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Unlocking the Potentials in Shea Butter Value Chain: Mapping and Profit Share of Key Actors in Katcha Local Government Area, Niger State Nigeria

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Abstract

Shea products are one of Nigeria's high export commodities and have numerous economic uses. Every part of the shea tree has its uses. The pulp of the fruit is edible and the seeds when crushed yield vegetable oil that can be used in cooking, soap making, skin and hair care. The bark and root are used in traditional medicine. This study traces the shea butter value chain showing product flow and actor inter-linkages as well as analyzed the profit share of the various actors participating in the chain. A two-stage sampling techniques were employed to sample 120 respondents across the key value chain actors. The data for the study was collected using a structured and pretested questionnaire. The study revealed that collectors, processors, and marketers are the key actors that performed various functions in the product flow through the chain with some supporting institutions providing enabling environment for the shea butter development in the State. Collections of nuts, processing and marketing were revealed to be profitable with the marketers having 67%, collectors with 19.45% and processors with 13.55% of the profit share. Although the chain is well linked, upgrading is necessary to maximize resource use and improve sustainability. The factors that were found to sabotage actors' efforts were inaccessibility to financial aid, high costs of transportation, poor processing equipment and storage facilities. Provision of easily accessible credit facilities, construction of shea centers as well as good access road will vastly improve the quality, prices and availability of shea products.

Keywords: Shea butter, Value Chain, Mapping, Profit-Share and Nigeria

1. Introduction

Shea tree (*Vitellaria paradoxa*) is a perennial crop mainly found in the wild Agro-forestry parklands of semi-arid region of Africa, where the annual rainfall ranges between 600 to 1500 mm [1]. It occurs across the shea belt which is on an estimated 1,000,000 km²area between western Senegal and northwestern Uganda [2]. In 2004, the FAO posited the total African production of shea nut at approximately 1,760,000 metric tons and Nigeria accounts for 62% of the 600,000 metric tons produced in West Africa making it the largest producer of shea products in the world [3]. Shea butter is a triglyceride (fat) derived mainly from stearic acid and oleic acid. It is

a slightly yellowish or ivory colored fat extracted from the nut of the African shea tree [4]. Nearly all parts of the tree have their uses; the butter extracted from the nuts is widely used in cosmetics and the chocolate industry as a cocoa butter substitute, although the taste is noticeably different. The pulpy part of the fruit is eaten and the leaves are used as fodder and serve as an ingredient for making alkaline and paint [5]. It is an important economic crop due to the heavy demand for its butter in the international market mainly as a cocoa butter substitute for the production of chocolate, and the pharmaceutical and cosmetic industries.

Value chain analysis of a product describes the full range of activities which are required to bring a product or service from conception, through the different phases of production, delivery to final consumers and final disposal after use [6]. Shea trees have a lot of potential benefits to the rural economy that include, the edible pulp of the fruit, the seed, when crushed, yields vegetable oil that can be used in cooking, soap making, skin and hair care while the bark and root are used in traditional medicine [7]. Collecting the nuts and making butter have traditionally been women's activity and marketing the oil has giving women better opportunities, primarily through improved income which makes shea butter a valuable trade commodity [8].

Despite the potential of shea butter, its value chain is not properly documented, and the contributions of the actors have not been fully assessed. However, previous studies on shea butter value chain [9,10&11] only focused on parts of the value chain as case studies for their areas dealing only with specific problems.

It is against this background that this study traced out the inter-linkages and profit share among actors as well as identifies the constraints in the shea butter value chain in the study area.

2. Methodology

2.1 Study Area

The study was carried out in Katcha local government area, one of the 25 LGA's in Niger state. It is located between longitude 9°03′00″N 6°09′00″E and latitude 9.05°N 6.1°E. It has a total land area of 1,686.1 km². The area has a total population of 122,176 people (male 62,326 and female 59,850) with a population density of 72 persons/km² (population census, 2006).

