Facilitating entry into shea processing: a study of two interventions in Northern Ghana

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Introduction

Trends in rural development in Africa

Like many other international publications and pronouncements since the milestone World Development Report 2008 on 'Agriculture for Development' (World Bank 2007), a recent report by the African Development Bank signals the importance of the agricultural sector for poverty reduction and development in Africa (Kanu, Salami and Numasawa 2014). Because high economic growth rates in Africa experienced since 2000 have not translated into major poverty reduction in the rural areas which support livelihoods for 90% of the population, 'inclusive agricultural growth' is needed, allied to 'green growth' to meet concerns for good environmental management.

The development imperatives for Ghana, like much of Sub-Saharan Africa, include poverty reduction, food security, and sustainable development within a context of significant but unequal economic growth and natural resource constraints. It is in an often unsympathetic agro-ecological, economic and political context that attention is turning towards more diverse production systems, livelihood strategies and engagement with markets by small farmers.

Another recent report highlights the need and opportunities for inclusive entrepreneurism throughout the value chains for African commodities (Agriculture for Impact 2014). This includes value addition by processing of a wider range of rural products. But smallholder inclusion in value chains is no simple matter (Helmsing and Vellema 2011; Poole 2013), not least because recognition of rural heterogeneity means it is simplistic to assume that all producers are equally willing and able to access markets (Poole, Chitundu and Msoni 2013). Among the approaches to inclusive growth in rural food chains is a sector-wide, multi-stakeholder approach to forestry projects, which should address the optimal management and exploitation of tree and forest resources (Kanu et al. 2014). Much is yet to be learnt about the relationship between trees, nutrition, economics and wellbeing (Ickowitz, Powell, Salim and Sunderland 2014). In the search for food and income security, understanding the contribution of tree crops is important.

Trees: inclusive development of food chains in the Sahelian region

Tree foods are part of the natural and economic landscape, with potential for a greater contribution to poor rural people's subsistence and engagement with markets than hitherto recognised. Shea (*Vitellaria paradoxa*) is one tree whose products have been better researched. It so happens that in the shea sector, environmental conservation, income generation, and gender equity potentially meet in a triple-win situation. While natural resource endowments commonly belong in the first instance to men, harvesting, processing and marketing in the West African shea industry are primarily in the hands of women, often individually but also through collective organisations. There is considerable potential for shea to contribute to the economic empowerment of women through enterprise and employment creation in the region, particularly through interventions in shea value chain development (Elias and Carney 2005).

At present women are at the bottom of an increasingly lucrative shea value chain and there is significant activity from governments and NGOs to promote the shea industry as a development that favours rural women in the Sahel region. Traditionally rural women have had largely unrestricted access to both shea trees and their products. However, historically they have had little capacity to influence the terms of their engagement with the shea trade in order to increase the returns they realise from these activities.

This article examines interventions in Ghana's Upper West Region at two different processing stages of the value chain intended to facilitate women's participation in, and enhance the benefits accruing from, shea harvesting and processing. Both interventions concern local innovations in chain organisation. The first intervention targeted the primary processing of shea nuts, that is, the transformation of 'wet' shea nuts to dried kernels for sale. This initiative sought to improve producer prices and nut quality though organic certification. The second intervention focused on the secondary processing of shea kernels into 'butter'. Here the organisation of women into cooperative groups aimed to improve women's access to markets and machinery. Both processing activities are widely carried out by women working independently, that is, outside any formal group or producer organisation. The study uses non-group participants as a comparison group to assess the impact of the interventions on chain participation. We use the responses of the nut pickers and butter processors to qualitative and quantitative field research undertaken in 2010 to explore the constraints facing women's participation at two points in the shea value chain.

