



GLOBAL SHEA NUT COMMODITY CHAINS AND POVERTY ERADICATION IN NORTHERN GHANA:

MYTH OR REALITY?

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Abstract

The increase in shea production, accompanied by the shea market restructuring, is often portrayed as an engine for rural transformation that will help end endemic poverty in Northern Ghana. In order to assess the actual impact and future promises of smallholder integration into the global shea commodity chain, this study undertook qualitative and quantitative research on shea pickers in the Upper East and Upper West regions. It looked at access to shea trees and nuts, forms and levels of production, marketing patterns and prices, as well as the local benefits from the shea trade. The research results show that the sale of shea nuts does provide a welcome source of income for rural women and poor rural households in Northern Ghana at a time of the year when resources are scarce. The sale of shea nuts therefore mitigates poverty to a considerable degree. But the findings also suggest that the low level of production and rather minuscule income from the shea nut trade cannot easily be raised by most shea pickers, as they face a limited labor supply and a reduction in access to shea trees. This makes it unlikely that the future of the shea nut trade will be a decisive factor in widespread poverty eradication, even if the price of shea nuts rose above current exploitative levels. This is also reflected in the behavior of rural women who tend to disengage from shea picking when more profitable economic activities such as independent farming, wage labor, or business opportunities arise.

KEYWORDS: Global commodity chains, Northern Ghana, Poverty eradication, Shea nut trade, Smallholders

Introduction

The integration of African smallholders into global commodity chains is often portrayed as a panacea for rural transformation and poverty eradication. International donor organizations (World Bank, 2007, 2009) and national governments thus promote rural development approaches that champion market-oriented production. In Ghana, for example, neo-liberal and market-oriented policies are mirrored in national agricultural policies (MOFA, 2007). Following a largely neo-liberal agenda, the idea is to enhance

Ghana's comparative advantage, promote agricultural growth based on exports, diversify the country's export base, and compete in (emerging) international markets (MOFA, 2007, p. 28 ff). There are similar policies and regional rural development agenda targeting the country's underdeveloped north (IFAD, 2007; SADA, 2010). One product that has received renewed attention under the government's export diversification schemes is shea nuts – the fruit of the shea tree (*vitellaria paradoxa*). Apart from its

local uses, shea kernels and shea butter have long attracted commercial interest. From the 1970s up to 1994, when the shea nut trade was liberalized, trade in shea nuts in Ghana was largely state-controlled and involved the Cocoa Marketing Board, the Produce Buying Company (PBC), and licensed traders. After liberalization, the shea nut trade was taken over by a number of international and local trading companies buying shea nuts at local and district levels, often recruiting the networks of shea purchasing agents created by the government (Chalfin, 1996). International and local companies have fostered the development of the country's shea industry; consequently, Ghana has become one of the largest exporters of shea nuts worldwide (Holtzman, 2004, p. 4; Moore, 2008, p. 216), fuelled by the increase in the global demand for shea products (Strauss, 1992) (Gough, Langevang, & Namatovu, 2014). Many studies (e.g., Carette et al., 2009; Chalfin, 1996; Fold, 2004; Scholz, 2010) focusing on shifting shea trade patterns demonstrate the manner in which asymmetric power relations in the global shea value chain run against the interest of local shea producers and allow oligopolistic food processing and cosmetic companies to dictate the terms of trade, both in terms of the price and quality of the products exported.

Despite the wealth of literature, there is a dearth in scientific research addressing the impact of the commercialization of shea nuts on local livelihoods and the distributional aspects of the shea trade (Chalfin, 2003; Wardell & Fold, 2013). In general, smallholder integration into global shea commodity chains is seen as a great opportunity. Econometric studies on the livelihoods of shea producers in Ghana (Hatskevich & Essilfie, 2013; Hatskevich, Jenicek, & Antwi-Darkwah, 2011) portray a very optimistic picture of the potentially transformative and poverty-reducing impact of shea commercialization echoed in ecological studies (Moore, 2008; Poudyal, 2011). The same arguments are common in the public and political discourse in Northern Ghana. In the media the shea sector is portrayed as “a major poverty

alleviator and a catalyst to bridge the North-South developmental gap” (Kwode, 2010, p. 3); shea nuts are called “women’s gold” or the “cocoa of the North,” and there is the expectation that “small scale shea farmers and producers could become Ghana’s newest “nouveau riche” (Shore, 1996, p. 1). “Government agencies, but also development organizations and a host of NGOs try to promote and upgrade shea production, processing and marketing (Kwode, 2010, p. 2; UNDP, 2011, pp. 36-37). However, due to a lack of research on the (potential) local consequences of the expansion of the shea trade, it remains unclear whether the current discourse is actually based on a sober analysis of the facts or, rather, whether the argument that the shea industry has the potential to lift smallholders in Northern Ghana out of poverty is simply a narrative. The underlying questions of whether shea nuts have the potential to become more than a “feminized subsidy from nature” (Elias & Carney, 2007) and whether smallholder integration into the global shea commodity chain can become a “game changer” in poor rural households in Ghana remain unanswered.

Studies from Burkina Faso (Elias et al., 2007) and Benin (Schreckenber, 2004) show that rather than a way out of poverty, the shea nut trade and shea nut processing are complementary income activities in the diversified livelihood portfolio of rural women. The trade is important because it provides access to cash during the lean season when households lack both capital for farming and food stocks. Therefore, the shea nut trade mitigates poverty to some degree. At the same time, shea commercialization appears not only to be an economic opportunity; it is also a potentially threatening process that makes smallholders dependent on potentially volatile and oligopolistic global markets; and could transform gendered access rights to shea trees and control shea profits to the detriment of women (Boffa, Knudson, Yameogo, & Nikiema, 1996, p. 119; Wardell et al., 2013).

