



In the shadow of the 'Chocolate War': local marketing of shea nut products around Tenkodogo, Burkina Faso

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Abstract

The purpose of this paper is to outline how shea nut and shea nut butter supply systems operate at the local level in Burkina Faso through an examination of the pattern of the local circulation in the area around Tenkodogo. It is demonstrated that regional and local flows of kernels and shea nut butter are organized in a way that ensures a supply of shea products on local markets all year round. Apparently, the local supply system of shea nut products is at present relatively isolated from the remainder of the commodity chain, i.e. the export-oriented part.

Local circulation of shea nut products is not only a simple movement of kernels and shea nut butter from areas with a relatively high to areas with a relatively low density of shea trees, or flows due to regional variations of the harvest season. It is to a large extent also

a question of an emerging spatial and social division of labour due to local comparative advantages as regards access to labour saving technology (grinding machines) and distance to the local market.

Keywords

Shea nut, shea nut butter, petty trade, local markets, Burkina Faso.

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Shea nuts, the seeds from *Vitellaria paradoxa*, are an important, yet regionally localised source of vegetable fat. The shea nut trees occur in dense stands only in the southernmost part of the Sahel and the adjacent Sudan and Guinea savannas in West and Central Africa (von Maydell, 1986). The main processed product is shea nut butter which today still has a significant role in the local rural economy of these regions.

Shea nut butter has traditionally been used in the diet and it has an important historical role in the intra-regional trade in West Africa, transported by slave traders from interior to coastal areas (Park, 1980). Scattered evidence (Conti, 1979; UNIFEM, 1997) indicates that already in the early part of the 20th century, colonial traders discovered what was considered a vast potential for exports of shea nuts, particularly from areas in northern Nigeria. Processing companies in European countries used the shea nut butter for soap production and as an ingredient in various confectionery products. At that time, transport barriers were deemed to be the most important obstacle to overcome for the expansion of trade and the construction of railways was

expected to increase substantially exports of shea nuts - among other commodities - from the Sudano-Sahelian region. Both French and British companies were interested in getting hold of shea nuts from the region; yet, due to the colonial control of territories, the foreign involvement in the shea nut trade in Burkina Faso, at that time Upper Volta, was exclusively in the hands of French companies.

After Independence in 1960, and particularly during the 1970s and 1980s, considerable amounts of shea nuts were exported from Burkina Faso to Japan. The lion's share of exports, however, were directed to the European market, during the 1990s particularly to the UK and Denmark (UNIFEM, 1997; Audette, 1995). Relatively modest volumes of shea nut butter are used in the cosmetic and pharmaceutical industries. Most of the kernels are processed by technologically advanced companies in the vegetable oil industry for later use in the production of various forms of cocoa butter alternatives, including cocoa butter equivalent (CBE) and cocoa butter substitutes (CBS). These products constitute a set of advanced, sometimes customerized, intermediate goods for the confectionery industry (Brun, 1998).

This latter use is the reason why shea nuts recently have become known to a broader public and not only by industry insiders. The use of CBE in chocolate was the subject of a heated debate among cocoa producing countries, NGOs, industry associations, consumer organisations, and the European Parliament. This so-called 'Chocolate War' embraced a set of complex issues such as the social construction of food in the industrialised countries ('What is chocolate?') and inter-NGO conflicts over support to different groups of West African producers - (male) farmers in cocoa-producing countries of coastal zones vs. (female) collectors of shea nuts in the southern Sahel (Bekure et al., 1997; Misser, 1998). By and large, the debate has ignored the aspect of local shea nut trade and the way in which local commodity circulation affects the economy and nutrition. A large proportion of the total shea nut harvest goes into local use of shea nut butter which is eaten together with millet or processed into soap.

The purpose of this paper is to investigate how shea nut and shea nut butter supply systems operate at the local level in Burkina Faso and how these systems link up with agricultural systems at the village level. More precisely, we investigate flows of shea nuts and shea nut butter in the circulation domain of Tenkodogo, the provincial capital of Boulgou Province (see Figure 1). After a presentation of

the local setting and methods, we give a brief overview of the changes in state regulation of the shea nut trade in Burkina Faso since the 1960s. Then, the local use of shea nuts is described, paying attention to processing and marketing practices of rural women. Finally, the organization and interaction of the supply systems for shea nuts and shea nut butter at different spatial scales is analysed. We conclude the paper with a discussion of potential conflicts between local supply systems and exports of shea nuts and map out some questions for further research.

