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SHEA COOPERATIVE MANAGEMENT ROLE IN SUSTAINING ESTABLISHED MARKET LINKAGES

Submitted by

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2020

SHEA COOPERATIVE MANAGEMENT ROLE IN SUSTAINING ESTABLISHED MARKET LINKAGES

A research project submitted to Van Hall Larenstein University of applied Sciences
In Partial Fulfilment of the requirements for the degree of Masters of Development,
Specialization in Food and Nutrition Security

By
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September 2020

Acknowledgement and Dedication

Ya Rabbi! Maasha Allah for bringing me this far on my academic journey. My sincerest appreciation goes to my Supervisor Mr Jan Hoekstra for your guidance in my work, your contributions, Critiques and comments have been very helpful on this thesis journey. Thank you so much Sir for your patience, I cherish the motivation you gave me to continue even when I got lost. I want to also thankful to Masters of Development staff [(Dr Anne-Marie, Dr Suzanne (my mentor, thank you for being there in my trying times), Dr Pleun, Dr Gerrit, Miss Leonor, Miss Karen] of Van Hall Larenstein (VHL) for the knowledge imparted in me. Hartelijk dank for enabling me unlearn and learn new things, a big COVID-19 FREE hug to you all.

Thanks to the Dutch government, Nuffic for granting me opportunity to benefit in the Orange Knowledge Program, this granted me the opportunity to gain knowledge and study abroad experience. To my senior Soburu Gausu, my gratitude knows no bound. Thank you to all my colleagues, it's been a pleasure sharing this time with you, you are treasured. Lydia Kimachas you as well.

My appreciation also goes to Rev John Nkum (Nkum Associates), Mr Mahama Alhassan of Pas Ghana (Mile 7), Agritree Sustainable Centre staff, Shea Network Ghana Staff, Mr Habib Haruna and Mr Mustapha Torobo Seidu for your guidance and contributions on this path. A big thank you to my respondents for your patience to provide me with information.

To my Family: Hajia Ubeida, thank you for understanding, dad I know you smiling and my siblings, I am grateful for being there to take care of mum while am away, may Allah's blessings be upon us all.

I dedicate this to all shea industry actors.

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Table of Abbreviations

Abbreviation	Meaning
ECDPM	European Centre for Development Policy Management
FGD	Focus Group Discussion
GMP	Good Management Practices
GhSA	Ghana Standards Board
GSA	/Global Shea Alliance
ICCO	Inter-Church Organization for Development and Development Cooperation
IOM	Institutions and Organizations Model
ISO	International Standard Organization
JICA	Japan International Cooperation
JHS	Junior High School
RP	Resource Person
MI	Member Interview
MoFA	Ministry of Food and Agriculture
PBC	Produce Buying Company
QC	Quality control
RP	Resource Person
SFC	Savannah Fruits Company
SMC	Shea Cooperative Management
SNG	Shea Network Ghana
SNV	Stichting Nederlandse Vrijwilligers (Netherlands Development Organization)
ToT	Training of Trainers
UNCTD	United Nations Conference on Trade and Development
VSLA	Village Savings and Loans
WC	Warehouse Committee

ABSTRACT

Shea tree fruits is first processed as shea kernels for sale or further processed into butter. The butter has been used over time in food, cosmetic and industrial purposes. Processing shea as an individual usually comes with a risk of poor sales at the market due to inefficiencies. To avert this and other risks, processors form groups termed shea cooperatives. Apart from mitigating risks, cooperatives are also engaged in economic activities like disbursement of credit, distribution of agricultural inputs (e.g. jute sacks, packaging boxes, and plastic lying, gloves among others). These processors normally unanimously select leaders to steer the affairs of the cooperative. They perform tasks for and on behalf of the group, with the main task being marketing and market linkage establishment. The objective of this research was to assess the knowledge gap of factors hindering Shea cooperatives management in the East Gonja District of Northern Ghana's ability to sustain established market linkages. This is to enable the researcher suggest recommendations to Agritree Sustainable Centre that could enable the Shea cooperatives to improve and sustain market linkages. The method employed for the research were largely qualitative in nature for describing the phenomenon under investigation and some quantitative approach to aid the presentation of findings of the study. The findings indicate that shea cooperative management needed capacities enhancement in the areas of good governance, leadership, building relationship with stakeholders and maintaining them. Also, there were requirements to be met in order to sustain market linkages like quality (e.g. eliminating impurities, ensuring moisture content and peroxide levels, free fatty acid within appreciable levels), quantity delivery within stipulated agreements and ensure that contents of contracts are not breached. The findings also show that, the shea cooperative management have some expectations of the buyers which includes transparency on the level of quality, commitment to the terms and conditions of contracts, and logistical support. Another key finding is that many of the processors do not have the required equipment to carry out quality control at the processing centres, thus, have to rely solely on intuition and guts. Lastly, the finding reveals that there is a sharp decline in shea tree density, reducing the quantity of nuts harvested during the picking season. If this trend is allowed to continue then it will pose as a big threat to the survival of the shea industry.

The researcher recommends that trainings centred on leadership, transparency and accountability, good governance mechanisms for the shea cooperatives are instituted to strengthen skills and improve upon behaviours of the leadership and members. Shea tree planting and nursing should be encouraged among processors, the Agritree Sustainable Centre and the shea industry actors at large as the survival of the industry depends on the availability of shea trees.

CHAPTER 1: Research Background

1.1 Research Context:

Agritree Sustainable Centre (ASC) provides services such as the establishment of shea cooperative, advocacy and lobbying, business development training, market linkages and shea quality processing trainings. There is a knowledge gap on why Shea cooperatives in the East Gonja district of Ghana have not been able to sustain the established market linkages. This project has been commissioned by ASC to identify factors affecting the Cooperatives' inability to sustain established market linkages, and also to recommend ways to improve and sustain them. The study is organized in 6 chapters: background of the study, research main and sub-questions and conceptualization for chapter 1 while the rest of the chapters are composed of literature review(chapter 2); methodology in (chapter 3), research findings(chapter 4), Discussions (chapter 5) and conclusions and recommendations(chapter 6).

1.2 Background of Study

Throughout human history many activities have always been undertaken in groups rather than individuals, simply because this was a better and more effective way of doing things. An example is cooperatives societies, formed by self-motivated individuals with a common interest. This is not different from shea groups, where a collection of shea processors carryout this self-mobilizing act for the benefits of their own development. A similar view is shared by (Dejene, 2015) where Cooperatives is the main legal means of mobilizing communities for the performance of activities that indirectly supports the growth and development of a country.

The International Cooperative Alliance has defined a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise. From the legal view, Helms (1968) in (Bijman and Hanisch, n.d.) defines cooperative as "a registered voluntary association of persons, with membership not less than ten person with a common interest formed and operated along democratic principles, for the purpose of economic and social interest at least cost to its members who contribute the capital and manage the business so established by delegating some powers to elect management." Cooperatives societies are distinguished from shareholding firms by the democratic nature, with voting rights being assigned by person rather than by size of shareholding. Besides, they are enterprises and not charities, NGOS or branches of government.

Mohammed in (Samaila and Kamaldeen A. A, 2014) recognised Self-Help Groups (SHGS) for their contribution to the development of a countries and how they become formal institutions of credit if they are registered as cooperative. He went further to say that they are a sub-set of the formal institutions (when registered) that provides support to a wide variety of economic happenings like farming, petty trading, local processing that serve as source of livelihood of millions of people in rural areas.

Many of the commercial production areas where cooperative societies can be easily identified is the agricultural sector. This explains why the influence of the agricultural sector to poverty lessening over the eons has been incredible. According to the World Bank (2014), about 70% of the rural poor in the world are engaged in agricultural activities as the mainstay of livelihood. Again, (Ravillion and Chen, 2007) shares that many countries experienced a significant decline in rural poverty largely due to high rates of growth recorded in agriculture.

In Sub-Saharan Africa, agricultural activities have the prospects and propensity of boosting economic growth. A study by the IFAD (International Fund for Agriculture Development, 2001) reported that Africa has the arable, fertile and favourable climate to produce enough to feed itself and the rest of the world. This dream could have been achieved if African governments had

invested adequately in the agricultural sector and created right policies and conducive atmosphere for smallholder farmers to thrive.

According to (World Trade Organization, 2018), Africa today depends largely on other continents to feed its rising urban population mainly due to little adoption of technology, inaccessible agricultural extension services, imperfect and changeable markets, poor trade organization, inability to access microcredit and land security. These have made it difficult for the many farmers in Africa to produce in commercial quantities for the markets, thus, unable to earn decent income. The potentials as well as the challenges aforementioned are evidenced in the shea business and its value chain in Ghana. Anecdotal evidence suggests that about 80% of women are empowered through Shea processing. The “Shea trees (*Vitellaria paradoxa*) grow in parklands, dry savannahs and forests on a strip of about 5,000 km that crosses West Africa, more precisely in Benin, Burkina Faso, Cameroon, Congo, Côte d’Ivoire, Democratic Republic of Congo, Ghana, Guinea, Mali, Niger, Nigeria, Senegal, Sudan, Togo and Uganda” (Tweneboah Kodua, Ankamah and Addae, 2018).

Shea Network Ghana (SNG) (2017), postulate that Shea trees are found extensively in the Guinea Savannah and visible in almost the entire area of Northern Ghana, covering an area of about 77,670 sq Km. Communities located in these areas collect Shea fruits and further process it into Shea kernels (nuts) or butter for subsistence and for sale.

In the East Gonja district, a large number of the populations are peasant farmers. However, the area has a large number of Shea trees and inhabitants within the district especially women are able to improve upon their livelihood outcomes through active participation in the Shea value chain (Quainoo et al., 2012). In addition, there is considerable potential for Shea to contribute to the economic empowerment of women through employment creation, particularly through interventions in Shea value chain (Elias and Carney, 2005) as cited (Kent, Bakaweri and Poole, 2014) where cooperatives are usually the based.

Furthermore, leveraging on the capacity of cooperative societies, access to good prices and better terms and conditions of contracts can be easily guaranteed. Good prices lead to an increment in levels of income which enables the women to buy food, pay fees and support their families and sustain their business. In fact (Al-hassan et al., 2011) suggests that new members who join cooperatives receives capacity building trainings lasting 4-6 weeks in key areas such as business management skills, book-keeping, and group dynamics and these are very important for the operations of the cooperatives.

Although the intent of establishing cooperatives have been to facilitate easy trading for local and international Shea aggregators while ensuring the achievement of the livelihood outcomes of Shea processors, it has been observed that there is a Knowledge gap on why the market linkages are not sustained with cooperatives when established. The issue of marketing Shea produce has been sighted by a lot of literature, for example, in SNV, JICA, PBC, SFC (Banye, 2012; Mensah and Suleman, 2014) have made project interventions to support Shea cooperatives have access to markets.

1.3. Research Problem

Shea cooperatives play a key socio-economic development role of Shea producers in East Gonja district. Many actors in this business have seen their lives transformed remarkably. This is being made possible through the assistance from the development organizations/partners (ASC) working in Shea.

However, like all human enterprises, these shea groups are faced with several challenges which need attention if the optimum benefit is to be derived from their operations and consequently, their contribution to the sustainable economic growth of Ghana. Critical among the challenges is

the weaknesses in the established market linkages making cooperative members incapable to strategically make investments decisions. They are also becoming less competitive against other shea groups across the sub Saharan region. As a result of this, members are unable to cater for basic needs, pay fees for education of wards due to uncertainties associated with markets. Seeking answers to why the cooperatives fail to sustain these established market linkages has become imperative. Therefore, this study is aimed at assessing the factors that are important in sustaining the established market linkages of Shea cooperatives in East Gonja district.

1.4. Objective of Research

The objective of the research is to assess the knowledge gap of factors hindering Shea cooperatives inability to sustain established market linkages in the East Gonja District of Northern Ghana. The findings will be the basis for which suggested recommendations will be made to ASC for a possible turnaround of the problem.

1.5. Question of Research

What factors hinder shea cooperatives management from sustaining established market linkages in East Gonja district of Northern Ghana?

1.6 Sub Questions

- a. What are the necessary requirements for the Shea cooperatives management in the East Gonja District of Northern Ghana to connect with buyers to sustain an established market linkage?
- b. What are the capacities of Shea cooperative management to support its members in an established market linkage in the East Gonja District of Northern Ghana?
- c. What are the necessary requirements for shea cooperative management in the East Gonja District to connect with buyers to sustain established market linkages?

1.7 Background of the Shea Cooperative

Shea cooperatives are planned by self-selection move by the concerned members. ASC convey cooperative sensitization awareness activities in the communities educating persons on how forming a cooperative will aid them to pull their individual competence together towards improving their lives. This attracts the interest among the people leading to the formation of the cooperative.

After formation, participants are engaged through group dynamics, co-operative principles, interim leaders' selection and formulation of by-laws. Interim leaders' spearheads the mobilization of member's drive even as they still undergo coaching. Within a period of three months, a first Annual General Meeting (AGM) is held for the members to confirm or elect substantive leaders and to 'adopt the by-law or the constitution' drawn up by the group.

From members' initial contributions, a bank account is opened, Tax Identification Number (TIN) acquired and then file the necessary papers with the Department of co-operatives of the Government to get the Co-operative Registration Certificate. This provides legitimacy by the DAs and helps them to get any support that the government intends to give co-operatives in the district.

ASC plays the role of a facilitator, coaches and supervises the process. Its record them as part of their working partners and beneficiaries. This act makes them commit to advancing funds, time, personnel and other resources for the development of the cooperative. This however does not

mean that the cooperative belongs to ASC, they can disassociate themselves from ASC and the vice-versa.

1.8. Commissioner of Research

Agritree Sustainable Centre (ASC) is a not-for-profit organization in the Northern region of Ghana, promoting sustainable agriculture especially for rural dwellers. The organisation provides capacity building and training programs for women and youth. Thus, providing a platform that supports, motivate and cushions women and youth's livelihood strategies towards the attainment of their desired livelihood outcomes.

ASC also render services in area of advocacy and lobbying, trainings (Shea, cooperative development, village savings and loans, soya beans production, groundnut production, vegetables cultivation, safe farm practices) drawing up business development plans, proposal writing and design manuals for sustainable agriculture.

It is an active member of Global Shea Alliance, Shea Network Ghana and friends of the environment. They have partnered all these organizations to provide trainings for Shea women groups, groundnuts, soya and tree planting activities in the East Gonja district of Northern Ghana for more than 4 years. Through these activities, ASC have built the capacities of women and youth to process good Shea products, enhanced their skills in processing, advocating and lobbying for support for same within communities.

1.9. Problem Owners

ASC need information on why Shea cooperative management (SMC) are not able to sustain established market linkages with 'big' buyers.

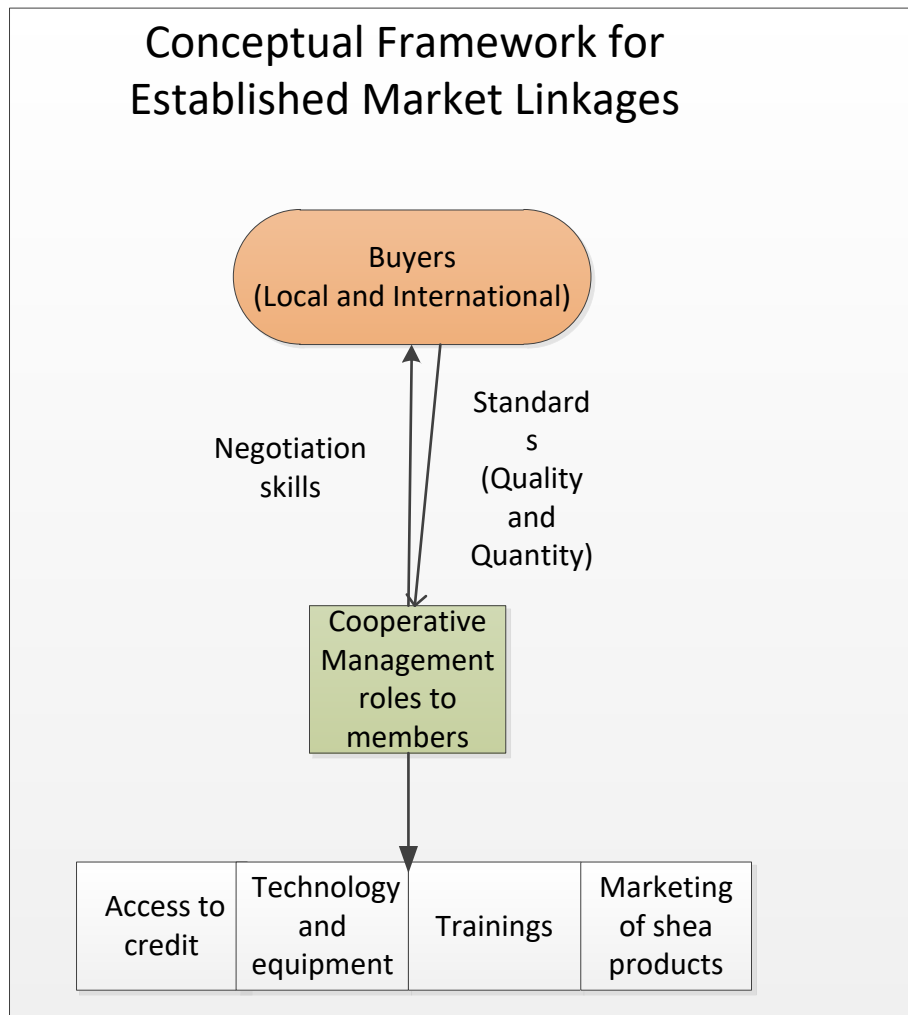
1.10. Role as a researcher

I am a master's student at Van Hall Larenstein University of Applied Sciences, The Netherlands, undertaking a master's program in Management of Development with Specialization in food and nutrition security. There is a knowledge gap on sustainability of established market linkage, therefore, ASC has commissioned this research to provide it with knowledge to fill the gap. The recommendations from the study are going to become input for project intervention in Shea processing. The researcher will strive to remain neutral and detach her emotions from the research process in order to ensure quality of the enquiry, keep track of all events, and do observations attentively (Laws, 2013)

1.11 Conceptual Framework

To carry out an assessment of the role of Shea cooperatives in managing established market linkages, there is the need to look at how the cooperatives are governed. This assessment will be done with insights of a governance chain from (Hoekstra, 2020).

