- Other support players: certification agencies, research institution, representatives of associations, local authorities, market and agricultural experts.

The complete list of stakeholders interviewed is displayed in the Annex ([Annex 8.1](#)).

The interviews generated information on:

- Sourcing the raw materials (shea nuts);
- Points of sale by Ugandan shea nut collectors, small scale processors, traders, medium scale processors;
- Collectors costs and margins;
- Other shea stakeholders' costs and margins;
- Farmers' shea use, including awareness of use of (especially local) products;
- Perceptions of opportunities and constraints;
- Requirements, regulations, and certification procedures.

2.4.2 Secondary Data Collection and Desk review

To complement and triangulate the information compiled through interviews, existing shea market studies, policy documents, official sources of data on Ugandan agriculture and other materials were reviewed.

Based on the gathered information from the guided interviews and the desk review, the data were analysed including the following steps:

- Value chain and stakeholder mapping – The key value chain and political actors were identified, and information retrieved about their interests, constraints, and opportunities for growth of the Uganda shea market.
- Data analysis and modelling – This included estimating the current supply and demand in Northern Uganda, calculating the cost mark-up along the value chain, modelling the demand growth potential for key products and distribution, etc.
- Triangulation and validation – Estimates and projections based on primary data were then triangulated and ‘sense checked’ against available official data.

3 Overview of the Shea Market

Shea butter is a vegetable fat, which is extracted from sun-dried kernels of the shea tree (*Vitellaria paradoxa*, synonyms *Butyrospermum parkii* and *B. paradoxum*; or *Vitellaria paradoxa* ssp *Nilotica*), and widely appreciated as a natural product for the cosmetics, food, and medicinal sector. Shea trees are native to sub-Saharan Africa, in a region known as the shea belt. The region extends from West to East Africa, and Shea butter is an important household resource in this whole region. There are two known types of shea trees: Shea *Vitellaria paradoxa* subspecies *Nilotica* which is native to East Africa and Shea *Vitellaria paradoxa* subspecies *paradoxa* which is native to West Africa. Most commercial harvesting takes place in West Africa where the international shea trade is dominated by purchases made by or on behalf of, Cocoa Butter Equivalent (CBE) manufacturers in Europe, Asia, and America. In East Africa, the species of shea tree is *Vitellaria paradoxa* subsp. *Nilotica*, with Uganda and South Sudan being the main producers. The trees are not cultivated but instead grow traditionally in parklands with natural regeneration.⁴

The shea butter is obtained from the nuts of shea tree. Nut gathering practices and traditional processing techniques are broadly similar across the region. The fruit is rich in magnesium, potassium, and protein content; some of its chemical constituents are reported to have antimicrobial, anti-inflammatory, and humectant properties. To extract the shea butter from the kernels, either the hot press or cold press method is used. The kernels are cracked manually to remove the outer shell, and then grounded to fine paste. After grinding, the paste is put in the oil pressing machine and pressed. The resultant light yellowish liquid (shea butter) is collected in a dry container ready to be used.⁵ If fractionized, shea butter can be split into liquid and solid phases and is the source of liquid shea oil.

Shea butter (shea oil) is utilized in various social and cultural contexts across the shea belt.⁶ However, its usability for industrial and commercial purposes is strongly ascribed to the amounts of the dominant fatty acids it contains.⁷ Although processing is similar across the shea belt region, the proportions of stearic and oleic acids in the shea kernels and butter differ significantly among the subspecies. The fatty acid composition of the shea butter extracted from *Nilotica* subspecies common in East Africa (incl. Uganda) is different from subspecies *Paradoxa* being common in

⁴ Although there are some initiatives (governmental, research and/or NGO driven) oriented towards a more purposive management of shea tree stands, these are still rather in development phases and not yet functional. With specific focus on Northern Uganda, this has also been confirmed through site visits and interviews as part of this study.

⁵ Further details on processing methods are presented in Section 3.1.2

⁶ Including cooking and food accompaniments, cultural rituals (such as traditional initiation, marriages, births, rainmaking, etc.), traditional medicine (for example in treatment of wounds) and topical treatments of various skin or hair conditions.

⁷ Stearic (saturated) and oleic (unsaturated) acids are the two dominant fatty acids, accounting for 85 – 90% of the total fatty acid composition. Stearic acid is recognized specifically ideal for use as an industrial base for confectionary and food products, whereas oleic acid is specifically ideal as a raw material for cosmetic and personal care applications. In addition, unsaturated fatty acids are appreciated for their high stability. Fat content and fatty acid composition of Shea butters (e.g. ratio of saturated fatty acids to unsaturated fatty acids) determine their attractiveness for different industrial and commercial uses (S. Gwali et al. (2012): Fat content and fatty acid profiles of shea tree (*Vitellaria paradoxa* subspecies *nilotica*) ethno-varieties in Uganda).

West Africa (see Table 1), and so are the physical characteristics of the butters. Shea butter from the *Nilotica* subspecies has a higher content of oleic acid (Omega-9 - 56%-60%) and lower contents of stearic acids (29%-32%) which gives it excellent moisturising properties. The fatty acid proportion of West African shea butter is more variable than Ugandan shea butter; its oleic content is lower, and the stearic acid ratio is higher.

Table 1: Fatty Acid Composition of Shea Butter

Main Component	Uganda	West Africa
Oleic Acid (Omega-9)	56-60%	44-50%
Stearic Acid	29-32%	40-44%

Source: <https://www.ajol.info/index.php/ajfand/article/view/51484> (Okullo et al.,2010)

Apart of the traditional uses of shea as presented in the Background Section, on the local market in African countries, shea is mainly sold and used as vegetable oil or fat for cooking and personal body care/cosmetics. In particular, shea butter is used in many African countries as a waterproofing wax, for hairdressing, but also in candle-making, and as an ingredient in medicinal ointments.

The main use of the exported product depends strongly on the chemical composition. Due to its higher stearic acid content, butter from West African shea subspecies is highly demanded as cocoa butter substitute and to a fewer quantity as ingredient in cosmetic products. Bakery and confectionery manufacturers widely use West African shea butter as an alternative for cocoa butter due to high prices of cocoa. Increasing demand for cocoa butter alternatives and growing consumption of chocolate and bakery products are expected to drive this market for shea butter.

In contrast to that, East African shea butter, due to its characteristics, is considered a more luxurious product, suitable for sensitive, ageing or bruised skin, burns, wounds, dry peeling skin and baby skin. Due to its composition of essential fatty acids and unsaponifiable, and its resulting properties, it is attractive in personal care and cosmetics industry. High product demand in that subsector is likely to further boost the export market. However, based on available figures, discussions and interviews held during this study, it is not possible to make solid estimates on how much shea oil/butter is locally used in Ugandan households. It is also difficult to estimate the local market development potential.

At the moment, the local market is mainly focused on nuts, less on processed shea butter products. High-end shea butter products, marketed in promotional centers (e.g. in Kampala), seem to attract mainly people from N-Uganda or clients among Kampala's international society (expats) who are already aware of the beneficial characteristics of Ugandan shea. While the West African shea sector has received more support (e.g. in terms of promotion and awareness raising), the Ugandan shea sector is still lacking recognition on both public sector, private sector and individual consumer level, conditions which also affect reliability of supply chains and stability of business relationships, among others.⁸

⁸ Information from KII

Extensive Research and Development by cosmetics manufacturers to introduce innovative and more effective shea butter-based products will also contribute to drive the demand in this sector.⁹

3.1 The Market for Ugandan Shea

Uganda's Shea *Nilotica* composition is highly valued for the cosmetic and food industry. Production is dominantly in the shea belt, mainly in Acholi, Lango, West Nile, Teso regions and areas of Masindi and Nakasongola districts. Shea trees favour intercropping with other seasonal crops and productivity per tree is heavily dependent on its age. The average yield is 15 to 20 kilograms of fresh fruit per tree, with optimum yields up to 45 kg. Each kilogram of fruit gives approximately 400 grams of dry seeds.¹⁰ Harvesting is dominated by one season in a year (April-August) for collecting nuts.

There are no concrete figures available about the overall yield of shea nuts in Uganda. Even less information is available about the amounts of processed shea products. However, according to the Ugandan Export Promotion Board, Uganda is among the countries with potential to produce 70,000 to 300,000 tons of nuts per year (UEPB 2019 Shea export strategy; no recent data estimates), provided that all areas where the tree exists are fully exploited. In 2019, approximately 13,598 MT of raw nuts were purchased by five processors from collectors, traders, and cooperatives (see Table 5). According to available data from UEPB (Table 2), the volume traded of shea products was 185 MT. However, this data does not capture informal exports of nuts to Kenya and informal processing.¹¹

Table 2: Trade volume of shea butter products in Uganda

Volume	2017	2018	2019	Ratio
Export (kg)	68,067	311,965	131,390	60%
Domestic (kg)	27,227	124,786	52,556	40%
Total	97,311	438,769	185,965	

Source: <http://ugandaexports.go.ug/statistics> URA 2016/17-2018/19¹²

Three principal markets can be distinguished for Ugandan shea:

- Local / national markets;
- Regional market (East Africa region)¹³; and

⁹ <http://www.sbwire.com/press-releases/shea-butter-market/release-860606.htm>

¹⁰ information confirmed by FGD and KII

¹¹ The researcher was unable to establish this information.

¹² Including only registered trades. Informal trades are not being registered.

¹³ Regional markets in general include both formal and informal trade markets. However, figures are only available for registered/formal trade of shea (nuts and products). A substantial share of regional trade is not being registered.

- International markets.

Local processors /farmers focus on local consumption and local market. There is a strong consumer perception in the country that natural ingredients are safer and healthier than synthetic substitutes. Cosmetics products (aftershave, hand & body lotion, lip shine, and laundry soap) and hair care products (hair food pomade, hair conditioner and hair spray) are produced mainly for the local and the regional market.