Shea (Vitellaria paradoxa)

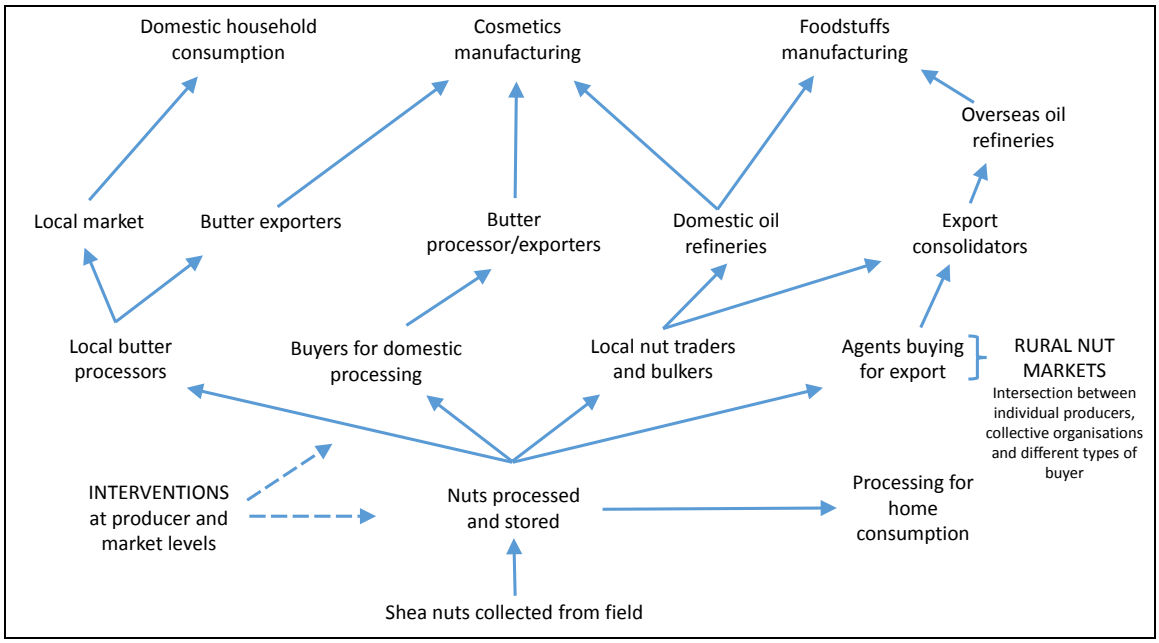
Shea trees are found in the semi-arid regions of West Africa, particularly in the savannah belt which stretches from Senegal to Chad and encompasses all of northern Ghana. Here shea is a dominant tree species of the savannah parklands and trees are preserved in high numbers on farmlands. The kernels of the shea fruit are high in oils and have long been collected and processed by women in savannah communities, where they provide a useful source of fats in diets. The fat, extracted as shea butter, also has cosmetic and pharmaceutical uses as a skin preparation. The production of shea butter and processed nuts provides a valuable income source for women and rural households in this region (Chalfin 2004).

Shea value chain

Shea nuts and butter have been traded in West Africa for centuries. However in the past decades the deregulation of trade in shea combined with increased demand for shea both as a cocoa butter substitute and a 'natural' cosmetic product have led to a rapid increase in demand. The domestic and regional markets for shea butter for human consumption and for industrial purposes are huge, and international markets are growing (Sidibé, Vellema, Dembélé, Témé, Yossi, Traoré and Kuyper 2014).

The status of shea nut activities as women's work has focused attention on the potential of the industry as promising opportunities for remote and low agricultural potential semi-arid regions offering particular benefits to women. At present rural women find themselves at the bottom of a value chain with end points in multi-national food companies and the local domestic market (Figure 1). Fruits are picked and processed mainly by women and sold into local nut markets where they are bought by a range of actors including local butter processors and local nut traders. More recently agents buying for export have become increasingly prominent as the market has grown. Since 2002 the establishment of industrial shea butter extraction facilities and shea butter oil refineries has added further channels to the shea value chain in Ghana.

Figure 1. Shea value chain



Institutional interventions in the shea value chain have been numerous but most visible are the activities of NGOs who seek to increase women's involvement in butter-making by encouraging group organisation, providing training and equipment, and facilitating links with international buyers.