In order to assess the benefits and opportunities as well as the obstacles and perils that the

globalization of the shea trade brings to Ghanaian smallholders, the main focus of this article centers on the local socio-economic dynamics in our research areas in the Upper East Region (UER) and the Upper West Region (UWR) in Northern Ghana. Particularly, the article addresses the trade in pre-processed shea nuts, which presents the bulk of the shea products that rural women from Northern Ghana insert into global commodity chains, either via nut exporters or increasingly through local industrial shea butter processors who export shea butter (Canel, Idemudia, & North, 2010, p. 3). Based on qualitative and quantitative research in Northern Ghana, this

Table 1: Demographic information for UER and UWR

	UER	UWR
Population	702,110	1,046,545
Population density	118.4	38
Rate of urbanization	16.3	21.0
Literacy	47.5	46.2
Agricultural households	83.7	77.1
Household size	5.8	6.2
Poverty incidence*	70.4	87.9

Source: (*Coulombe & Wodon, 2007; GSS, 2010a)

The UER and UWR form part of Ghana's Guinea savannah belt, earmarked by a semi-arid climate and a dry season between April and November. The agro-ecological conditions of the two regions vary to some degree as population density in the UER has always been much higher; deforestation and soil degradation levels also surpass those of the UWR. Available land allows shifting cultivation in the UWR while most agricultural land is permanently cultivated in the UER. Agriculture is earmarked by smallholder production with a large percentage of households also keeping animals (UER: 82.8%; UWR: 63.7%) (GSS, 2010b, p. 296). In both regions, most agricultural households are not able to rely

article analyzes the current socio-economic and institutional dynamics sparked by the successive commercialization of shea nuts in four communities in the UER and the UWR of Ghana. The research project has been generously funded by Volkswagen under the initiative "Knowledge for Tomorrow – Cooperative Research Projects in Sub-Saharan Africa."

Study Area and Methodology

The UER and UWR have been selected because they record a high incidence of poverty and illiteracy and the high proportion of households involved in agriculture (see

produced for local consumption. Since the sourcing of pre-processed shea nuts dominates the Ghanaian shea market, and more than 90% of the shea nuts traded are bought by agro-processing companies, this study focuses on the local dynamics of the shea nut trade.

exclusively on farming activities, but like elsewhere (Crawford & Hartmann, 2008; Ellis, 2000), most smallholder households diversify their livelihood strategies as they engage in trade, food processing, wage labor, labor migration, hunting, and gathering (Laube, 2008).

The field research was conducted between February 2012 and May 2013 in four communities in the UER and UWR in Northern Ghana. Biu and Kologo were selected in the UER, two villages about 20-25 km west of Navrongo, the district capital of the Kasena Nankana East District (KNED). The selected villages in the UWR were Kpongou, a peri-urban farming community that

forms part of Wa (the regional capital of the UWR) and Dorimo, a rural community about 20 km north-east of Wa. All four research communities are predominantly smallholder farming communities, but notable differences exist. Biu and Kologo were selected from the UER because of the rich local research experience of the author, which allowed particularly close interaction with local shea pickers, processors, and traders. Kologo represents a typical rural farming community, where smallholders focus entirely on production in the rainy season, whereas the farmers in Biu, in addition to their rainy season farms, have access to Ghana's largest irrigation scheme (the Tono Irrigation Project). Thus, they are able to raise additional income during the dry season (rice and vegetables). The idea to include these two communities in the study was to capture the potential effects of agricultural intensification on the local shea industry.

Further, Dorimo and Kpongu were selected from the UWR in consultation with researchers at the University for Development Studies (UDS) in Wa who facilitated the survey work in both regions. It also appeared important to capture the difference between a typical rural community (Dorimo) and a peri-urban settlement (Kpongu). Thus, the study covers two rural farming villages in which people depend on the typical rural livelihood portfolio found in Northern Ghana (Yaro, 2006, p. 132) and two villages in which agricultural intensification (through irrigation) and peri-urban land, market, and labor dynamics enhance the local availability of additional income sources.

The study employed both qualitative and quantitative methods. Initially, participant observation in markets and during shea nut processing, combined with qualitative open-ended interviews with local shea nut pickers, processors,

Table 2). Typically, they stemmed from relatively large households, about two-thirds of which had diversified livelihoods beyond shea nut production and farming. Only in Biu, where access to irrigation increases farming opportunities and

traders, and agricultural extension agents in the UER, were conducted to gain first impressions about resource access, production patterns, and produce marketing from a historical perspective. Additionally, focus group discussions (7-22 participants) with shea nut pickers, processors, and traders were held in all four study communities. Group discussions were guided by semi-structured interview guides and were used to further explore the historical development of the local shea market and the development of rules and regulations granting access rights to shea trees and nuts within the community.

After this exploratory phase, a quantitative survey was designed to collect demographic and socio-economic background data as well as information on shea tree access rights, shea nut production and marketing, and the benefits of the shea trade from women engaged in shea picking. Apart from the shea picker survey, a physical count of the mature shea trees to which individual respondents had exclusive access was conducted. The survey, which was conducted with about 50 shea nut pickers in each community, was implemented by an enumeration team consisting of research assistants and students of the University of Development Studies. The questionnaire was pre-tested by the researcher and the enumeration team in Biu and Kpongu. In the absence of any shea nut picker database, the enumerators selected respondents using snowball sampling (Bernard, 2011, p. 143 ff). Since shea nut picking is an almost exclusive female activity, only female respondents were interviewed. However, enumerators were asked to pay attention to kinship patterns and the social structure (age, wealth status) of the communities and purposefully select respondents of different groups. The female respondents were mostly middle aged, illiterate women (see

income, did half of the households engage in agriculture and the shea business alone. The asset-based household well-being measure of the households in the various communities was largely comparable on a rather low level, given that assets owned by the households at the time of

the research - in the form of buildings, means of transport, agricultural equipment, animals, and consumer goods - had an average value of 2280.70 GHS (approx. 1,150 USD).