“You cannot compare shea products to other oils that have negative effects to life yet “expensive”

Obua – Otuke Subcounty

With a view to regional markets (East Africa), Kenya has the largest cosmetic sector in the region, and within the region, the main export destinations are Kenya, Rwanda, Burundi and Tanzania. **Table 3** below shows shea exports in the East African countries in the last eight years. However, there is no reliable data to indicate the values on local or regional trade for shea products.

Table 3: Main export countries for Ugandan shea products¹⁴ within EAC

Exporters	Export value in 2010	Export value in 2011	Export value in 2012	Export value in 2013	Export value in 2014	Export value in 2015	Export value in 2016	Export value in 2017	Export value in 2018
World	937,743	1,161,298	1,268,401	1,430,662	1,541,838	1,468,914	1,435,369	1,725,885	1,893,050
EAC-5	6,194	4,276	6,303	7,872	6,744	8,006	9,077	8,999	13,688
Kenya	2,695	3,232	4,721	5,898	5,774	6,853	7,285	8,281	12,882
Uganda	45	165	1,125	1,582	679	379	240	270	474
Rwanda	0	0	392	392	282	745	1,331	447	285
Burundi	0	6	0	0	0	0	0	0	47
Tanzania	3,454	873	0	0	9	29	221	1	0

Sources: ITC, UN COMTRADE

Other export destinations for Ugandan shea products include Germany, USA and South-Eastern Asia.

UEPB¹⁵ reports that approx. 60% of the total volume of shea products produced in Uganda are destined to regional and international markets. The export market is mainly dominated by pure shea butter for food and cosmetics and toilet soap.

The total value exported of Uganda’s fixed vegetables fats and oils in 2019 was \$698,000 dollars, resulting in a trade balance of \$658,000 dollars. Shea products (oils and their fractions-fractionated shea) accounted for 47.6% (\$332,240) of the total value. 92.6% of Uganda’s fixed

¹⁴ Incl. raw shea butter, shea cream, processed shea butter. There is no breakdown of products made by ITC/UN Comtrade. However, information from KII indicate that mainly raw shea butter is exported.

¹⁵ Source: Interview with UEPB Export Marketing Executive

vegetable fats and oils exports were destined to Canada, USA and Germany (see [Annex 8.5](#) - List of importing markets for the product exported by Uganda in 2019).

Over the last four year, the Ugandan processors have increased the volume and value of domestic and export market. For example, data from four processors for shea butter oil increased from 8,319 kgs in 2016 to 13,621 kgs in 2019 ([Table 4](#) below). Other shea products which show growth rates include Shea Butter Soap (4800 kg in 2016 to 6400 kg in 2019).

Table 4: Shea Products Domestic and Export Sales (Volume & Value) 2016 - 2019

Domestic Shea Products (Volumes & Sales)								
	2016	2017	2018	2019	2016	2017	2018	2019
Shea Butter Oil	Volume(kg)				Value in USD			
Blessed Organic Release	300	250	200	250	1,345	987	808	1,006
Pader Shea Cooperative	185	1400	450	600	1,345	899	2,960	3,926
Kahangi Estates	100	83	167	42	599	437	899	225
Guru Nanak Oil Mills Ltd.	5,734	8,040	10,235	10,129	34,274	42,316	55,101	54,326
Shea House Ltd	2,000	1,700	2,050	2,600	13,748	102,894	12,691	16,036
Subtotal	8,319	11,473	13,102	13,621	51,311	147,533	72,459	75,519
Shea Butter Body Creams	Volume (kg)				Value in USD			
Shea Beauty Company Ltd	360	480	240	50	6,886	8,084	4,134	858
Subtotal	360	480	240	50	6,886	8,084	4,134	858
Soap	Volume (kg)				Value in USD			
Kahangi Estates	4800	7000	6200	6400	4303	5579	5006	5149
Subtotal	4800	7033	6267	6400	4303	5579	5006	5149
Shea Butter Body Lotions	Volume (kg)				Value in USD			
Kahangi Estates	98	220	102	110	791	1563	741	797
Subtotal	98	220	102	110	791	1563	741	797
Total					63,291	162,759	82,340	82,323
Exchange rate					3346	3800	3715	3729
Exports of shea products								
	2016	2017	2018	2019	2016	2017	2018	2019
	Volume (kg)				Value in USD			
Shea Butter Products	0	68067	311965	131390	0	323305	474228	332240

Source: Raw data from processors (March 2020), confirmed by URA.

As figures show, there was a significant drop in 2019. Taking into consideration the high market share of EU exports, this drop might mainly be affected by stringent EU import regulation on agricultural products from Uganda. In addition, a dry spell at the end of 2018 might also have had

an effect, but as information on shea production was not available for comparing different years (2018 vs. 2019), this effect could not be confirmed solidly.¹⁶

There is a wide range of stakeholders in the shea sector in Uganda – collectors -village pickers and post-harvest processors of dry kernels; local buying agents; rural or urban traditional butter processors; large-scale exporters of shea kernels; large-scale processors (mechanical extraction and export) of shea butter based ‘in-country’; small-scale entrepreneurs formulating cosmetics based on shea butter in Africa; external entrepreneurs or companies formulating cosmetics based in shea butter; and, external entrepreneurs or companies formulating edible products.

The following chapters will explore the Ugandan shea sector in respect of the different sections: supply, processing / value addition and trading.

3.1.1 Supply of Shea Products

In 2019, approximately 13,598 MT of raw nuts were purchased by five processors from collectors, traders, and cooperatives (see Table 5). According to the Uganda Export Promotion Board (UEPB), Uganda is among countries with potential to produce 70,000 to 300,000 tons of nuts per year (no recent data estimates). According to these figures, the potential exceeds the current supply by far. In its National Export Strategy for Shea Butter Products 2019 to 2023, UEPB estimates that Uganda can produce up to 100,000 tons of nuts marketed over the next five years, with a potential average annual total production of 30,000 to 35,000 tons of shea butter. Presently, updated figures on tree populations, production, processing and export statistics are not available.

The local variety, *Vitellaria Nilotica*, is widely used as a raw material for both local and international shea product manufacturers. As mentioned above, due to its chemical characteristics (Okullo et al. 2010 - <https://www.ajol.info/index.php/ajfand/article/view/51484>), Nilotica shea butter is softer and more fragrant than West African shea butters which makes it a very attractive raw material for the fast growing cosmetics industry in Kenya (among others). Given these circumstances, there is a high demand for Shea Nilotica nuts, which allows the Ugandan women farmers to generate substantial incomes from selling the raw shea nuts.¹⁷

The quantity of nuts available in the markets is dependent on the seasonality of the Shea tree. Also weather conditions play a role. Nut volumes at the markets are highest in the months of June, July, and August (peak season). In the months of September, October, November and December, volumes fall by 50%. The quantities are lowest in January, February, and March, before they begin to rise in April and May. For example, five processors purchased about 5,439 MT during short peak season and 8,159 MT over the long off-peak season. Depending on nut availability on the markets, prices for shea nuts vary in a year ranging from Ush. 1200 (= USD 0.33) / kg during harvesting season, to Ush. 2000 (=USD 0.55) / kg off season. Other units used by

¹⁶ Information from KII

¹⁷ According to FGD and KII, shea nuts from Ugandan Nilotica trees are sold for prices up to five times higher than those on W-African shea. Selling the raw nuts is much more attractive to collectors than processing, which due to low efficiency and additional costs of packaging would not allow the collectors to achieve comparable margins with selling processed shea products.

farmers is a cup selling Ush. 300 (=USD 0.08) to Ush 900 (=USD 0.25) / cup for off season. Also, a basin of nuts cost Ush. 25,000 (=USD 6.85)¹⁸. Price differences due to quality criteria (incl. certification schemes) have not been confirmed in interviews with shea collectors. Although there is a grading system for shea nuts (criteria include size, status of fermentation), that doesn't seem to considerably affect the prices.¹⁹

Table 5: Shea nut volumes purchased by some processors (in MT)

	Peak Season				Off Peak Season										Total MTs	
	June	July	Aug	Sub	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Sub		
Guru Nanak Co Ltd	1750	1750	1750	5250	875	875	875	875	875	875	875	875	875	875	7875	13125
Raw and Organic Investments Ltd	18	18	18	53	9	9	9	9	9	9	9	9	9	9	79	131.25
Kahangi Estates Ltd	20	20	20	60	10	10	10	10	10	10	10	10	10	10	90	150
Organic Care Uganda Ltd	9	9	9	26	4	4	4	4	4	4	4	4	4	4	39	65.625
Shea Beauty Company Ltd	17	17	17	50	8	8	8	8	8	8	8	8	8	8	76	126
Total				5,439											8,159	13,598

Shea farmers (collectors) harvest about 0.4 kilograms of shea nuts (dry seeds) from every Uganda kilogram of fresh shea fruit. Collectors, usually women, pick the fallen seeds and store them temporarily in baskets in readiness for processing.²⁰

Summary / Conclusion:

Although consolidated figures on overall shea nuts collected in Uganda do not exist, it is to be assumed that the current supply of shea nuts is by far less than the potential supply. The Ugandan Export Promotion Board estimates that the supply could be substantially increased during the next years. As mainly women or women groups are involved in the collection of shea nuts this would especially provide opportunities for women to benefit from the growing demand of the sector. Due to seasonal harvesting, prices for shea nuts vary over the year with highest prices achieved on the market during the off-peak season. Improved storage management and increased reliability of supply also during off-peak season might further contribute to increased margins.

¹⁸ Exchange rates according to Uganda currency rates

¹⁹ In FGD it was commented that bad quality seeds are rather sold during off-peak seasons when market prices for shea increase.

²⁰ Source: <https://www.selinawamucii.com/produce/nuts-and-oil-seeds/uganda-shea-nuts>

3.1.2 Processing and Value Addition

Shea butter is a fat obtained from the kernels of *Shea Nilotica* subspecies tree. The shea butter is extracted from the kernel of the nuts, using either hot-press or cold-press methods.

Hot Press Method

Findings indicate that hot press is commonly used in small-scale production at household level and by small-scale processors.