Figure 1: Conceptual framework on role of Shea Cooperative Management in sustaining established market linkages.



Source: Developed by Author, 2020

The figure 1 above provide the conception on the functional role of management of the Shea cooperatives to members and the other stakeholders (buyers). In the figure, the area shaded green depicts the cooperative management role to members and the buyers. They play dual roles to these two separate entities and the success of the marketing transaction depends largely on how these roles are executed. From the bottom of the figure, shea cooperative members have needs including access to credit, technology and equipment, training and sales of their produce. These are the expectations of the members of the society, and one can only have access if duly registered.

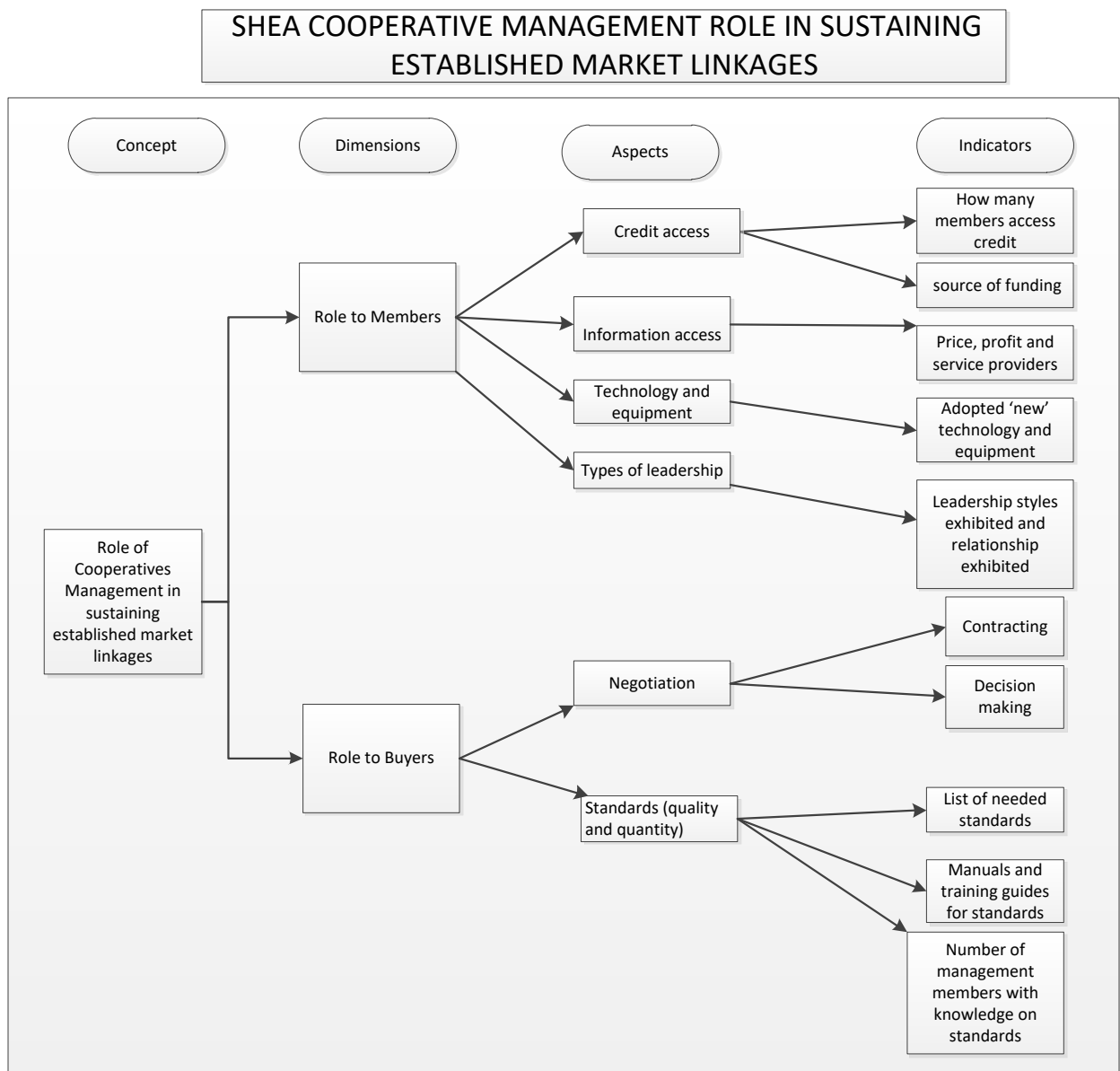
From the arrows from the green box in the middle to the top labelled buyers (local and international), depicts the relationship and expectations of both cooperative leadership and the buyers. Leadership transact business with buyers by negotiating with them paying particular attention to quantities, price, product safety and quality. This kind of relationship that exist or arise from the negotiations can arouse interest and willingness from the buyers to support the cooperative for inclusive business benefits (World Business Council for Sustainable Development (WBCSD), 2011).

In The figure 2 below, Shea cooperative management as a whole further depicts the functions to include development of new products, market and market linkage of products or services, processing and branding and credit mobilisation.

For the aspect of marketing and market linkage (area of concern), cooperative leaders perform two roles; a duty to their members and to the buyers. The capacity of the management to communicate, engage and relate with members, buyers and facilitating organizations is key requirement for enabling sustained relationship between the buyers, members and the facilitating organization.

Therefore, investigating the role of management of Shea cooperatives needs to be conducted to identify strategies for effectively unearthing militating factors that hamper the progress of market linkages.

Figure 2: Operationalization of Shea cooperative management Role in Sustaining Established Market Linkages



Source: Developed by Author, 2020.

CHAPTER 2: Review of Literature

This chapter provides information through desk assessment of previous studies associated with this research, in order to find relevant data on the topic under review. This is to provide a clearer understanding and to enable evaluation of results. In this regard, clarifications related to Shea cooperatives, its importance to women Shea processors, market linkages, formation, information on markets, requirements for processed Shea (quality and quantity) will be reviewed from peer reviewed journal papers, grey documents and edited books.

2.1 Structure of the Shea Industry

Honfo (2015) describes the Shea trees (*Vitellaria paradoxa*) existence within widespread coverage approximately 5,000km from Senegal (West) to Ethiopia, Sudan, Uganda (East) across the African continent and has numerous dialect names. Tales on Shea tree growth in Northern regions of Ghana states that they are God's gift to nature, naturally in the wild, in the dry Savannah belt and semi-arid lands. According to (Bup et al., 2014), Ghana is part of the Countries that has a high potential of producing 70,000–300,000 tons per year.

The evolution of the Shea industry is projected by (www.solutions-site.org, n.d.) began with the academic works on the Shea plant by Mungo Park, a Scottish/English traveller in the 18th century who travelled between the Gambia River and River Niger, described the prominence of the Shea tree and its products. In the late 1980s, a subsidiary of Cocoa Research Institute of Ghana (CRIG), stationed at Bole in the Northern region of Ghana carried out scientific research on the Shea tree with a core mandate to reduce maturation of the Shea tree from 15 - 20 years to 7 years (CRIG, 2002). The earliest research work on the biology of the Shea tree in Ghana was conducted in 1928 on the flowering and propagation pattern of Shea.

2.1.1 The Shea Tree

The Shea tree thrives on different soils and heights, except low lands that are frequently flooded (Boffa, et al., 1996). Typically, Shea tree grows to a regular stature of around 15m with swarming branches and a dense waxy and intensely fissured bark that makes it resilient to fire. Yield per hectare of the tree regularly is estimated at 15–20kg of fruits annually, although trees in appropriate atmosphere can produce up to 50–100kg yearly. In favourable environment, phonological germination of the nut takes place within 7 – 10 days. Nursing seedlings growth is slow and take 2 - 3 years to reach field planting. Gestation period is speculated to lasts for 15 – 25 years which makes domestication difficult. Flowering starts at the age of 20 years, and the plant matures at the age of 40 – 50 years and can fruit for more than 200 years by (www.solutions-site.org, n.d.). Globally, (Venturini et al., 2016) the Shea tree is seen as a close ancillary for cocoa to the extent that the Shea can be used for all what cocoa is used, it has enormous uses ranging from domestic, industrial through to medicines uses.

2.1.2 Significance of the Shea Tree

Anafo, (2016) explains that shea tree plays crucial part on the livelihoods of the countryside populaces over the years, as every part of the tree has some uses, ranging from fruit to bark. For instance, the fleshy pulp is very sweet and nutritious while the leaves are served as silage as well as an ingredient for making alkaline and paint.

(a) Industrial uses; is mostly used in the cosmetic, confectionery and pharmaceutical industries. The tree produces sap that serves as a raw material for the gum and rubber industry. Also, the edible fat is used for both medicinal and industrial purposes (Hatskevich, Jenicek and Antwi Darkwah, 2011)

(b) Domestic uses; Shea butter is mostly used as edible oil, for traditional treatment of ailments and hair and body creams. The butter heals burns, stretch marks, skin diseases, dryness and

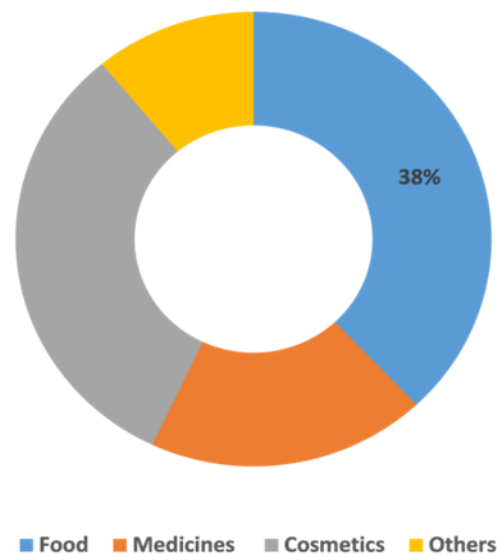
ulcerated skin. The vegetable fats it contains stimulates circulation and cell regeneration. It also serves as a substitute for margarine whereas poor quality butter is used as a source of light (Hatskevich, Jenicek and Antwi Darkwah, 2011), again, the residue from the extraction of butter is mixed with mud for plastering homes built with mud. Still in (Hatskevich, Jenicek and Antwi Darkwah, 2011), it is said that shea wood is good for making sturdy tools, pestles and mortars for food processing, farm hoe grips. Furthermore, the branch of the tree is used to inform in-laws the sex of a newly born baby locally. Finally, Dogbevi, (2009) in (Hatskevich, Jenicek and Antwi Darkwah, 2011) explains how the fleshy pulp is edible and serve as food for folk especially farmers and children whereas the butter forms a part of oil consumption in most homes in northern Ghana.

(c) Medicinal uses

In (Abagale et al., 2016), suggests that Shea tree contains vital fatty acids that aid to protect and rejuvenate hair and damaged skin. it goes further to describe its constituents and its functions like vitamins like A, E, and F, and other minerals. The vitamins help reduce wrinkling of the skin as well as other signs of ageing. It also assists in revitalizing and conditioning of dull/dry skin particularly in the harmattan where skins crinkle, mouths and feet crack, butter plays a very vital role in moderating crinkles and cracks.

According to (Anafo, 2016) shea butter is used as pomade during pre-warm bath for babies to promote smooth agile skin. Not only that, it also stimulates the recuperation of the nipple of babies. Shea butter is used by most traditional healers to prepare ointments for the treatment of dislocations and fractures while the bark and roots are mostly boiled or pounded and then used to treat decaying wounds, dysentery and other ailments. Despite its enormous uses and benefits enumerated, the Shea industry is yet to receive the needed attention it deserves (www.solutions-site.org, 2002).

Figure 3: Global Shea Butter Market Application Shares in 2016 for Food, Medicines, Cosmetics and others



Source: (Market Research Future, 2020)

2.1.3 Factors affecting the yield of the Shea Fruits

According to Dwomoh (2004) in (Anafo, 2016), bush fires, harsh weather conditions, insects and parasites have a negative effect on the yield of the trees. In Dwomoh's view, lack of water easily leads to creasing of the seed or less Shea fruit. Anafo (2016) espoused that the harmattan dust and strong winds cause flowers of the Shea tree to drop down, likewise droughts and bush fires having a undesirable properties on the flowers, fruits and Shea tree and argues that most of the bush fires are consciously set by the cattle herdsman to enable fresh pastures to grow while the Hunters do same to aid them pursuit of "bush meat". These actions greatly affect young Shea trees, killing them easily and affects regeneration. Furthermore, Caterpillars affect the foliage and fruits of the Shea tree but adds that they are consumed as well (Payne, 2020).

2.1.4 The Shea industry in Ghana

According to the CRIG, in Ghana, the *Vitellara paradoxa* is found all over Northern Ghana with few trees scattered round the Northern parts of Volta and Brong-Ahafo regions with land area of over 77,670 square kilometres, is densely populated in Tumu, East Gonja, West Dagomba, Wa, Nanumba South, Mamprusi, Lawra, Talensi/Nabdam, and West Gonja. However, the collection and processing of the Shea nuts is predominantly a female pursuit that see women, often assisted by their children rushing to their farms to harvest (Anafo, 2016; Agúndez et al., 2019). (Anafo, 2016; Lovette and Phillips, 2018) provides reasons such as distance, competition from other women and the cattle and to serve as labour for husbands in tidying the farms as reasons for going to farms early.

Shea nuts mature at the commencement or during the rainy season, between June and August. This makes it possible for females to engage in Shea nut collection. Also, the processing of the nuts falls within the domain of food processing which is the preserve of women. Women mostly pick as several nuts as possible from trees on farms and fallows or from trees in the bush. Picking of Shea nuts on cultivated land is restricted to women whose husbands own the lands while a Shea nut from uncultivated bush land is unrestricted (Lovette and Phillips, 2018).

Most women carry the nuts in basin (approximately 15-20 kg) on their heads, wealthy women carry the nuts with a donkey cart and others with tricycles (popularly called motor king). Honfo (2015) clarifies home post-harvest activities to include pulp removal from the nuts, nuts parboiling and left to dry, after drying, the nuts are de-husked from the shell and then dried again. The dry nuts are then stored in jute sacks for sale into Shea butter.

2.2. Shea Cooperatives

CasaleF (2010) defines a co-operative Society is an independent association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and controlled enterprise. From a Business perspective, Frietag, C., (2008), views cooperative an organization established for the purpose of purchasing and marketing the products of its members, i.e., shareholders, and/or procuring supplies for resale to the members, whose profits are distributed to the members (in the form of patronage dividends), not on the basis of the members' equity in the cooperative.

Based on the two definitions, a Shea cooperative is an independent group of Shea women Shea women (Shea pickers, Shea butter processes and cosmetic) who voluntary come together to address their economic, social and cultural needs using Shea resources. Associated benefits of being in the cooperatives includes development of savings culture, access to loan in the form of cash or goods, cooperative power, acquisition of skills, knowledge and expertise of members as they participate in the running of the cooperative which can be beneficial in their personal lives.

To reap these benefits, Shea cooperatives need to become organized and to strengthen internal and external relations with group members, service providers, and market chain actors.

2.3. Management of Cooperatives

The survival of every group mostly depends on its leadership and as a key criterion for a cooperative; the leadership is elected by the members of the group (Food and Agriculture Organization, 1998). These chosen leaders serve as the face of the group in all dealings. They act for and on behalf of the group. These group of managers act as 'management' and before they are chosen, their skills, knowledge, trustworthiness, honesty and experience are very important things to consider during this decision-making process because of the role in marketing especially. Management composes of executive, board of directors and a member's council.

2.4. Functions of the Management of Shea Cooperative:

In (Hanisch, 2009), highlights of some functions of cooperatives to include, development of new products, marketing and market linkages, processing and branding and access to credit. Still in the (Food and Agriculture Organization, 1998), it is stated that the management decides on allocation of resources, strategizes implementation, monitors performance, records financial flows and reports back to members. Shea cooperatives are serving as a point where individual processors are put together to enable them access markets and to also ensure that markets made are those that can work for all members to reap their cost of production and earn more income.

So, they are very attractive entry point to either sell (for members) or to sell to buyers (they can easily mobilize volumes and be traced hence buyers prefer them as they are more 'organized'). Hazell, Shepherd, Markelova et al cited in (Choudhary, Kunwar and Rasul, 2015) argue that the opportunity for smallholder farmers to raise their incomes depend on their ability to compete in the markets, and this can be enforced through cooperative action, similarly observed by Wymann in (Choudhary, Kunwar and Rasul, 2015), collective action is notably the key to overwhelming the shortcomings of unreliable and low production and enhancing producers' negotiating power in the value chain. Meaning that in the case of Shea processors they will be reducing operation costs, gaining required market information, access to new technologies and improve market access by acting collectively. In this research, the role of the cooperative management to the group and buyers is the Marketing and market linkage role. Insights on how they identify clients, the roles they play to the members and buyers, what goes into the contract negotiations among others will be considered.