Neither the number of respondents nor the sampling strategy allowed for statistical representativeness, but the statistical evidence enabled a buttressing of arguments that are mainly derived from qualitative methods.

Table 2: Characteristics of respondents, respondents' households, and respondents' assets in the four research communities in the UER and UWR (2013)

	Name of community								
	UER				UWR				
	Biu (n=52)		Kologo (n=49)		Dorimo (n=49)		Kpongu (n=52)		
	M	S	M	S	M	S	M	S	
Age of respondents	50.4	2.1	41.1	2.0	44.8	2.5	34.1	1.6	
Household size	6.7	0.3	5.8	0.3	8.2	0.5	6.4	0.3	
Household well-being ¹	2101.0	378.1	2645.7	337.7	2066.7	342.1	2301.7	291.5	
Level of education	None	80.8%		81.6%		77.6%		80.8%	
	Basic	19.2%		18.4%		20.4%		17.3%	
	Secondary	0.0%		0.0%		2.0%		1.9%	
Livelihood portfolio	Only shea nut	3.8%		2.0%		2.0%		1.9%	
	Farming & shea nut	42.3%		28.6%		20.4%		13.5%	
	More sources	53.8%		69.4%		77.6%		84.6%	

Source: own data

¹ Well-being was measured with an index recording household assets, such as the type of building materials used (mud, block, thatch, zinc), the number of transportation means (motor bikes, bikes, donkey carts), the number of livestock (sheep, goat, donkey, pigs, cattle), agricultural implements (knapsack, donkey cart, pumping machines), and a weighing and summing up of the assets reported. The local cost of construction and the market prices of different items at the time of the research (e.g. knapsack=50 GhS=50 points) were taken in consideration. The wealth index varies between 0 and 14825 points with an average of 2280.27 points and a standard deviation of 2406.18 points.

Accessing, Collecting, and Processing Shea Nuts

In Northern Ghana, collecting and processing shea nuts is primarily a female-dominated activity that adult women, often assisted by their daughters, undertake. The gendered nature of this activity is a result of the wider division of labor in rural households. Shea nuts ripen at the beginning or during the rainy season, between June and August, when most men are very busy preparing and weeding the farms, a largely male activity. Since farming is the mainstay of rural livelihoods, the men cannot leave their farms to collect shea nuts. Therefore, women, who are less busy on the farms during that time, engage in shea nut collection. The processing of the nuts falls within the realm of food preparation, mainly the responsibility of women. Traditionally, all women knew how to process shea nuts and prepare shea butter although, in many homes, shea butter is no longer prepared on a regular basis and is either bought from the local market or replaced with industrially produced cooking oil.

Most of the shea nut-picking activities in the research areas are conducted in the early morning. Women set off in the early dawn to pick the shea nuts that have fallen overnight. In general, shea nuts are not harvested from the tree – apart from children looking for the fleshy parts of the fruit – but are left to fall to ensure full maturity and to avoid conflicts between those sharing access to the nuts on one tree. If many fruits are available, women usually pick as many nuts as they are able to carry – up to a basin (approx. 15-20 kg). Additional nuts may be heaped and collected later. This is only done in areas where access to the nuts is exclusive, and nobody can come and collect the piled nuts. In the house, the flesh is removed from the nuts, and the nuts are washed and left to dry. After drying, the nuts are parboiled, then shelled. The dry, shelled nuts are then stored, sold, or processed into shea butter. Many respondents complained about the tedious nature of shea picking as pickers get up at dawn and set off to their farms or into the bush. The distance covered may be between 10 and 15 kilometers altogether. Carrying such heavy loads, even half this distance, suggests that the activity is physically demanding for the nut pickers. Since picking happens during the rainy season, pickers may also be affected by rains and get sick, and since grasses stand high, they face the risk of snake bites while searching for the nuts.

The nuts can be collected from trees on farms and fallows or from trees in the bush. On the farms, shea saplings are left to grow during farming activities and may be protected from bush and farm fires by the removal of burnable grasses and farm residue from their vicinity. Trees on agricultural land are owned by landowners – in most cases, men – as land is traditionally owned and controlled by the male members of patrilineal clans. Although some women may have their own farm land, they gain access to the shea trees on the land of their own or their husband's patrilineage. Access to the trees is shared among the different women of one man in polygamous marriages and among the different women of extended families. Sharing rules vary in between communities and families. Women may pick together and share the nuts, have access to particular trees, to trees on particular farms, or take turns in harvesting the nuts. In Bui and Kologo, these rules only apply in the morning when most of the shea picking activities take place, but outsiders are allowed to pick leftover nuts in the afternoon. In the UER, women have full control over the shea nuts picked from trees owned by their male family members; in the UWR, nuts or the proceeds from the sale of per-processed nuts from trees owned by men have to be shared with the tree owner.