Traditionally, the dry kernels are crushed by being beaten with stones or wood in order to remove the outer shell. They are then roasted and pounded in mortars to extract the butter which is then boiled in water until the fresh shea butter rises to the surface. It is then scooped into gourds or clay containers and left to cool and set. Although these artisanal methods result in smaller output and low production of about 30% utilization, no chemicals or synthetic agents are needed at any stage.

Shea butter may also be extracted by pressing in an expeller type press which cuts 3-5 hours off the extraction time. Again, no chemicals or synthetics are needed. The product of either method is raw or unrefined shea butter.

Local communities report a shelf life of up to two years for shea oil produced in this traditional way. With about 30% of shea oil extracted from the kernels through hot-press, the efficiency of this method was referred to as lower than cold-press efficiency.

The Cold Press Method

The cold-press method is mainly used by medium scale processors with improved processing techniques that are being promoted in the region. Once the nuts have been dried to readiness for processing, they are grounded into powder. After grinding, two processes are available, the hot and cold press. In the case of cold press, the powder is mixed with hot water and poured into a bag which is put in a container. It is hard pressed and the oil filters through the bag into a container. Using the cold-press method, processors obtain a higher quality product and can produce about 4 litres in 30 minutes or up to 40 liters in one day. Its production potential stands at 55-75% utilization. In addition, the efficiency of the cold-press method is reported to be higher than the hot-press, with approx. 40% of the oil extracted from the kernel.

Table 6: General steps for processing of shea products (hot and cold press)

Processing steps	Details / Remarks	Stakeholders
Shea fruit collection	From April to August each year, the ripe (fallen) shea fruits are collected by hand from the ground under the shea tree	Individual women and youth
Shea fruit de-pulping	The fruit pulp is removed by hand, by feeding the fruit to animals or by fermentation. For fermentation, the shea fruits are buried in pits which causes the pulp to ferment and disintegrate, while the heat generated prevents germination	Women

Boiling the nuts	After de-pulping, the recovered nuts are often boiled in water for about 40 minutes, using the traditional three-stone cooking stoves. One of the objectives is to loosen the kernels in the shell to help de-shelling. This process can be done by using a jacketed kettle.	Women
Sun drying	The boiled nuts are sun-dried on a mat, cemented ground, or drying racks. This is to loosen the kernel from the shell for easy de-shelling. If drying by machine is required, hot air-drying oven or microwave drying machine can be used.	Women or processor
De-shelling	The dried nuts can be cracked by using a mortar and pestle or between two stones to remove the shell. There is also sheller/separator suitable for processing shea nuts	Women or processor
Washing of shea kernels	The kernels are washed with water. This can be done using a kernel washing machine	Processor
Kernels drying	The washed kernels are sun-dried to remove moisture. Hot air-drying oven or microwave drying machine can be used in this process.	Women or processor
Kernels sorting	The kernels are sorted to remove bad seeds and impurities	Women
Pounding/crushing into grit	The dried kernels are pounded in a mortar and pestle or crushed in a crusher into small pieces for easy roasting. This can also be done using a kernel chopping machine.	Women or processor
Roasting of the kernels	The crushed kernels are sent to the roaster and roasted to aid in oil extraction	Women or processor
Milling/grinding into paste	The roasted kernels are then ground in the grinding machine into a paste.	Women or processor
Separating the oils (Kneading)	Traditionally the butter is extracted by kneading by hand in large basins; water is gradually added to help separate out the butter oils. As they float to the top, the butter oils, which are in a curd state, are removed and excess water squeezed out. The butter oil curds are then melted in large open pots over slow fires. A period of slow boiling will evaporate any remaining water. Pressing by hydraulic/screw press or solvent extraction can also be utilized followed by refining with refining equipment	Women or processor
Boiling	The fat is boiled on fire to dehydrate it. The actual butter is skimmed off the top. This boiling process can be done by using the jacketed kettle.	Processor
Filtration and solidification	The butter is then filtered through a filter cloth, allowed to cool down and solidify. Gradual stirring is done to facilitate cooling.	Processor
Packaging	The butter is then packed in airtight containers. This can be done by using filling machine. The cake is also packed in bags ready for sale to the feed millers	Processor

Source: information collected through field visits

As the above table shows, the principle steps are similar in both methods. The main difference is in the last three steps, when different instruments and technologies mark the difference among the processes.

After pressing, the left-over shea cake, the residue that remains after the extraction of shea butter, is removed. Some local producers report the cake repels mosquitos. Others mention that the shea nut cake, serves as excellent fuel. It is also good ingredient for livestock feed formulation as well as for the treatment of skin diseases. The cake is also ideal for use as manure and fertilizer production. For every metric ton shea nut processed, 450-600 kg of shea nut cake is produced.²¹

The potential for using the shea cake for business enhancement (e.g. for production of animal feed, charcoal bricks, wood paint) was mentioned by several key informants²² during the field phase of the study, however there isn't yet any concrete initiative underway so far.

Although, local production is beginning to take root, an unspecified amount of shea kernels is also exported and processed abroad.

Machine Capacity Utilization- “feedback from processors”

Shea Beauty Company: *“The machines capacity utilization is determined by the market demand otherwise they do not utilize their capacity. Also, the machines do not do A to Z activities, the speed is also dependent on manpower for changing and carrying oil and the cake. The machine at full capacity in one shift (8 hours) produces 12 jerrycans X 20 = 240kg. But if there is need, they can do two shifts 12X2= 24 X 20 = 480kg.”* Note: The current production capacity could be estimated at 20%.

Raw and Organic Investments Ltd: *“It can at least do 500kg per day, which translates to at least 200 litres”. Currently, I utilize less than 1% to be frank. The reason is, I do not have orders or serious demand. So, I usually bring 200 to 400kgs press them and market them. When the butter is nearly over that's when I press more”. “I would be very grateful if you can kindly get me some good market Sir.”*

Guru Nanak Oil Mills Ltd can produce more than 50 MT of nuts per day which result into 20 MT of butter per day. It was tricky to get the utilization capacity now. (Note: *They only process for three months in year and stock.*) The company plans to install a new machine to increase efficiency of the nuts by reducing waste. It will produce better oil which will be launched after the lockdown.

Organic Care Uganda: Does process for people and has no products / brands. The processing plant is producing organic Shea butter. Can produce 200 to 250 kg/litre per day. Note: I have realized the processors do not know installation capacity and never ascertain their current utilization capacity.

²¹ Source: <https://www.shellingmachine.com/application/economic-values-of-processing-shea-nut.html>

²² Incl. Guru Nanak Oil Mills Ltd., RDC Otuke, Gulu University, Makere University

Summary / Conclusion:

Hot-pressing of shea oil is mainly used for household consumption in Northern Uganda's shea belt region. Cold-pressing technology mainly used by processors allows for better quality products and higher efficiency compared to hot-pressing. Processing capacities in Uganda are still limited, both in terms of technology and in terms of quantity. Processing SMEs commented that their facilities would allow to increase quantities, but market demand is perceived unstable. Most Ugandan processors manage their production according to explicit market demand. Improved relationship between processors and buyers as well as increased awareness on market opportunities might contribute to better use of processing facilities and increased business performance. In addition, capacity development for processing SMEs could focus on new technologies for improved product quality and increased efficiency in oil production.

3.1.3 Trading of Shea Products

Results from interviews indicate that the kernels are sold by collectors, traders or processors in both local and regional markets for further processing. This is highly driven by the demand and margins on the quantities sold. Most of the processors in the country own cottage firms, that is, small family owned processing units in the backyard of homes in trading centres or small towns. A substantial amount of shea butter is produced by the wider community using the traditional method. They produce it mainly for household consumption. Minor quantities are also sold in local markets.

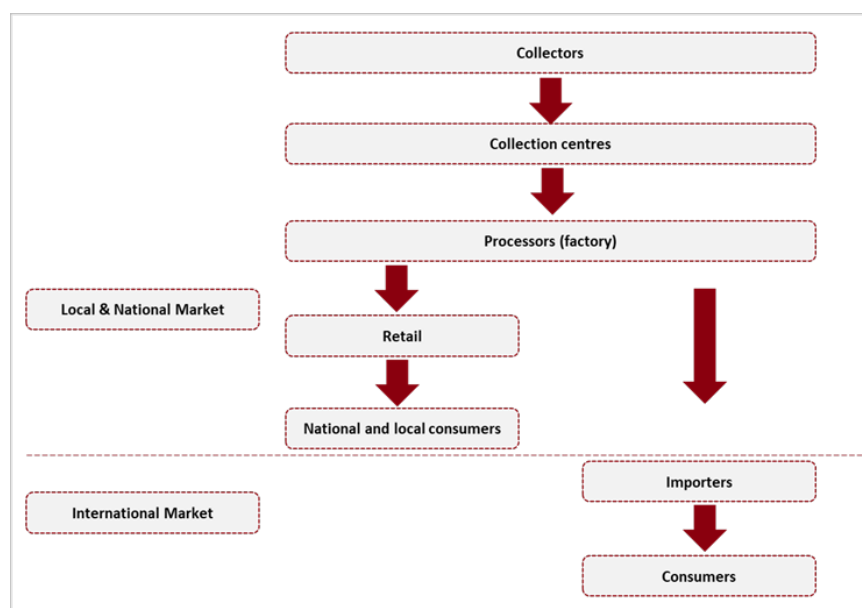


Figure 1: Shea trading chain in Uganda

Source: Author, 2020

The growth for shea market goes along with a shift from valorisation for traditional uses to recognition as a valuable source of household income. Mainly women and youth drive key activities for shea collection and processing since they take charge of households and they recognize its value for household food, as well as its potential as a source of income.

Local and international market exhibitions are driving the local, regional and international market for Uganda’s shea products (see also [Table 7](#)). Findings indicate that natural cosmetics (hand & body creams, shea butter baby jelly, laundry soap, lip shine) sales are growing more strongly on the Ugandan market than conventional cosmetics, pushed by an increasing demand for natural ingredients for cosmetics industry and an increased awareness of health aspects of personal diet and body care.²³ The study identified that shea products on the national market are consumed by middle- and high-income earners, mainly for health reasons.

