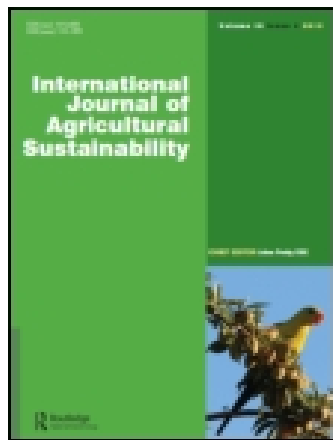


This article was downloaded by: [115.85.25.194]

On: 31 March 2015, At: 22:02

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



[Click for updates](#)

## International Journal of Agricultural Sustainability

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tags20>

### Women, shea, and finance: how institutional practices in a Malian cooperative create development impact

Amadou Sidibé<sup>a</sup>, Sietze Vellema<sup>a</sup>, Fadiala Dembélé<sup>b</sup>, Bino Témé<sup>c</sup>, Harouna Yossi<sup>c</sup>, Mamoudou Traoré<sup>b</sup> & Thomas W. Kuyper<sup>d</sup>

<sup>a</sup> Knowledge, Technology and Innovation group, Wageningen University, Hollandseweg 1, NL-6706 KN Wageningen, The Netherlands

<sup>b</sup> IPR/IFRA de Katibougou, BP 06, Koulikoro, Mali

<sup>c</sup> Institut d'Economie Rurale, BP 258 - Rue Mohamed V, Bamako, Mali

<sup>d</sup> Department of Soil Quality, Wageningen University, Droevendaalsesteeg 4, NL-6708 PB, Wageningen, The Netherlands

Published online: 01 May 2014.

To cite this article: Amadou Sidibé, Sietze Vellema, Fadiala Dembélé, Bino Témé, Harouna Yossi, Mamoudou Traoré & Thomas W. Kuyper (2014) Women, shea, and finance: how institutional practices in a Malian cooperative create development impact, *International Journal of Agricultural Sustainability*, 12:3, 263-275, DOI: [10.1080/14735903.2014.909640](https://doi.org/10.1080/14735903.2014.909640)

To link to this article: <http://dx.doi.org/10.1080/14735903.2014.909640>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or

distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

## Women, shea, and finance: how institutional practices in a Malian cooperative create development impact

Amadou Sidibé<sup>a\*</sup>, Sietze Vellema<sup>a</sup>, Fadiala Dembélé<sup>b</sup>, Bino Témé<sup>c</sup>, Harouna Yossi<sup>c</sup>, Mamoudou Traoré<sup>b</sup> and Thomas W. Kuyper<sup>d</sup>

<sup>a</sup>Knowledge, Technology and Innovation group, Wageningen University, Hollandseweg 1, NL-6706 KN Wageningen, The Netherlands; <sup>b</sup>IPR/IFRA de Katibougou, BP 06, Koulikoro, Mali; <sup>c</sup>Institut d'Economie Rurale, BP 258 – Rue Mohamed V, Bamako, Mali; <sup>d</sup>Department of Soil Quality, Wageningen University, Droevendaalsesteeg 4, NL-6708 PB, Wageningen, The Netherlands

Development impacts are often framed in terms of the effects of exogenous inputs, such as finance or technologies, on measurable ultimate outcomes for a specified group of beneficiaries, for example increased income. This case study of sourcing, processing, and trading shea butter and kernels by a Malian women's cooperative emphasizes intermediate outcomes, specifically early signs of institutional change, as measures for assessing the development impacts of access to finance. The cooperative succeeded in obtaining working capital provided by a microfinance organization. The impact of this arrangement was most visible in how the provision of working capital catalysed emerging institutional practices within the cooperative, particularly in sourcing and stocking, which altered relations with non-members and traders. Hence, access to finance achieved an impact in terms of the interaction between the evolving strategies of the cooperative and the activities of people not directly included in the group-based activity itself.