2.5. Marketing of shea products through linkages:

Market has been defined by many authors in (Houck, 1984), (S.Pindyck, 2012) as "A market is the "place" where price is determined. In other words, a market is the collection of buyers and sellers that, through their actual or potential interactions, determine the price of a product or set of products". (Aninbogu, 2016) also defines marketing as "a societal process by which individuals and group obtain what they need and want through the process of creating, offering and freely exchanging products and services of value with others".

The marketing of shea products largely depends on the linkages established during conferences (business to business sessions: a session usually set up for strategic engagements of processors, NGOs', aggregators, local/international buyers to 'meet and greet' and discuss, place orders or propose intentions of purchase of shea butter/kernels.

Ahenkan and Emmanuel (2010) stipulates that marketing of NTFPs is basically done individually; it is unorganized, dispersed and farmers lack the necessary marketing skills and information required for the optimal performance. (Ahenkan, 2010) goes further to say that marketing points involves anywhere immediate village markets, markets within neighbouring villages and local towns, roadside, junction selling points and markets in the nearest large urban centres and cities. This approach has been stated in existing literatures as the easiest adopted approach for producers of all products including shea processors.

According to (Aninbogu, 2016) cooperatives societies creates platforms to improve agricultural production as they play a key role in regulating the market in terms of processing of members farm produce; construction of warehouses, provision for grading and standardization of product, standardization of weight and measures, day-to-day circulation of information on market prices of agricultural commodities, facilitates transport services.

2.6. Value chain concept

The value chain concept is occupied by a range of value additions necessary to bring a product or service while going through different phases of production, raw materials acquisition, and combination of other materials to create a finished or semi-finished state, transport, and delivery through to the final consumer. According to Donovan et al, (2015), value chain depicts actors who connect a producing chain to provide goods and services to the final consumer through a pattern of activities.

This fact makes it very important to encourage the activities of the value chain as it in a way encourages competition to display relevance of each actor in the chain and can create room for innovativeness. A similar view is shared by Humphrey and Navas-Alemán, 2010; Staritz, 2012 seen in Donovan et al (2015), where they described Value chain development featuring prominently in development programming aimed at inspiring economic growth and increasing the keenness of the agricultural sector.

Shea Value chain

The diagram illustrates the Shea Value Chain, showing the flow of products and services from collection to export, involving various actors and support organizations.

Functions of shea cooperatives (Blue box):

- Collection of Shea fruits by women cooperatives
- Post harvest processing by shea cooperatives
- Retailing shea nuts
- Further processing of shea nuts into shea butter
- Retailing of shea butter
- Consumers

Actors (Green boxes):

- Individual shea processors
- Shea cooperatives
- Enterprises/private companies
- Big buyers (Local/international)
- Government (PBC)
- Facilitating organizations

Supporters (Blue box):

- Department of Cooperatives
- ASC (Commissioner)
- SNG, GSA

Export (Grey oval):

Service providers (Grey box):

- Packaging and transport

Areas of interest (Blue line):

The flow of the value chain is as follows:

- Collection of Shea fruits by women cooperatives
- Post harvest processing by shea cooperatives
- Retailing shea nuts
- Further processing of shea nuts into shea butter
- Retailing of shea butter
- Consumers

Simultaneously, the processing and export flow is:

- Individual shea processors
- Shea cooperatives
- Enterprises/private companies
- Big buyers (Local/international)
- Export

Supporting actors and organizations include:

- Service providers (Packaging and transport)
- Facilitating organizations
- Government (PBC)
- Department of Cooperatives
- ASC (Commissioner)
- SNG, GSA

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CHAPTER 3: Methodology

This chapter covers the research study area, research design, data collection and data analysis. Qualitative approach was used to collect primary data on the survey and secondary data from literature sources.

3.1 Study Area

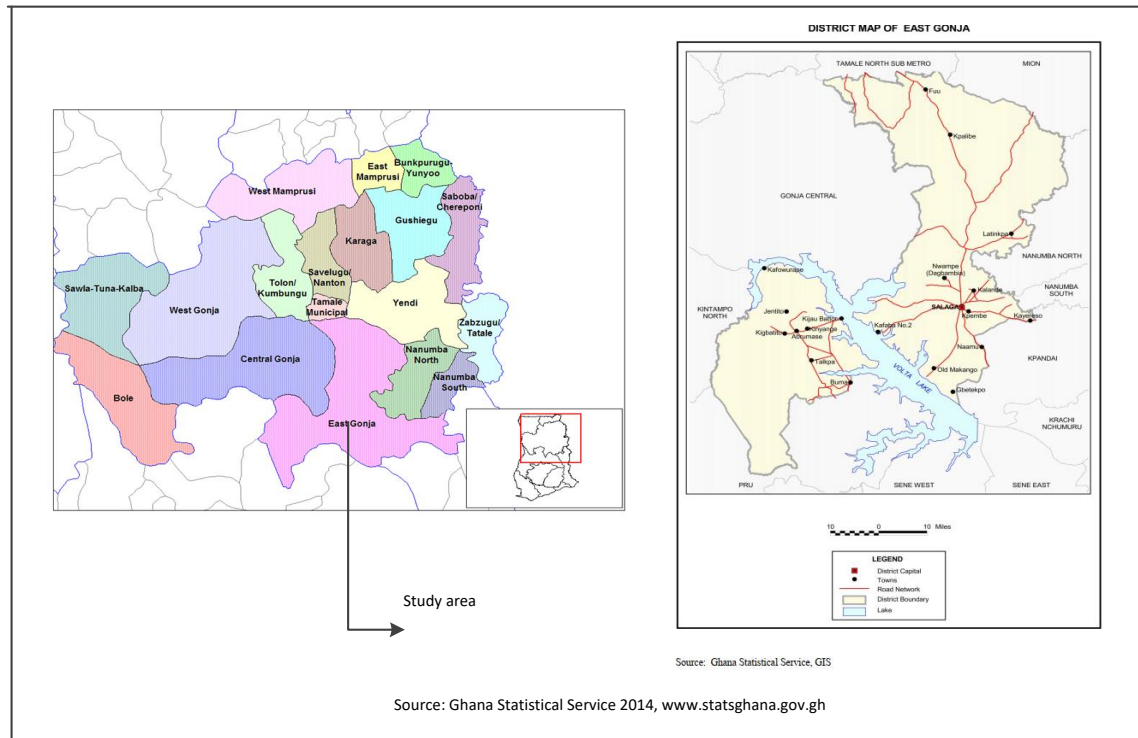
Ghana Statistical Service (GSS, 2014) notes that East Gonja District was created by a legislative instrument (LI 1938) in 2007 and located within the South-eastern section of the Northern Region of Ghana. It lies within Latitude 8°N & 9.29°N and Longitude 0.290°E & 1.260°W. It shares boundaries with the Mion District and the Tamale Metropolitan Assembly to the North, Central Gonja District to the West, Nanumba North, Nanumba-South and Kpandai Districts to the East, and the Ahafo Region to the South (Figure 1.1). The total land size of the district is 8,340.10 sqKm, covering about 11.95% of the landmass of the Northern Region, hence the largest district in the Ghana.

As recorded in GSS (2014), total population of the district in 2010 Population and Housing Census is 135,450. Males constitute 51.5 percent and females represent 48.5 percent. 81% of the population is rural. The average household size in the district is 4.4 persons per household. The proportion of literate males is higher (52.1 %) than that of females (47.9%). Four out of ten people (44.5%) can speak and write both English and Ghanaian languages.

About 72.4 % of the population aged 15 years and older is economically active while 27.6 per cent are not active. About 96.8% have jobs while 3.2% are jobless. Those not engaged in any economic activity, a large percentage are students (36.4%), 36.2% perform household duties and 3.4 percent are persons with disabilities or too sick to work.

Out of the employed population, about 77.3 % are engaged as skilled agricultural, forestry and fishery workers, 6.0% in service and sales, 11.1% in craft and related trade, self-employed without workers. The rest are contributing as family labours, casual labours and domestic staffs (house helps). Overall, men constitute the highest proportion in each employment category except the contributing family workers apprentices, domestic employees and a few other categories. The private informal sector is the largest employer in the district, employing 96.1 % of the population followed by the public sector with 2.7 % (GSS, 2014).

Figure 5: District and Regional Map of East Gonja District



Source: Ghana Statistical service, 2014.

3.2 Research Approach

Qualitative data was gathered from primary and secondary data sources. Secondary data was reviewed through a desk study using reports, journals and internet sources like from Greeni, Google Scholar, EMERALD, Scopus and guided by the insights from the commissioner (including discussions, reports, group information) documents. These sources of data provide information on the background of the ASC, their role in Shea cooperatives and market linkage activities especially in the East Gonja District, strategies and data on Shea cooperatives profile to understand the cooperative better with observations of the researcher to come up with a generalized view from these three sources of data.

As per discussions with the ASC (commissioner), some data was purposely collected from the members of 3 Shea cooperatives that have been linked with markets more than twice and none were sustained. Information on these three cooperatives provided an understanding of the diversities in the groups and gave different learning points. Some big buyers were also among the 'list of go to' buyers for international and 2 proposed local buyers. The staff of ASC, 1 staff of SNG, 1 Pure Trust Social Investors Foundation (facilitating organization), 1 district department of cooperatives officer, through interviews (online and physical), focus group discussion and observations from videos, pictures, phone calls and social media were the main data sources.

3.3 Method of Data collection

In wake of the COVID-19 pandemic, the research team used the following strategies to collect data

Primary Data:

Semi-structured interviews with the aid of interview checklist were conducted with 42 respondents detailed as follows.

First, the shea cooperatives were categorised into 3 (members =12, SCM=18 of which WC=3 and the board=6). SCM is 18 of the 6 positions (Magazia, assistant magiaia, secretary, assistant secretary, co-operative organizer and a treasurer). Each leader has a different role in the management of the group. Interviewing them provide a unique opportunity of understanding their roles and how they perceive their responsibilities and the discharge of their duties.

Additionally, 9 members (3 each from the general membership of the cooperatives) were interviewed to understand how they think their management performs their role. A Focus Group Discussion (FGD) was held for the Board of the cooperatives made of 6 members (2 each drawn from the 3 cooperatives and 3 other members of the cooperatives). The FGD members were selected because they perform an oversight role on the duties of SCM. Adding 3 members of the cooperative was to gauge whether the idea of the first 9 members with consistent. All these interviews were done in local dialect (Dagbani) by the research assistant. Internet connectivity was a challenge for the main researcher so the research assistants came in handy as they could visit respondents directly while observing COVID-19 protocols.

Second, 6 Resource Persons (RP) were interviewed as well. They comprised of:

- a. Staff of ASC, Pure Trust Social Investors Foundation, SNG (gave 1st hand information on the happenings in cooperatives development and market linkages).
- b. International Buyer (anonymous) local aggregator (a buyer who in turn sells to the large buyers, engaging him provided insights on commitment levels of each the buyers and how their support flows), this group gave insights on preference of quality, quantity expectation, contract discussions, support provided to cooperatives.
- c. 1 person from the cooperatives department of the district to enquire about formalities and other details from the local government that can support the Shea cooperatives.

Use of a research assistant:

The current COVID-19 situation does not allow for travel; therefore, research assistants were engaged for the task of collecting data. These persons had at least a Bachelor's degree, fluent in English and ability to translate in Dagbani. Before conducting the interview, the research assistants were trained on understanding and asking the right questions, and the process of data collection. They were also taught how to record the conversation (when possible), and notes taking. These actions were performed to aid the researcher co-transcribe the field data for data analysis.

3.4 Adherence to COVID-19 Protocols by the Research team while in the study Area

Given the current trend of COVID-19 pandemic in the world, the research team observed the safety protocols of COVID- 19. Face mask was not very comfortable and at a point only hand washing was the easiest to do. Social distancing made the setting odd and uncomfortable. Interviewees were 'intimidated' by the fact that the team kept their distance.

3.5 Reflexivity in research

As a staff of an NGO working in the shea sector, I am aware that undertaking this research and wanting to interview my colleagues and other stakeholders, I need to stay neutral and set aside my views and reactions, however, it was somewhat challenging to totally be objective.

3.6 Data Processing and Analysis

Data processing was done by categorizing the data that had been collected through online interview, online survey based on the themes. In the first stage, the data was divided into 3 categories based on the sub-questions; hindering factors, capacities of management to understand the markets available, channels for improving established linkages towards sustenance.

Each category had a code and colour label which simplified data tracing and grouping. The quantitative data on demographic characteristics were analysed by using excel and presented in both graphs and tables. Finally, triangulation was used in discussing by comparing and configuring the specific topic from different method of data collection and different respondents for reflective interpretations.

This grouping helped in doing comparative analysis. The groups and categories of data are presented in tabular forms for some categories and also linking each category to corresponding sub-questions. In addition, photographic evidences were marked based on the related category, because it has been used under discussion.

European Centre for Development Policy Management (ECDPM) 5 Capabilities (5Cs) framework which has been designed to aid in assessing the capability and performance of organizations and institutions identifies the exact capability that it lacks. The 5Cs comprises of capability to act and commit, Capability to deliver on development objectives, Capability to adapt and self-renew, capability to achieve coherence and capability to relate with external stakeholders. This model was selected because it will provide insights on which capability the SCM is lacking and therefore needs to be enhanced for the betterment of the SCM. In this study, the 5Cs has been modified to 2Cs. The “2 Cs” adopted were the capability to achieve coherence and capability to relate with external stakeholders. It provided insights on the conditions and capability of the internal elements of the SCM to see the possibility to improve their performance on the role of market linkage establishment and sustaining it. It was modified to 2C as a because that was what the SCM/WC were involved in.

The Institutions and Organisations Management (IOM) was used to describe the Cooperative internal and external elements beginning with its mission, output, input, factors, actors, strategy, structure, system, staff, management style and culture.

3.7. Ethical Consideration

During the conduct of the study, especially at the data collection stage, the researcher took into consideration and adhered to all ethical concern. Respondents’ consents were first sought about their willingness to participate in the research. Assurance was also given them on anonymity of respondents and information they provided. The researcher also explained the aims of the research to: be for academic purpose, to fill the knowledge gap and suggest recommendations for ASC. This is to enable Shea cooperatives management improve and sustain established market linkages. Again, no one was under any obligation to be part of the research and could stop if they did not feel the need to continue. The research team abided by all cultures in the community and followed all administrative process and procedure which were necessary, starting with a proper community entry with the help of ASC to engender trust and confidence in the research process.

All data gathered from interview were approved by the respondents before it was shown on the final report and treated with utmost confidentiality.

3.8 Challenges encountered

- I. Getting interviewees to describe their leaders without feeling that they were badmouthing/gossiping about the leaders and being open minded about it was a daunting task.
- II. At the time of taking data, there was voter registration exercise going on and this affected the rate of access to research participants.
- III. Interviewees demanded for incentives before providing information.
- IV. The researcher works in this sector and a known individual, therefore, many respondents sometimes turned because they see the researcher as a colleague and assumed that the researcher knows it all. Statements like “but why ask all these questions are you not at the secretariat, look in your archives you will find the answers”, quite common.
- V. Some respondents requested for remuneration making time for the interview.

CHAPTER 4: Research Findings

This chapter highlights the results gathered during the semi-structured interviews of the research carried out among the leadership/management of the cooperative, members and RS and grey materials from ASC.

4.1 Profile of Semi-structured Interview Respondents

Table 1: Profile of Semi-structured Interview Respondents

CODE	Grouping for Interview	Total participants	Age range	Sex of Respondents
RP	Resource Person	6	5 within 35-45 1 within 20-35	Male
MI	Member Interview	9	25-45	Female
FGD	Board members (6) with 3 members	9	20-45	Female
SCM	Shea cooperative Management	18	20-60	4 Males 14 Females

Source: Field 2020

For the purpose of the study, a sample size of 36 respondents were selected and interviewed. Respondents were drawn from Daashie (6 leaders), Jangyili (6) leaders, Dakpemyili (6 leaders). Nine (9) members were drawn from all three (3) groups, FGD (9). All the members were different, interviews were conducted on who was present and available at the arrival of the research team.

4.2 Socio-economic Descriptions

The tables 3 and 4 below are the description of socio-demographic characteristics from FGD, SCM and MIs.

Table 2: Socio-Economic Characteristics of Shea Processors According to Age, Marital status, Sex, Education and Experience in Processing

Socio-Economic Characteristics of Respondents		
Ages	Frequency	Percentage%
20-35	12	33
35-45	18	50
46-60	6	17
60+	0	0
Total	36	100
Marital status		
Status	Frequency	Percentage%
Married	19	52.8
Single	7	19.4
Widowed	6	16.7
Divorced	4	11.1
Total	36	100.0

Educational Status		
Level	Frequency	Percentage%
Arabic education	10	27.8
Primary	5	13.9
Middle/JHS	0	0.0
SHS	3	8.3
No education	18	50.0
Total	36	100

Head of household		
Sex	Frequency	Percentage%
Male	26	72
Females	10	28
Total	36	100

Years of experience in shea processing		
Experience	Frequency	Percentage%
Less than 5	4	11
6 to 10	6	17
More than 10	15	42
Since childhood	11	31
Total	36	100

Source: Field 2020

The study revealed that majority of respondents were females. However, the few men in the industry were said to be acting as middlemen between the women and the buyers, operators of the crushers and grinding mills, packaging and loading of the nuts or butter into trucks comments from (8 MIs,12SCM,3RP).