Table 7: Shea butter products and markets

Type	Shea Butter Products	Market
Cosmetics	Hand and body creams Shea butter baby jelly Aftershave shea lotion Lip shine/balm Shea hair oil Laundry/toilet soap	Uganda EAC COMESA South Africa
Hair care	Hair food pomade Hair conditioner Hair spray castor oil	Uganda EAC South Africa
Food and cosmetics	Pure shea butter (Raw) Toilet soap	EAC, USA, Canada, S. Africa, Hongkong, Israel, Japan, Russia, S. Korea, Germany Netherlands, Switzerland, UAE

Local, regional and international consumers are increasingly buying the story behind products they use both in Uganda and international.²⁴ Much as the ingredients can be an important component of such stories, especially for sensitive products like cosmetics, the manufacturers use marketing stories on how they empower women through Shea production. Brands also use fair trade certification to support their claims about shea production empowering producing communities.

With regard to the actual trading processes, study findings indicate that middlemen play a key role in trading. They buy kernels, sort them into three grades A, B and C according to size, moisture content, and breakage and sell them to processors (producers of shea butter).

Some processors buy directly from organized women or farmers groups. In such a case, the shea collectors organize and establish their own groups and enter a contract with the processor to buy/supply shea kernels. A group may be up to 50 women. Usually, besides shea collections, the groups also deal in other commodities like simsim (sesame) and sunflower. In a good harvest season, each group member on average reportedly may collect more than 100 kilograms of shea kernels.

²³ Source: key informant interviews during field visits

²⁴ Source: Interviews with processors

Pricing

Each kilogram of kernels costed up between US\$ 1200 and US\$ 2000 at the time of this study.

The pricing of shea products (refined and unrefined) in Uganda varies from one processor to another though for the brands available in supermarkets and beauty shops, which tend to compete on prices, the difference is not big. The pricing in Uganda is affected by packaging material and by branding the company invests in. If to compare, the unbranded shea butter products are cheaper than well packaged and branded with certification. Also, from all the companies interviewed, processors have different pricing for the same shea products. None seemed to have a clear pricing strategy based on investment costs and expected returns.

Summary / Conclusion:

Trading of shea comprises mainly raw shea nuts. High-end shea butter products are only traded to limited extents in Uganda. However, an increasing awareness among middle- to high income earners created through local and international market exhibitions contributed to a slowly increasing demand for high-end shea butter products on the national market.

In summary, trading strategies are existent only to limited extents and interviews with traders revealed substantial lacks in terms of pricing strategies, which severely affects the understanding of traders on business limits or potentials and potential investments to make.

3.1.4 Quality Standards and Certification of Shea Products

Only few traded shea products are certified to meet the national and/or regional market requirements.

For long, shea products have been classified under oils and fats, yet most traders /processors require Quality mark (Q-mark) to access formal markets (local supermarkets) as well as regional trading.

More recently, the Uganda Export Promotion Board with support from UNDP and in partnership with Uganda National Bureau of Standards have developed five standards for shea products to guide the general certification of Ugandan shea products and to promote their exports through harmonizing regional standards (US 1636:2016, Shea nut–Specification; US 1635:2016, Shea butter-Specification; and US 1931:2019, Shea butter for cosmetic industry-Specification; two more standards for shea shaving cream and shea hair oil are still in process of development / have not been adopted by UNBS).²⁵ This has since helped major processing companies to certify their product, which has not only contributed to improved access to regional markets but also aided them to sell their products in big Ugandan chain stores (for example Moyaa shea products - Moyaa shea soap, body care, skin care).

According to UNBS certification standards, shea butter shall: be expressed from Shea nuts which are fit for the purpose; be free from adulterants; and any other foreign matter, separated water

²⁵ Source: https://members.wto.org/crnattachments/2016/TBT/UGA/16_1200_00_e.pdf;
https://members.wto.org/crnattachments/2016/TBT/UGA/16_1201_00_e.pdf;
https://members.wto.org/crnattachments/2017/TBT/UGA/17_5634_00_e.pdf;

and added coloring substances; be free from rancid odor and taste; have colour characteristic of the designated product; and be free from admixture with other oils , when tested according to appropriate method.

Table 8: Shea butter requirements

No.	Characteristic	Requirement	Method of test
i)	Moisture and matter volatile at 105 oC, % m/m, max.	1	ISO 662
ii)	Insoluble impurities, % m/m, max.	0.05	ISO 663
iii)	Slip point	30°C - 42°C	ISO 10539
iv)	Relative density (40 oC/ water at 20 oC) g/cm ³	0.900 - 0.930	ISO 6883
v)	Refractive index, 40 oC	1.460 - 1.470	ISO 6320
vi)	Saponification value (mg KOH/g oil)	170 – 190	ISO 3657
vii)	Iodine value (Wij's),	52 – 70	ISO 3961
viii)	Unsaponifiable matter, g/kg, max.	10	ISO 3596
x)	Acid value, mg KOH/g oil, max	1	ISO 660
xi)	Peroxide value, mEq peroxide oxygen/kg oil, max.	5	ISO 3960
xii)	Free Fatty Acid, Max	0.5	ISO 660

According to UNBS, shea butter shall be packaged in food grade containers and sealed in manner to ensure the safety and quality requirements specified in the standard are maintained throughout the shelf life of the product. Shea butter in Uganda is commonly packaged in plastic containers of various sizes and sold as a raw material for the manufacture of other value-added products like ointments, hand and body lotions, hair creams, baby jellies, soap, and other skin care products.

In addition to the UNBS standards, the United States Agency for International Development and other companies have suggested a classification system for shea butter separating it into five grades. This classification system has been adopted in 2019, however the classification can only be quoted if standards from UNBS are fulfilled.

Classification system (grades)	Description
A	Raw or unrefined, extracted using water
B	Refined
C	Highly refined and extracted with solvents such as hexane
D	Lowest uncontaminated grade
E	With contaminants

Commercial grades are only those classified A, B, or C. The classification system provides information on quality criteria and other characteristics of the shea product.²⁶

Discussions with market experts revealed that public standards are mandatory for manufacturers to adhere to. At the international market, public standards are a must and private /voluntary standards are coming with a competitive advantage. Interviews with major processors, showed that a few companies are organically certified, and this has helped penetrate international markets, e.g. Guru Nanak on Amazon²⁷ being one the best online distributors. Moyaa Shea Products Ltd. produces Grade A shea butter and derived products not only according to UNBS standards, but also certified by the American Shea Butter Institute and subscribing to fair trade certification scheme, which helped them to enter the Canadian market.²⁸ The producers / manufacturers with fair trade, organic, sustainable production certified and ethically operating will attract more niche buyers at favourable prices at international markets.

However, even the UNBS certification done locally does not come cheap for SMEs to afford the certification and audit process. So, there are still some SME processors not applying preventive controls and programmes such as Hazard Analysis and Critical Control Point (HACCP) throughout the operations to address most of the safety problems. Shea producers should adopt and implement good farming and processing practices to ensure a sufficient supply while addressing potential risks to ensure safety, meet audit process and reduce costs of handling.

Summary / Conclusions:

A national standards and certification system for shea products in Uganda is still in process of development. A set of standards for shea products have been developed already, others are still to be finalized and adopted. The national standards aim at ensuring quality criteria for the national shea markets and harmonizing Ugandan standards with regional standards. However, the national standard system hasn't yet fully adopted by all Ugandan shea processors. Farmers and most of local (SME) processors don't have knowledge about certification schemes, neither national nor international, or still struggle with adherence to the UNBS shea standard and corresponding certification process.

In contrast to that, some companies which adopted national and (to a limited extend) also international standards and certification processes, have been able to successfully enter to national niche markets and/or international markets.

3.1.5 Ugandan Shea Market Actors (private and public sector actors)

The trading relationships (as presented above in **Figure 1**) are not mature in the shea value chain and therefore still experience significant challenges. Often, nut collectors also double in local shea

²⁶ E.g. The colour of raw (grade A) butter ranges from cream (like whipped butter) to greyish yellow. It has a nutty aroma which is removed in the other grades. Grade C is pure white. While the level of vitamin content can be affected by refining, up to 95% of vitamin content can be removed from refined grades of shea butter (i.e., grade C) while reducing contamination levels to undetectable levels.

²⁷ <https://www.amazon.com/Organic-Shea-Butter-Fair-Trade-Replenishes/dp/B0732K9T9B>

²⁸ Source: <https://www.moyaasheabutter.com/>

processing. However, sector strengths can help it to grow.²⁹ The National Shea Sector Stakeholder Platform, which at the time of the study was in its process of formation³⁰, might play a key role in developing and coordinating joint actions to tackle these challenges.

Table 9: Strength and weaknesses of market actors

Market actors	Strengths	Weaknesses
Collectors <ul style="list-style-type: none"> Individual households Group representatives 	<ul style="list-style-type: none"> Resources availability (most is grown in the wild) Quality - Knowledge of the product 	<ul style="list-style-type: none"> Scattered producers Limited bargaining power Lack of proper storage (nuts) Yields being vulnerable to natural disasters, such as droughts or fires Market vulnerability, due to structured marketing (e.g. per quality, production standards, pricing) missing Quality of raw nuts affected by inappropriate handling (e.g. inappropriate drying)
Collection centres <ul style="list-style-type: none"> Traders Agents 	<ul style="list-style-type: none"> Quality control (storage) infrastructure allows to control prices 	
Processors (Shelling, Drying, Pressing) done at Collection Centres <ul style="list-style-type: none"> Group representatives Exporters Individuals 	<ul style="list-style-type: none"> High price due to value addition 	<ul style="list-style-type: none"> Limited skills, especially of local processing SMEs with regard to improved technologies allowing for increased efficiency of oil pressing and improved quality management for shea products, to meet international standards Cost of technology – Competition Access to international markets Costs associated to the analysis of the products
Ugandan market	<ul style="list-style-type: none"> Potential for development, especially targeting (upper) middle class consumers with an interest in health aspects for personal/body care and/or in social/ environmental benefits A National Shea Sector Stakeholder Platform is being established, which could play a role in improving and strategy development and coordination of actions. 	<ul style="list-style-type: none"> Limited awareness of Ugandan target groups on values/uniqueness/positive characteristics of Ugandan shea products Relationships among Ugandan shea stakeholders not well developed and hampering effective promotion/branding along the value chain The leadership of the National Stakeholder Platform is strongly influenced by political interests which hampers their functionality.