2.2 Sampling Procedure

Two stage sampling technique was used in drawing the study respondents. The first stage involves purposive selection of Katcha LGA due to the high preponderance of shea value chain actors, then five communities were randomly selected to represent the area. A sample frame of 642 was established through a reconnaissance survey and a sample size of 120 respondents was found to be sufficient for the study following the Yamane's guidelines [12]. The second stage involves Proportionate sampling that revealed 42 collectors, 24 processors, 36 traders and 18 consumers as the representative sample for the respective actors. Data was elicited through the use of well-structured questionnaire, subjected to pretesting to achieve the study's objectives.

2.3 Analytical Tools

2.3.1 Flow Chart Mapping

Flow chart mapping using simple Microsoft word tools was used to draw out the inter-linkages that exist between actors.

2.3.2 Gross Margin Analysis

The gross margin analysis was employed to determine the costs and returns of actors across the value chain, upon which profitability and profit share were established. Mathematically, the gross margin is represented as:

GM = TR - TC

Where, GM = gross margin, TR= quantity of shea butter or shea product in Kg (Q) x Price/ Kg and TC = Total Cost

Total cost is the aggregate cost of doing business. This encompasses both the fixed and variable costs.

2.3.3 Descriptive Statistics

Descriptive statistics in the form of frequency count and percentage were used to summarize the socioeconomic characteristics of the actors and constraints faced by actors.

3. Results and Discussion

3.1 Socio-economic Characteristics of the Respondents

Table 3.1 presents socio-economic characteristics of the actors. The results show that majority of the actors were female. This indicates that the females are mainly engaged in the shea butter value chain. This is due to the intersection of the shea production season with the time for agricultural production; hence the males are preoccupied with conventional

farming activities. This also agrees with the results of the Adagba [13] who found that 94% of the shea butter value chain actors were female and this was as a result of overlapping of shea collection season with the main cultivation season which keeps most adult male farmers engaged in other main farming activities.

Age distribution of the shea butter value chain actors further revealed that the majority were below the age of 50 while a few were above. Traders had

a mean age of 39.94 years and formed the oldest category followed by collectors with mean age of 39.62 years then consumers with mean age of 36.61 years and processors with mean age of 36 years. This implies that the actors in the shea butter value chain are on the average in their active age. This corroborates with the findings of Adagba [13] who stated that the average age of shea butter value chain actors was 36 years which was under 40 years of age.

Table 3.1: Socio-economic Characteristics of Actors in the Shea butter Value Chain

Table 3.1: Socio-economic	Pickers (n=42)		Traders (n=36)
Characteristics	Pickers (n=42)	Processors (n=24)	1 raders (n=30)
Sex			
Male	0(0)	0(0)	2(5.56)
Female	42(100)	24(100)	34(94.44)
Age			
≤30	3(7.14)	5(20.83)	3(8.33)
31-40	24(57.14)	13(54.17)	19(52.78)
41-50	11(26.19)	5(20.83)	12(33.33)
51-60	4(9.52)	1(4.17)	2(5.56)
Mean	39.62	36	39.94
Marital status			
Single	0(0)	0(0)	0(0)
Married	42(100)	24(100)	36(100)
Educational level	, ,	,	, ,
Qur'anic	39(92.86)	22(91.67)	32(88.89)
Western	1(2.38)	2(8.33)	0(0)
Both	2(4.76)	0(0)	4(11.11)
Household size			
1-5	24(57.14)	16(66.17)	10(27.78)
6-10	17(40.48)	7(29.17)	19(52.78)
11-15	1(2.38)	1(4.17)	7(19.44)
≥15	0	0(0)	0(0)
Mean	5.12	4.75	7.53
Experience(years)			
≤10	10(23.81)	13(54.17)	11(30.56)
11-20	15(35.71)	8(33.33)	15(41.67)
21-30	11(26.19)	1(4.17)	8(22.22)
≥30	6(14.29)	2(8.33)	2(5.56)
	20.38	13	16.5

Field Survey, 2018

Distribution of actors based on their marital status as shown in Table 3.1 indicates that all the respondents were married. This implies the availability of family labour which reduces production costs. The pickers mean household size of 5.12, while the processors and traders had a mean household size of 4.75 and 7.53 respectively. This

result implied that there is readily available family labor thereby reducing the cost of hired labor. Generally agrarian settlement with large family size is expected to incur less production cost [14].