Many women do not have exclusive access rights to shea trees or do not get enough shea nuts from the trees on family land. Consequently, they also pick shea nuts from the bush.² Access to shea nuts from uncultivated

² Bush land in our research areas of Northern Ghana is controlled by earth priests and spiritual leaders who, through special ancestral links, are able to communicate with different spirits inhabiting the land. Earth priests conduct rites in order to bring about fertility, rich harvests, ample rains, communal well-being, and the pacification of the gods when their rules and norms are broken; for instance, when violent crimes are committed, when incest occurs, or when totem animals such as crocodiles, snakes, or chameleons are killed (Der, 2001; Kasanga & Kotey, 2001; Laube, 2008).

bush land is unrestricted. In our sample, 80% of the women interviewed harvested nuts from bush land, 55% had access to their husbands' farmland, and 16% harvested on land belonging to other family members. Only seven percent had their own farmland (see Table 3).

For almost half of the women, bush land was the most important source of shea nuts, followed by their husbands' farmland (36%) and family land (8%).

Table 3: Shea nut pickers' access to shea nuts on different types of land according to the importance of the source

Rank	Access to shea trees on type of land	First importance	Second importance	Third importance	Total
1	Bush	98 49%	60 30%	4 2%	162 80%
2	Husband's farmland	72 36%	38 19%	1 1%	111 55%
3	Family land	17 8%	10 5%	6 3%	33 16%
4	Own farmland	11 5%	3 1%	1 1%	15 7%
5	People's farms	4 2%	5 2%	0 0%	9 4%
Total		202 100%	116 57%	12 46%	202 100%

Source: own data

Shea nut sources vary between communities. The tree counting undertaking showed that women had exclusive access to an average of 31 shea nut trees, but the range was very wide ($SD=52.819$). Almost 40% of the women had little or no exclusive access, 43.3% had sufficient access, and less than 20% had abundant access (see Table 4). On average, shea pickers in the UWR had access to a larger number of trees ($Kpongu=25.54/Dorimo=78.58$) than those in the UER ($Biu=16.27/Kologo=5.24$). In Kpongu and Dorimo, where population density and land pressure have been historically lower, shea trees on peoples' farms are more ample. Because of the peri-urban conversion of bush land into building plots in Kpongu, bush land and therefore shea trees on bush land are increasingly scarce. Only 3.8% of the respondents in Kpongu and 14.3% of the respondents in Dorimo claimed that their main source of shea nuts was the bush. In Biu, and especially Kologo, this number was significantly higher (25.0 and 71.4%, respectively). Notwithstanding ecological factors, it can be observed that in Biu and Kpongu (villages with access to additional economic opportunities), shea nut pickers are less likely to spend their time picking shea nuts from the distant bush.

Table 4: Exclusive access to shea trees according to community (N=201)

No. of shea trees	Community				Total
	Biu	Dorimo	Kologo	Kpongu	
0-10	18 34.6%	5 10.4%	37 75.5%	19 36.5%	79 39.3%
11-50	32 61.5%	15 31.3%	12 24.5%	28 53.8%	87 43.3%
>50	2	28	0	5	35

	3.8%	58.3%	0.0%	9.6%	17.4%
Total	52	48	49	52	201
	100%	100%	100%	100%	100%

Source: own data

Interestingly, the regional variation in access to shea trees has little bearing on the amount of shea nuts that the pickers reportedly harvest (see Table 5). In usual years, when the fruiting of shea nuts is normal,³ women in Biu, Dorimo, and Kologo report that they are able to harvest and process approximately 230-260 kg of nuts. In Kpongu, despite relatively high average exclusive access to trees, the usual harvest fails to reach half that amount. In the group discussion, the shea pickers mentioned the following reasons: apart from economic opportunities in the regional capital, Wa, in Kpongu, the conversion of bush land has led to a situation whereby access to shea trees is largely on the farms of male family members. Since shea pickers in the UWR are women who have to share the nuts picked on family land with their husbands, the incentive for women to invest significant amounts of time and labor into shea nut picking is greatly reduced. This reduction in interest in shea nut picking in Kpongu can also explain the fact that the variation in harvest reported by respondents in Kpongu – between best, usual, and bad years – is much smaller than in the other three communities. Because of the wide variation in wild shea tree productivity, shea nut pickers face large fluctuations in harvests. In Biu, Dorimo, and Kologo, the amount of pre-processed shea nuts drops by almost 60% in years with bad harvests compared to years with normal fruiting. In years with bumper harvests, the amount of pre-processed nuts collected by pickers almost doubles. These variations make shea nut picking a relatively unreliable source of income.

Table 5: Amount of processed shea nuts that pickers harvest in bad, best, and usual years in the four study communities

		Mean	Max.	Min.	S
Amount of processed nuts in a bad year (KG)	Biu	104.1	352.0	35.2	75.7
	Dorimo	99.0	440.0	.0	69.2
	Kologo	103.1	440.0	35.2	75.5
	Kpongu	72.6	246.4	17.6	47.9
Amount of processed nuts in a best year (KG)	Biu	474.4	1320.0	70.4	263.7
	Dorimo	549.2	1830.4	70.4	371.9
	Kologo	420.2	1760.0	88.0	308.7
	Kpongu	108.3	528.0	35.2	84.8
Amount of processed nuts in a usual year (KG)	Biu	237.1	704.0	44.0	132.0
	Dorimo	261.1	880.0	35.2	193.5
	Kologo	232.2	880.0	44.0	158.5
	Kpongu	95.1	316.8	17.6	64.1

Source: own data

Asked about differences in the socio-economic status of households and their engagement in shea picking, the respondents in all four communities emphasized that women of different ages and from different socio-economic backgrounds engage in shea picking. A typical response was: “Who can stay and let money lie in the bush” (group discussion in Kologo, 11.12.2012). But it was also explained that women with meaningful alternative income sources, such as shop owners, brewers, or restaurant owners, do not leave their business

³ Wild shea trees have cyclical yielding patterns of 3 to 5 years, and the fruiting of trees varies annually. This makes the production of shea nuts unstable. Experiments by the Cocoa Research Institute in Ghana showed wide fluctuations in production (Yidana, 2004, pp. 252-253).

to engage in shea nut picking. In the UER villages, no significant difference existed in the amount of shea nuts harvested and processed by members of different wealth groups. However, women from better-off and rather rich households in Dorimo and from rather rich households in Kpongu tended to harvest and process two to three times as many shea nuts than those from very poor or poor backgrounds (see Table 6). While in the UER access to trees on husbands' and family land is more evenly spread between older and younger women, and additional shea trees are available in the bush, exclusive access to trees in the UWR is controlled by older women who, as is typical of rural households (Chayanov, 1966), control the labor of their aging children. In the group discussions, the women in the UWR explained that older girls help to pick shea nuts in the morning before school or in the afternoons.