NGOs have also sought to increase returns to those at the bottom of the value chain, the pickers, by providing training in nut processing, organising pickers and linking pickers with exporters. At the producer level, research on the maintenance and management of shea trees has also received some attention.

Case studies

Intervention 1. Organic certification

Seventeen villages that comprise the Wechiau Hippo Sanctuary in the upper West region of Ghana have undertaken to protect the riverine forest within their lands as part of a community conservation project. SFC organised the certification with financial assistance of Dutch NGO SNV, the sanctuary area has been certified as organic. This initiative has created the opportunity for the community, through the sanctuary management board, to form a partnership with a fruit exporting company, the Savannah Fruits Company (SFC) to supply certified nuts for the production of organic shea butter for export.

SFC registers and certifies women; provides training on organic principles and nut processing; supplies bags and collects from pickup points in each community. Collectors are paid a premium of 15 percent after the close of the shea buying season in January. In addition SFC also pays a conservation premium to the Wechiau Sanctuary Management Board (SMB). In each community the certified pickers form a group and nominate one or two representatives to serve as contact persons between SFC and the community.

Intervention 2. The Tihitaribu Cooperative, Guli

The second intervention considered is a butter-processing cooperative in a village 4 kms outside Wa, the capital of Ghana's Upper West Region. The cooperative in Guli began as a mutual self-help group in 1979. This group, based on traditional modes of group cooperation, assisted women to organise for butter processing.

In 2002 the Guli group was linked to the Government of Ghana Agriculture Sector Support and Improvement Project (AGSSIP) by the Regional Technology Transfer Center (RTTC) to access a grant in the form of shea butter processing equipment; and they set up a processing centre in which the equipment was installed. The women's group became registered as a cooperative in 2004 with the assistance of a local

organisation called Youth Action on Reproductive Order (YARO). YARO has supported group development, savings and loans schemes, and quality management in butter processing.

In 2008 RTTC linked the group to a buyer in Accra (Ideal Providence) seeking butter for export. The buyer provided new machinery and premises to site the machines and create a space for weighing, packing and storing butter. Butter is collected from the store on a monthly basis. Payment is made to the cooperative; the secretary is then responsible for dispensing payment to each woman according to the number of 25 kg boxes she has supplied. The buyer has also contributed a pre-school to the community.

In 2010 there were 181 registered members of the cooperative. The cooperative provides loans to members and also makes applications for group loans. These are then disbursed amongst members.

Research methods

To investigate the impact of certification on women's participation in organic shea processing a questionnaire survey of nut pickers was carried out in 2010. A total of ninety nut pickers were selected from the following groups: 1) Women certified as organic pickers for at least 3 years; 2) Women within the organic certification zone who are not certified; 3) Women outside the certification zone but operating in similar ecological and market conditions.

In addition to the questionnaire surveys, a total of fourteen key informant interviews were conducted with experienced shea pickers to elucidate oral histories concerning the changing role of shea in local livelihoods.

For Group 1, women were randomly selected from the SFC list of pickers. The Wechiau sanctuary development zone contains 18 certified picker groups in 17 villages. Every other village was selected to provide a sample of nine villages. In each village women were sampled in proportion to the total number certified in that village. However, there was no pre-existing list of non–certified women. To sample non-certified women, certified women were asked to name women they knew who were not certified. A corresponding number of non-certified women were selected randomly from this list (Group 2).

In the area adjacent to the sanctuary all communities within 10 km of the sanctuary edge were listed. Two communities were selected according to the availability of village lists, and respondents were selected randomly from these lists (Group 3).

Respondents were asked about their nut processing activities and income in the previous season, how this had changed in the previous 5 years and their future intentions. Certified organic collectors were asked about their motivations for joining the group.

Intervention 2: To explore the impacts of cooperative membership, shea butter processors were surveyed in the village of Guli and three districts within the wider Wa municipality. A total of 60 women were surveyed, 30 coop members and 30 non-members.

For members of the cooperative every sixth woman on the list of members was selected. There were no butter producers who were not members of the cooperative in this village. Non-cooperative butter producers were therefore sought within three districts of the Wa municipality (Kpaguri, Duokpong, and Duobile).