... "I cannot pick shea even though it gives money, the time I will use in picking it I will use it to create yam mounds. Once in a while when I don't have a lot of work on the farm I help to pick" ... SCM#6 (male)

Results from field study contained in table 2 above reveals that majority (50%) of the respondents is aged 35- 45years while 33% of them are above 20-35. This result indicate that the sector has energetic actors and have the potential to increase productivity when given the needed support like credit and logistics (e.g. wellington boots, protective gloves, tricycles).

... "if women have tricycles, wellington boots, shea pickers, the women can go into the bush pick more than the quantities they have because they are strong and hardworking" ...RP#2

Also, the results in table 2 show that most of the women (53%) are married, 47% are widowed/divorced/single and may account for the low harvesting of shea fruits. According to the customs, shea picking is done within the land owned by families/relatives. If a family had more than one wife then there will be tussle for who to harvest. Sisters also compete with in-laws for shea fruits. The widows or divorced need to walk to long distant places to enable them pick fruits freely. This situation has been a huge setback for the sector as these happenings was shared by the all interviewees. 72% of respondents reported to have males as the head of their households whereas 33% of respondents had females as the head of the household meaning less access to shea trees and parklands.

... "I have to wake up when I hear the first call for prayers to prepare and walk far to so that I can pick more shea fruits when am not the one on duty in the house and if it's my co-wife's time she does same. We all do that because the one on our husbands farm is not much because he cut some trees to increase space for maize farming" ... FGD participant #7 (female)

Other findings from the interviews granted was that, majority (50%) of the women had no formal education while 14% of them had some form of formal education. About 19% had some Arabic training while 8% were high school (SHS) graduates who became members to serve as secretaries (SCM#13). Results indicated that the high level of illiteracy among processors in the industry pose a threat (RP#1,2,3,4) and could thwart efforts towards viability of their business. The sector thrives on information management, hence, difficulty in information dissemination, understanding and adaptability to new ideas negatively affect the cooperative's survival.

... "They cannot read, so if an officer is not there to explain the requirements from a buyer or a new change in the industry, they stick to the old techniques. Even the secretaries sometimes do not understand what we ask them to do. An officer has to always go there. There are revisions almost every quarter in processing techniques that's why we always do trainings"RP#2

Furthermore, table 2 shows that most (42%) of respondents have been in the Shea industry had more than ten (10) years working experience while about 31% since infancy and either in nuts picking or butter processing. Long experience in the industry was evident in the field as most respondents demonstrated (MI's, SCM and FGD) how to identify good Shea nuts from bad ones as well as quality Shea butter from inferior butter.

... "I grew up picking shea fruits to eat and bring the nut for my mother and grandmother. I knew how to knead butter when I was 12 because I had to help the two do it" MI #3

... "I was at a different town and when I came to settle here, I saw the women picking shea and told me they will sell later, the following year I started too and I have been doing that for almost 4 years" ...

The results prove that demographic and socio-economic descriptions such as level of education, status, age and experience in handling shea obtained from the interviews and FGD, influences management capabilities as it tends to shape ideas and share new knowledge on processing.

4.3 The necessary requirements for the SCM to sustain established market linkages.

Established market linkages as described by ASC is to facilitate the "connection" and /creation of a business relationship between a buyer and the cooperatives. ASC links the buyers with the WC to buy their produce. The buyer is either discovered at a shea conference or upon the request made to them by walk-in buyers or referrals. These "buyers" schedule a visit to the site after which the negotiation discussions take place. During these discussions, there is a form of a tripartite meeting made up of the leader of the WC with/without the treasurer, the buyer and the ASC to discuss the terms of transaction. Key points during negotiation are the price, quantity, quality, payment terms, date and point of delivery time lines. These are summarised into a contract agreement. It is then signed/endorsed by both parties and ASC serves as witness (Described by RP#2)

During the research interview, the WC leader said that the buyers are brought to them by the ASC and added that they come to visit to see if the shea group exists and if they are processing and then later meet to discuss the term of contract.

a. Standards on quality and Quantities

Quality and quantity assurance become a critical requirement that came up as part of the standards needed during the negotiations. Both ASC and the cooperatives described “quality” as processing nut or butter based on the descriptions agreed upon by the Global Shea Alliance (GSA), the Ghana Standards Authority (GhSA) and sometimes the Food and Drugs Authority (FDA). 5 RPs indicated that parameters have been set and must be met before one can term the product as having met the requirement. These parameters include Moisture Content (MC), Free Fatty Acid (FFA), impurities, Peroxide/Oil Content. The ASC had a description of these parameters in their training material as depicted in figure 6 below.

Figure 6: Shea Quality Standard Requirement indicating Parameters, Grades and Remarks

Quality Standards (Industry Quality Requirements)

Parameter	Grade 1 A	Grade 2 B	Grade 3 C	Remarks
Moisture Content	<8%	8% - 10%	>10%	Moisture meter Filed testing
FFA	<3%	3% - 8%	>8%	Lab Testing
Impurities	<0.4%	0.4% - 0.5%	>0.4%	Weighing and Visual Inspection
Oil Content	>50%	47% - 50%	<10%	Lab Testing

Source: Field work 2020, ASC Archives

Shea processing has two stages (Nut and butter processing), after harvesting the first stage is to process the nuts and it was described by all MI's, SCM, FGD and 4RPs as parboiling; separating the pulp from the nut, measure for cooking, first drying, shell removal, second drying, checking wetness (if the nuts are wet you dry again before bagging), remove all foreign materials and bag and transport to warehouse or sell. Second stage is to process into butter: separate good nuts from spoilt nuts; crush, roast, mill and knead, scoop all the white foamy part and boil, scoop off oil to cool and solidify (if is yellow butter an additive is added locally called “pagzhegu”).

RP#2 noted that parboiling of nuts is a very sensitive activity that must be done within a time duration. This is the best stage along the entire processing chain to ensure good kernels to produce good butter. SCM, FGD and MIs also said time is factored in during parboiling and that it takes a period of one week to process butter. Although parboiling is one of the quality assurance process of the butter making process, plucking unripe shea fruits would result in bad taste of shea butter (SCM #5,7,9). However, 5 of the MIs said that sometimes they are not able to stick the time allocations because they have other duties. As such, all the participants of this interview except

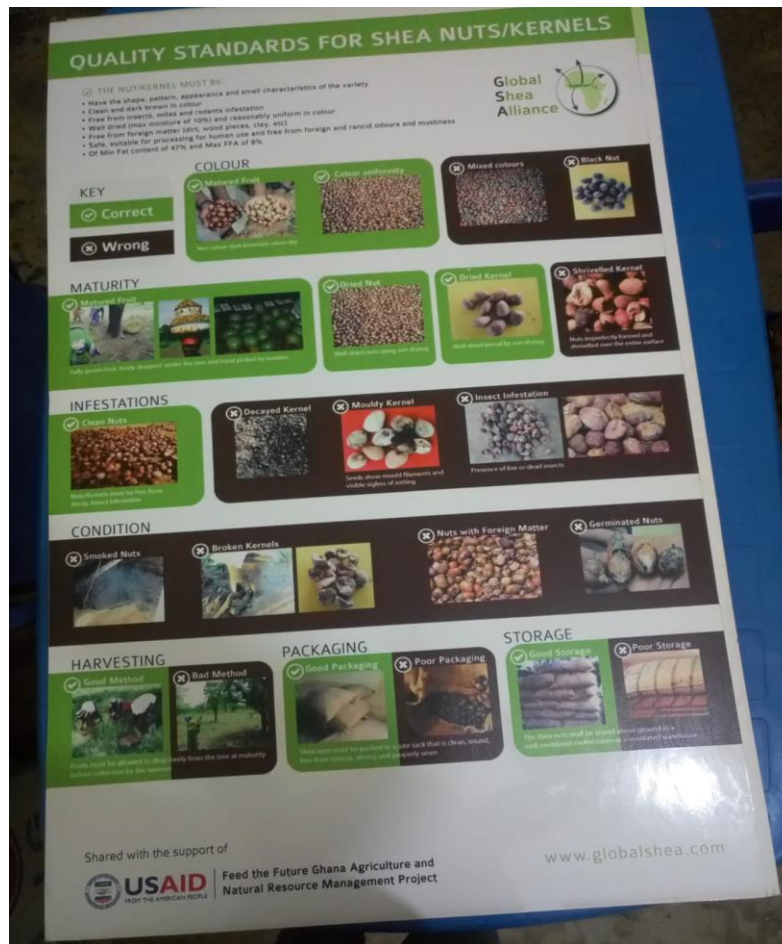
the cooperative department representative were able to describe this process as captured in figure 7 and 8 below.

Figure 7: Quality shea Nut Processing training guide from GSA



Source: Fieldwork, 2020 ASC archives

Figure 8: Quality Standards for Shea Nuts/kernels



Source: ASC archives

One of the support organizations' when asked about the requirement, he said that quality butter and nut is a key requirement and is one of the key things we do.

.... "Quality training is at the heart of our strategy. We also work to ensure that they have a decent working environment such as processing centre and equipment where possible" ...RP#1

Each of the associations under the cooperatives had some of the training guides of the nut only one had that of the butter.

Figure 9: Shea Processors Discussing the Quality shea processing Guide



Source: Fieldwork 2020

Figure 11: Demonstration of Quality nut processing by a participant of Training of Trainers (ToT).



Source: Fieldwork 2020

Figure 10: Participant of ToT filling a cooking pot with nuts during training on nut processing



Source: Fieldwork 2020

Figure 12: A results test on quality of shea butter from the Ghana Standards Authority.

GHANA STANDARDS AUTHORITY
FORM

Page 1 of 2

TITLE: Analytical Test Report **Doc. No. :** GSA-FM-T09-D

Your Ref:
Our Ref: 301/FA2/18
TO: [REDACTED]

LABORATORY CONDUCTING TEST
Food and Drinks Laboratory
Ghana Standards Authority
P.O. Box MB 24
Accra

Codes	
Generalised Product CodesFO.....
Specific Product CodeSB.....
Officer Responsible for ReportEA.....
Code of Approving OfficerPO.....
Period of Report03/2018.....
Lab. No. 301 Dept. FA Source Code 2 Yr 2018	

SAMPLED BY: Customer
NAME OF SAMPLE: Shea Butter (Batch # SL0011) **SAMPLE SIZE:** 1 x 500 g
DATE RECEIVED: 2018-02-20 **DATE(S) OF PERFORMANCE:** 2018-03-16 to 2018-03-21
SOURCE / PURPOSE: [REDACTED] IMPORT & EXPORT / QUALITY EVALUATION

TEST CODE	TEST CONDUCTED	UNIT	RESULTS	TEST METHODS	SPECIFICATIONS
	Moisture Content	%	0.17	ISO 662:1998	GS 238:2006 0.0 – 2.0
	Free Fatty Acid	%	11.91	ISO 660 : 1996	0.0 – 8.0
	Impurities	%	Nil	ISO 663:2000	0.0 – 2.0
	Peroxide value	mEq/kg	4.52	ISO 3960:2001	10.0 max
	Unsaponifiable Matter	%	0.91	ISO 3596-1:1996	1 - 19
	Oil content	%	99.83	AOAC 20 TH EDN 2016	-

Lab. No.301/FA2/18

On the request a buyer, the WC in collaboration with the GSA and the support organization, the WC carried out a quality evaluation on their butter contained high values of moisture, free fatty acids, peroxide they could only pass the impurity test. hence not meeting some of the requirement specification (figure 12).

Source: Field 2020

The cooperatives are thought to measure these parameters themselves by using their sense of touch, seeing and taste for Moisture Content (MC), impurities and Free Fatty Acids (FFA) while the rest are dependent on the laboratory of GhSA as contained in figure 12.

... "With shea butter they usually taste the raw butter by cutting a piece into the mouth and if the FFA is high more than 5% you can feel your tongue very itchy like acid burns but if it's low you won't feel the itchy sensation or burns" ...RP#2

... "MC is tested by the women through physical appearance of the shea kernels well dried kernels looks shiny and oily, they also break it to feel the MC when dried kernels are hard to be pressed with the fingers or crushed but high mc kernels are easily crushed and looks mouldy" ...RP's #1.

... "Impurities they do that by observation and picking out unwanted materials i.e unshelled shea nuts and any other foreign materials" ... RP's #1.

It was also established by the 2 buyers (RP# 4, 5) that the cooperatives are not able to deliver the right quality and quantity of butter. The claim “is not what I want” sort of leaves them with no options than to pay less than the agreed price. Due to the poor quality, the final buyers may also offer less for the butter. These actions though not appropriate, are done to save their operating capital.

Another issue that came up was the quantity not up to what was agreed upon. All parties in the interview said and agreed that there are times where cooperatives do not meet quantity demanded because some members have sold their produce away from the cooperative partly due to the fact that they needed quick cash.

... “When I want money for my children’s school fees but the cooperatives are not buying yet, I sell in the open market. Normally I reserve some of the nuts in my house and send the others to the warehouse for later sales” ... MI #7

... “low fruiting due to climate and other environmental factors, women cooperatives are not able to supply high volumes required. Also, their shea parklands are now far away due to agricultural activities” ...RP #2

RP #1,2, 5 observed that more often, processors were looking for the best price, hence, offer the shea produce to the first buyer who offers a good bargain with the hope that they will pick more nuts to make up the required quantities for their contracted agreement. However, many end up selling undried nuts resulting in low quality of produce. They prefer to do this because they are assured a guaranteed price. Plans do not always go the processors’ way, because shea cooperatives are not able to meet the required quantities because of low yield of the shea fruit.

During the interview with RP’s, the Ghana standards board was named as an organisation that sets standards for processors to follow, however, they lamented that requirement does not really end up categorizing or grading shea produce all though all rules associated with nut processing are adhered to. It was noted that the standards for shea processing vary, depending on whether you are processing for Organic/Regular shea kernels or butter. It could also vary based on the type of certification requirement if is FAIRTRADE or if you are following ISO standards.

... “Buyers have their specifications with quality standards however processors have no idea what their demand specifications are so they(processors) are not able to produce to meet their needs. In other words, if processors were to know their(buyers) interest they could at least manage to meet their specifications and thereby ensuring trade, to some extent it’s an unfair trade cut off” ... RP#2

... “Simply because, buyers are the only people privy to what makes butter spoilt butter for example or quality specifications when actually they don’t want to tell the cooperatives and making them complain of butter not meeting their needs hence fixing their own price ceiling” FGD participant #2

Again, the buyers from their side said that when they take the “low-quality” products to their buyers they receive less at later days since they have to spend a lot of time re-running test resulting in, they also paying cooperatives at a later date than the agreed one. 4 MIs also complained about late payments.

... “last time I shipped my stock, I promised to pay in 2 months after delivery because I was to receive payment 6 weeks after I ship, I later got payment after 3 months later less of what I negotiated and when I paid and placed an order it took awfully a longer time to process so I moved to another group”...RP#4

... “I sent my 5 bags to the warehouse and stored, we sold but I did not receive my money on time, I was desperate for cash and when it came I had borrowed so much that I used all to settle the bills and I became sad because I did not really benefit from the sales so I don’t think I will put all my eggs in one basket again”... MI#9

b. Shea Regulations in Ghana

Field evidence also has it that the shea is not managed well because it neither falls under the protection of the Forestry Commission (FC), the Ministry of Finance nor the Ministry of Food and Agriculture (RP#1). Hence the attempts of private sector actor like SNG has taken steps to carry out advocacy campaigns on the amendment of Forestry Commission Act, 1999 Act 571 to include the shea tree so that it can be protected. Owners will receive some form of compensation when it is cut down illegally. Shea trees are classified as Non-Timber Forest Products (NTFPs) and mostly not given a lot of attention, but lately, the status quo is changing (RP#1).

The shea sector operates an open market system partly because there is no a regulatory body to control price or set up time for sales of shea kernel. Prices paid for are subject to supply and demand dynamics. Anyone can sell at any price and time depending on their need and convenience. Further, the all 4 RPs indicated that though government had demonstrated some commitment to supporting the shea sector, it still was not enough to sustain the industry

... “Shea market has never been regulated in Ghana unlike cocoa. However, a recent attempt by the government to form the Tree Crop Authority is seen by some players as an effort to regulate the sector. This is not the intention.” ... RP#1

... “There must be premium prices for quality but this is not done. If government through the Ghana Standards Authority comes out with grading for shea kernels and its cost, women cooperatives will work hard to improve on the quality of shea to get the premium prices.” ...RP#4

In sum, the key requirements are to process shea with low impurities, low levels of peroxide, moisture content, inability to attain these are because the SCM lack skills and tools to enable them check this at processing stage because they rely on intuition.

4.4 Capacities of Shea cooperative management to support its members in an established market linkage.

4.4.1 Support to Members

MI, FGD and RP#2 shared insights the support the SCM/WC provided to the members in terms of access to credit, information, technology and equipment and leadership styles. Leaders do not receive any form of payments for serving, it is a voluntary role (RP #1, 2, 3). The study did a quick scan of the cooperatives to describe internal, external elements for its operation using the IOM tool.