Table 6: Average harvest of processed nuts per wealth group in the study communities (in Kg)

Wealth group	Name of community							
	Biu		Dorimo		Kologo		Kpongu	
	Mean	S	Mean	S	Mean	S	Mean	S
Very poor	252.1	148.7	231.7	167.3	209.5	181.5	88.0	55.3
Poor	233.9	119.7	176.0	90.4	225.5	131.9	88.0	50.3
Better off	183.0	104.4	406.6	272.2	264.0	119.9	97.6	84.5
Rather rich	252.3	193.9	396.0	62.2	242.9	222.4	220.0	62.2

Source: own data

The processed shea nuts can be stored, sold, or turned into shea butter locally; some are reserved for funerals when large quantities of shea butter are needed to prepare traditional dishes whereby shea nut can be given to support the bereaved family (see Table 7). The majority of shea pickers gather nuts to sell; only roughly one-fifth mainly pick to process the nuts into butter; but almost half of the women will at least save some nuts to process into shea butter for home consumption.

Table 7: Use of shea nuts by respondents in the four study communities

Use of shea nuts	First priority	Second priority
Selling	164 81%	26 13%
Processing butter	38 19%	92 45%
Funerals	0 0%	36 24%
Total	202 100%	154 76%

Source: own data

The following section describes the manner in which the local product enters the global shea nut commodity chains.

Local Integration into the Global Shea Nut Commodity Chain

In general, the interviewed shea pickers, traders, and the local agents of shea-exporting firms were rather indifferent in terms of which external trade partner they dealt with – so long as they got paid. Trade relationships are not perceived to be institutionalized, and individual shea pickers sell at different times and places. In general, most of the respondents sold most of their shea nuts to traders in the local market or to traders, agents, and shea butter processors within their community. However, since there is closer and more regular access to the district market (Kpongu and Biu), the number of shea pickers who reportedly sold in the district market was significantly higher (see Table 8). Since transportation costs are high, and especially very poor women are in dire need of cash during the lean season, they tend to sell more of their nuts locally. Only 37.8% of the very poor compared to 54.4% of the poor, 48.7% of the better off, and 54.5% of the rather rich respondents in our sample sold at least part of their nuts at the district market. On the contrary, very poor and poor women reported a much higher frequency in selling their products in the community.

Table 8: Marketing of shea nuts among the different study communities

		Name of community			
		Biu	Kologo	Dorimo	Kpongu
Location shea marketing	Local market	81.3%	87.0%	72.9%	86.0%
	District market	47.9%	26.1%	25.0%	86.0%
	Within community	2.1%	10.9%	33.3%	8.0%

Source: own data

As shea pickers sell their cache in different locations, they also sell to a variety of purchasers (see Table 9). Although local patterns vary, most shea nuts are sold to local or district traders that deal in a variety of foodstuffs. Almost equally important are sales to individual shea butter processors who produce shea butter for sale at the local or district market.

Table 9: Purchasers of shea nuts sold in different communities

		Trader	Shea nut processor	Agent	NGO	N	
Community	Dorimo	43	27	37	1	48	
		89.6%	56.2%	77.1%	2.1%		
	Kologo	28	33	10	0	46	
		60.9%	71.7%	21.7%	0.0%		
	Biu	27	22	24	0	47	
		57.4%	46.8%	51.1%	0.0%		
	Kpongu	49	37	18	0	51	
		96.1%	72.5%	35.3%	0.0%		
Total		147		119	89	1	192

Source: own data

The group discussions revealed that none of the study communities produced shea butter for long-distance trade. Less than half of the women engage in direct trade with the agents of export companies. Notwithstanding, this number may be underestimated as many local traders also act on behalf of export companies. They are not perceived as agents since they are not only involved in the buying and selling of shea nuts, but also trade in other farming products.

Apart from their role as middlemen in the export business, local shea traders perform an important function for many poor shea butter processors. According to information from the group discussions, most women sell large parts of their shea nuts shortly after harvest in the lean season when the need for cash and additional foodstuffs is highest. Local traders buy and store significant amounts of shea nuts and retail to local processors during the remainder of the year, usually with healthy profits, as the price of shea nuts frequently doubles or triples during the year (own observations 2012/2013; see Table 10; see also Carette, Malotau, van Leeuwen, & Tolcamp, 2009, p. 18; Elias et al., 2007, p. 43 on Burkina Faso).

Table 10: Changing prices of pre-processed shea nuts in the Navrongo market 2012/13⁴

Date	Price per bowl	Price (in GHS) per bag (85 kg)	Price (in USD) per bag (85 kg)
May 2012	1.20	15.00	7.77
June 2012	1.30	16.00	8.29
July 2012	1.50	18.00	9.33
August-September 2012	1.60	22.00	11.40
October-November 2012	1.80	25.00	12.95
December 2012-January 2013	2.00	30.00	15.54
February-March	2.50	40.00	20.72
April/May 2013	2.50	45.00	23.31

Source: own data

⁴ The average interbank rate from 05.01.2012-04.30.2013 according to OANDA.com was 0.5181 USD per 1 GHS; prices per bowl as reported by middle women at the village level; price per bag as paid by shea nut agents buying for exporters/industrial processors.