**Keywords:** women's groups; collective action; value-adding; microfinance; trade; evaluation methodology

### 1. Introduction

The organization of rural women in value-adding enterprises has figured prominently in the development practice and policy in Mali, particularly in initiatives by public and non-governmental organizations (NGOs) aimed at diversifying rural incomes in the shea sector. In Mali, adding value to collected shea kernels has been identified as a potential avenue for income diversification (Ministère-du-Développement-Rural 2001). The collection, processing, and commercialization of shea nuts are almost exclusively under the control of women (Carney and Elias 2006). After the nut is de-shelled, the kernel can be processed to provide shea butter (*beurre de karité*), which is an important ingredient in local diets, as it provides vegetable fat (Lusby and Derks 2006). There is a huge domestic market for shea butter: more than 90% is consumed domestically or traded in local markets. International cosmetic and pharmaceutical industries provide niche markets for 'improved' shea butter of low acidity. In addition, there is an increasing demand for shea butter from the international food (e.g. chocolate) industry. National policies and development interventions in Mali have encouraged women's groups to process higher volumes of good-quality shea kernel and butter for high-value export markets, as is also the case in other West

---

\*Corresponding author. Email: [sidibe.amadouy@gmail.com](mailto:sidibe.amadouy@gmail.com)

African countries (Badini *et al.* 2011a, 2011b). Linking women's groups to niche markets is particularly stimulated by Fair Trade certification (Greig 2006, François *et al.* 2009).

Our case study of a women-based cooperative provides an example of how organized women deviated from this strong orientation towards providing quality butter and kernels to international (niche) markets. The cooperative was able to obtain working capital (*fonds de roulement*) from a microfinance organization. The cooperative's use of working capital blurred the distinction between members and non-members. This paper aims to determine how the institutionalization of new rules and practices within the cooperative affected the institutional arrangements of the cooperative with non-members and traders.

Our analysis adds a new dimension to the literature on organized rural producers and/or women and access to finance. It tries to explain the developmental impact by looking at how finance catalyses the way in which institutional practices inside and outside the boundaries of the organization combine. The analysis shows that the outreach of finance extends beyond membership and it highlights the intermediate outcomes that can be achieved, affecting non-members and terms of trade. We conclude that the provision of finance made a difference by catalysing the articulation of institutional practices within the cooperative with local institutions and social relations. Consequently, finance empowered a wider group of women than that originally envisaged as the target group.

This paper starts with a brief review of development-oriented literature on the organization of (women) producers and access to finance. In the findings, we document managerial and organizational processes within the cooperative and multiple interactions of the cooperative with its environment, i.e. non-members, traders, financial organizations, and the agro-ecology of the shea tree. This case study is used to further clarify our proposal to analyse changing institutional practices as intermediate outcomes indicative of how access to finance, brokered at a higher system level, may lead to developmental impacts.

## 2. Rural women and access to financial services in Mali

The arguments supporting access to financial services emphasize inclusion of the hitherto excluded (Bhatt and Tang 2001) groups. The performance of programmes, such as ACCION's BancoSol in Bolivia, Bank Rakyat Indonesia, and Grameen Bank in Bangladesh, is frequently cited as evidence that microfinance organizations can sustainably provide small loans to large numbers of poor people. The success stories of such microfinance programmes have led to efforts to imitate them in several developing countries, including Mali (Bhatt and Tang 2001). Since 1990, in Mali, financial services have become one of the central tools in poverty reduction strategies (Koloma 2007). One in every three Malian women is linked to some form of microfinance (IMF 2008).

The emphasis on inclusion of intended beneficiaries in organizations that receive finance and technical inputs assumes a direct link between such interventions and dependent variables, such as incomes, assets, productivity, and general well-being (Bhatt and Tang 2001). Impact studies of microfinance services conducted in Mali (Koloma 2007) have based their assessment exclusively on quantitative surveys, comparing the well-being of beneficiaries belonging to an organization with that of non-members. Bingen *et al.* (2003) adopted another focus. They used their investigation of cooperatives in the Malian cotton sector to encourage governments and donors to revise their methods for evaluating producers' capacity building by shifting attention from short-term quantitative programme outputs to broader long-term impacts on human capacity. Bhatt and Tang (2001) also proposed assessing the effectiveness of such services as savings and credit by looking at their impact from the perspective of institutional plurality and changes in the institutional context.