In these communities, there were no lists of processors. With the assistance of a community leader the first non-co-operative processor was identified and interviewed. From then on, a snowballing technique was used, whereby each non-co-operative processor interviewed identified/recommended the next non-co-operative processor to be interviewed. This process was repeated until 30 processors were interviewed. Women were asked about the quantities of butter produced, income and how this had changed in the past 5 years.

Findings

Participation in certified organic shea nut processing

Nut processing involves collecting shea fruits from fields and bush, boiling to remove the outer pulp, drying nuts in the sun and cracking the hard outer shell to remove the inner kernel. Nuts are then bagged and stored for processing or sale. The time devoted to these activities varied considerably between

respondents, the mean estimated time spent to produce one bag (90kg) of nuts was 72 hours over 24 days. The average number of bags produced for the 2009 season was 3.4 per woman.

Comparing the groups inside and outside the sanctuary showed that similar quantities were produced. The data therefore suggest that the certification scheme has not impacted on the quantity of shea nuts processed by women (Table 1). The income reported for the certified group is not significantly higher than for the non-certified groups, however due to the SFC premium the price per kg received by certified pickers was higher than those received by non-certified pickers.

Although there was no evidence of higher nut volumes for women in the certified zone, responses concerning perceived changes in nut picking activity and incomes indicated the following differences between the groups:

- certified pickers were significantly more likely to report that they had increased the time they spend picking compared to five years ago;
- pickers in the certified zone (whether certified or not) were more likely to report an increase in shea income in the past 5 years.

Increased time spent picking can be both 'intentional' and 'unintentional', for example, some women reported spending more time on nut picking as a consequence of poor nut yields or changing access to trees (for example in widowhood) which means that collecting nuts takes longer. Similarly, aging was also given as a reason for taking longer to collect nuts. These were also the main reasons given for spending less time on nut picking.

Pickers inside and outside the zone attributed higher incomes to a generally improved market and better prices. Activity by NGOs and other agencies in the shea sector was also cited as reasons for increased income – again for certified and non-certified pickers alike.

Table 1. Primary shea processing activity

	Certified picker	Non-certified (within zone)	Non-certified (outside zone)
Respondents	33	26	31
No. of 90 kg bags produced (2009)	3.6	2.9	3.5
Income Ghana cedis (2009)	81.6	67.4	74.4[1]
Respondent reporting increased time on shea 2004-2009	27 (82%)	16 (67%)	17 (55%)*
Respondent reporting increased income from shea 2004-2009	30 (91%)	22 (92%)	21 (68%)*
Respondents who wish to increase activity	29 (88%)	22 (92%)	23 (74%)
Respondents who believe they have an influence of pricing	25	4	2

[1]for women who sell by the bowl this recollection is harder to make and was not possible for all respondents. In contrast SFC sellers usually receive this in one or two payments.
* Differences significant at $P<0.05$ (Chi-squared test)

Women were asked if they would like to increase the time spent on nut picking and processing. Women within the sanctuary zone appeared to be more willing to consider this (Table 1). The main reason given was in order to increase incomes; a few women referred to the strong market for shea. Reasons for not wishing to increase shea picking activity were aging or poor health and conflicts with farming and domestic duties.

Motivation for certification

A range of reasons for choosing to become a certified picker were given by respondents (Table 2).

Women selling in the market tend to sell in small quantities as and when they need money, especially for food purchases in the lean season between June and September when food stocks are lowest. Selling nuts can be tedious if the market is slow, they must carry small quantities of nuts to the market several times before they are purchased. In addition nuts are sometimes purchased on credit with risk of non-payment.

The most frequently cited reason for choice of sales channel was the better price obtained from SFC. Other important reasons were the fair measurement they received from SFC, reflecting the poor deal women sometimes receive from market buyers where nuts are bought by the bowl and there is potential for cheating due to non-standard measures. Women trusted the transparent way in which SFC transactions are carried out. SFC also purchases nuts from in centralized purchasing centres each community which saves women time transporting and marketing nuts.