Although quarrels over the volumetric measuring of nuts regularly occur, as traders use different bowls for buying and selling, the role of the traders is also acclaimed. Poor shea processors often buy shea nuts on credit and only pay back after they have sold the butter. NGOs involved in the processing of shea nuts in the Northern Region (Carette et al., 2009) do not play any important role in the shea markets of the UER and UWR. The decision concerning where and whom to sell to may depend on a number of factors, such as price differentials between the local and district markets, kinship, friendship, the frequency and cost of access to markets, as well as the quality of nuts. The quality largely depends on the post-harvest processing (removal of flesh, drying, parboiling, second drying and removal of shell). For instance, if the nuts remain wet for too long, they begin to mold and turn black. Such nuts can easily be sold to agents and exporters (see also Fold, 2004, p. 74), but they yield little on the local market as the quality and amount of shea butter that can be manually extracted is lower than that of properly prepared shea kernels.

The international demand for shea nuts, mostly processed into shea butter used in cocoa butter equivalents (CBE) in the confectionary industry, has been on a constant increase. Between 1994 and 2007, the market for nuts rose annually, starting from 50,000 mt to 250,000 mt, and Ghana is among the major producers (UNCTAD, 2013). Therefore, market failure, often one of the major dangers of the increasing dependency of smallholders on global commodity chains, has not yet struck local shea producers. Even in good years, shea pickers face no difficulty in selling their cache. However, local traders who buy nuts

during harvesting season in order to retail at a profit during the dry season have reported that they have been forced to sell without profit when prices failed to rise. While almost half of the shea pickers did not report any marketing difficulties, more than a quarter complained about the generally low prices of shea nuts, especially given the tedious nature of shea nut picking. Other difficulties reported by the women were temporary demand fluctuations, cheating during weighing, the failure to pay nuts bought on credit, as well as problems of storage and transport.

Low prices are a consequence of the terms of trade, the asymmetric negotiating power in the value chain, as well as the large number of intermediaries involved. Shea nut pickers, local agents, and traders state that they are hardly able to substantially influence the prices offered by processors (see also Scholz, 2010, p. 10). Prices seem to be fixed by a small number of shea nut processing companies and depend on the fluctuations of the prices of cocoa and other CBEs (Elias et al., 2007, p. 49).

Despite these problems, almost all women in the research communities, unless otherwise engaged in business or wage labor, engage in shea picking. While respondents stated that in the past nuts were lying in the bush, rotting and being washed away by the rain, nowadays, virtually all accessible resources are exploited (e.g., group discussion Naga, 11.12.2012). The impact of the shea industry on local livelihoods and the question of whether the shea trade can truly contribute to poverty reduction in the rural areas in the UER and UWR are discussed below.

Profits and Benefits throughout Ghana's Shea Commodity Chain

Based on the amounts harvested and the prices paid for shea nuts, the participation of local smallholder households in the global shea commodity chain is only marginally profitable. Looking at the raw value of the shea nuts – not considering the cost and opportunity cost of picking and processing (see Table 11) – it becomes clear that shea pickers are able to pick shea nuts, on average, at a value of 63.57 GHS or 32.93 USD in a usual year.

Table 11: Total value of shea nuts produced per women/per person in a usual year ⁵

	N	Minimum	Maximum	Mean	S
Value of shea nuts in GHS	201	5.46	273.06	63.58	48.73
Value of shea nuts in USD	201	2.83	141.47	32.94	25.25

Source: own data

There is a significant degree of variation, however, even the 141.47 USD in value, reported by the shea picker with the largest yield, does not seem to be overly impressive. A closer analysis shows that there is no significant variation in the value of shea nuts produced in different communities and between women of different socio-economic backgrounds (see Table 12).

Table 12: Mean value of shea nuts picked in a usual year per community and wealth grouping

		Name of community			
Wealth group		Biu	Dorimo	Kologo	Kpongu
Very poor	Mean value of shea nuts in USD	40.53	37.25	33.68	14.15
Poor	Mean value of shea nuts in USD	37.61	28.29	36.25	14.15
Better off	Mean value of shea nuts in USD	29.43	65.36	42.44	15.69
Rather rich	Mean value of shea nuts in USD	40.56	63.66	39.05	35.37

Source: own data

As has been explained above, the existing variation can be explained by the lack of access to shea trees in the bush in Kpongu and the control of trees and labor by older women in wealthier households in the UWR.

This does not mean that shea nut picking fails to play an important role in the diversified livelihood portfolios of smallholder households in the UER and UWR; this is evident in the tireless efforts made and the risks taken by shea pickers. The nuts are a welcome subsidy at a time of the year when circumstances become direr. At the beginning of the rainy season, rural households experience food shortages and are in need of cash for daily expenses, including money for their children's education (see Table 13).

Table 13: Use of proceeds from shea nut sales

Rank	Use of shea profit	First priority	Second priority	Third priority	Total
1	Food	120 59%	55 27%	8 4%	183 39%
2	Education	49 24%	53 26%	17 8%	119 26%
3	Daily expenses	14 7%	24 12%	15 7%	53 11%
4	Health expenses	1 1%	19 9%	31 15%	51 11%
5	Clothes	6 3%	5 2%	14 7%	25 5%
6	Farm inputs	3 1%	5 2%	16 8%	24 5%
7	Transport	0	5	0	5

⁵ The value of shea nuts is calculated on the basis of the harvest they report for a normal year: the average price for a kg of shea nuts as paid by agents during the 2012/2013 shea nut season. This is rather optimistic as most shea nut pickers actually sold during the lean season when prices were lower and often sold to local brokers who pay even less. The USD value is derived using the exchange rate as per footnote 4.