Morduch (1998) captured this discussion on impact assessment by distinguishing between the ‘institutionalist’ and the ‘welfarist’ approaches. Rather than focusing on ultimate welfare effects to demonstrate impact, a stronger institutional perspective shifts attention to outcomes closer to the actual intervention, e.g. the quality and use of services, and the ensuing institutional dynamics. Accordingly, an interest in institutional dynamics opens up new perspectives for assessment, for example by documenting how organization-undermining tensions can be resolved by internal rules or by institutional arrangements with external stakeholders (Ton 2010).

Hulme (2000) compared different ways to assess the impact of financial services that balance between verifying impacts for intended beneficiaries, such as individuals or households, and improving the processes underlying the intervention. Hulme’s focus on intermediate impacts fits with the interest in institutional outreach proposed by Yaron *et al.* (1997). Institutional outreach traces how the choices made by people or organizations in search of credit translate into a widening of the institutional arrangements that support access to credit.

Houkonnou *et al.* (2012) also emphasized the role of institutional arrangements and challenged the dominant focus on the central role of science-based technology by showing that institutional transformation is an essential condition for rapid productivity increase. They focused on the importance of ascertaining the institutional causes of constraints, by identifying key actors, networks, and mechanisms that maintain the constraints, and by identifying entry points for concerted actions to bypass or transform the institutional context.

Our study complements this interest in institutional change by showing how emerging institutional practices within organizational routines and boundaries of existing collective practices can become conducive to development. We focus our analysis on the performance of a specific cooperative and its network of processing units. We have an empirical interest in documenting how institutions, i.e. socially constructed norms or rules that constrain and prescribe behaviour (Scott 1995, Offe 1996), shape social–technical processes. We consider these as institutional practices, i.e. the purposive actions of individuals and groups to maintain or disrupt existing institutional arrangements or create new ones (Lawrence *et al.* 2009). The case study examines whether and how opportunities for institutional change created within the cooperative transcend the boundaries of the cooperative and are then adopted by other actors, in this case local traders and providers of financial services (Lawrence *et al.* 2002). This perspective emphasizes the cooperative’s practices (rather than new institutions that emerge as if out of the blue) in order to explain how working capital brings in change (Burns 2000).

### 3. Research design and methods

The study took place between 2010 and 2012 as a part of the action-research programme Convergence of Sciences – Strengthening Innovation Systems. The action part of this research programme created a Concertation and Innovation Group (CIG), which works as a platform to address institutional constraints faced by organized women in the Malian shea sub-sector. The CIG *Karité* is composed of representatives from the Ministry of Women’s and Children’s Affairs (*Ministère de la Promotion de la Femme et de l’Enfant*), the chamber of agriculture, the chamber of commerce, NGOs, and representatives of cooperatives. The CIG collaborated with the cooperative in Zantiébougou specifically on the issue of working capital. The cooperative prioritized obtaining access to working capital, and in response the CIG explored options with banks and microfinance organizations, and eventually brokered an arrangement with a microfinance organization to provide a loan to the cooperative.

Central to our case study are processes and events revealing how the cooperative’s practices are affected by the provision of working capital. We wanted to learn how financial provisioning influences the practices of the cooperative and how this configuration of capital and practices

affects developmental outcomes (Vellema *et al.* 2013). This paper conceptualizes the provision of working capital as a process catalysing, but not exclusively causing, institutional changes emerging in the daily operations of the cooperative. Hence, we present an in-depth case study of a relatively bounded phenomenon (Gerring 2004), namely collaboration and coordination around the performance of practical tasks, such as sourcing and stock management. The case study was not designed to make net impact calculations of working capital but rather to enable further theorizing about how the interaction of working capital with the practices of a member-based organization realizes institutional outreach and produces development impacts (Rohlfinger 2012).

For this purpose, Ton *et al.* (2011) separated immediate outcomes (e.g. the spatial expansion of the cooperative and the increased enforcement of rules) and intermediate outcomes (e.g. coordination between the cooperative and local traders) from ultimate outcomes (e.g. reliable incomes for women active in harvesting and processing). In the evaluation literature (Mayne 2001), immediate outcomes can be attributed to the tangible outputs from an intervention or to an external input reaching a specific group. Intermediate outcomes are changes or effects resulting from how the intervention combines with other processes active in the context. The fact of searching for intermediate outcomes recognizes that choice-making by organizations and its members is always constrained by processes and path-dependencies in a specific context.