Local setting, materials and methods

Data collection in the field was primarily carried out in the Boulgou province, which belongs to the Sudanian agroecological zone. The land use is dominated by major staple crops such as millet, sorghum, cowpeas and groundnuts (for further details see Mertz & Reenberg, this volume). Large proportions of the land are cultivated fields. As often seen in Sudano-Sahelian agricultural systems (e.g. Reenberg & Fog, 1995), wild vegetation plays a role as a supplement to cultivated agricultural products. In this particular region, farmers first and foremost list the use of shea nuts (*Vitellaria paradoxa*) and néré (*Parkia biglobosa*) as important. Shea nuts are especially widespread, in the fields as well as in the bush. Agricultural commodities, including the shea nut products, are traded at local markets, which follow the normal pattern of circulation between different localities and take place every third day in the larger villages and towns.

The majority of data on the local circulation of shea nuts were collected in June-July, 1998. During this period interviews were carried out with rural women engaged in the processing and marketing of shea products in the circulation domain of Tenkodogo. A smaller number of men engaged in the wholesale trade with shea nuts were also interviewed. The data relate to three different but interdependent types of commodity flows:

Firstly, the regional flows of kernels, i.e. the import (formal or informal) of kernels from northern Ghana and Togo to the border towns in Burkina Faso, and the further distribution of kernels to the Tenkodogo circulation domain. Secondly, the flows of kernels and butter to the Tenkodogo market, i.e. the volume, place of origin and type of products brought to the market by female traders who supply the largest concentration of urban dwellers in the region. Thirdly, the flows of kernels and butter from villages to



Figure 1: Main markets for shea nuts in the border region.

local markets in the surroundings of Tenkodogo were investigated in three test-villages in order to evaluate the pattern of commercialisation from villages without regular markets.

Different methods were applied. In one of the villages, focus group interviews were carried out with women from different village sections. In two villages, information was derived from interviews with the village chief and selected (female) informants. Women at market places were interviewed as individuals or in groups in order to get as broad a coverage as possible in the often quite chaotic circumstances. Data from the Tenkodogo market covering a larger period of time were recorded through observations from systematic visits to the market each market day during the period July 11th to August 13th, and two follow-up visits in early October.

In addition, secondary data were collected in Ouagadougou. NGOs, project documentation and the office of the EU Commission provided information about the changing regulatory framework and new policy measures to upgrade and expand activities related to the shea nut commodity chain.

State regulation of the shea nut chain in Burkina Faso

Shea nuts (kernels) are exported via two alternative trade routes from Burkina Faso to the coast from where they are shipped to customers in the industrialised countries. Kernels from areas in the southwestern part of the country are usually accumulated in Bobo-Dioulasso and sent by rail to Abidjan. Kernels from areas around Ouagadougou, the central and southeastern parts of the country are accumulated in the capital and sent by road to Lomé in Togo. Unknown, but probably substantial, amounts of kernels are smuggled to or from neighbouring countries depending on variations in purchaser prices fixed by different state marketing boards. For instance, kernels from Ghana used to be brought to Burkina Faso and sometimes kernels from Burkina Faso were smuggled to Togo or the Ivory Coast. Not only the price but also the efficiency and credibility of the marketing boards, the time of the start of the purchasing season and transport opportunities are major determinants for the volumes and directions of smuggling (UNIFEM, 1997).

Up to the late 1950s, there was no regulation of the shea nut trade by the colonial authorities. Traders operated in a

hierarchical structure based on the scope of territorial operations: smaller traders purchased the shea nuts at local markets in rural areas, either as independent traders or as buyers for bigger merchants in provincial cities (Brun, 1981). The same pattern of middlemen and independent traders was repeated at provincial level while major exporters were located in the two main cities, Bobo-Dioulasso and Ouagadougou.

From Independence in 1960 and up to the early 1990s, regulation of the shea nut complex was in the hands of a state marketing board, Caisse de Stabilisation des Prix des Produits Agricoles (the Fund for Stabilisation of Agricultural Product Prices - CSPPA). The Board fixed annual minimum purchaser prices during the in-take season (October to June, both months inclusive) and ensured that basic quality requirements were observed by traders (APROMA, 1995). From its establishment in 1974, the Board in effect had a monopoly on exports of kernels, although the institutional forms changed during the following two decades. Approved and licensed private traders were allowed to export, provided they complied with rules concerning the volume, export price and payment of export fees set up and controlled by the Board; about 50% of total exports were managed by private traders during this period.