		0%	2%	0%	1%
8	Other	2	1	4	7
		1%	1%	4%	2%
	Total	202	168	104	474
		100%	83%	51%	100%

Source: own data

The picture is similar in other parts of West Africa (Schreckenber, 2004, p. 99; Shackleton & Gumbo, 2010, p. 82). The shea nut trade is important for food security, rural education, healthcare, and a variety of daily expenses. However, it is nothing more than a welcome addition to the incomes of diversifying poor rural households, which can easily be reaped as rural women have a less busy farm schedule and face little opportunity cost at the beginning of the rainy and farming season. If real choices have to be made, women often engage in more meaningful activities than shea nut picking. As one of our respondents explained:

“When it is the season for shea nuts and I know that my work on the farm is less, I then spend a day or two to go and look for nuts, but my main thing is the farming work. But if I have time, I go to pick. I don’t have the time to pick shea nuts all the time. I will be ready [with my farming], but by then, Shea nut season will be over. So last year, I did not pick anything, and even this year, I did not pick anything meaningful. But I can tell you that it was better this year because there was this day I was going to my farm, and it started to rain heavily. So I took shelter under one of the trees there. Afterwards, I just picked shea nuts from around there and brought it home; that is all I picked last year.” (Akanvaani Yuuya, Biu, UER, 11.13.2012)

In the group discussions, many women explained that if they could choose, they would rather engage in other economic activities than shea nut picking. Women who have their own farms prefer to focus on these. As Achampong (11.09.2012, Biu, UER), a roughly forty-year-old mother of four explained:

“Your own work is more profitable than doing other jobs like picking nuts, making oil, or weeding for somebody for money. Your own farm work is more beneficial. [...]. In your own farm work, you get your harvest in bulk. So you can sell it at once and use the money to get something meaningful. That is why I prefer my own.”

Others engage in wage labor or take advantage of businesses opportunities, such as trading, food processing, and brewing. However, for women who have no alternative and more beneficial income sources, shea nut picking, though not highly profitable, remains beneficial. For these women, shea nut picking makes economic sense as there is no opportunity cost involved. But if the cost of labor is priced according to the official Ghanaian minimum wage (see Table 14), the prices paid for processed shea nuts, especially during or shortly after the harvesting season when most women sell, are significantly below the cost of production.

Table 14 Estimated costs of production and prices paid for shea nuts at the local level in USD (shea season 2012/2013)

Time	Local cost of production for one MT	Price of one MT of shea nuts bought by
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	of shea nuts ⁶	local traders ⁷
May 2012	240.82	81.81
June 2012	240.82	88.62
July 2012	240.82	102.26
August-September 2012	240.82	109.07
October-November 2012	240.82	122.71
December 2012-January 2013	240.82	136.34
February-March 013	240.82	170.43
April/May 2013	240.82	170.43
Average	240.82	122.71

Source: own data and Addaquaye, 2011, p. 6

⁶ Cost of labor and input factors according to Addaquaye (2011: 6): labor cost has been adjusted to the 2012 daily minimum wage (4.48 GHS/8 hrs); input cost has been inflation adjusted between June 2010 and June 2012 (19.69%).

⁷ Own observation

These figures suggest that shea nut picking and pre-processing, the activities that most rural women in Northern Ghana engage in, are exploitative rather than beneficial and are only maintained in the absence of alternative income opportunities. It appears that the main profits of the shea business are made at higher levels of the commodity chain. While traders and brokers make some profit by mediating between volumetric measurements at the local level and weighing of nuts at the retail level and also receive commissions from processors, exporters, or assemblers for higher-level shea agents (who bulk shea nuts for retail to processors, exporters, or international buyers) and the gains made at this level are not outrageous. Observations and market measurements showed that the gains made in this way amount to an estimated 30%. Depending on the capital they receive from the agents of larger companies, as well as the level of operation in the local shea commodity chain (village or district market), the local shea traders interviewed handled 10 to 500 bags of shea nuts. During the 2012/2013 shea nut season, the commission paid by the agents was 2 GHS per bag of shea nuts. Despite these sources of income, local brokers did not seem to be earning large sums of money. Given that local traders are able to trade in 100 bags, which is already significant for most brokers, they would have received 200 GHS in commission and earned roughly 625 GHS from the differences in measurement.⁸ Not considering the cost of transport, storage, labor, and opportunity costs, local traders able to buy and sell 100 bags of shea nuts would have earned approximately 825 GHS/323 USD in the 2012/2013 shea nut season. They could make additional profit if they were able to use their own money to buy shea nuts during the harvesting season when they are cheap and sell them at peak prices shortly before the new harvest. However, many of the local brokers we encountered lacked the necessary capital to engage in large-scale

⁸ The calculation is based on the assumption that a local trader is able to gain roughly 30% from the differences in measurement; it is also based on the average price paid to shea nut pickers in the 2012/2013 season.

hoarding although they often kept some bags of high-quality nuts that can be sold to local shea abutter processors in the dry season when prices are high. Local traders were mainly illiterate women and men who entered the shea nut trade as one of their business lines. They mostly also traded in other agricultural goods and showed little sign of large accumulated wealth. Larger profits are made further up the commodity chain. It is estimated that the largest profits within the Ghanaian shea commodity chain are made by the large international shea processing companies and large shea traders and shea processors who have their own networks of agents and assemblers. Although traders and processors seem to generate large profits by buying nuts locally at exploitative prices, given the moderate quantities that women are able to harvest and the shortage of labor in rural households during the harvesting season, it remains questionable whether shea nut picking and pre-processing have any potential to largely reduce poverty and transform rural Northern Ghana as is sometimes alleged in policy statements and NGO reports.