The case study used 21 formal and 16 informal interviews with the management and the members of the cooperative, and non-members. Through participant observation and semi-structured interviews, instructive events were identified revealing choices made by the steering committee as well as changes in rules and practices within the cooperative. This data collection was complemented with parallel research on the income sources of members and non-members and on fluctuations in shea tree fruit production (Sidibé *et al.* unpublished data). From these combined data, it was possible to describe how the sourcing and stocking of kernels was accomplished before and after the provision of working capital. These institutional practices are central to our description of how the cooperative dealt internally with processes such as cheating, exclusion, and sanctioning. They also show how rules and practices beyond the organizational boundaries of the cooperative evolve, particularly in relations with non-members and traders. The four main traders in the area of the cooperative were interviewed in order to trace modifications in modes of coordination in the shea kernels and butter trade. The relationship with financial organizations can be seen in the arrangements made for the provision of working capital and is further informed by six semi-structured interviews with professionals working in the shea sector and bank staff. Five meetings were organized with the CIG *Karité* to discuss preliminary findings about how working capital impacted on the functioning of the cooperative.

#### 4. Findings: the catalysing effect of finance on institutional practices in the cooperative

Harvesting shea fruit and processing kernels can be an individual task. Individual women selectively collect shea fruits in fields and fallows. They remove the pulp, which is used as a snack. The nuts go through various pre-treatment practices. Some women keep them in underground pits until they have time to process them. Some use traditional ovens to dry the nuts; this often affects the smell and colour of kernels. These pre-treatment and processing practices result in the production of butter for personal use but unsuitable for sale by the cooperative. However, local traders accept different qualities and find outlets for undifferentiated butter.

The above provides the context wherein the cooperative tried to define its role in collective processing of shea kernels. Initially, the cooperative COPROKAZAN (*La Cooperative des Productrices de Beurre de Karité de Zantiébougou*) started by producing high-quality butter for niche markets. In the beginning, the cooperative tried to introduce other pre-treatment practices – such as boiling and sun-drying shea nuts – that produce kernels that are suitable for making improved

butter for lucrative markets. Gradually, the management of the cooperative changed its priorities and shifted attention from the sourcing and making of high-quality butter to arranging consistency in the sourcing and stocking of kernels to be processed centrally and at a few selected sites. With this shift, the cooperative responded to the unpredictable qualities of butter and the natural fluctuation in the productivity of the shea tree. It began to rely on non-members as suppliers of kernels. The cooperative found that reliable access to finance was an important condition for realizing this shift and entered into new arrangements with a larger group of women.

The case study starts by describing how the institutional practices of sourcing and stocking kernels have been managed by the cooperative and how they evolved between 1990 and 2012, and particularly after the introduction of working capital (Figure 1). Subsequently, we document incipient changes in the interactions among the cooperative, traders, and financial organizations.

#### 4.1. Institutional practices in the cooperative: sourcing and stocking kernels and butter

Since the 1990s, COPROKAZAN has pioneered in finding ways to organize women in the shea sector. It started in 1991 with the technical support of a local NGO, AMPJ (*Association Malienne pour la Promotion des Jeunes*) to organize women to jointly make and trade shea butter. During the initial years, the focus was on building the technical and organizational infrastructure. In 1995, other villages in the constituency of Zantiébougou were attracted to the possibility of joint trading. From 1995 to 2000, this led to a gradual expansion and the creation of a union of 15 village female groups called UGFZ (*Union des Groupements Féminins de Zantiébougou*).

It proved difficult to ensure the quality of stocks of butter sourced from individual women. During this period, all married women were entitled to become members and to supply butter. UGFZ's butter was rejected several times by its Bamako market partners. In response, in 2004, the group called upon a Canadian consultant to diagnose the overall functioning of UGFZ with a view to address the issue of rejection. He recommended that the union should become a cooperative. The cooperative COPROKAZAN was created in 2005.

To address the quality issue, the cooperative shifted from joint trading of butter to managing stocks of kernels, which were processed centrally. Its management decided to source kernels from individual women and to centralize most of the processing into butter at the Zantiébougou facility.