The system was fundamentally changed in 1994 when the Board finally was dismantled as part of the structural adjustment programme for the agricultural sector, initiated by the IMF and the World Bank. Presently no state institutions regulate the shea nut complex in Burkina Faso and private traders are free to purchase and sell kernels at the most favourable prices. Unfortunately, quality requirements are no longer strictly implemented and private traders are not capable or motivated to replace the former state institution. On the whole, the functioning of the complex has to a certain degree degenerated and the previously competitive position of the Burkina complex on the world market for shea nuts has vanished (Sawadogo, 1998).

Two recently started international aid programmes are trying to rectify the situation. One of them is a programme (Projet Filière Karité - PFK) that exclusively deals with the shea-nut complex (CECI/ACDI, 1996). The programme started in 1996 and has been financed for a two-year period by CIDA (the Canadian International Development Agency) and implemented by the Centre Canadien d'Etudes et Coopération Internationale (CECI), a Canadian NGO. A large number of studies have been implemented within the

framework of the programme, both on technical issues and various socio-economic aspects of the organization of the complex. A set of major bottlenecks to the improvement of the material flow and organisation of the complex have been identified. Hence, it is suggested that future resources and policies primarily should seek to reduce the impact of these bottlenecks. At the national and local level, this involves finding ways to improve the quality of kernels and butter, to find new and adequate packaging materials, and to organise the actors in the complex in some kind of trade association. At the international level it involves the construction of an institutional mechanism that can monitor and possibly predict the short- and long-term movement in world market prices of shea nuts (Sawadogo, 1998). The programme was formally terminated in August 1998 but the institutional experience and the results from the study are expected to form part of a broader programme on other agro-food complexes, including the shea nut complex.

The other programme is financed by the EU and is part of the STABEX programme set up for exporters among the Lomé convention members (Ministère de l'économie et des finances/Union Européenne, 1997). In this programme, compensatory funds can be redeemed to exporters of selected commodities if world market prices drop by more than a predetermined percentage of a certain base-level price. The compensatory funds from the STABEX programme must be used to improve the commodity complex in question and to diversify other existing or potential export sectors. The present Burkina Faso programme has been negotiated for several years after a substantial decrease in the world market prices for cotton during the early 1990s. It includes a number of other agro-industries, i.e. livestock, gum arabicum and oilseeds; actually, the funds for the shea nut complex are a minor part of the oilseeds element of the programme. The programme is expected to start in early 1999 with an amount of 6 million FF set aside for the oilseed sector. The primary objectives of the oilseed element of the programme are to promote the establishment of trade associations, enhance seed production, support private traders and exports, and improve the quality of products via education and training.

In effect, both programmes neglect the local production, trade and consumption of shea nuts and shea nut butter in their policy considerations. The dominant and more or less exclusive objective for increasing organisational efficiency and capacity of the complex is to increase exports, not to secure and improve local supply. Obviously, this bias is a

product of the policy framework of structural adjustment, i.e. liberalisation, privatisation and export orientation, that prevailed - and still prevails - during the period of programme planning. However, in a development perspective it seems a rather curious omission, considering the important role of shea nut butter in the local economy in the Southern part of Burkina Faso: substantial volumes of shea nut butter are consumed on a daily basis by rural households and shea nut butter is the basic ingredient in domestically produced soap. Moreover, the processing of fruits into kernels, shea nut butter and soap is in the hands of women and income generated by the sale of these products is a very important asset for them (Conti, 1979; Kabore & Ouedrago, 1998; UNIFEM, 1997).

The local processing and commercialisation of shea nuts

Shea nuts are found in plum-size green fruits with a fleshy pericarp tasting of figs. In Burkina Faso, the fruits are normally collected from the ground below the tree crowns during May to July. In this period, just before the general harvest, food stocks are low and the fruit meat is a supplement to the diet. The kernel is covered by a shell inside the fruit. Before processing, the shell is removed by boiling what is left after the removal of the pericarp, followed by sun drying and cracking (de-shelling). The kernels are sun-dried once more to reduce the water content and after two days crushed before yet another boiling. The fat is skimmed off from the top of the boiler and purified in a process known as '*barratage manuel*', a demanding manual process comprising the successive washing-out of impurities with clean water until the brown substance turns yellowish or white. Shea nut butter is used as a frying medium or added to various sorts of porridge. Alternatively, shea nut butter is made into soap by adding wood or plant ashes to the boiling mixture of fat and water (UNIFEM, 1997).

