Challenges Faced By Women Entrepreneurs In The Shea Butter Industry

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Abstract: The Shea butter industry is one of the few businesses that women in the three Northern Regions of Ghana largely rely on to make earns meet. But for a long time, the industry has remained one of the most neglected sectors of the Ghanaian economy. The study sought to investigate the challenges faced by women entrepreneurs in the Shea butter industry in the Wa Municipality of Upper West Region, Ghana. Data for the study was obtained using structured questionnaires and interview guide. Simple random sampling technique was used to select 170 respondents. Quantitative data analysis was performed using the Statistical Package for Social Sciences (SPSS), version 18. The study revealed that there exist a number of challenges militating against the production and extraction of Shea products. Notable among them were inadequate financial support; rigorous production processes; lack of market; lack of regulatory policies; and high cost of borrowing. The removal of the barriers identified in the Shea industry would increase productivity, income and living standards of women and help Ghana achieve its Millennium Development Goals (MDGs) I and III: Eradication of extreme poverty and promoting gender equality and employment of women respectively. The study also recommended that the Government should provide adequate support to the various actors in the industry, than to relying on the provision of social safety interventions programmes such as cash transfer under Livelihood Empowerment Against Poverty (LEAP) as an alternative measure for eradicating poverty in these regions.

Keywords: Shea butter, poverty eradication, economic significance, women entrepreneurship and challenges.

I. BACKGROUND

Interestingly, the Shea tree has been described as a very special indigenous asset in Western and Central Africa. This is because after its remarkable exploration in the early 18th century, there has been an outstanding trade between West Africa and Europe so well that several European and American countries have made attempts to grow shea nut plantation in their economies but without success (Feris, 2001). The Shea tree, which is scientifically known as 'Vitellariaparadoxa' contributes immensely to the economic development of nations due to its diverse uses. Among its diverse uses is when the Shea nuts are processed into the production of Shea butter (Addaquay, 2004). The contribution of Shea butter industry to the socio-economic development of nations cannot be underestimated. The Shea butter industry

employs about 10 million women in rural communities in 21 countries across the African continent, contributing immensely to the economic growth of the respective countries (FAOSTAT, 2008). It has also gained recognition on the international market for its use in confectionery, cosmetic and pharmaceutical industries. It is also consumed locally in producing varieties as food, soaps, detergents, medicine, and also used for cultural and religious purposes. In West Africa, Shea butter has also enhanced cross border cooperation and integration in the area of trade.

In Ghana, they are grown in almost half of the country but are found mostly in the entire area of three Northern regions of Ghana. For this reason, Shea butter business constitutes a key source of income for local women in these regions. Stichting Nederlandse Vrijwilligers (2006) emphasize that more than 600,000 women in Northern Ghana depend on incomes from

the sale of Shea butter and other Shea-related products as a means for their daily sustenance, supplementing the family food budget and meeting medical and educational expenditure. In view of this, Shea butter processing has become a major alternative livelihood activity for most women in three Northern regions of Ghana. Thus, Shea industry's contribution to the achievement of Millennium Development Goal I (MDG I): eradicating extreme poverty and Millennium Development Goal III (MDG III): promoting gender equality and empower women cannot be underestimated (GSS 2013).

PROBLEM STATEMENT

The Shea Industry is among the prominent informal sectors in Ghana, which when developed could contribute immensely to the eradication of extreme poverty in Northern Ghana.