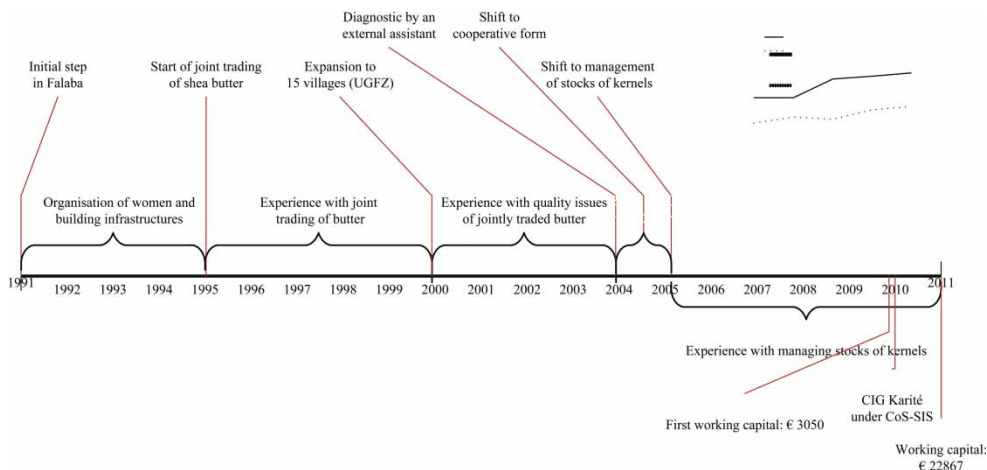


Figure 1. Timeline of the evolving experience of the cooperative COPROKAZAN before working capital. Source: Field notes 2010–2012.

Decentralized processing sub-units were created in two other villages. Although the cooperative initially planned to establish processing sub-units in five other villages, this expansion was halted. One reason was that the supporting NGO, which was to provide the processing equipment, faced a shortage of resources (AMPJ 2002). Another issue was the difficulty of arranging the transport of locally processed butter to the cooperative's premises in Zantiébougou. The small van owned by the cooperative was inappropriate for the bad road to the most remote sub-unit (30 km away).

The sourcing of kernels was managed mainly by a clerk hired by the cooperative. He was responsible for buying kernels from individual women and for controlling product quality. To process the kernels, three women in the central facility and four in each of the two operating sub-units were hired weekly from among the cooperative members. The selection of these women, which was based on the duration of membership, created frustrations among new members for whom the opportunity of a paid job was one of the attractions of the membership.

The cooperative's management realized that a focus on processing butter constrained its options to work with more women and to expand its operations. Thus, in 2010, the cooperative applied for working capital. It obtained a modest 2 million FCFA (€ 3050) from the National Bank for Agricultural Development (BNDA: *Banque Nationale de Développement Agricole*). The cooperative used this loan to buy a stock of honey with the intention of quickly selling it and subsequently increasing the amount of cash before the main shea nut harvest. However, the honey was difficult to sell. Consequently, the cooperative had trouble replenishing its working capital and failed to buy kernels from local women at the right time. The episode created tensions between the cooperative and women, both members and non-members, who wanted to sell their kernels to the cooperative but had to fall back on traders. To avoid remaining idle for the rest of the year, the cooperative was left with the option of purchasing a stock of kernels incidentally found with a local trader. The low extraction rate of these kernels translated into substantial losses. Nevertheless, the cooperative was able to repay the loan.

Both problems were compounded by that loan's repayment conditions. Repayment started immediately at the end of the month in which the loan was provided. The resultant cash flow problems within the cooperative led the steering committee to decide not to apply for another loan from BNDA. Nevertheless, access to finance remained a high priority and was considered instrumental to its expansion strategy.

In 2011, the cooperative obtained a loan of 15 million FCFA (€ 22,867) from a microfinance organization (*Soroyiriwa*) in which the CIG played a brokering role. The cooperative used the title deed to its infrastructure as collateral. Learning from their experience with the BNDA loan, the steering committee decided to take a chance with a microfinance organization, but negotiated a two-month grace period between the working capital being made available and the first repayment instalment.