Conclusion

The research results presented above clearly illustrate that shea nut picking is an important part of the diversified local livelihood portfolios in the study communities and that it is deeply rooted in the local historical and cultural contexts. Rural women, most of them illiterate or with little education, engage in this risky, tedious, and time-consuming activity at a time of year when many rural households lack financial resources, often even foodstuffs, and when their heavy domestic and agricultural schedule allows. Both the general level of poverty of rural households and the timing of the shea harvest make shea nut picking an important activity, which helps mitigate the worst consequences of rural poverty. Furthermore, shea butter is an important ingredient in the local cuisine as well as in social and ritual life. The amount of shea nuts that women can pick is determined by the access they can get to shea trees and the labor they can command. Access to shea trees in rural communities has become

institutionalized since the commercialization of the shea trade. Different rules governing access to trees within the community and within individual families on different types of land have developed. Many women lack exclusive access to shea trees and have to share trees with female relatives or are forced to pick from the bush where bush land is still available.

But even with access to ample shea nuts, women are hampered by the time available for this activity. Between domestic responsibilities, the need to work on their husbands' or their own farms, which is economically more beneficial, only limited working time (usually in the early morning and the late afternoon) can be afforded for shea picking and processing. Therefore, the amount of nuts that women are able to pick is limited. Although in wealthier households (particularly in the UWR where older women control a large amount of family-owned trees and the labor of grown-up children) where the amount can be substantial, average harvests are limited. So too is the income that can be generated from shea nut picking. This is partly due to the time of the year when most women sell their shea nuts – just after harvest when prices are low – partly due to the poor and, given the cost involved, exploitative prices generally offered. In this light, the shea narratives about the transformative potential of smallholder integration into the global shea commodity chain, as they are being told by the media, politicians, international and local NGOs, seem exaggerated. It is unlikely that shea nut pickers will be able to substantially increase their production with labor shortages and dwindling access to shea trees. Especially in the bush, the most important source of shea nuts for most women, access is becoming more difficult. In peri-urban settings like Kpong, most bush land has already been converted into building plots; in rural areas like Kologo or Biu, there are enormous amounts of pressure on the bush. Local chiefs give out the bush to Fulani herdsmen who often feed cattle (which they herd for local businesses and 'big men') on shea nuts. More importantly, the conversion of bush land as a consequence of large

and medium-sized agricultural projects, and mango farms in the case of Biu and Kologo, by international and local investors further decreases access to the shea nuts. These are dynamics, which are not peculiar to the study communities but happen all over (Northern) Ghana as urbanization is increasing, and investors seek opportunities to produce cash crops, agricultural raw materials, and bio fuels (Laube, 2008; Lund, 2006; Schoneveld, German, & Nutakor, 2011; Ubink & Amanor, 2008). It is therefore questionable whether individual pickers will be able to increase or even maintain their level of production in the long run. Similarly, despite increasing global demand, it cannot be expected that prices for shea nuts or the share of the profit that women gain within the Ghanaian or global commodity chain will rise to a level whereby shea nut picking becomes something more than just a welcome subsidy for impoverished households. At the global level, shea prices are determined by cocoa prices and the prices of other vegetable oils that can serve as substitutes for shea butter in CBEs or the food industry in general. It is unlikely that shea prices will explode in a global economic system in which prices in global agricultural commodity chains, as in other sectors of the economy, are dictated by a limited number of large transnational companies that can outplay competition between different producers and easily substitute products (Gereffi, 1994). National-level policies in Ghana, such as the introduction of minimum prices for shea nuts, which are annually announced by the government since 2011 (GBC, 2011), have remained ineffective as prices have not been enforced and were often set lower than the actual market price.

But even in the unlikely case that prices were to multiply, shea nut pickers would still be far from becoming Ghana's "nouveau riche" (Shore, 1996). Given that the average shea income in the study communities (in the 2012/2013 season) was approximately 32 USD – a figure that is mirrored in studies on other West African countries (Belcher & Schreckenber, 2007; Boffa et al., 1996; Elias et al., 2007; Schreckenber, 2004) –

shea nut picking and processing are unlikely to become a “game changer” or a transformative force for the majority of Northern Ghanaian smallholder households. This finding is mirrored in a report (FAO, 2003) about the benefits of non-timber forest products, which states that “the picture is somewhat less unambiguous regarding how these products may assist poor people to accumulate assets, improve their standards of living and move out of poverty, certainly in any enduring way. Non-wood forest products, thus, tend to be more central to poverty mitigation than is, preventing the deepening of poverty, than to poverty reduction or elimination, or lifting people out of poverty” (cited in Shackleton et al., 2010, p. 76).

This is not to denounce attempts by government agencies, NGOs, and development partners to assist shea traders with fair prices, quality premiums, training, credit, improved transport facilities, or even wellington boots and gloves. Similar attempts to engage in artisanal or industrial shea butter processing – both for local and global markets – have helped to better the lot of those engaged, however limited the number may be. As stated above, any additional economic opportunity for impoverished rural households in Northern Ghana is welcome. However, in the light of widespread endemic poverty in this region, the transformative capacity of the shea nut trade seems to be a myth rather than a reality, and different avenues for comprehensive rural transformation and poverty eradication will have to be sought. In the meantime, the current shea nut narrative seems to be a welcome discursive means with which vested economic, political, and ideological interests can be masked.

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