However, in spite of its tremendous contributions to the socio-economic development of local communities in respect to employment; poverty alleviation; women empowerment; and foreign exchange earnings, the industry, for a long time has remained one of the most neglected sectors of the economy as compared to the benefits they could have generated to the economy. For example, Yidana (2009) established that women who engaged in the Shea nut industry faced a daunting task in collecting the nuts. They had to wake up early in the morning in search of the valuable nuts that had fallen from the Shea trees which are grown in wild areas. This process exposed them to all sorts of risks such as snake, scorpion and other insects' bites as well as the scorching sun. Adam (2011) also lamented that the women were mostly exploited by middlemen, while Amoah (2000) also realized that the factors which had hampered the widespread commercialization of the Shea nut products centered on two main issues. Firstly; the irregular fruiting cycle of the Shea nuts, and secondly; the rampant felling of the Shea trees for charcoal and the depletion of the trees. However, could these challenges be generalized? It is on this note that the research work is carried out to investigate the challenges faced by women entrepreneurs in the Shea butter industry in Wa Municipality, and also offer recommendations regarding how best to eradicate the challenges in the Shea industry.

II. LITERATURE REVIEW

WHY STUDY WOMEN ENTREPRENEURSHIP

There is no doubt that, the increasing accomplishments of women entrepreneurship have earned them the compliment of being the great source of innovation and job creation in the twenty-first century (Jalbert 2000; OECD 2004). Women are able to create jobs for themselves and others, and also provide for societies different solutions to management as well as the ability to exploit new entrepreneurial opportunities. Research in female entrepreneurship studies conducted show that female entrepreneurs in all OECD countries and other developed countries contribute significantly to the socio-economic development of their countries (OECD 2004). They represent an economic strength for their respective countries through

their ability to generate both substantial sales and employment for the women and others in societies (Brush et al. 2006; Coughlin 2002). In developing countries, they contribute immensely to the creation of new businesses, and consequently go a long way to reduce unemployment rate and alleviate poverty (ILO 2000). For instance, majority (85% percent) of the Ghanaian female labour is in self-employment (Ghana Statistical Service 2010). It is also noted that Ghanaian women have traditional responsibilities of performing household chores; looking after the families; and also engage in various productive ventures. For that matter, their contributions to economic growth cannot be denied. (Britwum et al. 2006).

III. CONTRIBUTION OF SHEA BUTTER INDUSTRY TO DEVELOPMENT IN GHANA

The main contributions of the Shea industry to the development of Ghana could primarily be seen in the areas discussed below:

PROVISION OF FOOD SECURITY

The Shea nuts serve as food security in the areas where they are grown. This is because the harvest season normally coincides with the early wet season, and the edible fruit pulp contains protein and carbohydrates so in the periods of food scarcity they can be eaten (Hall et al, 1996; Obeng, 1994). It has been established that the Shea nuts are also sold by famers who pick them to raise income for the purchase of food. Picking of Shea nuts coincides with the hunger period in northern Ghana, hence the nut pickers sell them immediately to purchase the needed food Kletter (2002).

WOMEN EMPOWERMENT

Women are empowered economically through their engagement in the industry in order to make meaningful decisions and investments in their lives, families and communities at large. Shea butter has proven to be a significant source of employment and income generation venture for the women in the Municipality. In addition, the Shea butter is sold to raise funds to cater for food, utility bills, payments of school fees and health facilities with the intention to improve upon the welfare of their families. This process creates a sense of ownership and empowerment as it gives women the opportunity to make decision on their own with little or no consultation from their male counterparts. The Shea butter centres have also created avenue for the women to share ideas and also improve upon their lives and businesses (Kletter 2002).

FOREIGN EXCHANGE GENERATION

The Shea butter industry's contribution to foreign exchange earnings cannot be undervalued. About 80% of Shea exports are currently sold as raw nuts to large industrial processors in Europe. Shea butter is also exported to cosmetics, and pharmaceutical industries in Europe, Asia and

America. This makes Shea butter an important source of foreign exchange for Ghana over the years. Shea kernel exports for example in 2008 totaled 339,665,806Kgs, fetching the country US\$27,008,556.00 (GEPC, 2008). Shea exports were among the five key non-traditional exports in 2008 and contributed 9% of the total non-traditional exports (GEPC, 2009).