It can be noticed from the distribution of actors based on education attainment (Table 3.1) that the

majority of the shea actors had no formal education. The low level of literacy among the actors could affect, to a large extent, the efficiency of discharging value chain activities and also innovations are likely not to be accepted. This is because the ability to read and write gives individual the ability to discern immediately the implications of his actions in his business; it also enables him to discharge his duties without employing a translator. This corroborates with the findings of Kadigi [15] that education is important to manage the business as well as in decision making. The distribution of butter shea actors based on years of experience in the shea value chain, revealed that majority of the actors had more than 10 years of experience. The pickers had a mean experience of 20 years while traders and processors had mean experience of 16 and 13 years respectively. Years of experience could stand as an added advantage in terms of increasing efficiency, in converting marketing inputs to outputs as well as in production.

3.2 The Shea butter Value Chain

The shea butter value chain comprises of primary actors, the activities or functions they perform and actors who provide support for the entire chain as well as show the level of product that flows between actors. The primary actors perform certain activities that ensure the shea nuts are obtained, processed and marketed the produce properly to reach the final consumer. The supporting actors ensure that the environment and conditions for performing these activities are convenient enough to ensure maximum resource use, efficiency and returns.

3.2.1 Primary Actors

(a) Collectors: Shea nuts are collected during the picking season usually between April to August. Shea nut picking is done mostly by women and children. The Shea collection activities statistics by the respondents revealed that Shea fruits are generally allowed to fall on the ground before picking (97.62%) which serves as an indication that the fruits are ripe enough to yield quality butter. The collected nuts are then gathered and the fleshy pulp exterior is removed (de-pulping) majorly by hand (95.24%) to facilitate the process. The pulp of the shea nut also serves as a nutritious snack during this time and is sold as shea fruit in local markets and at the roadside [16]. The nuts are then washed

(80.95%) to remove dirt and pulp remnants and then parboiled in hot water with firewood as source of heat. The nuts are then dried in the sun (54.76%), with an oven (14.29%) or smoke (30.95%) to reduce the moisture content and then de-husked with mortar and pestle as well as stones. Only the kernels are picked and the husk is left behind. After dehusking, the good kernels are then sundried and stored in a clean and dry environment mostly in bags and basins either for further processing or until the need to sell them either in local or international market arises.

(b) Processors: Processing is the transformation of shea kernels into shea butter. It is a tedious and time-consuming process. In the study area, processing is carried out by women (100%) as shown in Table3.1. To produce the shea butter, the sorted kernels are roasted; this is believed to help ease extraction of the oil from the kernels. After roasting the kernels are milled into paste by grinding with a machine and left until the next day for kneading. Kneading (i.e. thorough and systematic mixing) is a mechanical process done manually with the hands, cold or hot water is added to the paste until it gives a smooth texture. The paste is then fried in a pan and left to settle after which it is sieved and mixed again to yield shea butter. The paste can also be boiled in large pots with water for several hours and the shea butter rises to the surface and is being scooped up with a plastic container or calabash after which it is allowed to cool, the boiling gives the butter a lighter colour denoting purity and is more preferred. The solidified butter is packaged into five-liter metal cans and twenty-five-liter plastic containers for storage and sale.