Children often help with the collection of fruits, removal of water, crushing, boiling and purification, but rural women control the organisation of labour. It is characteristic that women also manage the approximately 160 manual presses for shea nuts that so far operate in the rural areas of Burkina Faso. Most of these presses have been donated to women groups involved in various development projects. As many as half of the presses, however, are inoperative due to problems related to lack of spare parts and skilled

maintenance workers. Moreover, the presses in operation are not particularly well adapted to the women's physical capacity and they are only sporadically used (Nianogo et al., 1997).

Further, women control the commercialisation of the processed products, while customers are different household members purchasing for domestic consumption. Kernels are in principle commercialised in two different ways, either sale (mostly in the form of kernels) to middlemen linked to the export trade or sale on local markets. On local markets, both kernels and shea nut butter are sold by the direct producers or a representative for them, i.e. a member of the household or the village group of women that processed the shea nuts.

Shea nut butter is normally traded in two different quantities: a '*platte*' is a clay bowl filled with shea nut butter and the customer buys both the container and the content. The price of a bowl varies depending on size, but on the markets observed only two basic sizes prevailed. The smallest bowl costs about 250 F CFA and contains about 400-500 millilitres of shea nut butter. A '*boule*' is a much smaller lump of butter formed by hand, and presented and sold from a large plate. Usually a lump is sold at '*vingt-cent-vingtcent*', that is 25 F CFA per lump. This seems to be a fixed price but apparently small variations in the weight of the lumps make up for price differentials due to different traders, markets, or seasons. Depending of the actual unit price, a small bowl contains about 10 lumps. Thus, bowls are not significantly cheaper than the corresponding quantity of lumps so there is, surprisingly, no discount offered to 'cash-and-carry' customers - apart from the clay bowl. If bowls sell badly, the butter is often sold in lumps to speed up sales. Sometimes portions of the butter are sold to older women who then try to resell them in the form of lumps in order to reap a marginal profit. These lumps are sold to households with small amounts of disposable cash or a momentary need for modest volumes of butter to supplement their own domestic production.

The local supply systems for shea nuts and shea nut butter

A substantial amount of shea nuts is exchanged via local markets, whether in the form of kernels or shea nut butter. Butter, however, is circulated in smaller domains than that of kernels in the Tenkodogo area.

Basically, the reason for trade is differential access to resources for different social groups. Access to the trees, the basic natural resource, is unevenly distributed between households, villages and regions. Hence, some households, villages or regions are under-supplied with the basic resource, a situation which is further aggravated by the seasonal variations in the availability of fruits.

Inter-regional differences in availability of shea nuts

Local supplies of kernels and shea nut butter are primarily determined by the availability of shea nuts and idle labour as shea nuts are processed, either to kernels or butter, before trading takes place. In general, the supply of kernels and shea nut butter to local markets is at its lowest during the summer when stocks of kernels are at the lowest point and the labour demand related to primary agricultural activities is at its highest point. Territorial variations in both the availability of shea nuts and the intensity of labour demand in agriculture due to climatic differences thus stimulate a flow of kernels and shea nut butter, in this case from areas where fruits are collected earlier - and labour demand in primary agricultural activities has declined due to seasonal variations - to regions with a later collecting season.

The latter situation characterises the Tenkodogo circulation domain during June-July, i.e. when the study was carried out. Kernels from Ghana and Togo were transported to the market in Bittou for sale and distribution to other markets in the area. The initial origin in Ghana or Togo is difficult to identify, but the places of accumulation and commercial transactions before the shea nuts enter the Bittou market are the border towns of Bakwu in Ghana and Senkansa in Togo (see Figure 1). The kernels arrive at Bittou in 50-100 kilo bags loaded together with other agricultural commodities in large lorries.

In Bittou, kernels are sold to different types of Burkinabè merchants ranging from relatively cash-rich wholesalers, who also deal with other agricultural commodities, to small retail traders who specialize in shea nuts. Also women groups from villages buy larger volumes of kernels in Bittou for processing and sale at markets nearby their villages. Usually, remaining kernels are sold in small quantities to some of the retail and petty traders at the end of the market day.

Some of the purchasers re-sell kernels at the Bittou market. Others, especially the wholesalers, sell their kernels at other (smaller) markets either by themselves or via middlemen hired on a piece-work basis. A substantial part is

bought by wholesale traders based in Tenkodogo, transported to their hometown and distributed to nearby local markets in a similar way. Hence, there is a general flow of kernels from the border area in the south to the larger markets in the north, primarily Tenkodogo. From here kernels are distributed to smaller local markets in the surrounding Tenkodogo area.