EMPLOYMENT GENERATION

The industry employs about 10 million women in rural communities in 21 countries across Africa. In Ghana, about 66 districts across the three Northern regions and some parts of the Brong-Ahafo and Volta regions are involved in the industry, with women being the largest group involved. The shea industry attracts about 600,000 women collectors and butter processors at the community level. It is estimated that the average household size in the northern regions produce million's worth of Shea butter annually. It is also estimated that there are 200,000 fragmented sellers of Shea products across districts in the northern regions. (Techno Serve, 2004). These figures emphasize the importance of the industry's contribution to employment generation.

POVERTY ALLEVIATION

Most of the households engaged in the shea industry are among the poor and vulnerable in their respective societies and therefore rely on the Shea industry for their livelihood. Agencies which tend to extend assistance to actors in the Shea industry do so because of the industry's potential to reduce poverty levels among women. Studies have shown that most of the Shea butter producers are women who spend their incomes to provide food, shelter and health care for their families. (Techno Serve, 2004).

IV. RESEARCH METHODOLOGY

DATA SOURCES

Both primary and secondary data were used. The primary information was obtained through direct observation, focus group discussions and the administration of questionnaires. The secondary information was obtained from library materials, newspaper reports and published research works. A case study approach was adopted in order to have an in-depth empirical knowledge of Shea butter processing industry and the challenges that women encounter in the Wa Municipality. A sample size of one hundred and seventy (170) Shea butter business women within the Wa Municipality was selected for the study. The sample population included individuals and groups in the Shea butter business that were identified and interviewed using structured questionnaires to gather the relevant data for the study.

PROFILE OF RESPONDENTS

A total of 170 questionnaires were distributed and successfully completed for the study. The age category of

respondents revealed that 36.47% were within the age range of 35-44, and only 8.24% of the sample population was less than 20 years of age. It was also realized that majority of the respondents (46.47%) had only completed Primary and JHS education. Ironically, none of the respondents had tertiary education. Again, it was also realized that 84.70% of the sample population were married while only 10% were not married and 5.30% divorced.

Age Distribution of Respondents

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Age Category	frequency	(%)
Less than 20 years	14	8.24
25-34	48	28.24
35-44	62	36.t47
45-54	25	14.70
55+	21	12.35
Total	170	100.0

Educational level

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Educational Level	Frequency	Percentage (%)		
Never	84	49.41		
Primary/ JHS	79	46.47		
Secondary	7	4.12		
Tertiary	0	0		
Total	170	100.0		

Marital Status

	Marital Status	Frequency	Percentage (%)
	Single	17	10.0
	Married	144	84.70
7	Divorced	9	5.30
	Total	170	100.0

Table 1: Profile of respondents

HOW SHEA NUTS ARE OBTAINED

The respondents had varied sources of the Shea nuts for butter production in the Municipality. 68.24% of the respondents indicated that they bought the Shea nuts from the suppliers; 25.29% also indicated that they bought the Shea fruits and processed into nuts and only 6.47% of the sample population indicated that they picked the shea fruits and processed into nuts.

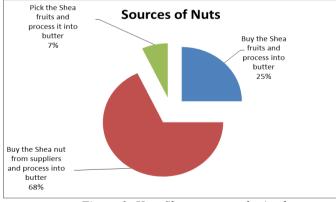


Figure 1: How Shea nuts are obtained

V. DISCUSSION OF FINDINGS

After thorough interactions with the respondents in the Shea butter industry, it was noticed that the industry faced some challenges. Pertinent among them were lack of ready market for their products, nutpickers suffering from snake and scorpion bites, long distances journey embarked by nutpickers to get the Shea nuts, inadequate credit facilities from financial institutions, inadequate support from other supportive institutions, unfavorable weather conditions, ill health suffered by women, seasonal fluctuations of the supply of nuts, inadequate research and development centres for the industry, handpicking of Shea nuts, high interest rates on borrowing, and lastly but not the least, crude method of production. The challenges identified were grouped into its commonalities and presented as follows.