(c) Traders: This is the stage of the shea chain where men are actively engaged, though women still dominate. The results of this study indicate that 94.4% were females and 5.6% were males as presented in Table 1, this agrees with Carette, Malotaux, Leeuween, and Tolkamp [17] who investigated 29 bulk shea butter traders in Tamale Aboabo market (Ghana) and found that 90-95% of the stores were run by women and only 5-10% by men.

Shea butter traders can be divided into various groups, namely; rural assemblers, wholesalers, retailers and exporters. They serve as middle men in

delivering the shea nuts, kernels and butter among the chain's actors. Some of their functions are stated below:

- (d) Rural assemblers: This group of middle-men undertakes the initial task of assembling the shea butter products from the shea nut pickers or processors. They may be landlords, village shopkeepers, wholesale merchants, processors, and cooperative or government procurement agencies. The rural assemblers may either act on commission or purchase on their own account.
- (e) Wholesalers: This group plays a central role in marketing of shea products. They take the shea butter products from the processors or rural assembles and sell to the retailers, other wholesalers and industrial users, but do not sell in significant amounts to final consumers in domestic and foreign and to manufacturers. Thev markets characterized by selling products in bulk. They may cash-and-carry wholesalers wholesalers who extend credit and offer delivery and other services. Wholesalers in the study area may finance the movement of goods themselves and in general they bear most of the marketing risks.
- (f) Retailers: The retailers obtain supplies and display them for sale in forms and at times and places convenient to consumers. Their task is to provide a wide variety of shea butter products at a single location, making it convenient for consumers to assemble the desired market quantity and quality

of shea butter products. Usually, the retailers buy shea butter products from one or more wholesalers and sometimes on credit and serve consumers who buy smaller quantities on day to day basis.

(g) Exporters: They buy shea products both in raw forms (shea nut) and in processed forms (butter) in large quantity. The export season for shea nut commences by June and end in October. The main buyers of shea nut and shea butter are chocolate manufacturers, cosmetic industries, pharmaceutical industries etc. Major destinations for Niger State shea nut and butter exports are the European Union and Japan.

3.2.2 Supporting Actors

They are actors that provide supportive services such as information, extension, research and financial services, the identified supporting actors include: (deustschegesellschaft GIZinternational ezusammenarbeit): GIZ is a German government supported program in achieving its objectives in the field of international co-operation for sustainable development. The objective of GIZ is to increase, sustain employment and income generation in SMEs. The main targets of GIZ are owners of SMEs and economically active lowincome households at state and local levels in the three selected states (Niger, Ogun and Plateau states). GIZ has provided several inputs and training as well as extension services to the shea butter value chain actors in the study area.

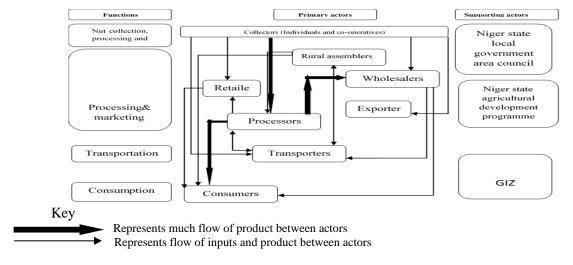


Figure 3.1: Value Chain Map of Shea Butter

Niger state ministry for local government: The ministry through Katcha local government area organizes training sessions for the shea butter value chain actors in the study area through combined training and extension services on improvement of Shea butter processing techniques to yield better qualities and higher income.

Niger State Agricultural Development Program (NADP): This agency in collaboration with other stakeholders have carried out series of quality improvement training in 68 communities, held number of meetings with stakeholders on creating synergy in shea development and drew up a comprehensive road map for shea in the state. The agency in collaboration with GIZ (German society for international co-operation limited) further conducted a Training of Trainers (ToT) workshop on Shea quality improvement to the 25 local government Principal Women Development Officer for them to replicate the training in their respective local government areas in the state; as well as trains of Agricultural Extension workers from ADP and Shea butter processors on Shea nut quality improvement and market linkages.