Informal discussions with certified pickers at Wechiau in a preliminary visit also supported the value women place in receiving a lump payment. Selling in bulk to SFC afforded women the chance to receive a lump sum for their nuts and the potential to use this income for more substantial purchases. Finally, women described how participation in the certification scheme demonstrates unity with the community and the broader Wechiau development project.

Table 2. Reasons for becoming a certified picker

Reason	**Rank**			**Total**
	1st	2nd	3rd	
Better price / Payment of premium	11	14	2	27
Fair measurement	7	6	4	17
Farmgate purchase	7	1	3	11
Unity	4	1	1	6
Lump payments	1	2	4	7
Access to an assured market	2	0	0	2
Group needed to access external support	1	0	1	2
To receive training	0	1	0	1
Other	0	1	0	1
Total	33	26	15	74

Of the 26 respondents who were eligible for certification but had not joined the scheme the majority (65 per cent) indicated that they were not certified because they had been absent or unavailable at the time of registration rather than because they had made a decision not to sign up to the scheme. Five women indicated that they did not have time to attend the SFC training and one did not want to have to wait for SFC to come and buy nuts. Finally some respondents stated 'other household members are selling to SFC' as a reason which suggested that there may be some benefit in maintaining some diversity of sales outlets for households. Overall, the majority of non-certified women expressed an interest in taking part in the scheme.

Pricing

The area of greatest difference between women inside and outside the certification scheme concerned perceived influence over pricing.

In each community in the sanctuary zone a representative is selected to represent the group at meetings with SFC. As a mechanism to transmit information and enhance empowerment it appeared to be successful: women in the certification scheme were more likely to feel that they had some influence over the prices they receive for their product (Table 1). Outside of the certification scheme the only recourse women had if they are unhappy with prices, was to refuse to sell their nuts at that time. While shea prices tend to double over the course of the season, the immediate economic situation of many women and households meant that few were able to store nuts until the price improved, and they were compelled to sell at prevailing prices.

Through SFC, women members of communities in the Wechiau Hippo Sanctuary gained certification as organic producers of shea, enabling them to form coordinated commercial alliances with SFC serving the export market for organic shea butter. Results showed that accreditation and enhanced access to higher value markets did not primarily enable the participants to increase throughput or increase incomes significantly, although there was a positive price effect. It is difficult to separate economic outcomes due to the intervention from those due to external market conditions. Results concerning time spent on shea handling were ambiguous, but pointed towards greater confidence of and ease in undertaking transactions with a trusted buyer. In this sense, market access had primarily transaction cost-reducing and empowerment effects: sellers enjoyed greater control of sales, both pricing, timing and payments, and could deal with confidence with the buyer from a position of community cohesion.

Intervention 2: The Tihitaribu Cooperative: shea butter processing

Information on quantities of nuts processed and time spent on butter making were recorded, however the some of the values reported were unreasonably high and therefore considered unreliable. We therefore concentrate on women's reported *changes* in butter making in the past five years.

Women in the cooperative were significantly more likely to report that they had increased time spent, and income derived from butter making over the past 5 years (Table 3). Increased capacity to purchase and process nuts were the main reasons given for allocating more time. All the butter processors surveyed regardless of cooperative membership had access to mechanised grinding and crushing. In all sites women also come together in informal work groups during the 'kneading' stage (a labour intensive process of beating the ground paste) of butter making. Women inside the cooperative attributed higher incomes to the presence of an assured buyer and bulk selling of butter. In contrast the lack of buyers was the most often cited reason for reduced income among the non-cooperative members.

The response to whether women would like to increase the amount they produce was overwhelmingly negative for both groups (26 and 24 out of 30). However, the reasons for not wishing to increase time on butter are quite different for the two groups (Table 4). Women within the cooperative viewed access to nuts as a limitation on production whereas those outside are more likely to cite lack of a market as a reason for not wishing to increase production.