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S/No	Type of Challenge	Yes	No
1	Suffering of snake	85.29%	14.71%
	and scorpion bites	(145)	(25)
2	Lack of financial	100%	0 %
	support	(170)	(0)
3	Shea nuts supply from	76.47%	23.53%
	Bush	(130)	(40)
4	Regulatory constraints	74.11 %	25.89%
		(126)	(44)
5	Lack of	86.47%	13.53%
	Entrepreneurial /	(147)	(23)
	Management Skills		
6	High Cost of	89.41%	10.59%
	borrowing	(152)	(18)
8	Inadequate support	67.65%	32.35%
	from other Institutions	(115)	(55)
9	Marketing challenges	88.24%	11.76%
		(150)	(20)
10	Unfavourable weather	65.88%	34.22%
	conditions	(112)	(58)
11	Health issues	70.59%	29.41%
		(120)	(50)
12	Rigorous production	78.24%	21.76%
	process	(133)	(37)
13	Inadequate protective	87.65%	12.35%
	materials	(149)	(21)

Table 2: Challenges faced by Women entrepreneurs in the Shea butter Industry

SNAKE AND SCORPION BITES

In terms of the challenges, 85.29 %, representing 145 respondents complained that they suffered immensely from snake and scorpion bites. The common reason given by the respondents was that they had to wake up early in the morning, travelled long distance into the thick forest in search of the valuable nuts that had fallen from the Shea trees which are grown in the wild areas. Hence, without protective clothing and gadgets, the nutpickers are exposed to all sorts of dangers.

VI. INADEQUATE FINANCIAL SUPPORT AND HIGH COST OF BORROWING

Irrespective of the role that the industry plays to the economic development of the nation in general and women in particular, the study also revealed that the industry's financial support were inadequate and untimely. In this vain, majority of the respondents interviewed answered affirmatively to that. However various reasons were given to support their arguments.

On the perspective of inadequate financial support, it was discovered the Shea butter processors were not able to provide collateral securities demanded by traditional financial institutions. They also confirmed that the problem with inadequate credit facilities resulted from the fact that some women were not able to pay back their loans on time and others also defaulted in the payments schedule.

Interest charges on loans also posed a challenge on the women in shea nut business since they cannot borrow from traditional banks.

On the part of rural banks and the micro finance institutions, it was discovered that interest rates charged on loans were so high that it deterred the women to borrow from them. Some of the respondents lamented about the cumbersome processes they needed to go through to enable them access such funds. Another reason given to support the inadequacy of funds was that majority of the micro financial institutions were unwilling to advance credit facilities to individuals but preferred to lend money to formal and organized groups. It was also ascertained that although the government of Ghana had established Microfinance and Small Loan Center (MASLOC) to mainly provide financial assistance to Small and Medium Scale enterprises (SMEs), their supports were not adequate and also not rendered on time. Most of the women interviewed, also saw the 2% per month interest rate as high because their profit margin did not encourage the acquisition of such loans. Out of the total number of thirty-three (33) centers visited, only six (6) centers had received financial support from Microfinance and Small Loan Center (MASLOC) in the Upper West Region. It was again realized that other agencies like Savannah Accelerated Development Authority (SADA) and Stichting Nederlandse Vrijwilligers (SNV) also known in English as 'Netherlands Development Organization' financial support provision to women in Shea butter production were inadequate and untimely.