Table 3: A Quick Scan of the Shea Cooperative Using IOM

IOM OF SHEA COOPERATIVES		
Element	Aspect	Action
External		<ul style="list-style-type: none"> • Supervise provision of quality products from member groups. Coordinate the distribution of inputs and the aggregation of products at agreed locations/warehouses. Support the establishment of social funds at the communities' level that provide safety nets for members of the Cooperative. • To undertake any activity that is in the interest of all the members of the Cooperative. • To encourage the setting up of (VSLA) as a way of mobilising funds for the aggregate shea nuts and other business opportunities. (Source: constitution of cooperative)
	Mission	
	Output	Shea kernel and Butter
	Staff	3 cooperatives made up of magajia (3), assistant Magajia (3), treasurer (3), secretary (3), organizers (3) and assistant secretaries (3). 3 are elected to serve as Warehouse Committee (WC) is made up of 3 SCM from 3 cooperatives. (Roles are described in table on roles of leaders)
	Actors	Members, ASC, Pas Ghana, SNG, GSA, local and international buyers, Nogcaf, Sekaf, Maltiti, Yumzaa, Pagsung.
	Building and support facilities	Ware house with an office space, processing centre, drying space, VSLA kits.
	Equipment tools and Materials	Shea nuts, basins, buckets, cooking pots, firewood, water, Morrison stoves, weighing scales, packaging boxes, bowls, stirring sticks/spatula, processing manuals. Some were kept at the warehouse and others with some members.
	Finance	VSLA and member dues, registration fees, in-kind contribution of shea products from members and grant (not necessarily in cash but in kind)
	Factors ascertained using Political, Environmental, Socio-cultural, Technical, Economic, Legal (PESTE lenses)	<p>P: Lack of support and commitment from government in the area of price ceiling and grant allocation.</p> <p>E: Reduction in shea fruits as a result of climate change, loss of shea tree population and land degradation.</p> <p>S: Women work more in this sector and there is competing use for their time for other household chore leaving them with less time to process shea effectively.</p> <p>T: High import duties on importation of tools for shea processing hence dependency on less advanced tools for processing as they still use a lot of labour.</p> <p>E: Low prices in the world market leading to low incomes received from the sale of produce.</p>

Internal	Strategy to achieve objectives	Practicing lessons learnt from ToT using processing manuals, following guidelines set by ASC.
	Management Style	Displayed some democratic and laissez faire attitude in leading. However, there is little to no participation in how market linkages are established. Too much dependency on support organization.
	Culture	Flexibility demonstrated in how all members participate in all activities earnestly, communication is good within groups.
	Membership	Free to anyone interested in shea in their communities. Members benefit include access to credit from VSLA, better prices, access to warehouse facility and trainings

Source: Fieldwork 2020

The capacities of the shea cooperative Management (SCM) is within the “appreciable” limits as they have performed accordingly with their responsibility (FGD). As per the constitution of the cooperative, each Leader on the management team have certain roles to perform and fulfil and it is all carried out by them (MIs #8,4,2).

The SCM were referred to as Warehouse committee (WC) which was made of members constituting of the leaders from the three groups, this WC is responsible for supervising the operations of the warehouse, taking decisions and provide feedback to all members of the Cooperative at Group level (RP#2). The table below provides insights on the roles

Table 4: Positions, Roles of WC Members and why some were not fully carried out

The Roles of WC as Enshrined in Their Constitution, Role not Directly Achieved and why.

Position of WC	Roles Expected to Be Performed	Role Not Directly Achieved and Why (source: FGD and SCM)
Chair Person	Leads in the implementation of decisions made by the WC, organize and lead regular meetings of the WC, provide updates on the status of implementation of decisions taken by the Cooperative, share with the Management Committee the views and problems of groups of the Cooperative, share knowledge on trainings participated in and also engage with stakeholders on matters that seek to promote the welfare of Shea kernel and butter producers in the District, act as the spokesperson on members’ behalf in the District and Operate bank accounts jointly with the Cooperative treasurer and secretary.	The role that was not really performed well was the role on updating the entire groups. This role was said to be shared by the other positions in the SCM. So, communication flows through them to individual groups and the vice-versa.
Secretary	WC Secretary shall inform representatives of SCM time and location of meetings, keep track of all discussions during meetings of the Cooperative and periodically remind all executives of key decisions taken at meetings for implementation,	Sometimes they are not able to partake regularly in WC activities because they have other engagements since they are not full-time

	and She (or he) shall jointly operate the Cooperative accounts with the president and the treasurer and represent the chair person at some events when the chair is indisposed and any other task deemed fit by the WC.	members. They rely on their other counterparts to document happenings at the missed session.
Treasurer	Ensure that all payments of product sales to groups are made by the WC, collecting any dues of members of the Cooperative and deposit them in the accounts of the Cooperative, update on financial status highlighting the assets and liabilities of the Cooperative within the period, communicate data on number of required stock of materials (jute sacks, packaging, labelling materials), ensuring delivery of the materials to cluster organizers.	This role is often shared between the WC and the ASC officer in charge of managing the cooperative. While the treasurer receives the cash, the officer breaks down the statements and other financial details for her to easily report to the other members.
Organizer	Invite members for meetings and prepare grounds and other material logistics for the meeting.	Achieved

Source: Fieldwork 2020.

The study showed that shea cooperative management had little or no education at all. Of the eighteen leaders that were interviewed only 4 had attained some level of formal education which was to the secondary level which allowed them to hold position as secretaries of the groups. The secretaries got the roles not as members but by virtue of the fact that they could scribe (SCM #6 male).

However, the fact that WC had only 1 member with form of high education formally, did not mean that the WC did not take up and deliver on their duty. They demonstrated clear understanding of their duties as they were able to give vivid descriptions of what quality nut and butter processing were. They showed pictures of the Manual for training for shea kernels and butter.

The SCM shared that they had participated in quality training; advocacy and lobbying; health and safety; packaging and branding at different stages and shared that the quality Nut and Butter training was done regularly at the beginning of Picking season (April-May) and the Butter (September to December).

...“I was part of the team that was trained during Health and safety training Program at Catholic Guest House in Tamale, I saw how they treated people with the things in this box (pointing to the first aid box), so when I came we told Manager and they gave us the box and I taught my colleagues. Formerly we just mix sand and water and plaster on any member who has a burn but now we don’t do that, we do first aid and go to Clinic” ... WC member

The response from the supporting organizations interviewed during the research were similar, as they indicated that they provided them with varying trainings like Health and safety practices, Village Savings and Loans Associations (VSLA), Quality nuts and Butter processing, Warehouse management practices, value addition, business development and advocacy and lobbying. Similarly, the cooperative department said that they also provide trainings in the areas of group formation.

A. Finance

MIIs disclosed that access to finance was based on contributions in the Village Savings and Loans Associations (VSLA) or other sources like from the sale of shea kernels, remittances, personal loans from family and friends. One is advanced a certain amount of capital based on what the person could afford but this did not mean that those who could afford could take more. FGD also shared that the cooperative gets funds from in-kind contribution on nuts/butter, dues and registration of new members and grants ("support from ASC"). In-kind contributions were converted to cash as necessary measure to be a form of 'safety' net to fall on when a member was not in position to take a loan but needed cash (RP#2, WC #1).

Pre-financing shea processors was touched on by some of the SCM and MI as something that was supportive and beneficial to them. A RP also made reference to this as the preference for the cooperative but a buyer was of a different view. Complaints of not receiving the agreed terms of buyers was given as the reason for buyers deflecting from pre-financing cooperatives.

B. Leadership

FGD and 9 MIIs views were sought about the perception they had about the role of their leaders in terms of the organization, styles of leading, deployed their presence, how they managed member expectation. Leaders were described using words such as "good", "up-and doing", "active", "serious" and "disciplined" by MIIs and similar was confirmed during the FGD. Members explained that they always get information about orders (Quantity required of the group, if there are equipment to distribute, what kind to process and the time to send to ware house for aggregation).

All 36 respondents said that at the individual group level at communities the leadership was six (6) member team. However, their roles at this level included welfare of members not just processing. At this stage, SCM takes dues very seriously and part of the dues goes to our members when they have funerals, naming ceremonies, weddings (SCM #7, 11,9). It was also discovered that when there is a processing order, then there is "collective leadership". It was explained that to keep an eye on what everyone does during the processing might be hard and difficult therefore, they rotate functional leadership in other that at each stage of the processing, some members get the opportunity to serves as a leader to monitor progress (shared by 7 MIIs and agreed on by FGD participants).

"last week, I was asked after meeting to supervise about 12 houses around my house to make sure that the par-boiling of nuts is done well" FGD #7

Following the interview responses, there was a need to enquire about the capabilities of the SCM using the 2Cs were chosen based on responses received from RPs and MIIs. It was somewhat evident that the leaders knew what their roles were and were committed to delivering on them.

.... "just yesterday, organizer told us that we will be having a meeting, and we should appear there to avoid paying fines, as the season has begun and is raining probably, we will discuss on how to handle the nut we have harvested to prevent them from being mouldy. Am going for the meeting tomorrow"MI#3

The cooperative members and leaders shared insights about how they engaged in rotational leadership roles based on the various activities in the processing chain. When there is an order and for everyone to participate, the group is further broken down into manageable units, members are assigned to monitor the activities of the sub division and report. This may demonstrate that there is a lot of trust within the group. However, one may ask why this trust not

extended into believing in the fact that the leaders can deliver on the required prices they need? If this set of leaders are stepping down will the other members be willing to take up their roles because they are practicing collective leadership?

... "Question: if you are asked to describe the SCM/WC what will you say?"

Response: they are the best.

Question: How do you mean best? can you explain further?

Answer: They don't like arguments, they like when you sit, listen, contribute to discussion well, pay dues and go. If you make noise you pay, lateness you pay. Me I don't want trouble so I don't "step on them".

Question: you said you do leadership rotation based on task, do you feel that you can serve as a leader when this groups turn expire and what role would you choose?

Response: laughs continuously and asks madam do you want to give me a problem? Do you want Leader to think am planning a coup against her?" ... excerpts from MI#1

The capability to relate with external stakeholders was to understand whether the leaders had their own strategies to function on their own. 6 participants raised their hands for 2, while 3 rooted for 3 taking an average of this gave a final score of 2, indicating a low score based on a 5-point score average. This was largely due to the fact that they relied solely on what the supporting organization made available to them and groups around them were a sort of support mechanism for beefing up their stock when they could not meet the required quantities or they attended their social events on invitations.

Capability to achieve coherence was to elicit information on how resources, credit was distributed and relationship balance among the SCM, WC and members during processing. A high score, an average score of 3.75 was attained. All 9 participants raised hands for 4 on 3 indicators discussed and 3 on the 4th, and an average was taken. The WC/SCM and members all had almost no bad experience to share as they indicated that everything was distributed accordingly and it was based on what you can produce and if you want a loan, you will be granted from the VSLA if you request. Details on the selected indicators and pointers are contained in figure 13 below.

Figure 13:"2C" Capability Worksheet Assessment of the SCM/WC from 9-member panel FGD

Capability Work Sheet Assessment of WC.				
Scoring is based on 1-5-point scale, where 1=very low, 2=low, 3=Average, 4=Good and 5=Very Good				
Capability	Indicator	Pointer	Score	Comment
Capability to relate with external Stakeholders	WC has the ability to enter into other networks/associations and maintain them	Participation in other cooperative/stakeholder events	2	WC scores 2 which is a low score as the WC had little knowledge on existing networks and the opportunities available to them. But they were able to reach out to some other associations around them to access their products.
	WC has the ability mobilize external capacity to achieve goals of the cooperative	Maintained relationship to be able to reach out to for support if necessary	3	
	total=4/2		2	
Capability to Achieve Coherence	Equipment, Credit and responsibility for the collaboration is shared among members.	Leadership supports staff to acquire/ access equipment, credit and shares responsibility for members	4	WC score here was 3.75 which is above average, attributed to the fact they provided the necessary materials that could aid processing and packaging as received from the supporting organization or buyer based on quantities supplied by members, it was also discovered that the target delivery quantities were made known to all and you are allowed to produce what you can hoping to meet the required level. Everyone interviewed expressed a sense of belonging to the WC/SCM demonstrating that they had some form of Harmony.
	There is a result driven structure and process.	Leadership sets similar target for all.	3	
	Attitudes of respect and trust are present, avoiding stereotyping or reactive behaviour (culture)	Leadership promotes team building	4	
	Members ensure that views of less powerful stakeholders are given a voice	Mutual respect existing in group and voices are heard	4	
	total=15/4		3.75	

Source: Fieldwork 2020, with insights from EDCPM 5Cs.

7 out of the 9 MIs said that SCM helped them to get buyers and the FGD also confirmed this. However, the 2 MIs said that they had not received any support yet because they are new (MI 14,13) but were hopeful to win their support with time. As indicated in figure 6 above, the leaders are only able to provide support in terms of what they get from the ASC. Information is shared as well as equal distribution of materials.

Table 5: Results of FGD responses of insights of SCM engagement with Buyers beyond ASC support

Relationship with aggregators		
Response	Frequency	Percentage%
Yes, I know	6	66.7
No idea	3	33.3
Total FGD	9	100.0

Source: Fieldwork 2020

Findings in table 5 distinguishes between, 66% representing 6 out of the 9 panel in FGD agreed that their members get support from SCM as they privately scout for better price offers in the open market. This is done to clear the stock piled so members could get some income. They knew these because these issues are discussed between the SCM and the board anytime there is higher stock pile in the warehouse without any news of a potential buyer from the ASC. All though in most cases the price received is poor we still sell (6 FGD participants). The other 33% did not know because they are not part of such discussions.

... “when manager doesn’t come with buyers, Chairperson (“magazia”) and organizer go to market together to see if they can sell in Aboabo market, sometimes the price is not good but we consider to sell because we all need money” FGD #3

Ms and FGD Participants do agree that the SCM gives them support based on what is available them and made efforts to adopt to the situation of engaging buyers when they have none from ASC’s side.

4.5 Ways SCM/WC connect to sustain establish Market linkages.

To improve on the role of the SCM/WC to sustain establish market linkages, the interviewees proposed measures that could enhance the leader’s ability to sustain established market linkages included the following:

I. Transparent Processes

Enquiries on what the cooperative management could do to meet up with the market requirement was posed to all interviewees including RP’s and they proposed that, regular training on quality issues, but this was a bit difficult to tell what exactly the quality issue was, because they kept reiterating the issue about quality, the support organizations said quality needed to be improved to meet up with the market requirement but neither the quality issues was further elaborated nor possible improvements indicated. Incorporated in this quality training request was the need to invest in value addition at the cooperative level as this was to enable them receive premium prices. Quality Control (QC) stems as the root of the quality management it requires more expertise, attention to detail and a certain degree of accuracy to be achieved (RP#1).

... “Quality does not attract high price and this is not encouraging women to improve upon the quality of their shea kernels despite the countless quality shea trainings done over the years for women shea collectors”RP#2

In describing the work involved in QC, SMC# 6 described it as beginning from the purchasing of/ acquisition of shea kernels (either purchasing or picking by the cooperative); examine the kernels to make sure they are really dried well for bagging in jute sacks for aggregating in the warehouse

or for the next stage of butter extraction (if is kernel aggregation, after the inspection if it's not dried well or impurities are found within them they are dried and cleaned well before bagging again to remove excess moisture and keep them from being mouldy while in storage) end of first stage; the kernels are further processed into butter where attention is needed as this goes with a need to control the production process: another inspection is carried out before the butter is packaged in any form requested by the buyer and then transported.

Additionally, RP#1 and #2 stated that standardization and certification measures of shea products by Ghana Standards Authority, Food and Drugs Authority and FAIRTRADE, ISO processing guide for Organic and regular should be easily available and accessible for all as what was available is for 'literate' and some of the end users are "illiterates".

... "when we were told about standards board, I went there one time with my colleague to see if we can get something to help us with our product because my friend from another town said we have to go and register, so I passed there. They told me a lot I didn't understand and, in the end, they said I should bring an educated person to help me. I felt I wasted my time so I won't go there again, I will wait for manager" ... SCM #10

II. Access and Investment in Technology

Investment in machinery and a "decent" working environment through the construction of processing centres and expansion of processing centres were also raised. Most of the processors especially those who were not close to the warehouse were processing from their homes and bulking at the warehouse. When one is processing at the warehouse all activities are highly regulated and attention is paid to details. Most inputs such as firewood, water, milling are paid for, therefore, pushing them to use the paid for items judiciously.

Some MIs and FGD also said that procurement of the tools that would aid them during the shea nut harvesting and collection will go a long way to keep them from reptile bites/stings, waist/joint pains. They listed the following as some of the things that would be supportive: shea roller/picker, gloves, wellington boots, tricycles and weighing scales.

RP#4 indicated that his company is willing to pay for tests, buy the MC detector for groups that sign up to continuously supply to them.

III. Negotiation Skills

The WC expressed a concern in dealing with the buyers. They said that when the contracts are drafted, the buyer will be the one who starts the negotiations when in actual sense they are those who are to start with the opening price.

... "if you go to the market, you ask how much and they will mention the price and negotiate to buy or walk away. But in our case, they coat the price and then we start discussing" ... WC member

This claim was verified when the team requested for a sample of contract(s) agreement between women groups and buyers. Contained in this was "negotiated" quantities, price, delivery time and payment terms and concluded with signatures of WC leaders, buyers and witnesses. One of the contracts stated the roles of each party and included the clause of being the lead in setting price for shea product in a transparent manner.

Figure 14: Sample of a shea processing contract indicating buyers taking lead in price negotiations under 4.0

1.0 Introduction

This agreement has been designed to facilitate aggregation of shea kernels (conventional/organic) from women shea collectors in the shea enclave of Ghana.

2.0 The Women Cooperative

The shea cooperative are groups of women shea nuts collectors and marketers operating in shea density communities in the shea enclave of Ghana. Women shea nuts collectors have voluntarily come together to produce quality shea kernels for sale to potential buyers in a profitable manner.