Moreover, there seems to be a quite distinct regional separation of circulation domains. Apparently, kernels from the region around Manga west of Tenkodogo are not circulated in the region, most likely due to high transport costs. The only case of overlapping circulation domains was discovered in Béguedo, located approximately half-way on the main road between Tenkodogo and Bindé, where a female retail trader at the market sold kernels purchased in the Manga area. Kernels from Ouargaye are traded in Tenkodogo and neighbouring local markets, indicating that kernels from the remoter southeastern parts of the region, possibly including kernels from northern parts of Togo, are circulated via the market in Tenkodogo. However, the volume of trading seems to be substantially smaller compared to the Bittou connection.

Only small volumes of shea nut butter are traded over longer distances and shea nut butter normally seems to be circulated within rather limited domains. Some women from a village near Bakwu in Ghana are an unusual exception from this rule. They purchase kernels at their local market and regularly (i.e. each market day) sell processed butter in larger portions at the Bittou market. Apparently, some of the more active women's groups in the Tenkodogo area sell butter south of the border, but this is a seasonal and not a regular phenomenon (Mm. Bambara, personal communication).

Inter-village differences in availability of shea nuts and marketing of shea nut butter

The number of traders at the main market in Tenkodogo varies within the year with the availability of kernels and amount of spare labour time. This is a general trend for both small and large scale kernel dealers and for the women who sell butter. The number of individual female shea nut butter traders at the Tenkodogo market increased from a level of about 30 in July to about 40 in early August and reached about 70 in early October. Obviously, these numbers say nothing about the actual quantity supplied on the different market days; nevertheless, they show the trend of the change during this period of the year in which the sup-

ply increases substantially. After November the supply gradually decreases until it again reaches its low point in June-July.

The annual variation is also reflected by the numbers of kernel traders. The number of individual female petty traders at the Tenkodogo market was about 10 during July, about 20 in early August and 40-50 in early October whereas the number of large-scale wholesalers increased from about five in July and early August to about 10 in October. Thus, the trade in kernels takes place at different quantitative scales. As described above, relatively large-scale wholesale merchants sell kernels in sacks, and specialised kernel dealers, usually males, sell smaller portions from one or two sacks, measured out on plates in accordance with customers' needs. These groups of traders are all based in Tenkodogo and get the kernels from regional market centres in Burkina and neighbouring countries (see above). However, the supply of kernels in the low season (June-July) at the Tenkodogo market is not only secured by the flow from the south; some of the wholesalers in Tenkodogo sell kernels kept from last year's peak season (October-November) when prices were low.

Individual women from many villages (see Figure 2) are also present at the market and try to earn some additional money income to spend on household necessities. Kernels are sold by these women and children in very small volumes, for instance on small plates, and as fruits. These small volumes of kernel and nuts are mostly collected by the sellers themselves but resale also occurs in surprisingly small volumes.

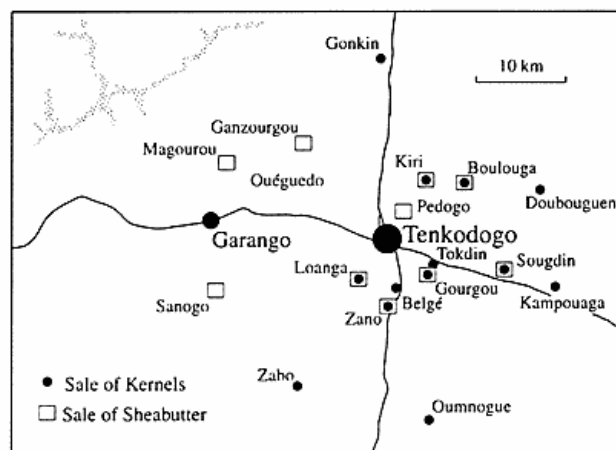


Figure 2: Types of village supply to the Tenkodogo market.

The women who on a yearly basis regularly sell shea nut butter at the Tenkodogo market mostly come from a limited number of neighbouring villages (Figure 2). Some of these women prepare nuts collected by themselves, but only in good harvest years when access to fruits is easy. In this sense, they differ from other women who buy kernels for domestic processing and consumption. These women specialized in shea nut butter buy kernels at the Tenkodogo market, i.e. the same market where they sell the butter, but they only use a minor part of the total butter production for consumption in the household. Besides supplying the household with fat and soap they earn cash from simple commodity production and petty trade in shea nut butter. In some cases the women are organised in cooperative-like production teams as in the case of the women from Kougsabla, a village in the peri-urban area of Tenkodogo.

All the shea nut butter at the Tenkodogo market and surrounding local markets is processed manually as no presses are available in the area. Individual traders offer about 10 bowls each but variations between eight and fifteen bowls were observed, depending on the scope of demand on the specific market, the available labour and the division of labour within the household.