SHEA NUTS SUPPLY

Varying submissions were gathered from respondents about the unpredictable nature of Shea nuts supply. The first reason was the irregular fruiting cycle of the Shea nut tree. This makes commercial dependence on its produce less predictable and very discouraging to some of the commercial processors of the shea nuts. Again, because, the shea tree averagely takes between 15 to 25 years to bear fruits once in every year, the industry faces the threat of nut not being able to meet future supplies of the local and international market demand. It was also discovered that certain care- free activities of farmers have affected the growth of the shea plants. The

introduction of mechanized farming in the northern part of the country and bush fires have also led to further depletion of the trees. This is because, it was realized that the shea trees were the most preferred trees for wood by artisans, local construction, charcoal burns and commercial fire wood users such as chop bar operators, and 'pito' brewers. Out of the 130 respondents (76.47%) who lamented over the depletion of the Shea tree, about 38% attributed it to bush fires-especially during harmatan season where cattle rearers set fires on bush; about 27% attributed it to the activities of commercial farmers and estate developers; about 16% also attributed it to charcoal burning in these areas; and the remaining 19% attributed the challenge to the population to the negligence of the farmers.

UNFAVOURABLE WEATHER CONDITIONS

Another challenge confronting women in the Shea butter industry is the unfavorable weather conditions. It was realized that 112 respondents, which represents 65.88% of the sampled population complained that due to unstable weather conditions they were not able to produce the expected quantity of Shea butter. They further stated that it affected the price and the quantity of nuts supplied. Hence the supply of nuts could not be accurately predicted, and therefore the production of Shea butter as well.

LACK OF LEGISLATIVE FRAMEWORK

Another factor accounting for the industry's predicament was identified as lack of legislative framework. It was realized that the industry did not have strong implementation of Legislative framework. Due to its loose public policies governing the shea industry, the industry lends itself to a free-for-all character. 74.11% of the sample population affirmed to the fact that the Shea industry had regulatory challenge. It was confirmed that felling of Shea trees was contributing to desertification for lack of regulatory body. Again it was established that women and children who were Shea nuts pickers lost their livelihood because of a new trend of demand for Shea products because prices tend to be determined by the buyers.

MARKETING CHALLENGES

One hundred and fifty (150) respondents, representing (88.24%) of the total sample population saw marketing constraints as a very crucial area that hampered the growth and development of the industry. 45% asserted that they did not have ready market for their produce; causing a long recoupment period on their investment capital. 21% of the respondents also claimed that they did not have reliable market space at the market centers, and this exposed them to sun which tended to melt their shea butter, hence these women could not stay for long hours under the direct sun. The remaining 23% also attributed the marketing challenges to their low bargaining power in the determination of the prices for their produce, and hence were mostly exploited. This typically leaves the women as price-takers.

Other marketing challenges gathered from the respondents were high costs of transport, limited reliability,

poor roads and cumbersome custom procedures for anyone wanting to move shea butter and kernel between countries or out of the continent.

HEALTH ISSUES

According to the information gathered, 120 respondents (70.59%) attested that they suffered severe health problems during the process of making the shea butter. The intensive use of firewood burning which produces wood smoke contains such compounds as carbon monoxide, nitrogen oxides, sulfur oxides, aldehydes, polycyclic aromatic hydrocarbons and fine respirable particulate matter. These compounds cause respiratory infection such as severe cough, lung infections. running nose, nasal congestion, headache, low-grade fever, sneezing, and optical disorders which are not good for the health of the women. Also the women complained of excessive burns as a result of exposure to naked flames, which was glaring on their skin. Lastly, it was ascertained that the women go through severe body pain during the kneading process of the shea butter when using traditional method of production.

PRODUCTION PROCESS OF SHEA BUTTER

From the research, it was realized that laborious processes used by the rural women to extract shea butter was a big challenge to them to come out with expected yields to meet the demand. It was observed that the method which involved hand kneading which produces only about 25-30% of the nuts was very tedious. The process also required the use of large quantity of water which is mostly inadequate for the rural women. One hundred and thirty-three (133) respondents, representing (78.24%) of the sample population supported this submission with the following explanations. Most of them claimed that the excessive use of energy, especially during the kneading stage, makes the women tired and stressed up and affects their total output. Other respondents also said that the intensive use of fire wood associated with the traditional method of processing increased the cost of production; and adversely affected the profit margins and made it very difficult to expand their production.