The collector's function to collect nuts and partially process them. The collectors are the main source of nuts for processors. Wholesalers and local consumers receive a vast majority of the shea processed while retailers acquire the butter in smaller quantities from the processors before selling to the final consumers. The transporters ensure that products are taken where they need to be, when they need to be, linking the entire value chain and making flow of products smoother.

3.2.3 Upgrading the shea butter value chain

Value chain upgrading as defined by Kaplinsky and Morris [17] is the acquisition of technological and market linkages that enable firms to improve their completeness and move into higher value activities. Collection and processing of shea butter are done mainly by hand and the use of crude implements. 85.71% of collectors use the sun and smoke from firewood to dry the nuts while only 14.29% make use of ovens. While the processors use clay stoves and firewood for their butter extraction, leading to a darker colored butter with low quality and market value. Despite the shea butter value chain having a good number of well

linked actors, there is still room for more bodies to provide technical and financial support to help bring the shea butter value chain to its true potentials.

Table 3.2: Drying Techniques Used by Collectors

Drying method	Frequency	Percentage
Sundry	23	54.76
Oven dry	6	14.29
Smoke dry	13	30.95
Total	42	100

3.3 Profitability of Shea Collection, Processing and Trading

Table 3.3 presents the gross margin obtained by collectors per 100kg of nuts collected. The results show the collectors incurred a total cost of №11,539.45 and realized total revenue of №13,278.71. However, further analysis shows that the collection of a 100kg bag gave a gross margin of №1,739.26 implying that there is an addition of value by gathering the nuts, transporting them and processing them into nuts and kernels which led to generation of profit.

Table 3.3: Gross Margin Analysis Per Unit Collected

Conected		
Items cost and returns	№ /100kg	% of
		TVC
Variable Labour		
Family Labour	10,709.08	92.80
Hired Labour	461.37	4.00
Transportation Cost	33.09	0.29
Firewood Cost	311.65	2.70
Market Levy	13.98	0.12
Commission Agent	10.28	0.10
Total Variable Cost	11,539.45	
Returns		
Quantity (Kg)	100	
Price (₹)	132.79	
Gross income	13,278.71	
Gross margin	1,739.26	

Source: Data analysis, 2018

Table 3.4 presents the results of the net farm income analysis of shea nuts per 100kg of nuts processed. The results show that the processors incurred \text{N12,452.64} as their total cost building up

total revenue of \aleph 13,663.97. The enterprise is profitable with a pure profit of \aleph 1,211.32.

The estimated gross margin analysis for shea nut traders is presented in table 3.5 show the average profit obtained by each individual. The total variable cost is summarized at ₹382563.6 with a gross margin of ₹388555.6. Each individual makes a sum of ₹5991.94, making trading in shea and shea products very lucrative.

Table 3.6 further presents the shea nut value chain profit share analysis; the result revealed that 67% of the value chain profit was earned by marketers. Collectors and processors only earned 19.45% and 13.55% respectively. All the actors make profit; however, the marketers make more by adding value in delivering the shea butter to a more favourable location for the consumers to enjoy.

Table 3.4: Gross Margin Analysis Per 100kg Of Nuts Processed

Items cost and returns	№ /100kg	% of TC
Variable cost	_	
Cost of product	9,106.43	73.13
Labour cost	2,415.56	19.40
Rent cost	21.61	19.40
Market levy	5.62	0.05
Machine repair	64.83	0.52
Firewood cost	365.21	2.93
Transportation cost	157.97	1.27
Cost of grinding	63.75	0.51
Total Variable Cost	12,200.97	97.98
Fixed Cost		
(Depreciation)		
Mortar Cost	93.79	0.75
Pestle Cost	20.01	0.16
Presser Cost	1.30	0.01
Pots Cost	95.95	0.77
Basin Cost	32.85	0.26
Rubber Cost	3.67	0.02
Drum Cost	1.30	0.01
Sievers Cost	0.65	0.01
Frying Pan	2.16	0.01
Total Fixed Cost	251.67	2.02
Total Cost (TC)	12,452.64	
Returns		
Quantity (Kg)	100	
Price (₹)	136.63	
Total revenue	13,663.97	
Gross margin	1,211.32	