It is significant that during the low-supply period, the shea nut butter traders both buy the kernels and sell the butter at the Tenkodogo market. None of the butter that is offered for sale is based on kernels collected by the butter processors and traders. During July all kernels are bought in Tenkodogo, the regional market centre, but as supplies increase in August some of the traders at the Tenkodogo market offer butter processed from kernels bought in nearby smaller markets such as Garango, Loanga, Gourgou, and Dassoui.

At the Tenkodogo market, traders (and producers) from Loanga, Kiri, Ganzourgou and Pedogo sell their produce on the market in the all-year low supply period in July. It is particularly interesting that nobody from the latter two villages sells kernels in Tenkodogo. This indicates that local resources of kernels are far below demand for raw materials (i.e. kernels), hence there is a relatively extreme specialisation among these women.

This phenomenon is a result of the installment of small grinding machines in some of the villages. In fact, all the shea nut butter for sale during July in Tenkodogo was made from grinded kernels. Manual grinding of kernels before boiling is a very labour demanding operation and the grinding machines save labour time and resources for

purification, thereby opening up possibilities to expand production of butter. The cost of grinding is a fixed price per unit of the specific agricultural commodity, about 100 CFA per cubic unit (bowl) in the case of kernels.

The practice of the women from Pedogo serves as an illustrative example. The women purchase the kernels at the Tenkodogo market and transport them back to the village by donkey-cart. Grinding takes place in a machine owned by a local entrepreneur who has invested in more than 20 machines and placed them throughout the Province of Boulgou. The grinding machines are primarily installed to process millet and groundnuts, the primary agricultural products in the area. Ideally however, a complete set of milling equipment consists of two grinding machines as the same machine should not be used for sheanut kernels due to their abrasive effect. After grinding and further processing, the butter is taken to the market, each Pedogo woman carrying 20-25 bowls on the head. Hence, the easy access to a grinding machine is the reason why the Pedogo women are present more or less throughout the year at the Tenkodogo market with substantial volumes of butter.

Some of the shea nut butter for sale in Béguédo and Garango also comes from shea nuts grinded at local machines before boiled and purified. For instance, shea trees are almost absent in Magourou, a village North of Garango, so all the kernels processed by the women from this village are purchased at the Garango market. The shea nut butter is sold in Garango after grinding and processing in the village. This example also underlines the crucial importance of access to grinding machines: differential access to semi-processing of the kernels leads to an emergent specialisation and new patterns of spatial and social divisions of labour. The presence of grinding machines further deepens the varying socio-economic importance of shea nuts between different villages in the Tenkodogo area.

Inter-household differences in access to shea nuts and grinding machines

On top of the differences already explained, the role of shea nuts varies quite notably even within a relatively limited geographical area where agro-ecological conditions differ very little. In this section we sketch three different patterns of overlapping inter- and intra-village differences in the access to shea nuts and grinding machines.

The complex picture of nut collection, trading and processing of kernels is revealed in the different activities of the women in the four village parts of Silmiogou. In two

of the parts (Danpore and Siguenonguin), the women primarily collect the shea nuts from the fields cultivated by the household. No differentiation is perceived between access to the fields controlled by the wife and the rest of the fields cultivated by the household. It seems to be generally accepted by both males and females that benefits from shea nut butter processing and sales accrue to everybody in the household. It also seems to be a generally accepted practice to collect nuts from neighbouring fields cultivated by other households in the village. On the other hand, in Natenga (a third part), nuts are primarily collected from the bush due to the relatively small number of trees on the fields, whereas women from Nintouré (a fourth part) collect all available nuts whether they are from the fields or the bush. Generally, the women from all the parts complained that the volume of nuts at their disposal is insufficient and decreasing. Most of the available nuts are collected and kernels are often bought at the markets in periods when household supplies run short. None of the women in Nintouré sell the kernels collected by the household as all kernels are processed. Women from the other parts of the village, however, sometimes sell surplus kernels at the market when cash is needed.

It is notable that all the women bring their kernels to one of the two grinding machines located in nearby Nagsore and Ouéguedo (see Figure 3). Apparently the cost of grinding depends on the volume brought in, but prices in the range of 30-60 CFA per bowl are mentioned. The grinded kernels are processed manually by groups of women, sometimes consisting of individuals from different households.