²⁹ For example, the unique shea variety and the increasing demand for organic products worldwide, provides an opportunity for shea actors to develop efficient relationships and targeting specialized markets.

³⁰ Champion stakeholders were in the process of registration. GIZ is a key partner in setting-up the platform.

<p>International market (access by Ugandan companies)</p>	<ul style="list-style-type: none"> • Increasing demand for organic products worldwide • Unique product 	<ul style="list-style-type: none"> • High freight costs (transportation) • Different standards and high certification costs • Difficulty in meeting market requirements • Lack of national export association • Competition • Timing and pricing • Exports are needed in tons / supply chains not reliable / stable
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Summary / Conclusions:

Relationships between Ugandan shea sector stakeholders are characterised by limited coordination in implementing the relevant strategies and policies. Knowledge and skills are at very different levels and resulting gaps are barriers for effectively targeting the potential markets, nationally and internationally. Improved coordination and mutual support in closing skills, technology and information gaps would probably contribute strongly to substantial sector growth. The National Shea Sector Stakeholder Platform, which is currently being established, could play a significant role in all attempts of harmonizing approaches and coordinating the implementation of Ugandan shea related policies and related support projects.

3.2 Regional and International Shea Markets

The regional market for Ugandan shea products is basically in the East African region. International markets beyond the East African region (West Africa, Europe, Asia, North America, and Middle East) are not subject of the present study but will be referred to in terms of rather general observations.

Findings of the study indicate that there is huge informal exportation of shea nuts to Kenya by nut collectors, traders and processors in Uganda as opposed to value added products, without volumes of nuts traded being recorded.³¹ No figure was reported of the finished products as export to the Kenyan market. However, figures from Table 3 show that over the last 5 years, Uganda has been increasing its shea exports to Kenya, while exports to the rest of EAC countries are declining. This is mainly triggered by Kenya's quickly growing cosmetics industry. In 2018, shea butter products worth \$12.882 million dollars were exported to Kenya compared to \$13,688 million dollars for all EAC countries.

With regard to international markets, the following table (Table 10) presents an overview on export values for Ugandan shea products for the last three years.

³¹ Source: interviews with collectors, traders, processors

Table 10: Volume and value of Uganda's shea (oils & their fractions) exports

	2017	2018	2019
Volume (kg)	68,067	311,965	131,390
Value (\$)	323,305	474,228	332,240

Source: <http://ugandaexports.go.ug/statistics> URA 2016/17-2018/19 formal & informal exports.

The North America market (Canada & United States) accounted for approximately 85% (\$405,782 dollars) of the shea exports value in 2018 (Table 12 below). 92.6% of fixed vegetable fats and oils and their fractions exports are destined to Canada, USA and Germany (see Annex 8.5 - List of importing markets for the product exported by Uganda in 2019). Canada, USA and Germany accounted for 86.4% (\$409,776) worth of shea (oils & fractionated shea) product exports (Table 12 below). The biggest single contributor to exports into EU, USA and India, mainly certified organic shea butter and pure natural shea butter was Guru Nanak Oil Mills (U) Ltd. It sold shea butter products worth \$354,970 dollars in 2018 alone (Table 11).

Table 11: Shea (oils & fractionated shea) exports by company

Company	2016		2018		2019		Destination
	Qty	Val	Qty	Val	Qty	Val	
Agro-ECO Uganda Ltd.	-	-	200	781	1,184	9,918	Germany
Alumalum Rural Investments Ltd.	-	-	22,800	81,858	38,000	136,432	Canada
Bumaco Logistics Ltd.	-	-	200	534	-	-	DR. Congo
CAIO Shea Butter (U) Ltd.	-	-	1,139	4,002	3,330	2,182	Netherlands, Israel
Golden MARS International Co. Ltd.	-	-	1,000	299	-	-	Burundi
Guru Nanak Oil Mills (U) Ltd.	60,847	302,236	253,326	354,970	87,976	181,458	USA, Hongkong, Netherlands, South Africa, Brazil, Switzerland, Poland, Australia, Czech Republic, Tanzania, Germany, Lithuania, Finland
Kalpalira Uganda Ltd.	-	-	30,000	26,896	-	-	Rwanda
Kiba Auto Garage Ltd.	-	-	1,800	4,494	900	2,250	Kenya
Mohamad	-	-	1,500	394	-	-	Central African Republic
Pameri Organic Shea Butter (U) Ltd.	5,508	14,988	-	-	-	-	United States
PAN AFRIC Commodities Ltd.	1,000	1,731	-	-	-	-	Kenya

Shea Beauty Company Ltd.	712	4,350	-	-	-	-	Saudi Arabia, United States
Total	68,067	323,305	311,965	474,228	131,390	332,240	

Source: <http://ugandaexports.go.ug/statistics> & URA 2016/17-2018/19 formal & informal exports

Growth in exported quantity between 2015-2019 (% p.a.) was 33%, with a particular increase in shea product exports between 2016 and 2018, period for which an increase of 50% in shea export value has been reported (URA & UEPB statistics 2016-2019).

As per the Global Shea Alliance, shea butter is a key trade commodity for the African economy; with Burkina Faso, Mali, Ghana, Nigeria, Benin, Togo, and Guinea are the main shea butter producers. Rising dependency on African countries for shea butter export is a key factor behind the massive market growth in this region. Ugandan shea butter is preferred by many customers who buy from processors because it is milder in aroma, has a softer and is more fragrant than the West African variety has a higher absorption rate.

Europe accounted for more than 25% share in the overall shea butter market. Growing concept of premium and high-quality food products with promised health benefits is likely to support segment growth. Changing socio-economic dynamics, increasing purchasing power has forced consumers to pay premium price for basic dietary and natural ingredient laden products. Stringent EU laws to allow minimum 5% shea butter in chocolate products indicates massive growth of shea butter in European region by 2025.

Table 12: Shea (oils & fractionated shea) exports by market

	2017		2018		2019	
	Volume (kg)	Value (\$)	Volume (kg)	Value (\$)	Volume (kg)	Value (\$)
COMESA	1,400	4,836	33,000	32,223	900	2,250
East Asia	-	-	8,806	15,868	-	-
European Union	45,824	232,742	784	3,994	67,798	155,712
Middle East	673	2,966	608	1,997	570	862
North America	9,166	66,460	263,984	405,782	51,515	161,492
Other Africa	10,710	10,048	2,593	11,063	10,607	11,924
Other Europe	-	-	930	1,476	-	-
Latin America	-	-	1,260	1,825	-	-
Total	67,773	317,052	311,965	474,228	131,390	332,240

Source: <http://ugandaexports.go.ug/statistics> & URA 2016/17-2018/19 formal & informal exports

The government of Uganda through Uganda Export Promotions Board (UEPB) has been promoting shea butter products. UEPB was able to connect shea nut butter products and exporters to overseas markets in EU, USA, and India.³² All the exports to Middle East, European Union, Asia

³² Source: UEPB Export Marketing Executive

Pacific, North America, South Africa were mainly processed shea products (oils & their fractions). Exports to the COMESA countries benefited from the regional trade tariffs. About 15 MT of shea nut oil value added products are exported out of Uganda to key markets like Germany, Japan, Kenya, and India per month.³³

³³ Source: <https://www.softpower.ug/govt-moves-to-boost-export-volumes-for-shea-butter-products>

4 Shea Market Framework in Uganda

There are several strategies, laws and by-laws regulating the shea market framework in Uganda.

Initially, governance issues were concerned mainly with the conservation status of the shea tree. In 2006, the President of Uganda issued a directive to protect the shea tree from overexploitation. Being a hard wood tree species, the shea tree makes good charcoal, and charcoal burning is a serious threat to the shea tree. In some districts like Aleptong, Agago, Kitgum and Lira, the occurrence of the shea tree has decreased significantly due to charcoal production and land clearing for farming. Charcoal production has become the main source of income for the region which was recovering from two decades of civil unrest and the brutal Lords' Resistance Army rebel insurgency. The Government has now listed the shea tree as endangered³⁴, and through local government councils, it has passed by-laws banning the cutting of shea trees for charcoal. However, the enforcement of the by-laws is still weak, but it is welcomed by some local community members who say it reminds them of their old traditional sacred beliefs, which prohibit cutting shea trees. They believe that the shea tree is a divine gift and anyone who cuts it would be cursed.

In 2005, the President also directed that a factory for shea butter production be established in the region.³⁵ In addition to the President's directive, there are some other shea framework guiding strategies which have been developed during the last years:

- The National Environment Management Authority prepared a National Strategy on Shea³⁶ in 2015 aiming at promotion of the sustainable utilization of the shea tree, supporting conservation of the shea tree, marketing of shea butter, and promoting research in shea and capacity building, collaboration, and coordination.
- The Uganda Exports Promotion Board included shea butter as a biotrade product to be promoted.
- In 2018, the Uganda National Bureau of Standards³⁷, on the other hand, has developed four new national standards for shea butter and a certification scheme for small businesses, which shea producers could benefit from. The cosmetics standards include pure shea nut butter cosmetics (DUS 1931:2017), lip balm (DUS 1932: 2017); lip shine (DUS 1933: 2017) and after shave (DUS 1934:2017) plus the already developed shea nut butter food products standards.