3.0 Duration of Contract

This agreement is for 2020/2021 season and subject to renewal in subsequent seasons.

4.0 Roles and Responsibilities of Limited.

- Laisse with working with women cooperatives development to facilitate aggregation processes.
- Provide Jute sacks to collectors on timely basis.
- Weight of shea kernels will be 86kg per bag.
- Take lead in the setting of prices for shea nuts and in a transparent manner during the start of the collection season.
- Limited will buy shea kernels from the women with prevailing market prices.
- Shall be responsible for the transportation of shea nuts from collectors to warehouse.
- Individual co-operatives will be rewarded with consumer products from based on performance in terms quantities of nuts supplied.

5.0 Roles and Responsibilities

ensure women store shea nuts in their warehouses in their communities to avoid contamination with other foreign materials.

- They will also ensure women only collect and process according to the collection/processing methods and sustainability methods.
- They will make sure groups will not sell shea nuts to other companies without prior notice to

Date:

Witness

Date:

Source: Field work, 2020 ASC Archives

Furthermore, the RPs recommended that coaching and mentoring of WC/SCM should be carried out on contract development, communications, leadership skills, business development, stakeholder engagement and good record keeping. The enhancement of these skills will go a long way to help them sustain and develop new market linkages themselves.

Finally, Shea tree protection and propagation advocacy activities came up during the interviews. All RP's made mention of the fact that the shea trees were reducing in number and gradually becoming extinct and for that reason women had to go far distances to harvest shea fruits and this served as a threat/barrier to shea activities and the industry as a whole. Less trees would

mean less kernels leading to low or no processing at all, and consequently, a loss of source of livelihood for the cooperative members among others.

Existing opportunities that could support the cooperatives to function well were mentioned by the 3 RP's. They include and not limited to the following:

Improving financing through VSLA, the Growing demand for shea kernels at the international and local levels, increased youth participation in the collection, processing and marketing. Also, most cooperatives are engaged in farming activities and if women are supported with inputs it will help reduce the burden on the family to sell the shea kernels early to support the household agricultural activities

RP's that played supportive roles shared that they had organizational plans that supports and which were geared towards helping SCMs to maintain established market linkages. They listed the following: training more cooperatives to business development skills, facilitating the construction and donation of warehouses through lobbying and advocacy, continues support to complying on quality standards, good record keeping, shea tree protection and propagation campaigns while encouraging them to keenly stick with contractual agreements.

Based on the descriptions, there are several ways that the cooperative can use to connect to sustain established market linkages, for instance, training, increasing finance, setting quotas for members to contribute during processing for delivery and this is the way to meet up the quantities required of them. Also getting samples tested will give them an idea of what grade their product is and gauge the price to indulge buyers during contract negotiations.

CHAPTER 5: Discussion of Findings of the Research

This chapter highlights the reflection of results obtained from secondary literature and interviews

5.1 Socio-Economic Characteristics of Respondents

The study found that the shea sector is largely dominated by women ages ranging 35-45. This category is characterised as youthful and energetic, generally, men are not actively engaged in post-harvest processes except for playing roles of aggregators or marketers (field, 2020). A confirmation view by (Bup, et al., 2014) says that in progressive shea processing countries like Ghana, shea is mostly picked by women and children. This Signifies why women are dominating in the shea production and processing. However, studies by Dolan 2001, Coles and Mitchell, 2011; Quisumbing et al. 2015 in (Elias and Arora-Jonsson, 2016) argue that this ideology makes shea processing a gendered role and thus limits access to resources and should be looked at.

5.2 The necessary requirements for the SCM to sustain established market linkages

A. Standards on Quality

From the interviews, buyers expect shea nut or butter to be within the grades of A-C. However, to be able to prove that these requirements are met, proposed guidelines for processing shea kernels were disseminated to members to aid in attaining these grades. Furthermore, the study findings showed that processors know the contents of these guidelines and relied on intuition as a way of checking parameters. Although the interviewees claimed no knowledge of the grading system, it is a stated requirement for the industry as referenced in figure 6. Again, the information was shared with trainees as part of the training manual.

Respondents including 5 RPs who were abreast with the standards agreed that 'grade A' was the best. Those who did not have this information relied heavily on what they see, feel/ taste, to test for quality. A similar view is shared by Global Shea Alliance (2014) and Lovett (2015). Relying on this unscientific method does not guarantee best results. As reported in figure 12, assessing quality by taste and seeing contrary to the approved parameters may always results in sub-standard products. Processors and support organizations are encouraged to undertake the laboratory tests to systematically determine the levels of FFA, peroxide/oil content clear descriptions of what outcome of the test are is described in (Abagale et al., 2016).

Interesting to note is the fact that none of the study respondents could tell if there was any basic test that the SCM could carryout on the kernel/butter to check the parameters like the laboratory does. However, (Eliot, 2005) and (Lovett, 2018), postulates that Product quality of both shea nuts and shea butter depends primarily on postharvest processing, mainly parboiling of shea nuts at the start of the season to prevent the seeds from germinating and to drying them more quickly. Findings agreed with this when respondents said they were not able to stick to the time schedule of parboiling shea kernels due to other duties.

Laboratory results will serve as guide to the ASC on the price expectations for the WC and they will in turn explain to their membership likely price range to curb high expectations on price. Ghana Export promotion Authority (GEPA) is a regulatory body in charge of exports, before a commodity is exported out it has to meet its requirements. So, for a product to be off take, it means those requirements have been met. Still in (Global Shea Alliance and African Organization for Standardization, 2019) stated that quality is a prerequisite for successful market access and for improving the competitiveness of exporters.

Lovette and Phillips (2018) shares that masses of shea trees is cleared leading to a rapid decline of shea tree cover. The findings agreed with the view that shea tree population is decreasing and indicated the need for shea tree plantation, efforts had been made at multiplying shea trees as

they had planted shea trees and lost some due to poor management practices. Still in (Lovette and Phillips, 2018) adds initiatives to develop indigenous tree nurseries, including shea, are now active. Implying that if adequate care and commitment is not there will not be shea trees to harvest shea nuts thereby putting shea processors livelihood in danger.

C. Shea Regulations in Ghana

Government established COCOBOD in 1947 to manage the cultivation and marketing of cocoa, coffee and shea, established cooperative department to support cooperatives. These interventions were instituted to provide the necessary logistics to ensure that these cash crops do well and contribute to the development of the country. The regulation of Shea market combined with increase in demand for Shea butter both for home and industrial use has seen a growth in trade and Value chain activities (Sidibè, et al., 2017). Lovette and Phillips (2018) views on the activities in the sector compliment government's effort to support the shea sector although NGO's dominate the space. In contrast to the view of COCOBOD and Sidibè, et al. (2017), the findings of this study indicate that the shea sector had never been deregulated, even though shea has been grouped with cocoa and coffee, it had received little attention from the government. Study findings assumes that the lackadaisical attitude of COCOBOD and by extension government towards setting price ceilings has left the determination of prices in the hands of the few buyers who determine what they will pay the shea processors for their work. Also, the Buyers, support organizations and COCOBOD agree that buying in groups is more beneficial to the processors (COCOBOD Ghana, 2020). Even with that there is little effort on protecting the interest of these processors. In a similar way, Lovett (2015) opine that overall, governments regulation of the shea sector has been weak and unsuccessful, with most development not coming from government support, but rather through NGOs, external aid, and private sector participation.

5.3 Capacities of Cooperative to Support Members

a. Leadership

The existence of the SCM/WC and their ability to organize members to grant interviews to the research team is an indication that the cooperatives are poised for engagement with respect to their produce traceability. The study findings takeuchiconfirm that negotiating across different negotiation objectives where producers seek to improve their prospects for high value markets by forming associations (Elias and Arora-Jonsson, 2016). The SMC/WC had knowledge and insights of their job as they could each describe their roles explicitly. The members also felt that their leaders were the best to hold such positions. The leaders performed their duties strictly as it was captured in the constitution. The composition of the SCM/WC was similar to that described by (CasaleF, 2010; Bijman and Hanisch, 2012).

From the study, the score on the 2Cs showed that the SCM roles were tailor-made, step by step practices designed by the ASC. The score in the capability to relate with external stakeholders was low and this could be attributed to the fact that they are not really able to create any networking / develop a connection without the support of ASC, as result, making them highly dependent on ASC. The lack of capacity means that they are likely to be dysfunctional if they lose connection with ASC. This is also highlighted by the contents of the contract terms as showed in figure 14. Even though the study responses indicated that they were satisfied with the leadership but did that mean complacency? There were no reports of conflicts in the group. Since establishment, there has not been any change or proposal for change of the leadership. This painted a picture of an almost 'perfect' groups caused eyebrow raising. The thought of having almost 200 processors without disagreements was too good to be true. Either ways, the expectation of members were met according to the interviews.

The WC/SCM were not really active on establishing market linkage because it was not directly a role that they took part in. They are more of negotiators that set discussions on marketing activities. They are involved only when the ASC has initiated the discussion for sales and so they could not take up the task on their own.

b. Finance

Findings indicated that the SCM raises funds from in-kind donations of kernels and butter, payment of VSLA dues, new member registration, grants and sometimes pre-financing from buyers. Members who needed loans were granted based on how much they needed confirmed by the view of (Anigbogu, Taiwo and Nwachukwu, 2016) stating that management secures credit and distributes it for members.

5.4 Ways to Connect to Sustain Established Market Linkages

5.4.1 Transparency

Moving on from requirements to ways to connect with the buyers, issues of trust, transparency and accountability seems to be topical. Study indicated that, for example, the buyer's unwillingness to pre-finance the cooperative stem from the fact that buyers do not believe that the right quantities, qualities will be delivered at the right time. The processors are also doubtful that the prevailing market price would be what they will receive. This revelation from the study is shared by (Schrader, et al., 2015). On the issues about trust, transparency and accountability, all parties (buyers, WC/SCM and cooperative members) should be able to come to a common understanding before and after the processing of kernels or butter.

For instance, if after processing a batch and laboratory tests are carried out on a sample and the records are kept, any buyer who wants to do business with them will know their ability based on these records and may or may not engage them. In addition, the buyer can also decide that he/she will support in upgrading processors from their current level to another. Drafting a contracts requires that considerations and clear discussions on quality of inputs, technical assistance, access to finance, access to markets, risk management, quality control, logistics arrangements, price mechanisms, payment systems should be explicitly stated and agreed, but findings from the field varies vastly from the views of (Holtland, 2017).

5.4.2 Access to Investment and Technology

The study findings showed that the warehouse has facilities and equipment for processing but was inadequate. Findings also suggests that quality variations were attributed to the fact that some members were processing the butter away from the designated production centre, hence, supervision compromised. Again, procuring tools to aid in nut picking would reduce the processors chances of having body pains and keep them from reptiles; increase their productivity. This view is confirmed by (Jibreel, Al-Hassan and Musah, 2016), it is stated that access to improved processing tools like crushers, kneading machines among others reduces the time spent on manual processing and saves labour

5.4.3 Negotiation Skills

Study findings indicated that SCM/WC roles included marketing, but this role was led by the ASC. Even when the SCM/WC were involved in the discussions with buyers, they are disadvantaged because the buyers take lead in negotiations. The training on contracting, a review of the roles to include market establishment so that SCM become active themselves in creating markets linkages and this way they will be motivated to maintain existing market linkages while creating

new ones this way they can inspire the other members to unconsciously network too because they practice collective leadership. As Bill Gates said *“As we look ahead into the next century, leaders will be those who empower others”* (Wallace, 2019) so, the SCM shouldn’t just be leaders by name or by the duties enshrined in the constitution, they can actually strive for more and become more innovative on their roles or functions.

5.5 Reflecting on My Role as a Researcher

Reflection on Research Topic:

When I took part in the second module on Food and Nutrition Security (FNS) Concepts, I wondered what I was going to write on my thesis. I thought that I was to write based on FNS so my initial thoughts to write around a project my organization is running on sustainable nutrition, however I was scared that I would not be able to express myself because VHL is where I came learn on FNS. I had surface knowledge but not enough to go on like a “pro”. During organisational analysis report compilation, marketing shea products was a key challenge that was not easy to find a recommendation for as staff of Shea Network Ghana. I fumbled a lot in the end, I suggested looking for external buyers and promoting domestic consumption. I knew that it was not enough but this was the best options I could think of. The feedback from this report pushed me to want to dig further, I raised this during a discussion with my colleagues back home when ASC sent me an email asking me about the list of buyers for shea within that period. I was surprised because myself and the requesting party had started negotiating with potential buyers at a just ended conference. I also sent him direct supply request from 3 separate buyers so I did not understand why they were looking for buyers again for the same cooperatives. I thought they had expanded production capacity. He explained that they had less sales from the buyers because they said the butter was of low quality. I was very familiar with this statement, infuriated I asked what did they say can be done to meet their quality of choice, did you ask them? He said no but am hot, I need to get new people for my groups. I sent an email request to my superior for buyers list for them and it gave me an opportunity to probe whether my superior could explain what causes processors not to meet standards. We dragged this discussion and finally settled on that even if they could not meet the required standard of grade A it did not mean that the transactions should stop. In the process of the discussion, ASC was invited and that was how I got a commissioner.

With insights on the importance of social capital we settled that poor management of social capital was causing this lack of continuity of market linkages. It was time to pitch proposal topics and I settled on utilization of social capital by shea cooperatives. I was very interested to know how social capital could be used by the cooperatives themselves, because I assumed that when the support organization secures a market for the cooperative, they should be able to manage it with the necessary intervening of the support organization and hinged on this. I was thinking in the future. After pitching my idea to my lecturers, I received a lot of feedback to mean I was mixing the problems. My assigned supervisor listened to my story because I was insisting and he supported me to get the distinctions myself with questions he asked and told me to look back instead of going forward. With this thought a new discussion started and the focus was narrowed down to the management as they were responsible for the marketing of shea products on behalf of the entire cooperative. I prepared the proposal and with guidance of my supervisor and submitted, defended received comments to review my proposal and had a “go” to start data gathering, I was super scared at this moment until I heard it because some colleagues did not make it.

Reflecting on Data collection and challenges encountered

Occurrence of COVID-19 pandemic thwarted my dream of going home for data because I could not travel due to travel restrictions. It was stressful for me, most of the methods I proposed to use for the data collection was to meet in person. I was sad because I could not meet the participants in the research to make use of the options of observing and participating in this research. I had to adjust to adopt the new normal way of eliciting information from the field from a distance. There were many options on the internet on how to do research in the wake of the pandemic. I tried a lot with my colleagues at work to see which would be the best medium to communicate with little disruptions. I explored the use of zoom, skype, Facebook, WhatsApp, Telegram, google forms, internet calls via yolla applications. In the end I used more of WhatsApp, Facebook, zoom. Although I used a research assistant, I decided to start with the interviewing of the resource persons myself to see how it would go and realised that I could not do it alone so I did a joint call so he could experience how it was although we had a series of testing of how to do the interviews doing it actually was different.

As an active person on shea issues in my area, I thought that it would be easier to get participants commitment in participation to my dismay I encountered a lot of challenges. The resource persons turned me away because many of my anticipated respondents stated that I knew the responses already and so could answer it myself, some also felt that after completion when I go back to work I will use the contents of the information I got to do advocacy campaigns which might go against their organizations. I encountered some persons who were willing to give information but requested not to have their details captured as the providers of the information.

I got appointment and had to reschedule so many times because there was poor internet connectivity or the person was not available. The fortunate part for me was that I had a long list to select from but the disadvantage was that some were not meeting the parameters I set for resource persons. I had to engage a completely rely on the officer from ASC to gather the data, because the respondents did not even want to give the research attention. I was very glad when some came back to ask if I still needed the information and I proceeded with them. Some requested that I pay for airtime, others said I should buy them stuff when coming.

My colleague research assistant was not spared either, the shea processors turned him away because he mentioned my name as the one who sent him there. They told him I would have sent message through other persons to schedule them so it wasn't true, I had to record a video of myself for him to show them before they opened up. There is poor network connection in the area of research so calls cannot be placed directly. In the course of the work I had to seek 2 more persons to assist in data collection because the first got sick. Those respondents I could not get on line the assistants connected with directly. I was straight and direct with questions with some respondents and others needed clarity.

The data gathering period was the period slated for voter registration exercise, as such it was not easy for the research team to meet the processors as they were going to other locations to register. Some of them requested for cash to stay for the interviews, they said that the election registration came with some form of financial gain from the political aspirants and if they have to forfeit it for the interviews then they would need to be compensated. It was difficult to manipulate and manoeuvre but I persevered. I spent way more than I budgeted for, the focus group was rescheduled 4 times due to rain, the members of the third group could not join but their participation was necessary so it was important to keep rescheduling.

Reflection on Data processing and report writing

When I received the first set of data from the interviews, I realised there were some missing, I queried my colleagues and realised that they did not really know how to get the questions through

in the local dialect. I requested for them to take a member out of the community so that we could get internet connectivity to call. During the WhatsApp video call I asked the woman to describe the leadership but she could not, I asked her if she's asked to describe me as someone who has been working with them how would she do that in terms of attitude, how I speak whether I was harsh, friendly, bossy or pushy. She smiled and did, then I asked her to apply the same concept to describe the leaders and my colleagues took the same approach. I used Microsoft excel, transcribed some of the discussions I took part in and coded, I shared the codes with my colleagues so they could also use it to fasten entry process.