Table 3. Reported change in income from and time spent on butter activities

	Coop member n=30	Non-member n=30
Respondents reporting increased income from butter 2004-2009	23 (77%)	5 (17%)
Respondents reporting increased time on butter 2004-2009	17 (57%)	5 (17%)
Respondents wishing to increase activity	4 (13%)	6 (20%)

Table 4. Reasons for not wishing to increase time on butter processing

Reason	**Coop**	**Non-coop**
No nuts available	18	1
Did not wish to commit more time (domestic responsibilities)	6	7
No market buyer	1	11
Aging or poor health	1	5
Total	26	24

Benefits of cooperative membership

The main reason for joining the cooperative for the women interviewed was the access to an assured buyer (Table 5). In addition to the certainty that this provides it also makes marketing easier (no need to carry butter to Wa market) and reduced the overheads of marketing butter individually.

Women in the cooperative received other benefits as a result of membership. In Guli cooperative members contributed to the wages of a woman who minded their children whilst their mothers were working. Women in the cooperative also received training in nut storage, butter making, and group organisation.

Table 5. Reasons for cooperative membership

Reason given	1st	2nd	3rd	Total
Assured buyer	18	3	-	21
Ease of marketing	5	3	-	8
Bulk purchasing	3	5	-	8
Group unity	3	1	1	5
To access other assistance	1	0	-	1
Butter price	0	1	-	1
Reduced overheads	0	3	-	3

The Tihitaribu Cooperative, which has a long history, found that its operations were boosted from 2008 onwards by commercial linkages with a private buyer supported by investment in improved processing facilities. The data suggest that the butter-processing cooperative has a positive impact on women's participation in shea processing. In contrast to the Wechiau intervention, the investment in processing led to an increase in scale: shea throughput increased as women dedicated more time to the enterprise. Growth was limited by the availability of nuts. The attraction was, like Wechiau, the higher prices in an assured local market for processed nuts. Amongst non-coop members the absence of a buyer was the main reason given for lower incomes and reluctance to increase investment in butter.

Discussion

It is evident from these studies that interventions in rural enterprises can effect improvements in market access by smallholders. It is equally evident that propitious market conditions manifested in increasing demand and rising prices were important external factors. A comparison of the survey results for the two interventions highlights the different constraints to participation that operate at these different points in the value chain.

Table 6. Comparison of reasons for participation in shea intervention

	Accredited pickers (n=33)	Butter cooperative members (n=30)
Improved price	**82 %**	3 %
Fair measurement	**52 %**	-
Ease of marketing (bulk purchase from village)	33 %	**63 %**
Assured buyer	6 %	**70 %**
Unity with group/community	18%	17%
To receive training /external support	9 %	3 %

Access to an assured market was less important for nut pickers than butter sellers. The market for nuts is almost guaranteed, storage is not a problem and capital requirements for nut picking are very low. The

organic certification did not increase market participation or the productivity of shea nut pickers. However, participants strongly perceived other benefits from participation and certification did impact on the participation of pickers in the value chain by initiating a dialogue between producers and buyers that previously did not exist. This may have benefits for participants in the future as a result of being able to negotiate directly with export buyers and offer bulk purchases.

The finding that, despite reported claims to have increased time spent on nut picking, certified nut pickers do not appear to be producing more may be due to the growing competition for nuts. This was evidenced in the survey by the number of respondents who cited increased travel for nut picking, and also in the qualitative interviews which described the effects of increased competition on access to trees. For nut pickers therefore this research suggests that time and access to trees were the main constraints to increased participation.

If demand for shea continues to increase, incentives to preserve and develop the shea resource will become critical. The SFC organic certification scheme operates within an existing community conservation project and is therefore not a typical sustainability scenario. The question of how the increased value of shea nuts can create incentives to conserve rather than over-exploit this resource is crucial but this is beyond the goals of this research. Although this research did not probe issues of conservation and regeneration of trees, recent research in neighbouring Burkina Faso, both in situ conservation through natural regeneration and selection and replanting are proven techniques (Audia, Poole, Kaboret, Kent and Hill 2014).