The importance of ready cash for sourcing kernels was underscored by the deficiencies in the methods previously used by the cooperative to pay the women. The steering committee allowed members to pay entry fees and contributions to capital in kernels. The cooperative purchased kernels on credit from members who could afford to have their payment deferred. However, these practices led to various problems. Suppliers of kernels blamed the cashier for biased management of the deferred payments. For her part, the cashier reported cases of cheating, with suppliers attempting to get the same receipt paid twice; such cheating led to a loss for the cooperative of 300,000 FCFA (€ 457). The cooperative monitored extraction rates in order to check whether the processors were holding back butter. The cooperative accepted quantities of butter, based on an extraction rate of 26%, well below the theoretically possible rate of 35%.

After receiving the working capital in 2011, the cooperative speeded up the creation of decentralized processing sub-units, accompanied by stricter implementation of rules for buying kernels. Three new intake and storage points were created. The number of processing sub-units increased



from two to seven, three of which served as intake and storage points. In addition to increasing and stabilizing the flow of kernels (given the high fluctuation in fruit production), the new sub-units also doubled the number of paid job opportunities. To reduce the tensions created by the selection of women for the processing teams based on the length of membership, it was agreed that all members should qualify for these temporary jobs.

The availability of working capital encouraged the cooperative to start operations in villages remote from the central unit. Its staff and management started to mobilize social networks in order to facilitate arrangements with these remote villages. This enlarged sphere of influence linked the cooperative to a larger group of non-members interested in supplying kernels. Through its decentralization policies, the cooperative aimed to get closer to the majority of non-members, who could not reach the central facility of Zantiébougou to sell their kernels. Before the working capital was secured, these non-members had supplied 60% of kernels to the cooperative. Non-members borrowed membership cards to benefit from the differential price paid to members. Members benefitted because it increased the bonuses for volume delivered, and for the cooperative it diversified the sources of kernels.

During the expansion of the cooperative's operations, tighter control was exercised on the quality of products and services. The regular rejections of butter supplied to traders in the Bamako market made it clear that not only consistency of supply, but also butter quality required managerial attention. Experienced women were appointed to check the quality of kernels at the intake points, a task no longer left to the weighing clerks. Quality control also involved a new task: transferring kernels from suppliers' containers to the new sacks that the cooperative used for storage. This task enabled the workers hired by the cooperative to observe and evaluate the quality of the kernels near the bottom of the containers. They were instructed by the steering committee to return any off-quality kernels they might encounter. The origin of the repackaged kernels could be traced through the names of the villages, and this allowed the cooperative to sanction groups that supplied low-quality kernels.

Informants claimed that the unprecedented amount of working capital meant that the cooperative could no longer afford loose management practices; it required new stringent ones. The use to which the working capital was applied was subject to internal decisions within the cooperative. Four village-based processing teams were caught with butter that was being diverted for sale to accomplices. These four villages were suspended for six months, after which they were given another chance to send processing teams, but with new members. This new chance was a signal that the cooperative did not want to frustrate its own ambition to extend its influence to all 42 villages in the constituency. The cooperative also imposed penalties for low extraction rates.

Before the loan, the cooperative bought kernels only within the constituency of Zantiébougou. The low productivity of shea trees in Zantiébougou in 2011, combined with the newly available cash, allowed the cooperative to target other areas. The president of the cooperative used her social network to obtain information about stocks available in new areas. In contrast to 2011, 2012 was characterized by a relatively better harvest from the shea trees, and consequently in 2012 there was no agreement within the cooperative about the expansion of the sourcing area. The president wanted to deliver on her promise to her clients in new areas by continuing to buy their kernels in 2012. The accountant, more concerned about the transaction fees, disagreed because the cooperative was able to source enough kernels closer to Zantiébougou. The accountant wanted to impress upon the president that she should not make promises on behalf of the cooperative without prior discussion with the steering committee.

These observations suggest that access to working capital catalysed (ongoing) processes within the cooperative, particularly affecting the manner in which the cooperative enhanced the sourcing of kernels by including non-members and by expanding its spatial coverage. This expansion was accompanied by a set of rules and practices on which the cooperative had been

working but that now became operational. The cooperative developed a specialization in sourcing quality kernels; this in turn modified its relationship with traders.