Documenting the findings of the research was interesting for me, I realised that I knew absolutely nothing about marketing. Like the iceberg theory, I just saw market establishment as introducing buyers to women groups and following up to check whether they signed agreements to supply and payment option. I was enlightened with my findings as some were new and others were not because I had read them from reviewing literature and some because I worked in the sector. However, on the issues of quality measurements and tests, it was interesting how all the resource persons kept saying they do not know the gradings but had them in their records they shared with me. My colleagues refuted when I stressed that could it be that the trainers themselves did not understand the training guide, how much more the "uneducated" processor. Another issue that confused my mind was that, since there was no price ceiling for shea kernel/butter but a prevailing market price was there possibilities of grading the not best quality in layers too so that the prices would be below the market price and processors would still benefit?

Further women groups were expected to ensure levels of moisture, free fatty acid, peroxide values either low or high but did not have the means to check this as they required tests from the laboratories. There was no knowledge of a basic way for test for any of these quality issues except in the laboratory of Ghana Standards authority at a fee. Scouting the internet, I came across several articles on how these requirements occurred in cocoa too but several articles were written to describe how it occurred and how to avert it. Little can be said for shea. The training officers could not clearly pin point where the issues emanated from whether it was at the post harvesting stage or after processing. It was only one of the support officers who made an attempt but again said he's not sure. That made me wonder on quality trainings, whether they really need to be carried out by laboratory staff or development practitioners? What other alternative existed for the butter or nut that failed to meet the requirement was there correction processes? If the processors used their butter for if they use the local approach to test? are there complications from usage? And how will they know its repercussions?

Notwithstanding these outcomes, I managed to match my data along the two areas of interviews and literature reviewed. The interviewing of resource persons, the members, management, board gave me insights of how each of them understood the role of the shea cooperative management in sustaining established market linkages. Triangulating their views was not easy. It was much easier with the focus group discussion because it was more of consensus responses based on vote. Going through all the interviews to match and find identical/ differing views was also not easy. I could not participate in a lot of the discussions because there was poor connectivity. In the focus group it was a long audio recording. My colleagues called later after it was done and played the audio for me through WhatsApp, a smaller phone used to record the proceedings. I made my notes and compared with what was shared, I realised that my choice of words was different although they were almost same meaning this was as a result of translating from our local language (Dagbani) to English. Based on how you see and understand issues your judgement will be in that direction. Recorded responses of resource persons were sent back for validation, some accepted and others made some changes.

Reliability of Study

It's good to note that no one was under any obligation to participate in this research and that was why some respondents were replaced. It was clearly explained that this enquiry was for academic purpose only and respondents were assured of anonymity. The responses received especially from key respondents after careful examining was shared with them for verification and some made alterations to what I recorded. I want to stress that these findings are views of the 42 shea processors and resource persons selected for this case study. The participants had similar characteristics and hence a homogeneous group of shea processors except for the resource persons who had different backgrounds and knowledge.

CHAPTER 6: Conclusion and Recommendation

This section provides a summary of findings and discussions of the research and recommendations.

A. Conclusion

The main reason for this assessment was to provide information on the knowledge gap of ASC, the commissioner of research on factors hindering SCM/WC in the East Gonja District of Northern Ghana's ability to sustain established market linkages.

First of all, establishment of shea cooperatives in East Gonja district of Northern Ghana has supported shea processors to sell products in an established market linkage as a group lobbied for on their behalf by the SCM/WC through support the ASC. These milestones achieved by the ASC have served as a way of reducing poverty in the communities where shea cooperatives exist and operate. Findings from both literature review and interviews indicate the factors hindering the SCM's ability to sustain established market linkages because they are not able to meet buyer requirements in terms of quality and volumes. The following is the conclusions drawn from the study:

The success of the SCM/WC role from both literature review and field interviews in sustaining the established market linkage is being hindered by issues such as lack of knowledge in the transparency on what the preferred quality requirements is for either cosmetics, pharmaceutical and food industries. This lack of transparency per a segment market leaves the SCM/WC no room to produce what is required but to produce what they know.

This act by the buyers could be interpreted as a 'cunning' way to gain more on the side of the buyer, therefore, a disservice to the cooperative because there is little room to explore better prices making them vulnerable to the realities of unfavourable buyer determined prices. Thereby 'leaving them behind' and making them lose out on the benefits of associating with the cooperative. On the trust, transparency and accountability, all parties (buyers, WC/SCM and cooperative members) should be able to come to a common understanding before and after the processing of kernels or butter.

Additionally, although the SCM/WC has demonstrated ample leadership skills, findings show that they support the members but they still lack a good governance management system that will ensure that all the investment of both members and buyers are safe. What was obvious was the fact that the leaders diligently contributed to social cohesion of the group by practicing rotational leadership per activity. However, inadvertently, this could be a way of off-loading responsibility in a way or it could be a way of creating a succession plan. What was also established was the fact that the cooperative is highly dependent on the ASC to gain market access, meaning that they are not going to be ready to fit the 'realities of the business world' if they pull out meaning that they are not ready to operate as an independent self-sustaining business entity that a cooperative is believed to move towards.

Furthermore, the ASC can engage in dialogue with GSA, buyers, other support organizations in the shea sector to come up with an agreed quality requirement standard for all the consumer groups (pharmaceutical, food and cosmetics) in a form that is easily and readily accessible in user-friendly and manner suitable for all. This will support the SCM to check for test supposed to be taken at the laboratory for the parameters and if possible, correct butter that does not meet the quality standard before engaging a buyer. There could be other criteria for selling the less quality butter or nuts and not left at the mercy of the buyer's discretion. This way partners like the ASC will be able to train cooperatives on the various processing requirements necessary to fit any of

the sectors. This process will also help them to save time and resources spent on quality trainings to focus on other development needs of the cooperative. Instead refresher trainings can be held to keep their processing skills in shape.

Finally, there were concerns on the effect of climate change and shea tree population decline resulting in low quantities of harvest. A careful look at this rising concern would save the shea cooperative and the industry as a whole. Shea processing occurs solely because of the existence of the shea tree if good conservation practices are not employed, in the future there won't be shea cooperatives as there will be no trees to harvest shea fruits.

B. Recommendation

Flowing through the research deliberations, a lot of the issues has been highlighted upon by the literature review and the interviews but there still lack of clear clarity on why buyers do not reveal the clear standards for production to satisfy the need for their sector be it cosmetic, food or pharmaceuticals. Clarity is needed in this area so that the Shea Cooperative management will know and communicate it with their members for processing to secure premium prices and not remain backward.

- i. Shea tree planting and nursing should be encouraged among processors, the ASC and the shea industry actors at large as the survival of the industry depends on the availability of shea trees. The buyers want volumes but it's difficult for WC/SCM to provide these volumes because shea trees are cut down. The ASC through should intensify advocacy campaign to include the shea tree in Forestry Commission Act 157.
- ii. In order to meet the requirements of buyers, SCM/WC should pay more attention to kernel or nut processing stage. The timing schedules for nut processing gives them better chances of producing good butter. Deficit volumes can be acquired from other cooperatives to meet up buyer needs.
- iii. A closer look at trainings on leadership, transparency and accountability, good governance mechanisms for the shea cooperatives to strengthen their institutions, improve upon their behaviours and attitudes will go a long way to imbibe the spirit of trust, transparency and accountability to both members and other stakeholders. Since the cooperative has been existing on "functional leadership rotation", ASC has to look into this to see if it fit the purpose.
- iv. Again, management should also tag along when the ASC is embarking on client hunt so that they can gain the experience on how to establish market linkages. The expansion in their activities can allow an assessment using the complete 5C unlike what was done. To carry out a thorough assessment on the capacities, the 5C has to be used completely, and not 2C. The Visitation to other successful shea cooperatives in the areas of market linkage retention is highly recommended as some times being exposed to competitiveness reveals innovative thinking and actions.
- v. Finally, further research should be conducted on easy ways for shea processors to carry out test to:
 - a. Identify and predict the likely concentration of FFA and oil content of shea kernels and butter at the processing levels.
 - b. Ways to correct the butter if they fail to meet the requirement after a laboratory test is conducted by the Ghana Standards board.

Reference list

- Abagale, S., Lateef, A., Oseni, Abagale, F., Oseni, L. and Oseifosu, N. (2016). Chemical Analyses of Shea Butter from Northern Ghana: Assessment of Six Industrially Useful Chemical Properties Alpha glycosidase inhibitors from selected antidiabetic plants: Isolation and biological evaluation View project Exploring avenues towards management of the banana weevil, *Cosmopolites sordidus* View project Chemical Analyses of Shea Butter from Northern Ghana: Assessment of Six Industrially Useful Chemical Properties. *J. Chem. Eng. Chem. Res*, 3(1), pp.953–961.
- Agúndez, D., Nouhoheflin, T., Coulibaly, O., Soliño, M. and Alía, R. (2019). Local Preferences for Shea Nut and Butter Production in Northern Benin: Preliminary Results. *Forests*, 11(1), p.13.
- Ahenkan, A. and Emmanuel, B. (2010). Commercialization of Non-timber Forest Products in Ghana: Processing, Packaging and Marketing. *Journal of Food Agriculture & Environment*, [online] 8(2), pp.962–969. Available at: https://www.researchgate.net/publication/267841192_Commercialization_of_non-timber_forest_products_in_Ghana_Processing_packaging_and_marketing [Accessed 3 Jun. 2020].
- Al-hassan, S., Abdul-Malik, A., Alhassan and ani (2011). The role of Grameen Ghana in improving income of women shea butter processors. *Journal of Development and Agricultural Economics*, [online] 3(11), pp.537–544. Available at: <https://academicjournals.org/journal/JDAE/article-abstract/DF1DFEB8810> [Accessed 6 Sep. 2020].
- Anafo, F. (2016). COLLEGE OF HUMANITIES UNIVERSITY OF GHANA THE SHEA INDUSTRY: A TOOL FOR POVERTY REDUCTION AMONG RURAL WOMEN IN NORTHERN GHANA. [online] *University of Ghana*. Available at: <http://ugspace.ug.edu.gh/bitstream/handle/123456789/23429/The%20Shea%20Industry%20A%20Tool%20For%20Poverty%20Reduction%20among%20Rural%20Women%20in%20Northern%20Ghana.pdf?sequence=1&isAllowed=y> [Accessed 6 Sep. 2020].
- Anigbogu, T.U., Taiwo, A.O. and Nwachukwu, O.F. (2016). Performance assessment of farmers multipurpose cooperative societies (FMCS) in marketing of members farm produce in Benue State, of Nigeria. *Cogent Social Sciences*, 2(1).
- Banye, E. (2012). *SNV Netherlands Development Organisation 1 Case Studies*. [online] Available at: http://www.snv.org/public/cms/sites/default/files/explore/download/adding_value_to_women_s_savings_groups_in_ghana.pdf [Accessed 6 Sep. 2020].
- Barkley, E.F., Claire Howell Major and K Patricia Cross (2014). *Collaborative learning techniques: a handbook for college faculty*. San Francisco, Ca: Jossey-Bass, A Wiley Brand.
- Bijman, J. and Hanisch, M. (2012). *Support for Farmers' Cooperatives Developing a typology of cooperatives and producer organisations in the EU*. [online] Available at: <https://edepot.wur.nl/244820> [Accessed 5 Sep. 2020].
- Brouwer, H., Woodhill, J., Minu Hemmati, Karèn Verhoosel and Simone Van Vugt (2016). *The MSP guide: how to design and facilitate multi-stakeholder partnerships*. Rugby: Practical Action Publishing.
- Bup, D.N., Mohagir, A.M., Kapseu, C. and Mouloungui, Z. (2014). Production zones and systems, markets, benefits and constraints of shea (*Vitellaria paradoxa* Gaertn) butter processing. *OCL*, 21(2), p.D206.
- CasaleF (2010). *Communication Organization Development Participation Training Learning Appraisal Monitoring Evaluation Understanding Cooperatives Planning Organizing Management A MANUAL FOR TRAINERS*. [online] FAO. Available at: <http://www.fao.org/3/a-x0475e.pdf> [Accessed May 2020].
- Chen, J. (2020). *Stakeholder*. [online] Investopedia. Available at: <https://www.investopedia.com/terms/s/stakeholder.asp> [Accessed 4 Jun. 2020].

COCOBOD Ghana (n.d.). *Ghana Cocoa Board Official Website*. [online] cocobod.gh. Available at: https://cocobod.gh/home_section.php?sec=13 [Accessed 6 Sep. 2020].

Dand, R. (2011). Cocoa bean processing and the manufacture of chocolate. *The International Cocoa Trade*, pp.268–289.

Donovan, J., Franzel, S., Cunha, M., Gyau, A. and Mithöfer, D. (2015). Guides for value chain development: a comparative review. *Journal of Agribusiness in Developing and Emerging Economies*, 5(1), pp.2–23.

Elias, M. and Arora-Jonsson, S. (2016). Negotiating across difference: Gendered exclusions and cooperation in the shea value chain. *Environment and Planning D: Society and Space*, 35(1), pp.107–125.

European Centre for Development Policy Management (2011). *Bringing the Invisible into Perspective: 5Cs Framework*. [online] ECDPM. Available at: <http://ecdpm.acc.vpsearch.nl/publications/5cs-framework-plan-monitor-evaluate-capacity-development-processes/>.

Food and Agricultural Organization (2001). *Agricultural Cooperative Development - A Manual for Trainers*. [online] www.fao.org. Available at: <http://www.fao.org/sustainable-food-value-chains/training-and-learning-center/details-materials/en/c/266505/> [Accessed 10 May 2020].

Ghana Standards Authority. (2020). *Standards*. [online] Available at: gsa.gov.gh/standards [Accessed 25 Aug. 2020].

Ghana Statistical Service (2014). *EAST GONJA DISTRICT*. [online] *Ghana Statistical Service*. Ghana Statistical Service. Available at: http://www2.statsghana.gov.gh/docfiles/2010_District_Report/Northern/East%20Gonja.pdf.

Global Shea Alliance and African Organization for Standardization (2019). *Capacity Building for Export Competitiveness of women-led SME's and Standards Promotion in Cosmetology sector in Africa-Quality Management for Export and Competitiveness in Cosmetics the Cosmetics Centre for Special Focus on Shea Cosmetics*. GSA & ARSO.

Hanisch, M. (2009). *Global Cooperative linkages? - The Challenge to Harmonize local with global economies*. [online] Available at: <http://www.un.org/esa/socdev/egms/docs/2009/cooperatives/Hanisch.pdf> [Accessed 8 Sep. 2020].

Hatskevich, A., Jenicek, V. and Antwi Darkwah, S. (2011). SHEA INDUSTRY - A MEANS OF POVERTY REDUCTION IN NORTHERN GHANA. *Agricultura Tropica Et Subtropica*, [online] 44(4). Available at: https://www.agriculturaitz.czu.cz/pdf_files/vol_44_4_pdf/hatskevich.pdf [Accessed May 2020].

Honfo, F.G. (2015). *Quality of traditionally processed shea (Vitellaria paradoxa) kernels and shea butter*. Wageningen: Wageningen University.

Hooper, P.L., Kaplan, H.S. and Boone, J.L. (2010). A theory of leadership in human cooperative groups. *Journal of Theoretical Biology*, 265(4), pp.633–646.

Ilo.org. (2020). *Cooperative Societies Act of Ghana*. [online] Available at: <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/18180/107411/.../GHA18180.pdf>. [Accessed May 2020].

Jibreel, M., Al-Hassan, S. and Musah, A.-N. (2016). *Shea butter and its processing impacts on the environment in the Tamale Metropolis of Ghana GHANA FEED THE FUTURE AGRICULTURE POLICY SUPPORT PROJECT (APSP) View project Adoption of Mobile Phone Use by Shea Butter Processors View project*.

Kent, R., Bakaweri, C. and Poole, N. (2014). Facilitating entry into shea processing: a study of two interventions in northern Ghana. *Food Chain*, 4(3), pp.209–224.

Laube, W. (2015). Global shea nut commodity chains and poverty eradication in Northern Ghana: Myth or Reality. *UDS International Journal of Development (UDSIJD)*, [online] 2(1),

pp.128–147. Available at:
https://www.researchgate.net/publication/290428274_Global_Shea_Nut_Commodity_Chains_and_Poverty_Eradication_in_Northern_Ghana_Myth_or_reality [Accessed 18 May 2020].

Laws, S. (2013). *Research for development - a practical guide*. Sage Publications Ltd.

Little, P.D., Tiki, W. and Debsu, D.N. (2015). Formal or Informal, Legal or Illegal: The Ambiguous Nature of Cross-border Livestock Trade in the Horn of Africa. *Journal of Borderlands Studies*, 30(3), pp.405–421.

Lovett, P.N. (2015). Shea butter. *Specialty Oils and Fats in Food and Nutrition*, pp.125–158.

Lovette, P. and Phillips, L.D. (2018). *Agroforestry Shea Parklands of Sub-Saharan Africa: Threats and Solutions*. [online] *ResearchGate*. The World Bank. Available at:
https://www.researchgate.net/publication/340675434_Agroforestry_Shea_Parklands_of_Sub-Saharan_Africa_Threats_and_Solutions/comments [Accessed 8 Aug. 2020].

Market Research Future (2020). *Shea Butter Market Size, Share, Trends, Industry analysis, 2023 / MRFR*. [online] www.marketresearchfuture.com. Available at:
<https://www.marketresearchfuture.com/reports/shea-butter-market-6160> [Accessed Aug. 2020].

Mensah, C.A. and Suleman, D. (2014). Urban Poverty in Northern Ghana: Tracing the Livelihood Strategies of Women in the Shea Butter Industry. *www.academia.edu*, [online] 3(11). Available at:
http://www.academia.edu/14388091/Urban_Poverty_in_Northern_Ghana_Tracing_the_Livelihood_Strategies_of_Women_in_the_Shea_Butter_Industry [Accessed 6 Sep. 2020].