Bi-laws and approved ordinances are in place at local government levels for environmental conservation in which shea tree is highly prioritized. These have been facilitated by the National Environment Management Authority (NEMA) in partnership with district leadership. The development has been supported by UNDP and by NGOs (LWF, CARE) and local authorities, and

³⁴ Presidential Decree from 2005, Information confirmed by RDC

³⁵ However, this factory hasn't yet been established.

³⁶ NEMA (2015): National Strategy for the Conservation and Sustainable Use of the Threatened Shea Butter Trees in Uganda.

³⁷ <https://www.unbs.go.ug/>

led to an enhanced awareness of the Uganda Shea products and facilitation of local and export market linkages.

Recently, Uganda has adopted a National Export Strategy for Shea Butter Products (2019-2023).³⁸

Table 13: Overview of legal framework documents regulating the shea sector

Shea market section	Strategy/Laws/Plans	Year of publication	Lead stakeholder
General	National Export Strategy for Shea Butter Products (2019-2023)	2019	UEPB
Conservation/Production	National Strategy for the Conservation and Sustainable Use of the Threatened Shea Butter Trees in Uganda	2015	NEMA
Marketing	National standards for shea nuts and shea butter products	2018	UNBS
Conservation/Environmental protection	District specific by-laws, regulating mainly aspects of environmental protection (e.g. no-cutting of shea tree, penalties for mis-use of shea trees, collection)		DLGs, UNDP, other development partners

In addition, the shea sector framework is influenced by interrelations with other services providers. Several public organizations are involved in shea related research. For example, Uganda Industrial Research Institute developed some value-added products from shea butter. Makerere University and National Forestry Resources Research Institute carried out research on physio-chemical characteristics of shea butter and ecology of shea trees. Ngetta Zonal Agricultural Research and Demonstration Centre was used for experiments with grafted shea trees. The Government Analytical Laboratories and the Natural Chemotherapeutics Research Institute collaborated in carrying out quality tests on shea butter samples.

The National Drug Authority is capable of certifying safety of cosmetic and medicinal products; and a quality mark can be obtained from the Uganda National Bureau of Standards. Also, by registering their trademarks (either individually or collectively) with the Uganda Registration Services Bureau, local producers of shea butter and manufacturers of value-added shea butter products may have greater control of their markets.

A key challenge is to ensure that all shea butter actors engage and interact in a manner that promotes coordination, mutual learning and innovation. In particular, regarding the National Export Strategy, it seems that it would add greater value if activities of implementation focused on innovations for shea butter processing at its locus, to enhance collaboration and cooperation among the shea actors.

³⁸ By MoITT, through UEPB

5 Shea Market Analysis in Uganda

5.1 Opportunities and Growth Potential

Different studies have focused on the ecology of the shea tree, its natural regeneration and propagation by farmers.³⁹ Other studies by the National Forestry Resources Research Institute plan to develop fast maturing and better yielding varieties of the shea tree. These studies and the shea projects by non-governmental organizations, helped highlighting the importance of the shea tree in the livelihoods of communities in the shea-belt districts. However, there has been no effective mechanisms established yet to further use these studies beyond the academic interests of the students.⁴⁰

Physico-chemical characteristics and fatty acid profiles of Ugandan shea butter show that it is a high value vegetable oil.⁴¹ These studies have shown important differences in the West African and East African varieties of shea butter. A key difference is in the fatty acid profiles. The West Africa variety (*Vitellaria paradoxa ssp paradoxa*) has more stearic acid, which makes it a good cocoa substitute in chocolates; while the East African variety (*Vitellaria paradoxa ssp nilotica*) on the other hand is richer in oleic acid, which makes it a good moisturizer. The Ugandan shea butter therefore would find greater use in cosmetics, edible oil, soaps, and other skin care products. Firms in Uganda have developed some of these products, but they have not tested them to ascertain their efficacies and to compare quality with other similar products on the market. More research and product development are needed for novel formulations and product blends, design and testing of shea butter products.

The communities in the shea districts of Lira, Aleptong Gulu, Agago, Kitgum have used the traditional method of producing shea butter for decades; and more recently private firms have adopted the cold press method. However, efficiency of these methods has not been fully studied. To close this gap, firms and local artisans should explore possibilities of collaborating with knowledge centers, like universities and local research organizations, to optimize production efficiencies. This arrangement can propel and enable growth of a vibrant shea butter cluster in Uganda and in the East African region.⁴²

While the Ugandan market has a significant potential of growth, it still needs considerable support in terms of stakeholder coordination, awareness raising and promotion of shea butter products as a valuable, healthy and unique Ugandan product. The principal driver for investments in the Ugandan shea sector currently seem to be the anticipated growing global markets, especially for shea butter derived cosmetics and other skin care products. Ugandan shea butter is promoted as a good moisturizer because of its higher oleic content. It is also promoted as an

³⁹ Okia, Obua, Agea, & Agaro, 2005; Orwa, 2009; Sanou et al., 2004

⁴⁰ Although pilot projects have been started for shea tree nurseries or shea grafting, these have not yet reached results which proved to be effective in shea stands management.

⁴¹ Okullo et al., 2010; Honfo et al., 2010; Maranz, Wiesman, & Garti, 2003

⁴² A cluster is defined by Colgan and Baker (2003) as a concentration of firms in a geographic region that are interconnected by the market they serve and the products they produce, as well as by the suppliers, trade associations, and educational institutions with which they interact.

organic product because it grows naturally and is collected in the wild. However, it means that if firms are to meet the certification requirements for organic shea butter, the kernels must be collected from farmlands where no pesticides or herbicides have been used. In other words, farmers who wish to trade in organic shea kernels should neither spray their crops nor apply fertilizers in fields with or close to shea trees stands. Although the use of fertilizers and agrochemicals is generally low in Uganda (less than 0.6kg/ha), it may rise as farmers begin to grow more commercial crops like maize and sunflower.⁴³ When this happens, it may pose a challenge in sustaining the organic shea market. Technical support in anticipating and negotiating potentially conflicting interests of stakeholders involved in organic shea businesses and those involved in commercial crop production might help to address these challenges. The National Uganda Shea Stakeholder Platform might play a considerable role in that. However, the structure it is not yet functional, and it has to be recognized that substantial capacity and organisational development support seems to be needed, especially with regard to sector coordination, sector awareness and lobbying for sector services.

Shea butter production may also be promoted to supplement household incomes in the shea districts, which are among the economically disadvantaged regions of Uganda. After the tyranny of the LRA had displaced over one million people from their homes between 1986 and 2006, many communities have returned to their settlements, and diversified sources of income have become necessary for households, particularly for the women and youths. In this regard, investing in shea butter production may contribute to inclusive growth in the region. The experience of Moyaa Shea Products Ltd. could be taken as an example and reference for the further development of similar inclusive business approaches. The company has received the certification of Fair Trade (certified by the American Shea Butter Institute) and is committed to adhere to the principles of fair trade⁴⁴, including the promotion of social and economic development opportunities for small-scale producers, payment of fair wages, not using child labour, and building the capacities of local producers.⁴⁵ An approach promoting private investments in the development of inclusive shea based business could build up on these (and other similar) experiences.

A great opportunity for shea butter investment in Uganda, however, comes from the good political will towards shea butter production. The President's directive of 2005 to build a shea butter processing factory in the region is a good example of this political will. This directive has not yet been fully implemented, but is on its way in-line with the Strategy for Sustainable Utilization of Shea in Uganda⁴⁶ which is oriented towards five key objectives:

- Enhance compliance to environmental laws, ordinances and by-laws relating shea butter tree resources.

⁴³ Ministry of Agriculture Animal Industry and Fisheries, 2010

⁴⁴ Fair trade is a global social movement which advocates for fair trading conditions for disadvantaged producers and consumers so that the latter can extricate themselves from poverty and have a sustainable livelihood. Fair trade arrangements offer premium prices for farmers and helps cushion them from fluctuations in the global markets.

⁴⁵ <https://www.moyaasheabutter.com/>

⁴⁶ NEMA, 2015

- Support tree growing and shea butter tree regeneration for enhancement of environmental quality and livelihood improvement of local communities.
- Enhancing the marketing of products from shea butter trees at the local, national and international levels.
- Support/strengthen research on sustainable management of shea tree resources, utilization and value addition to shea products.
- Strengthen coordination and collaboration at local, national and international levels

A key challenge in implementation of the political and strategic guidelines is to ensure that all shea butter actors engage and interact in a manner that promotes mutual learning and innovation.

Shea butter production in Uganda is still small compared to West Africa (Ferris et al., 2004), but has attracted interest from private investors and community-based organizations. Most Ugandan private firms emerged in the last five to ten years. Most of these private firms are engaged in shea butter production and in small scale manufacturing of shea butter cosmetics, soaps, and ointments. There is organized marketing of these shea products evolving. However, many private firm owners and employees still have low entrepreneurial skills and allocate limited resources to enhance capabilities.⁴⁷

Global demand is projected to rise as nilotica shea butter is increasingly recognized for its superior properties in making beauty and skin care products, and, in the case of West Africa shea butter, as cocoa substitute in chocolates.⁴⁸ However, to penetrate both local and international markets, local shea butter producers and processors, may need to work towards certifying their products for safety and quality. The National Drug Authority is capable of certifying safety of cosmetic and medicinal products; and a quality mark can be obtained from the Uganda National Bureau of Standards. Also, by registering their trademarks (either individually or collectively) with the Uganda Registration Services Bureau, local producers of shea butter and manufacturers of value-added shea butter products may have greater control of their markets. Shea butter is also one of the products, which can be geographically indicated because it is endemic to this part of the country.

Within Uganda, the tax regime is favourable for locally manufactured goods and for Ugandan exports. All exports of goods and services is zero rated (Government of Uganda, 2005). This along with other incentives such as the liberalized foreign exchange market and availability of land for investors could promote investment in shea butter production and processing.