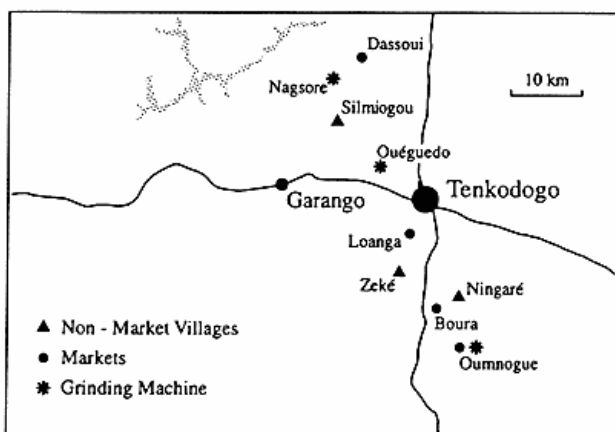


Figure 3: Location and acces to grinding machines.

Total household consumption of soap is covered by domestic production of shea nut butter and the major part of the remaining butter is sold at the markets in Garango and Dassoui. The preferred market is determined by the shortest distance from the village part although higher prices at the market in Garango sometimes attract the women from Nintouré and Danpore despite the more troublesome travel. Moreover, the women from Siguenonguin had obligations of some kind towards other women at the Dassoui market to sell on credit terms, while cash sale, which is preferred by the women, prevails in Garango. All the women stress the major and unchallenged importance of shea nut butter sales for income under their control.

While all women in Silmiogou have relatively easy access to grinding machines, the situation is completely reversed in the village of Ningaré. There are a couple of grinding machines in Oumnogue, the most important nearby market. Yet, due to the distance, the women do not find it worthwhile to transport kernels to the grinding machines, return to the village to do the processing and then again bring the butter to Oumnogue for sale. This is in contrast to the local availability of shea nuts. The trees are abundant around the village and the women primarily collect the nuts from the fields but also in the bush, if there is time left over from other duties. Actually, the bush has a large potential and many trees are left untouched. In good harvest years kernels are stored for later use or sold on the market; kernels are only bought on the market in bad years. The market in Boura is an afternoon market and not used as much as Oumnogue and the market in Tenkodogo is rarely frequented due to its distant location.

Finally, in the village of Zéké, which consists of three village parts (Kihoiré, Zéke, and Mahoun), a third pattern is found. It is only in Kihoiré that significant amounts of shea nuts are collected. The number of shea trees in the other village parts is simply too small to supply adequate volumes. In good harvest years women from other village parts are allowed to collect nuts in Kihoiré and even women from the nearby village of Loanga are permitted access to the trees. In bad harvest years, however, they are chased away. The households whose own supplies of nuts are insufficient buy the kernels for their own processing of butter and soap at the markets in Tenkodogo or Loanga. No butter is taken for sale at the market, not even by the Kihoiré women who - on the other hand - sometimes sell kernels in Loanga. Hence, the degree of commercialisation of shea nuts is significantly lower in Zéké than the other

examples due to 1) the modest presence of trees and 2) the absence of a grinding machine in the vicinity of the village.

Concluding remarks

Shea nut products, whether in the form of shea nut butter or soap, are important elements in the reproduction of rural households in the Tenkodogo region. Shea nut butter covers partly the human need for daily intake of fat through various uses of shea nut butter in the diet. Both shea nut butter and soap products are domestically produced and consumed, although they also play a significant role as a means of income for rural women.

Processing and marketing of these basic consumer goods are controlled by women. Women also control petty trading in kernels whereas kernel trading at wholesale level primarily is controlled by male merchants. This dichotomy in terms of gender positions in the shea nut commodity chain is reflected in the incorporation of different actor groups in the world market. While male merchants and middlemen are linked to the export sector, women are more engaged in the supply systems centred around the local markets. However, women are related to the world market via sales of kernels to middlemen and merchants linked up with foreign customers.

This paper has examined the pattern and volume of the local circulation in the area around Tenkodogo. It is demonstrated that regional and local flows of kernels and shea nut butter are organized in ways which ensure a supply of shea products on local markets all year round. Local circulation of shea nut products is not only a simple movement of kernels and shea nut butter from areas with a relatively high to areas with a relatively low density of shea trees, or flows caused by regional variations of the harvest season. It is to a large extent also a question of an emerging spatial and social division of labour due to comparative local advantages as regards access to labour saving technology and distance to the local market: The introduction of grinding machines appears to be crucial to women's involvement in commercial shea nut butter production.

Thus, kernels are in deficit in some villages while not being utilized in other villages in the same circulation sphere. At the level of the circulation sphere, however, local supply and demand of kernels and other shea nut products seems to be in balance, the commercial system 'liv-

ing its own life' so to speak, irrespective of the dynamics of the world market demand.