Payne, C.L.R. (2020). *Moths & Legends The contribution of chitoumou, the edible caterpillar Cirina butyrospermi, to food security, agriculture and biodiversity in a low-intensity agroforestry system*. [online] www.repository.cam.ac.uk. Available at:
<https://www.repository.cam.ac.uk/handle/1810/303300> [Accessed 6 Aug. 2020].

Quainoo, A.K., Nyarko, G., Davrieux, F., Piombo, G., Bouvet, J.V., Yidana, J.A., Abubakari, A.-H., Mahunu, G.K., Abagale, F.K. and Chimsah, F.A. (2012). DETERMINATION OF BIOCHEMICAL COMPOSITION OF SHEA (VITELLARIA PARADOXA) NUT USING NEAR INFRARED SPECTROSCOPY (NIRS) AND GAS CHROMATOGRAPHY. *Semantic Scholar*. [online] Available at:
[https://www.semanticscholar.org/paper/DETERMINATION-OF-BIOCHEMICAL-COMPOSITION-OF-SHEA-\(-Quainoo-Nyarko/19bf432892ef7574aebfcc3244cbd89cb5d7d99](https://www.semanticscholar.org/paper/DETERMINATION-OF-BIOCHEMICAL-COMPOSITION-OF-SHEA-(-Quainoo-Nyarko/19bf432892ef7574aebfcc3244cbd89cb5d7d99) [Accessed 5 Sep. 2020].

R Edward Freeman, Husted, B., Sandra Sutherland Rahman, Jörg Andriof and Waddock, S. (2017). *Unfolding Stakeholder Thinking Theory, Responsibility and Engagement*. Routledge.

Ravillion, M. and Chen, S. (2007). China's (uneven) progress against poverty. *Journal of Development Economics, Elsevier*, [online] 82(1), pp.1–42. Available at:
<https://ideas.repec.org/a/eee/deveco/v82y2007i1p1-42.html> [Accessed 20 Aug. 2020].

Samaila, M. and Kamaldeen A. A, L. (2014). Cooperative marketing societies and its challenges for sustainable Economic Development in Lagos, Nigeria. *IOSR Journal of Research & Method in Education (IOSRJME)*, 4(6), pp.24–31.

Schrader, T., van Benthum, L., Groot Kormelick, A., Wennnink, B. and Janssen, I. (2015). *It takes two to trade: Understanding and Improving farmer-firm relations in Africa*. [online] *agriprofocus.com*. Drukkerij De Groot. Available at: <http://agriprofocus.com/two-to-trade> [Accessed 4 Sep. 2020].

Sidibé, A., Vellema, S., Dembelé, F., Traoré, M. and Kuyper, T.W. (2017). Analyse d'une plate-forme d'innovation dans la filière karité au Mali. *Cahiers Agricultures*, 26(4), p.45001.

Tweneboah Kodua, T., Ankamah, J. and Addae, M. (2018). Assessing the profitability of small-scale local shea butter processing: Empirical evidence from Kaleo in the Upper West region of Ghana. *Cogent Food & Agriculture*, 4(1).

United Nations Industrial Development Organization (UNIDO) (2013). *Mali Shea Butter UNIDO (en)*. [online] mali-shea-butter-unido-en.html. Available at: <http://www.fao.org/un-expo/en/multimedia/mali-shea-butter-unido-en.html> [Accessed 6 Sep. 2020].

Venturini, S., Haworth, A., Coudel, N., Jiménez, E. and Simonet, C. (2016). *CULTIVATING CLIMATE RESILIENCE: THE SHEA VALUE CHAIN*. [online] BRACED. Available at: <https://www.odi.org/sites/odi.org.uk/files/resource-documents/10508.pdf> [Accessed 6 Sep. 2020].

Wallace, N. (2019). *Bill Gates: "Tomorrow's Leaders Will be Those That Empower Others."* [online] Real Leaders. Available at: <https://real-leaders.com/bill-gates-tomorrows-leaders-will-be-those-that-empower-others/> [Accessed 2 Sep. 2020].

World Business Council for Sustainable Development (WBCSD). (2011). *Inclusive Business*. [online] Available at: <https://www.wbcsd.org/Programs/People/Social-Impact/Resources/Inclusive-Business-Creating-Value-in-Latin-America> [Accessed 6 Sep. 2020].

World Trade Organization (2018). *How trade can help to reduce poverty : 10 case studies*. Geneva: World Trade Organization.

www.solutions-site.org. (2002). *Bole, Ghana: Research and development of the shea tree and its products | HORIZON SOLUTIONS SITE*. [online] Available at: <https://www.solutions-site.org/node/110> [Accessed 2 Sep. 2020].

Appendix

Appendix I: The Interview Addressed to Cooperative Leaders

Good day to you, am Dauda Hajia K, a student of Van Hall Larenstein University studying Management of Development. Am currently conducting a research about the ***“Shea Cooperative Management Role in Sustaining Established Market Linkages”*** in East Gonja district. I would like to request your cooperation to participate in this study through this interview which takes times around 20-30 minutes. My colleague is assisting me take this information from you due to the COVID-19 pandemic which prevent me from travelling. Be rest assured that information will be treated with utmost confidentiality and the data will be used for academic and educative purposes. Thank you in advance for your time.

If you have any questions about the research, kindly reach me through hajiakhadijah.dauda@hvhl.nl or dhajia8@gmail.com:

Name of cooperative..... Location.....

1. Please indicate by ticking an age range
 - a. 20-35 b.35-45 c.45-60 d. 60+
2. Sex: Male/Female
3. Indicate your level of educational attainment.....
4. Marital status.....
5. How long have you been involved in shea processing?
 - a. Less than 5 years b. 6-10 years c. more than 10 years d. since childhood
6. Please specify the position you hold in the group
7. When did you assume this position?
8. How many members are you in this cooperative?
 - Members with credit
 - Source of credit
9. What level of processing of shea do cooperative members you do?
 - What technology do you use for processing?
 - how men members have access to this technology
 - how do you procure this technology? (negotiation capacity)
10. Why did you join the cooperative?
11. You decided to serve in cooperative as a leader, can you please indicate why you chose to serve as a leader?
 - Motivation of being a leader
 - Why do you think you were chosen?
 - If u nominated yourself what skills do u have to serve/support members

12. Can you please tell me some of the benefits of serving in cooperative as a leader?
13. Can you please tell me some of the challenges of serving in cooperative as a leader?
14. What roles do you play as individual and what role the management is playing to serve the cooperative members?
 - Services providing
 - Scouting for buyers
 - Prices negotiation
15. Have you received any form of training regarding your role since you assumed the position?
 - Production training
 - Marketing
 - Leadership
16. How does leadership assist the members in cooperative in terms of accessing credit, production tools/technology?
17. How does members and leadership relate with each other? Do you have lows and regulation in your cooperative?
18. How do management deal with members how doesn't comply with rules and regulation?
 - Autocratic
 - Democratic
 - Laissez faire
 - Charismatic
19. Do you have the immediate buyers of your shea products? And How did you get this buyer?
20. What is your plan to keep the buyers you have (strategies to meet the buyer's conditions)?
 - Types of butter needs by buyers
 - Prices negotiation
 - Quality and quantity
 - Needs from buyers

Appendix II: The Interview Addressed to Members

Good day to you, am Dauda Hajia K, a student of Van Hall Larenstein University studying Management of Development. Am currently conducting a research about the ***“Shea Cooperative Management Role in Sustaining Established Market Linkages”*** in East Gonja district. I would like to request your cooperation to participate in this study through this interview which takes times around 20-30 minutes. My colleague is assisting me take this information from you due to the COVID-19 pandemic which prevent me from travelling. Be rest assured that information will be treated with utmost confidentiality and the data will be used for academic and educative purposes. Thank you in advance for your time.

If you have any questions about the research, kindly reach me through hajiakhadijah.dauda@hvhl.nl or dhajia8@gmail.com:

Name of cooperative..... Location.....

1. Please indicate your age by ticking an age range
 - b. 20-35 b.35-45 c.45-60 d. 60+
2. Sex: Male/Female
3. Indicate your level of educational attainment.....
4. Marital status.....
5. How long have you been in the cooperative?
6. How long have you been involved in shea processing?
 - a. Less than 5 years b. 6-10 years c. more than 10 years d. since childhood
7. What are the advantages of being a cooperative member?
 - How members access credit
 - How cooperative help you to link with source of funding
 - Adopted ‘new’ technology and equipment
 - Price, profit and service providers
8. Do you have immediate buyers of your shea products? And How did you get this buyer?
9. What is your plan to keep the buyers you have (strategies to meet the buyer’s conditions)?
10. How do you select your leaders?
11. What are the roles of your leaders in getting and keep buyers?
12. How does management deal with members who do not comply with rules and regulation?
 - Decision making
13. How do the leaders’ express power they have (power over, power to, power with and power within)?

14. What type of power do you see among your leadership?
15. Do you have any challenges being part of the cooperative?
16. Do you have any suggestions that can help improve the leadership in carrying out their duty?
17. What are your suggestions to encourage women to join cooperatives?

Appendix III: The Interview Key resource persons

(Cooperative development trainer& market linkage / programs officer/ manager)

Good day to you, am Dauda Hajia K, a student of Van Hall Larenstein University studying Management of Development. Am currently conducting a research about the ***“Shea Cooperative Management Role in Sustaining Established Market Linkages”*** in East Gonja district. I would like to request your cooperation to participate in this study through this interview which takes times around 20-30 minutes. My colleague is assisting me take this information from you due to the COVID-19 pandemic which prevent me from travelling. Be rest assured that information will be treated with utmost confidentiality and the data will be used for academic and educative purposes. Thank you in advance for your time.

If you have any questions about the research, kindly reach me through hajiakhadijah.dauda@hvhl.nl or dhajia8@gmail.com:

Role in your organization..... Location.....

1. Please indicate your age by ticking an age range
c. 20-35 b.35-45 c.45-60 d. 60+
2. Sex: Male/Female
3. Indicate your level of educational attainment.....
4. Marital status.....
5. What role does your organization play in shea women cooperatives?
 - Group formation
 - Trainings
 - Development (access to technology, skills and management)
 - Marketing
6. How are your organization collaborate with other stakeholders to ensure continuous existence of shea cooperatives?
 - Government
 - Financial organisation
 - Other NGOs
7. How are market linkages done? What is considered before linking the cooperatives to the buyers?
 - Buyers conditions
 - Cooperative conditions and capacities
8. How do help cooperative to maintain the buyers?
 - Trainings on marketing

- Customer care
9. what do you think is hindering the cooperatives from sustaining established market linkages? And what can be done to improve their ability towards sustain established market linkages?
 - Price
 - Qualities and quantities
 - Packaging
 10. What are the opportunities are available for the shea cooperative?
 11. What is the plan for your organisation to help cooperative to maintain established market linkages?

Appendix IV: Interview Guide for BIG buyers (Local and International)

Good day to you, am Dauda Hajia K, a student of Van Hall Larenstein University studying Management of Development. Am currently conducting a research about the ***“Shea Cooperative Management Role in Sustaining Established Market Linkages”*** in East Gonja district. I would like to request your cooperation to participate in this study through this interview which takes times around 20-30 minutes. My colleague is assisting me take this information from you due to the COVID-19 pandemic which prevent me from travelling. Be rest assured that information will be treated with utmost confidentiality and the data will be used for academic and educative purposes. Thank you in advance for your time.

If you have any questions about the research, kindly reach me through hajiakhadijah.dauda@hvhl.nl or dhajia8@gmail.com:

1. Please indicate your age by ticking an age range
a.20-35 b.35-45 c.45-60 d. 60+
2. Sex: Male/Female
3. Indicate your level of educational attainment.....
4. Marital status.....
5. Tell us about your business of shea
6. What determine the quality and quantity of shea you buy?
7. What standards are available for your preference?
8. In what ways have you supported the cooperatives to produce what you want?
9. What is the relationship like with the cooperative?
 buying and selling
 includes other elements of developing the cooperatives
 contract
10. Contract terms: who draws it, how is drawn, who takes part?
11. What challenges do you encountered to source shea?
12. From your perspective, what can be done to improve?
13. What do you think are the needs of shea cooperative to meet the market demand?
14. What support can different stakeholders provide to shea cooperative to help the to comply with the market demand?
 Government support
 NGOs
 Buyers
 Others

Appendix V: Interview guide for Cooperative department

Good day to you, am Dauda Hajia K, a student of Van Hall Larenstein University studying Management of Development. Am currently conducting a research about the ***“Shea Cooperative Management Role in Sustaining Established Market Linkages”*** in East Gonja district. I would like to request your cooperation to participate in this study through this interview which takes times around 20-30 minutes. My colleague is assisting me take this information from you due to the COVID-19 pandemic which prevent me from travelling. Be rest assured that information will be treated with utmost confidentiality and the data will be used for academic and educative purposes. Thank you in advance for your time.

If you have any questions about the research, kindly reach me through hajiakhadijah.dauda@hvhl.nl or dhajia8@gmail.com:

Role Location.....

1. Please indicate by ticking an age range
 - a. 20-35 b.35-45 c.45-60 d. 60+
2. Sex: Male/Female
3. Indicate your level of educational attainment.....
4. Marital status.....
5. What are the roles of the cooperative department in promoting private sector management of cooperatives?
6. What would you consider as factors that hinder cooperatives from functioning?
 - Marketing
 - Management
 - Financial
7. What factors would you say contribute to success of a cooperative? (influence and support of policy)
8. What support exist from government sector for the cooperatives?
 - Leadership
 - marketing
 - production

Appendix VI: Focus Group Discussion Guide

1. indicate participants group
2. Age range a.20-35 b.35-45 c.45-60 d. 60+
3. Sex: Male/Female
4. Indicate your level of educational attainment.....
5. Marital status.....

6. How long have you been involved in shea processing?
a. Less than 5 years b. 6-10 years c. more than 10 years d. since childhood
7. Do you have immediate buyers of your shea products? And How did you get this buyer?
8. What is your plan to keep the buyers you have (strategies to meet the buyer's conditions)?
9. How do you select your leaders?
10. What are the roles of your leaders in getting and keep buyers?
11. How does management deal with members who do not comply with rules and regulation?
12. Decision making

How do the leaders' express power they have (autocratic, democratic, Laissez faire, Charismatic)?

13. Are there any challenges you have encountered in the cooperative?

a) Insufficient production c) Lack of enough raw materials

b) Insufficient market d) Unreliable/incompetent heads

e) Lack of training f) others, please specify,

14. 3. What are some of the causes of these challenges in cooperative?.....

15. Please indicate by scoring. (count and indicate the number that chooses what per pointer

Score on 1-5-point scale: 1= very low, 2=low, 3=Average, 4=Good, 5= very good			
Indicator	pointer		
WC has the ability to enter into other networks	Participation in other cooperative /stakeholder events		
WC has the ability to mobilize external capacity to achieve goals of the cooperative	Maintained relationship to be able to reach out to for support if necessary		
Equipment, credit and responsibility for the collaboration is shared among members	Leadership supports staff to acquire/ access equipment, credit and shares responsibility for members.		
There is a result driven structure and process	Leadership sets similar target for all		
Attitudes of respect and trust are present, avoiding stereotyping or	Leadership promotes team building		

reactive behaviours (culture)			
Members ensure that views of less powerful stakeholders are given a voice	Mutual respect existing in group and voices are heard		
Any other comment			

General remarks.....

APPENDIX VI: Respondents Selection

Table of Questions, Type of Information needed, source, strategy, methods, tools and data processing

Sub questions	Type of Information needed	Source	Strategy	Method	tool	Data processing
What are the requirements of shea markets for shea cooperative management to sustain established market linkages in the East Gonja District of Northern Ghana?	Management perception of their role as leaders.	3 Shea cooperatives of East Gonja district	Case study	Semi structured interview	Interview checklist	Coding, categorize in themes and Triangulation
				FGD	FGD guide, IOM, 2Cs	
		Secondary sources Online sources, documents from commissioner, records of shea cooperatives	Desk study	Reviewing of relevant related data	Computer and internet connectivity	

What are the capacities of shea cooperative management to support its members in an established market linkage in the East Gonja District of Northern Ghana?	Skills of leadership.	Shea Cooperatives	Case study	Semi structured interview	Interview checklist	Coding, categorize in themes and Triangulation
	Relevance of the position of management of cooperatives .			FGD	FGD guide, IOM, 2Cs	
	Type of training required for improving	Secondary sources: online sources, documents from commissioner,	Desk Study	Review relevant literature	Computer and internet connectivity	
What are the necessary requirements for the shea cooperative management in the East Gonja District of Northern Ghana to connect with buyers to sustain established market linkages?	Expectation of suppliers	Key RP	Case study	Semi-structured interviews	Internet connectivity, social media applications (WhatsApp, zoom, Facebook) Interview checklist	Coding, categorize in themes and Triangulation
	Does the management understand the requirements?					
	Negotiation and business skills.					
	Quality and quantity requirements	Secondary Sources online	Desk study	Reviewing relevant literature	Computer and internet connectivity	

Source: Fieldwork 2020

VII. Photo Gallery

Dashie women Group posed for a Picture after the Interview



Source: Fieldwork 2020



Source: Field 2020

Jangyili when the Research team arrived and carrying out community entry processes



Source: Fieldwork 2020

The research team bumped into an officer on community Visitations to one of the Cooperatives in East Gonja



Source: Fieldwork 2020.