Table 3.5: Gross Margin Analysis for Shea Nut Traders

Items cost and	Amount	%TVC
returns	(N)	
Variable cost		
Cost of nuts	1,46,166.7	38.21
Cost of kernels	77,402.8	20.23
Cost of butter	139486.1	36.46
Transportation	14944.4	3.91
cost		
Rent cost	972.2	0.25
Market levy	3028.9	0.79
Commission agent	562.5	0.15
Total variable cost	382563.6	
(TVC)		
Returns		
Receipt	388555.6	
Gross		
Gross margin	5991.9	

Table3.6: Profit Share Analysis Along Shea Butter Value Chain

Value chain item	Average amount (N)	Profit Share (%)
Collectors profit	1,739.26	19.45
Processors profit	1,211.32	13.55
Marketers profit	5,991.94	67.00
Value chain (TVC)	406,555.69	
Value chain (TR)	415,498.28	
Value chain profit (TR –TC)	8,942.52	

3.4 Constraints to the Shea butter Value Chain

3.4.1 Constraints Faced in Shea Nut Collection

The results of the constraints faced by shea nut collectors are presented in Table 3.7.

Table 3.7: Constraints Faced in Shea Nut Collection

Variable	Frequency	Percentage
Poor processing		
and handling	9	21.43
techniques		
Lack standard and		
quality control	10	23.81
Low price nuts	15	35.71
Poor storage	13	30.95
facilities		
Non-availability of		
cheap labour	6	14.29
Crude implements		
for nut picking	3	7.14
Cost of transporting		
shea nuts	12	28.57
Financial problem	29	69.05
Low returns	3	7.14
Lack of buyers	11	7.14
Cutting down of		
shea trees	3	7.14

Source: field survey, 2018

Some of the major constraints encountered by the pickers were financial problems (69.05%), low price of nuts (35.71%), poor storage facilities (30.95%), cost of transporting shea nuts (28.57%), lack of buyers (26.19%), lack of standard and quality control (23.81), poor processing and handling techniques (21.43%), non-availability of cheap labour (14.29%). These imply that the collectors lack financial capacity to pay for labour which translates to fewer quantities of nuts being picked per season, also the nuts attracting low market prices can discourage collectors from venturing further into the business. Also, the poor storage facilities can lead to wastage in case of no buyers, which could also be the reason for low prices of the nuts. The high cost of transportation affects the margin of the collectors by increasing their variable cost. While, crude implements for nut picking, low returns, and cutting down of shea trees are of minor concern (7.14%). However, Carrette et al. [16] found that the factors that are considered most threatening for regeneration of shea trees is the cutting down of shea trees and the lack of sufficient fallowing to enable regeneration.

3.4.1 Constraints faced in shea nut processing

The result of the constraints faced by shea nut processors is presented in Table 3.8 Some of the major problems encountered by the processors were lack of access to loans and incentives (58.33%), lack of processing implements (54.17%), cost of transporting products and low prices (50% each) as well as distance to the market (37.50%). Therefore, the major constraints faced by shea nut processors in the study area were lack of access to loans and incentives, lack of processing implements, cost of transporting products to the market, low prices and distance to the market. Lack of loans and incentives could lower the morale of the processors because the processing process is long and very tedious. The results imply that due to lack of processing implements, low quality butter is obtained which translates to low prices. The cost of transportation increases the cost of production which creates a smaller profit margin for the processors. The distance to the market implies that more transportation cost is incurred. Sometimes shea collectors organize some type of transportation back to their homes when the source is far from their homes [16].