As a product traditionally consumed and used for decades, shea butter is acceptable in the shea-belt districts and communities. Its use as a food flavour is common only among communities in the shea-belt districts. Some people, especially those outside the shea-belt districts, find the flavour quite strong and unpleasant (personal communication). Possibilities of blending with fragrant perfumes and other mechanisms to suppress the smell may be explored when promoting

⁴⁷ For assessing entrepreneurial skills, criteria such as proper books of account, availability of an investment plan and/or linkages with other shea-based business partners were applied.

⁴⁸ Source: Elias & Carney, 2007

shea butter as cosmetic. However, its fragrant smell especially when traditionally processed is what makes it a delicacy for the communities that consume it as an edible oil and food flavour.

Shea butter production using the traditional method is an art which can be easily learned and perfected with time. About one in ten households in the shea-belt districts can produce shea butter using the traditional method. Similarly, the conventional cold press method can be easily mastered and perfected with time. Therefore, the necessary human resources for shea butter production cannot be in short supply. However, expertise may be required to optimize production processes, and to design and develop shea butter value added products. This expertise and the infrastructure for quality testing and assurance can be made available in the private sector as well as the universities and local research organizations and could be reasonably afforded at prevailing labour market rates.

This notwithstanding, there is an untapped potential in the three public universities located in the shea districts. These universities are: Busitema University College of Agricultural Sciences in Soroti, Muni University in Arua, and Gulu University of Agriculture and Environment Sciences in Gulu. There are also public agricultural research organizations in the region viz, the National Semi-Arid Resources Research Institute in Serere district and Ngetta Zonal Agricultural Research and Development Institute in Lira, among others. These are potential knowledge providers, which are all within reach in the region. They can make a significant contribution to the development of the shea butter in east and northern Uganda. To begin with, these universities should learn from the experience of Makerere University in creating and working with innovation systems (business incubation).

In Uganda, most of the investments in shea butter production and value addition are financed by shea producers and processors themselves through savings and micro credit. Of recent some financial opportunities were put in place, which could support farmers, women groups and small firms involved in the shea butter business. The Agribusiness Initiative Trust (aBi), which was set up in 2010 by development partners and led by the Governments of Denmark and Uganda continues to finance the shea sector. The aBi offers financial services and technical support for private sector driven agribusiness development ventures. Oil seeds is one of the value chains eligible for aBi support. However, red tape (i.e. severe conditions and bureaucracy) in accessing these financial services is one of the limiting factors for most individuals and small firms engaged in shea butter production and processing.

Another concern is that, whereas financial services are being created to support private sector initiatives, there is no clear mechanism to link this support with potential contribution from the knowledge actors like local universities and research organizations. If the shea butter cluster is to grow and become competitive, local governments, universities, research organizations and shea producers should be closely linked. It has been demonstrated by the triple helix concept that innovations thrive, and more value is created where universities, industry and government effectively collaborate.⁴⁹

⁴⁹ Etzkowitz, 2003

5.2 Bottlenecks and Constraints

The shea tree has a long tree regeneration and maturation. Shea trees grow mostly in the wild and produce their first fruits after 10–15 years, with full production not setting in before trees are nearly 30 years old. This therefore makes it difficult to avail reliable production data to project production trends that can inform investment in long run. There is indiscriminate burning of bushes and cutting of trees coupled with population increase, insecurity, and expanding agricultural land clearing have led to woodland degradation in almost all districts where shea trees are found. Research on the domestication of the plant and development of improved cultivars for sustainable future performance is still limited.

At the supply level, there are some challenges related to picking shea nuts from the farms: All respondent said they were often exposed to rains and snakes. In line with that, the respondents also commented that the process of picking and processing the shea nuts to kernel is often energy demanding and time consuming. Other constraints cited include lack of protective clothes and boots, lack of enough space to sun-dry their nuts, fighting among the pickers especially on community lands because of land tenure issues, and theft of their nuts on their farmlands. Shea trees are at the risk of bush fires during the dry season resulting in low yields of the sea trees during the fruiting season. Seasonal nature of the shea tree makes shea business a one season business, at least as long as value addition is limited and the business based on products with short shelf life.

The shea butter cluster in Uganda is still weak. Although the value of shea butter is widely recognized, private sector investments in the sector remain low and no bigger investments have yet been made to fully exploit it. Suffice to say, however, that recognition of shea butter as a high value product has made local governments to pass by-laws for conservation of the shea tree. Other than the by-law, local governments of the shea-belt districts have not yet prioritized shea butter as a potential investment opportunity. Only recently, local governments started to include shea butter production in their district development plans.⁵⁰

In terms of efficiency, there is inadequate basic processing for both traditional hot and cold press, and limited handling skills greatly affect the quality of shea butter products during processing and packaging.⁵¹ Though efforts are being made continuously to improve on the shea butter production methods, accessibility to these improved methods remains low. The majority of the processors⁵² still use traditional techniques which are inefficient and lower the quantity and quality of shea butter available for sophisticated export markets, however, they have met the quality requirements for the Ugandan market. Traditional shea butter processing involves little

⁵⁰ The DLG of Agago District, integrated shea in its recent draft of the District Development Plan III. Under the Agro-industrialization and Private Sector Development Programs, commitments were made to improve value addition through processing of agricultural products like shea, and also to improve the shea value chain respectively.

⁵¹ Inadequate equipment and skills affect not only production capacities, but also efficiency (amount of shea oil received from dry nuts: approx. 30% for hot press and 50% cold press), capacities and product qualities; e.g. utilization of out-of-date equipment instead of stainless-steel equipment leads to shea oil impurities or contamination.

⁵² No accurate data are available on the proportion between traditional processing of shea, cold-press and fractionated shea. Approximations are based on information compiled through interviews with shea stakeholders (see Annex 8.1 for list of interview partners)

mechanical input, heavy drudgery, and high input of firewood, which has a direct effect on the quality of shea butter.

Processors acknowledged key constraints were that the activities of shea butter processing were labour intensive, time consuming and they are often exposed to fire during boiling and roasting of the kernel. Also, the process of sorting bad shea nuts from the good ones is one of the key challenges. There is limited training or assistance funding or equipment from government or any related organization to help them process good quality butter.

6 Recommendations for PRUDEV

Sensitizing communities and promoting shea tree planting

The Shea sector is peculiar in that it has an inordinately long pre-harvest stage. Growing a new shea tree to maturity and peak production can take anything up to 25 years. Preservation of currently productive trees is vital. Based on the findings, I would recommend that any intervention should encourage:

- Sensitizing communities on benefits of preserving and costs of destroying shea trees;
- Promoting planting of other trees species as alternative sources of timber and firewood.
- Passing and enforcing by-laws prohibiting the cutting of shea trees in all shea districts.
- Identify community based “volunteers” to promote shea tree preservation.

Facilitate research and development to enhance the desired properties of shea butter

Scientific research findings applied to other tree crops has resulted in higher yield per tree and even altered for the better the characteristics of the tree products. Physico-chemical characteristics and fatty acid profiles of Ugandan shea butter show that it is a high value vegetable oil (Okullo et al., 2010; Honfo et al., 2010; Maranz, Wiesman, & Garti, 2003). Further research should target to

- Reduce maturation of trees,
- Raise fruit / nut yields per tree and
- Develop varieties with the desired chemical properties, e.g. higher oleic acid content.

The different institutes by the government should not work in isolation. It is required that the scientific research results be linked to governmental and communal initiatives as well as shared with the private sector. A regular exchange between all shea stakeholders will provide the opportunity to exchange perspectives, increase understanding and build up the trust between them.

Support the establishment / strengthening of entrepreneurial cooperatives

Attempt should be made to streamline shea nut handling and marketing by organizing gatherers/farmers into viable/entrepreneurial cooperatives and or groups, including initial support to maintain governance structures.

- Empower the cooperatives to become the main buyers of members’ collections;
- Encourage cooperatives to set up storage facilities at cooperatives and groups including setting up grading and stock management systems;
- Important to sensitize members of cooperatives on quality and standards maintenance and enhancement through training.

Improve processing systems

The bulk of shea nuts are processed by traditional means and mostly for home consumption. Improving processing systems at artisanal (traditional) level will revive the agro-economy of these communities.

- Identify local manufacturers of processing equipment who provide supply equipment to artisanal processors and work with them to utilize stainless steel in those parts where the nuts are processed.⁵³
- Facilitate cooperatives/groups to establish primary processing capacity of their own using appropriate machinery and equipment.
- Limited volumes of shea butter and shea butter products which Uganda is putting onto international markets originate from industrial level operators. There is still potential demand to be covered by local processing SME provided that they can ensure quality and stability of supply.
- Encourage existing and potential processor/exporters to equally use equipment incorporating required material i.e. stainless steel.
- Avail processors with information on available loan facilities for agro processing.
- Facilitate the development of suitable and adequate food grade processing equipment across the entire chain that can facilitate high production of quality shea butter.

Facilitate market entry initiatives

Local processors are supplying national, regional, and international markets, however certification and introduction of quality management system for shea products might help to approach new markets/improve market access. Facilitate market entry initiatives of exporter enterprises or those enterprises considered nearly export ready. Focusing marketing efforts onto markets and countries that grant preferential entry e.g. EU and USA.

- Set-up a shea export trade website and ensure it is updated on a weekly basis. The National Shea Stakeholder Platform would be well positioned to assume a lead role in that.
- Work with the telecommunications companies to use mobile telephony to disseminate vital market information to stakeholders.
- Exhibit Ugandan shea butter at appropriate trade fairs and use the country's missions abroad more effectively.

⁵³ The majority of the processors still use traditional techniques which are inefficient and lower the quantity and quality of shea butter available for sophisticated export markets. Traditional shea butter processing involves little mechanical input, heavy drudgery and high input of firewood, which has a direct effect on the quality of shea butter.

Shea related policy development

. Building-up on the environment related policies (environment and forestry), the development of a local economy based on sustainable products of the shea tree needs a level of prioritization in other policies that have thus far excluded it. Awareness raising and promoting shea butter and shea butter products are of vital social and economic importance to support the improvement of livelihoods of some of the most marginalized communities in North and North-Eastern Uganda.