INADEQUATE PROTECTIVE MATERIALS

It was also realized that due to lack of protective materials, women in the industry were exposed to certain health hazards. 149 respondents, representing (87.65%) of the sample population, attested that the use of firewood generated excessive smoke and exposed them to naked flames and caused severe cough, lung infections, running nose, sneezing, and optical disorders. They also complained that due to lack of protective materials during the process of picking the nuts they were most at times attacked by bees, snakes and scorpions.

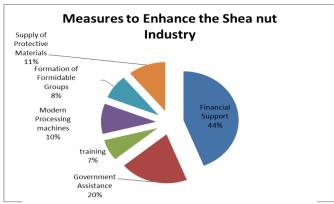


Figure 2: Suggested Measures to enhance the Shea nut Industry in the Municipality

The above figure gives the pictorial presentation of suggestions made by the respondents on how the industry could have a face lift. Out of the 170 respondents contacted the indications were that 75 women representing 44% emphasized financial support as the key measure if the Shea nut industry wanted to see improvement in their yield. It was also discovered that 34 respondents representing 20% also indicated Government assistance as key issue to see the industry growing. Other factors indicated by the respondents were training programmes in the areas of production, marketing, cultivating of Shea nuts as well as provision of modern processing machines, availability of protective clothes and formation of formidable groups to be recognized came to light.

VII. DISCUSSION OF RESULTS AND CONCLUSION

The study revealed that Shea butter industry is dominated by female. This is an indication that women entrepreneurs are able to create jobs for themselves and others, and also provide societies with different solutions to management challenges and also being able to exploit new entrepreneurial opportunities. This goes a long way to endorse the findings by OECD (2004) that female entrepreneurship contributes significantly to the socio-economic development of nations. And that of ILO (2000) and Brush et al. (2006) that women entrepreneurs contribute to the creation of new businesses reduce unemployment rate, alleviate poverty, as well as empowering women to take traditional responsibilities by performing household chores and catering for their families. Shea butter centers have also created avenues for women to share ideas relating to home management, assist themselves financially; expand their businesses and other areas of their live positively.

The study also revealed that the Shea butter industry is dominated by female in the active ages of (17 years to 54 years) which represent about 87.65%. The study further revealed that women in the industry constitute a higher percentage of the vulnerable group and therefore during lean seasons, most players migrate to the southern part of Ghana to undertake menial jobs. The Shea butter processing business could therefore be a promising business venture for these porters, and help curb rural urban migration among women in the Wa Municipality.

It was also established that the Shea butter industry is also dominated by those who had no formal education or who had only obtained primary education (95.88%). This situation affects their production volume, market earnings, and implementation of appropriate technology to increase productivity. Because of this problem, most of the women in this industry are cheated by hired middle men who provide market avenues for their products.

The research also revealed that the industry faces other challenges. Notable among them were the lack of financial support (100%), high cost of borrowing (89.41%) and marketing challenge (88.24%). It was discovered that very few governmental and non-governmental organizations are able to provide financial support to the players in the Shea butter industry. Microfinance and Small Loan Centre (MASLOC), National Board for Small Scale Industries (NBSSI), Business Advisory Centre (BAC), Savannah Accelerated Development Authority (SADA), Stichting Nederlandse Vrijwilligers (SNV) were the organizations providing financial support to the women in the Shea butter production business. With reference to rural banks and other traditional banks the women complained about high interest rate, strict demand of collateral security and bureaucratic process of loan applications.

It was established that the Shea butter extractors have no ready market for their produce. Additionally, the intensive use of firewood produces wood smoke which causes respiratory infections such as severe cough, lung infections, running nose, nasal congestion, headache, low-grade fever, sneezing and optical disorders among women in the industry. This had a tendency of reducing effective work hours.