Table 3.8: Constraints Faced in Shea Nut Processing

Variable	Frequency	Percentage
Unavailability of		
quality shea nuts	4	16.67
Distance to the		
market	9	37.50
Lack of processing		
implements	13	54.17
Lack of access to		
loans and incentives	14	58.33
Cost of transporting		
products to the	12	50.00
market		
Low prices	12	50.00
Lack of buyers	3	12.50
Poor quality butter	2	8.33
Lack of water for		
processing	5	20.83

Source: field survey, 2018

3.4.2 Constraints Faced in Shea Trading

The result of the constraints faced by shea traders is presented in Table 3.9 Some of the major constraints encountered by the traders were lack of access to credit facilities (63.89%), price instability (55.56%), transportation cost and low prices (52.78% each) and finally insufficient storage facilities (41.67%). The lack of access to credit facilities indicates that trading activities will be limited and the possibility for acquiring more products for sale is hampered due to lack of funds. Price instability discourages processing activities due to the uncertain nature of market prices. Also cost of transportation affects the profit margin of the processors by increasing total cost of production. A low price translates to less capital for subsequent purchase and processing of nuts. Insufficient storage facilities lead to low processing because processors will want to avoid wastage, in an attempt to prevent wastage, it could also lead to low prices. Lack of buyers leads processors to process less and less because the demand for shea products is low.

Table 3.9: Constraints Faced in Shea Nut Trading

Variable	Frequency	Percentage
Lack of access to credit facilities	23	63.89
Transportation cost	19	52.78
Non-availability of buyers	3	8.33
Insufficient storage facilities	15	41.67
Price instability	20	55.56
Low prices	19	52.78

Source: field survey, 2018

3.4.3 Constraints Faced in Shea Nut Consumption

The result of the constraint faced by shea butter consumers is presented in Table 3.10 Some of the major constraints encountered by shea nut consumers were poor quality of product (72.22%), price of products (66.67%), limited choice of product (44.44%) and product availability (33.33%).

Table 3.10: Constraints Faced in Shea Nut Consumption

Variable	Frequency	Percentage
Availability of shea products	6	33.33
Quality of Products	13	72.22
Price of Products	12	66.67
Durability of products	2	11.11
Choice of products	8	44.44

Source: field survey, 2018

Poor quality shea products are the most pressing constraint to shea consumers in the study area because the rational consumer will prefer higher quality products, this can lead to a low demand. The high price of products complained about by the consumers leads to a lower demand because the higher the price the lower the quantity demanded. The choice of products implies a non-availability of variety of shea products to choose from. The results also imply that products are not available in the area; this could be because of lack of loans and incentives to the processors as well as other limitations faced by other actors in the chain.

4. Conclusion and Recommendations

The shea butter value chain exhibits a well interlinked network of actors comprising of collectors, processors and marketers as well as supporting institutions providing the actors with conducive atmosphere to do business. Shea butter value chain activities are profitable with the marketers having a higher profit share than the collectors and processors. Income from the shea activities become an important source of livelihoods in the rural community and the shea butter serves as a healthier alternative to high cholesterol oils. Actors identified lack of access to credit schemes to enable them invest in the business and break the vicious cycle of poverty and the high costs of transporting shea and shea products to the activity destinations as major militating factors to shea development in the community. The overall shea value chain potentials can be further unlocked when government plays an active role in the development of the shea sector, in partnering with several bodies like NAIC, BOA

and BOI to provide loans and incentives to the shea butter value chain actors. Construction and rehabilitation of existing roads should also be made a priority. To help actors upgrade their positions in the chain, government should partner with shea actors to co-construct shea centers and equip the centers with modern processing machineries to improve the quality of shea as well as attracts more favourable prices. Enhancing linkages with NGO's and both foreign and local agencies would help in introducing new innovations and techniques to shea butter processors to improve the quality and boost production to meet the rising demand for domestic use and exports.

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