These findings have important implications viewed in a development perspective. Firstly, it strongly questions the relevance of present efforts by state institutions and NGOs to disseminate manual presses to women groups. Women groups should not be tied up in financial commitments, technical problems and rational production planning related to the operation of manual presses. Instead it is probably more promising to stimulate the establishment of village-based grinding machines with a potentially much higher utilization rate, owned and operated by entrepreneurs and/or technically trained persons as was the case in the Tenkodogo area. Secondly, it rearticulates the classic question of local food security versus production (more precisely collection and de-shelling) of export crops. In the remaining part of the conclusion we shall deal with the latter issue.

Apparently, the local supply system of shea nut products is at present relatively isolated from the remainder of the commodity chain. Information as to whether the system for a longer term has co-existed with substantial exports of kernels from the same region is not available. There are, however, a number of reasons to believe that kernel exports from Burkina for the moment are at a low point. Since the dismantling of the state controlled marketing board in the early 1990s, the competitiveness of kernels from Burkina Faso has deteriorated. Prices obtained have been lower than before and demand primarily directed towards other exporting countries, Mali in particular. Previous quality requirements for kernels for export have been hollowed out as no alternative institution has taken over the regulatory tasks of the marketing board.

The low export price may have removed any incentives for traders to introduce a system of differential purchasing prices structured according to quality: at the current price level, all shea nuts can be sold locally. Private traders pay the same price for kernels irrespective of quality and this widespread practice seems to set up barriers for the re-introduction of quality specifications by any non-monopsonist actor. Hence, market forces are at present unable to stimulate the sufficient export-oriented supply of kernels not only in terms of the required quality but also in terms of volume and regularity.

The potential local impact of changing conditions on the world market - for instance a situation of rapidly growing demand and prices - cannot be easily addressed. Higher or

differential prices would probably stimulate a larger supply of high quality shea nuts but the effects on the supply to the local markets are unclear: The price elasticity is probably relatively low as shea nuts are collected and not produced, but the potential supply is difficult to assess due to the unknown availability of nuts.

Nevertheless, it is highly relevant to consider the way in which a possible increase in demand for shea nuts for export would affect the local supply system. Vegetable oil derived from shea nuts is an appreciated commodity on the world market because of its specific qualities which make it a unique ingredient in the confectionery and cosmetic industries. It is to match the demand from these industries that the new initiatives from above (the EU's STABEX-package) and from below (the NGO's PFK-project) have to be considered. The programmes aim at the upgrading of organisational efficiency throughout the whole national shea nut chain, including the (re)introduction of quality awareness at collector level. If they succeed, local supply systems will definitely be affected. We see at least four effects that need further research in case of a successful export-oriented restructuring of the shea nut chain in Burkina Faso.

Firstly, the effects on labour. This issue concerns the allocation of available labour resources at the household level. More time devoted to collection, primary processing and sale of kernels could drain the necessary labour time needed for (other) agricultural activities. Alternatively, there might be surplus labour capacity in certain households that can be deployed to shea nut commercialisation. However, the former situation was the one most often pointed to in the present investigation.

Secondly, the effects on the general state of nutrition. Presently, there are no operational assessments of the nutritional importance of shea butter at the household level. If cash rather than shea nut butter for own consumption is preferred, the end result could be a deteriorating nutritional status. On the other hand, cheap imports of palm oil from neighbouring countries could replace shea nut butter in the diet without any substantial decline in health.

Thirdly, and closely related to the issue of cash or auto-consumption, the effects on control over processing and marketing of shea-nut products. Other cases have demonstrated the tendency for males to take over control of crops that are cash generating while food production for domestic consumption is often controlled by females. In the case of shea nuts there is a strong tradition of female control

over the domain of small-scale collection, processing and marketing. Whether this tradition can survive a prolonged phase of high export prices is an open question, though.

Finally, the effect on what broadly could be termed regional resilience. A phase of streamlined exports of kernels to the world market may serve to increase the region's dependence on world market conditions. Hence, the economic dynamics of the region are 'locked-in' with the fluctuations of global demand for shea nut oil, in turn constituted by a complex of processes such as the technological development of substitutes and economic/political/cultural struggles on taste in the EU.

The general lesson of this study is that future debates on agro-industrial politics in the North and their consequences in the South need to be based on a more solid basis than the one articulated in the 'chocolate war'. Only a thorough knowledge of the structure and dynamics within the agro-industrial chain in question may save the debaters from adopting inconsistent positions.

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