The constraints to participation in the butter market were chiefly access to export markets: the demand in local markets is limited and competition is constrained. This is clear when responses to questions on increasing production are concerned. A high proportion of nut pickers were interested in increasing production in contrast to butter makers who were not. However, in the butter cooperative group the reason for this is given as a lack of nuts, and in the non-cooperative group, access to markets.

It is clear from the study that mechanisms to link butter producers to markets and subsequently to sources of credit were key for the development of the shea value chain in a way that retains value locally and benefits rural producers. In addition, complementary services such as pre-finance and investment in processing infrastructure facilitated participation in the butter chains.

Butter marketing is at present limited by issues of scale-efficiency and chain financing: unorganised women operating subscale are unable to achieve timely delivery of the required volumes of minimum quality butter to buyers. Major buyers find rural producers unreliable business partners and as a result they face high search and aggregation costs. The use of intermediaries is one way to manage search costs, but this potentially increases chain inefficiencies, limiting benefits to producers.

In most cases, women need external support to locate and establish trading relationships with buyers. In Guli the link between the buyer and the coop was facilitated by an outside agency (the RTTU intervention).

For women to benefit from participation in shea markets, the ability to negotiate and influence the terms of trade between producers and buyers is important: facilitating access to buyers was critical in both interventions. Some mechanisms to increase participation in nut chains were in place such as well-organised and registered groups, pre-finance from the buyer, and simple transparent contracts between the buyer and each producer. Training on quality nuts production enabled the producers to meet the buyer's quality needs.

Conclusions

The triple win: shea value chain development unquestionably contributes to women's empowerment, and the industry has significant potential for economic development and for stabilising ecological fragility in marginal areas like the Sahel.

Participants in both of these interventions reported benefits from shea-related activities. Like the study by Sidibé et al (2014) in Mali, in the one case, the participation of women and the sustainability of the interventions was found to be enhanced through the impacts on the value chain organisation and conduct, which in turn increased the sense of empowerment of the participants. In the other case, the cooperative established new formal arrangements, transparent communications and shared investments with the buyer enabling the cooperative to meet the buyer's demand for quality and quantity of shea product. The

successful linking of the buyer with the producer group has been critical for value chain development through the role of the intervening agency in improving market access.

Two mechanisms for promoting shea value chain development are therefore highlighted by this study:

- collective organisation of producers to help overcome issues of small scale and quality control and the primary processing stage;
- value chain development by linking producer groups to buyers at the secondary processing stage. In these cases the role of the intervening NGOs was essential in improving market access.

These relationships may be subsequently strengthened by buyers' investments in productive and social infrastructure, pre-finance arrangements, end of season premiums, and simple transparent contracts. Such interventions have the potential to kick-start entrepreneurism and sustainable commercial linkages.

Two other more general but equally important insights emerge from the data about factors underlying livelihood strategies among Sahelian peoples for encouraging interventions to increase opportunities for market access. Both concern women's decision making and merit further research. Whether they are market-led initiatives, NGO project interventions or public sector development policies and programmes, understanding the rural household context is essential:

First, market initiatives and interventions must be considered in the context of time management of diverse livelihood strategies. Picking and processing shea is subject to a time constraint. Particularly for women who have multiple household responsibilities, rural production includes other economic activities, notably production of staple foods, which require substantial and peak investments of time and effort. There are perennial challenges in balancing economic needs with reproductive and caring functions, likely to become all the more significant as predominantly male migration takes labour out of the household and leaves women with greater responsibilities. Related to this are the dimensions of age and stage of lifecycle, which both influence the capacity to invest time and energy in arduous physical activities.

Secondly, it is a 'given' that negotiated and more secure sales agreements are highly advantageous to suppliers of rural produce. However, issues of household financial management need to be considered in relation to the optimal contractual terms for women's market participation. It is evident that both immediate cash flow requirements and the advantage of female control over lump sum payments affect the women's incentives to invest time in shea. How financial management and benefit sharing occurs within households – specifically between men and women – are sure to interact with the willingness of women to participate in new shea opportunities. Understanding the impact of these intrahousehold dynamics on market participation and female inclusion, and what changes are occurring to so-called traditional behaviour, require more work.

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