VIII. CONCLUSION

The research was undertaken to find out the challenges faced by women entrepreneurs in the Shea industry in the Wa municipality and the way forward to improve upon the industry in the municipality. It was established that women in the Shea industry were able to improve upon their household income and living standards in the areas of education and healthcare needs of their families. This is an indication that much talked about women empowerment is gradually being attained through the Shea nut industry since it gives them the necessary platform to exhibit their talents and contribute immensely to the socio-economic development.

Notwithstanding the economic significance of the Shea nut industry, the findings also indicated that the actors also faced certain challenges such as suffering from snake, bee and scorpion bites as a result of lack of protective materials and inadequate Anti Snake Vernon (ASV) and other vaccines at the Health Centers.

It was also discovered that support from central government and the municipality was inadequate. In addition, it was also noticed that rigorous production processes; lack of market; lack of institutionalized regulatory policies for the industry; inadequate financial support and high cost of borrowing were among the major hindrances to the smooth growth of the Shea butter industry.

From the following challenges discussed, it is very glaring that the industry does not get the necessary support

required to enhance its productivity. Again, it was realized that the government of Ghana has not consciously provided sufficient form of support for the Shea butter sub-sector. Instead, it continues to concentrate much on its social safety interventions programmes such as the cash transfer under Livelihood Empowerment Against Poverty (LEAP), and Ghana Social Opportunity Project (GSOP). Although these interventions are appreciable in the short run, it would be more appropriate for the women groups to have sustainable income generated activities. Otherwise the aim of eradicating extreme poverty in the three northern regions would be fiasco. For instance, due to inadequate support for the Shea nut industry, the key actors in this sector: Shea nut pickers, processors, local agents and manufacturers have resorted to cutting down production levels, search for alternative jobs, increased borrowing from Micro-Finance operators and other financial institutions and also out-migration by young girls.

IX. RECOMMENDATION

From the research findings, the following recommendations were made.

- There should be appropriate linkages of state institutions to embark on public education on topical issues to protect Shea trees on farms and bushes; cultivation of more trees to combat desertification and promote Shea products. For this reason it is recommended that government should make fire prevention an integral part of the Ghana National Fire Service mandate to consistently work in collaboration with traditional rulers. Public education units like National Commission for Civic Education (NCCE) should be attached to Environmental Protection Agency (EPA) to educate rural people on sustainable forest management. In addition, Ghana Forestry Commission should also be well equipped and be made key state custodian of guiding people as to what trees to plant and how and when to fell such trees.
- ✓ The government must also establish regulatory framework and institute laws and by-laws to regulate the Shea industry to ensure sanity in the Shea industry. Here it is recommended that Ghana Food and Drugs Board and Ghana Standards Board should be well equipped to play their normal role of testing and certifying Shea products for both the local and international markets.
- ✓ Entrepreneurial research forum should be organized to educate farmers about the new method of planting Shea trees which tend to reduce the number of years of fruits bearing from 25 years and above to between 3 to 5 years. This can be achieved through education programmes for farmers about the use of grafting method of Shea tree planting.
- ✓ Government and key stakeholders in the Shea nut business should undertake vigorous research and development (R&D) activities to enable them identify better processing methods, machines and other equipment to improve upon the quantity and quality of Shea produce. In this vain institutions like Ghana Appropriate Technology Transfer Industrial Service (GRATIS) Foundation Intermediate Technology Transfer Units

- (ITTUs) and other simple equipment manufacturing companies need to be supported financially to manufacture simple equipment and tools to reduce the cumbersome processes associated with Shea processing.
- ✓ Conscious effort should be made by the government to provide Anti Snake Venom (ASV) and other vaccines and protective clothes for the women who are normally bitten by snakes, scorpions and other animals. Additionally, protective clothing and other logistics should be made available for women to reduce this hazard.
- ✓ Government and other Non-Governmental Organizations should provide subsidized credit facilities to the actors in the industry. In this vain, Micro and Small Loan Centres (MASLOC), National Board for Small Scale Industries (NBSSI), Business Advisory Centre (BAC), Fund for Small and Medium Enterprises Development (FUSMED) and other donor agencies available to the SME sector, including Private Enterprises and Export development Fund; Deutsche Gesellchaft Fuer Technische Zusammenarbeit (GTZ) should come on board.
- ✓ Government should establish Shea Co-operative Association to coordinate local Shea business activities by institutionalizing a national apex body to perform the coordination role at the district and community levels.