Support the establishment of a National Shea Sector Stakeholder Platform

The platform will spear head promotion of shea products in the local and international markets and support coordination of sector players to lobby for sector services. The Platform is currently in the process of formation, and support will be needed in terms of capacity and organisational development for fulfilling the objectives of improved sector coordination, sector awareness and lobbying for sector services.

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<https://www.unbs.go.ug/>

8 Annex

8.1 List of Stakeholders interviewed

District	Name	Organization
Agago	Grace Akot	Agago DFA/processors
	Okeny Justine	District agricultural officer
	David Olal Churchill	District Natural resources officer
	Okidi Sam	District production officer
	Ojok Geoffrey	District community development officer
	Okello Marciliano	Shea nut collector
	Anyanga George	Shea nut collector
	Onyingi Kato	Shea nut collector
	Adongo Rebecca	Shea nut collector
	Okema Joseph	Shea nut collector
Kampala	Marion Etiang Busingye	Shea Care Naturals
	Dorah Egunyu	The Shea House
	Lillian Olok	Yaa Oils
	Lancy Nakiboneka	Kahangi Estate
	John Bosco Lwere	Uganda Export Promotion Board
	Morris Ochen	Ministry of Science and Technology
	Abby Katumba	URA
	Michael Obala	Organic Care Uganda
Kigumba	Patrick Omara	Cropvet Farmers
	Duku Micheal Zamba	Shea Beauty Company
Lira	Dr. Surjit Singh	MD - Guru Nanak oil Mills (u) Ltd
Lira	Alex Tabule	Uganda National Bureau of Standards
	Moses Okao	Shea Grafting -Ngeta ZARD
Otuke	Mr Robert Abak	RDC Otuke
	Ebongo Boniface	District Natural Resources officer
	Ocen Bonny	District Agricultural Officer
	Dr. Anyuru Thomas	District Production Officer
	Patrick	District Forest officer
	Olang John Bosco	Shea collector

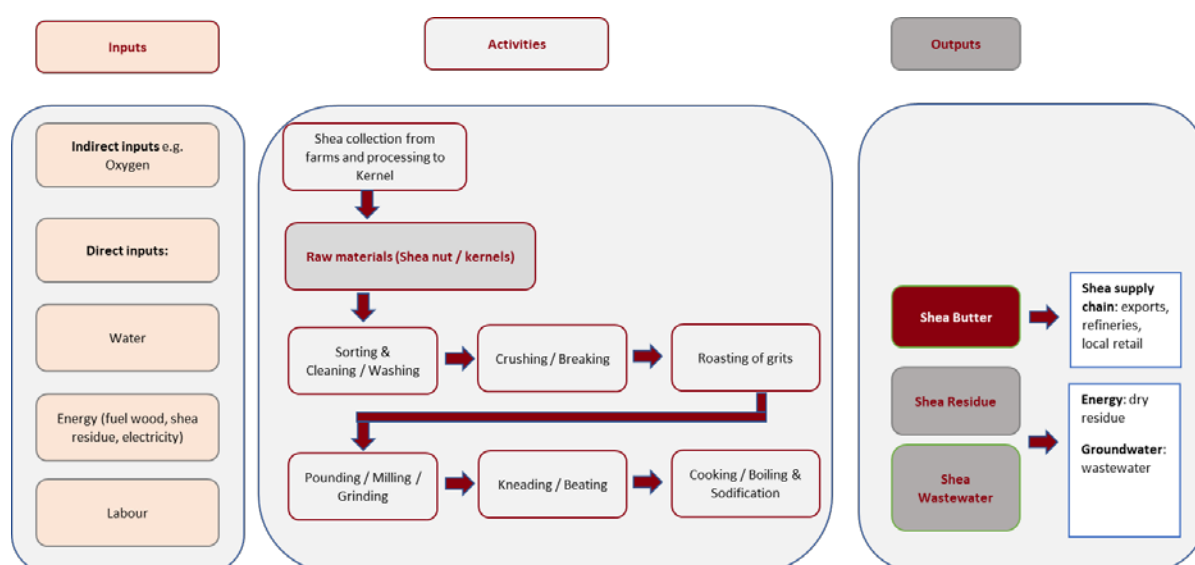
	Akullo Hana	Shea collector
	Ogwanga Denis	Shea collector
	Ogwanga Richard	Shea collector
	Ebongo Tommy	Shea collector
	Adongo Betty	Shea collector
	Awor Hellen	Shea collector
	Atim Suzanne	Shea collector
	Awino Grace	Shea collector
	Ogwanga Andrew	Shea collector
	Ajok Caroline	Shea collector
	Obua Joel	Okwang Cooperative Society Ltd
	Aciro Doreen	Shea collector
	Abalo Rose	Shea collector
	Adoch Rose	Shea collector
	Amone Thomas	Shea collector
Pader	Leonora Abalo Okello	Pader Shea Cooperative Society Ltd
	Ayero Hellen	Shea nut collector
	Ocungerene Robinson	Shea nut collector
	Margaret Laloyo	Blessed Organic Products
	John Tyan	District Fisheries Officer
	Acan Irene Ruth	District Physical planner
	Nyeko Julius	District Agricultural officer
	Okello Martin	District Forestry officer
	Festo Okidi	District Community Development Officer
Alabtongo	Dr Knocki Charles	District Production Officer
	Ogwal Moses	District Agricultural officer

8.2 List of Exporters and Importers

S/N	Company name	Contact person
1	Blessed Organic Release Co. Ltd	Ms. Laloyo Margaret
2	Organic Care Uganda Ltd	Mr. Michael Obala
3	Guru Nanak oil Mills Ltd	Mr. Surjit Singh
4	CROPVETI Farmers Centre Ltd	Mr. Omar Patrick
5	Shea Beauty Company Limited	Mr. Zamba Duku
6	The Shea House Ltd	Dorah Egonyu
7	Kahangi Estate Ltd	Nancy Nakiboneka
8	Livara Natural Organic Cosmetics	Ms. Maxima Nsimenta - C.E.O
9	Pelere Group Limited	Letio Sandra - Team Leader

10	Shea Care Ltd	Marion Busingye
11	Zen Organics	Sam
12	CAIO Nilotica Shea butter	Suzanna Mushabe Haarbosch
13	Raw and Organic Investments Ltd	Enid Natukunda
14	Local Trader	Caroline Ocanda
15	Local Trader	Clare Alako
16	Local Trader	Yvette Kukunda
17	Local Trader	Olok Lillian

8.3 Stages of Shea Butter Processing



8.4 Ugandan Shea Butter and Derived Products

S/N	Product	Cosmetics	Food	Market Destination
1	Aftershave	Cosmetics		Uganda
2	Aftershave Shea lotion	Cosmetics		Uganda
3	Hair conditioner	Hair care		Uganda
4	Hair pomade	Hair care		Uganda
5	Hair food	Hair care		Uganda
6	Hair Spray with castor oil and shea butter	Hair care		Uganda
7	Hand and Body Cream	Cosmetics		Uganda
8	Lip Shine	Cosmetics		Uganda
9	Laundry soap	Cosmetics		Uganda
10	Lip balm	Cosmetics		Uganda
11	Lip sheen	Cosmetics		Uganda

12	Pure Shea butter (Raw)	Cosmetics	Food	Uganda, Kenya, Rwanda, USA, Canada, S. Africa, Hongkong, Israel, Japan, Russia, S. Korea, Germany Netherlands, Switzerland, UAE
13	Perfumed Shea butter Baby jelly	Cosmetics		Uganda
14	Shea butter with Fragrance	Cosmetics		Uganda
15	Shea hair oil	Cosmetics		Uganda, Kenya
16	Shea honey		Food	Uganda, EAC
17	Shea insect repellent	Cosmetics		Uganda
18	Shea skin care (lotion)	Cosmetics		Uganda, Kenya
19	Toilet soap	Cosmetics		Uganda, Kenya, Canada
20	Laundry soap			Uganda

Note: Honey is just nectar from Shea tree flowers

8.5 List of importing 20 markets for Shea products exported by Uganda in 2019

	Value exported in 2019 (in thsd. USD)	Trade balance 2019 (in 1000 USD)	Share in Uganda's exports (%)	Quantity exported in 2019	Quantity unit	Unit value (USD/unit)	Growth in export value	Growth in export quantity	Growth in export value	Ranking	Share of partner countries in world imports (%)	Total imports growth in value	Average distance	Concentration of all supplying countries	Average tariff
Total	698	658	100	80	Tons	8,725	33		14		100	8			
Canada	251	251	36	17	Tons	14,765	786		79	10	2.9	6	5,609	0.17	0
USA	247	247	35.4	27	Tons	9,148	44	35	-23	1	15.5	16	6,246	0.13	0
Germany	148	148	21.2	32	Tons	4,625	115	138	679	4	5.4	6	2,674	0.09	0
Netherlands	7	7	1	1	Tons	7,000				3	6.1	5	3,658	0.1	0
Japan	3	3	0.4	0	Tons		-29			6	4.3	-4	8,324	0.11	0
France	1	-34	0.1	0	Tons					2	7.8	3	2,454	0.09	0
UK		-4								8	3.3	8	2,400	0.2	0
Sweden										5	4.4	11	897	0.77	0
China										7	4.2	44	8,933	0.3	0
Korea, Republic of										9	3.3	0	7,621	0.13	6.8
Belgium										11	2.7	5	3,058	0.14	0
Russian Federation										12	2.6	27	2,568	0.29	0
India										13	2.6	62	1,571	0.85	6.3
Austria										14	2.5	10	670	0.17	0
Singapore										15	2.1	13	1,289	0.58	0
Malaysia										16	2.1	2	9,598	0.15	0
Australia										17	2	-2	8,748	0.14	0
Switzerland										18	1.9	6	5,276	0.4	0
Italy										19	1.9	0	4,438	0.12	0
Yemen										20	1.9	87	12,511	1	7.5