REFERENCES

- [1] Adams K. (2011), "Cheating in the Shea nut Industry, the Mirror, February 15, 2011
- [2] Addaquay, J. (2004), The Shea Butter Value Chain, Refining in West Africa. WATH Technical Report No. 3, Dakar, WATH.
- [3] Amoah, (2000), "Joint efforts for profit in Shea nut", Gratis Review, Vol.1. Tamale
- [4] Brush, CG, Carter, N, Gatewood, E, Greene, P & Hart, M (2006), Growth-Oriented Women Entrepreneurs and their Businesses: A Global Research Perspective. Edward Elgar Publishing, Cheltenham.
- [5] Britwum, A, Ghartey, N & Agbesinyale, P (2006), Organizing Labour in the Informal Sector, The Conditions of Rural Agriculture in Ghana, Ghana Universities Press, Accra.
- [6] Coughlin, J (2002), The Rise of Women Entrepreneurs, Quorum, Westport, Connecticut
- [7] CRIG (2009), Research by the Cocoa Research Institute of Ghana (CRIG) into the cultivation and processing of Sheanut as an alternative to cocoa products. Economics 20: 135-140.
- [8] Ghana Export Promotion Council (2008), Annual Report, Accra, GEPC.
- [9] Ghana Export Promotion Council (2009), Annual Report, Accra, GEPC.
- [10] Ghana Statistical Service (GSS) (2010) Annual Report
- [11] Ghana Statistical Service (GSS) (2013) Annual Report
- [12] FAOSTAT., (2008). Food and Agriculture Organization of the United Nations, FAOSTAT database Page 362. Ghana Statistical Service (2010) Report on Small Scale Business in Ghana. Vol. 3 No. 1: 2010 GOI (2006).

- [13] Feris R.S.B. (2001), "Evaluating the marketing opportunities for Shea nut and processed production in Uganda: Natural Resources Institute, submitted by USAID in October 2001 p 4 Ghana Statistical Service (2010).
- [14] Hall, J.B.; Aebischer D. P; Tomlinson H. F.; Osei-Amaning E And J. R.Hindle, (1996). Vitellaria Paradoxa: a Monograph. School of Agricultural and Forest Sciences Publication Number: 8, Bangor, University of Wales.
- [15] International Labour Organization (ILO), (2001), 'Gender Issues in Micro- Enterprise Ghana Statistical Service, 2002, 2000 Population and Housing Census: Summary of Final Results, Ghana Statistical Services, Accra
- [16] Jalbert, S (2000), Women Entrepreneurs in the Global Economy, Center for International Private Enterprise, Washington, DC.
- [17] Kletter, L. (2002). Highlights for 2002 Planning. Accra, TechnoServe Ghana

- [18] Obeng, I. S. (1994). The effects of domestic policies on the production and export of non-traditional agricultural commodities in Ghana. Unpublished M.Phil., Thesis. Department of Agricultural Economic and Farm Management. Faculty of Agriculture, University of Ghana, Legon.
- [19] Stichting Nederlande Vrijwilligers (2006), Improving Market Access for Smallholder Farmers: Concept note on developing shea market chains. SNV Shea Subsector Study Tamale Metropolitan Assembly Profile, 2006-2009
- [20] Techno-Serve Ghana (2004), Shea Industry Strategic Plan, Accra.
- [21] Yidana, J.A.(2009), Progress in developing technologies to domesticate the cultivation of Shea Trees (vittellariaparadoxel.) in Ghana: Agricultural and Food Sciences Journal of Ghana. Vol. 3 December, 2004. Pp249-267.