#### 4.2. *The cooperative's relations with local traders*

In addition to expanding the kernel-sourcing area, management took the decision to link up with local traders to broaden the cooperative's access to kernels. The cooperative made efforts to collaborate more intensively with four traders that had different types of operations in the vicinity.

The most important trader used to be the main supplier of kernels to MOBIOM (*Mouvement-Biologique du Mali in Bougouni*). The cooperative bought the trader's stock after MOBIOM deferred purchase because of cash issues. Afterwards, the trader decided to continue selling his kernels to the cooperative. He collaborated regularly on the basis of unwritten agreements. He described his relation with the cooperative as follows:

When the women requested my collaboration I decided to help them. I promised to source for them the volume of kernels they wanted. I delivered the promise. I supplied to them more than 100 tons of kernels at the same price of 140 FCFA/kg in less than three months. I promised not to change the price during the entire period of collaboration even if wholesalers increased the price on the market. (Interview, 2012)

This trader was involved in several other businesses that caused him to travel a lot throughout the constituency, wherein he was well known and maintained an extensive network.

Another trader was part of the kinship network of the cooperative's president. Her brother-in-law became responsible for the sourcing of kernels from a village not yet covered by the cooperative. According to the cooperative staff, the president started sourcing kernels in that village during weekly market days. She collected the stock of kernels sourced by the trader and left cash to fund sourcing between visits.

Two petty traders sporadically supplied relatively small volumes of kernels to the cooperative when these passed the quality check (weekly average 100 kg). The cooperative sourced these kernels in Zantiébougou market. The flow of information about the availability of high-quality kernels was ensured by people visiting the market and reporting back to the cooperative. Traders interacted with the cooperative via telephone calls, regular visits to the cooperative by some of them, and verbal communications through a third party.

All traders operated within the proximity of the cooperative. Hence, the traders were already connected to women supplying kernels to the cooperative. However, there was little coordination or collaboration between them. A larger trader stated:

Women from my village are also member of the cooperative. Initially, the cooperative members and I were even not saying hi to each other. They saw me as a competitor. I do not have the same feeling about them. I think that this 'factory' (referring to the central unit of the cooperative) belongs to women and they deserve help because we are all proud of what they are achieving. We are all linked by kinship bonds, marriage, or we are joking cousins.<sup>1</sup> For this reason, when we started to collaborate, for them exceptionally, I was patient enough to wait sometimes up to two weeks after supplying kernels before they managed to pay me back. I might have made more profit with wholesalers, but I was happy with over one million FCFA (€ 1500) profit out of this collaboration because I think I contributed to something that women are doing. (Interview, 2012)

The relevance of such social bonds was also confirmed by both petty traders:

On market day, people go up and down between the market and the central unit of the cooperative. If we source kernels that we think can meet the quality requirement of the cooperative, we just send a

sample through someone passing by. We all know one another here. The quality of the kernels is then checked before the transaction is concluded. (Interview, 2011)

However, collaboration between the cooperative and traders was contingent on shea tree productivity. The different forms of collaboration were observed mainly in 2011. As already discussed, in that year productivity was very low (2.4 kg per tree). In 2012, when productivity improved (13.4 kg per tree), the cooperative sourced kernels without resorting to traders. This is also confirmed by the larger trader:

They did not request collaboration this year because there was no shortage of kernels. (Interview, December 2012)

But shea is an unpredictable tree and I know they will need my help in the times to come. (Interview, 2012)

The trust between the cooperative and the main supplier was affected, however, when the cooperative rejected his last lot of 17 tons of kernels on quality issues. He angrily reported about this incident:

They rejected the lot of kernels after I unloaded it on the roadside in front of the cooperative. Before I loaded it on the truck, however, they promised in our telephone conversation that they were going to buy it. Yet, they did not even compensate the costs I incurred for transportation and unloading. That was the end of this first experience. I will not say I am not going to collaborate with them anymore, but we will take measures to prevent this kind of frustrations. (Interview, 2012)

Others traders also began to source kernels for the cooperative, in addition to the cooperative's existing trading channels. To supply the cooperative, local traders differentiated kernels by quality. High-quality kernels were designated for the cooperative, whereas the lower quality ones were sold to wholesalers. Traders accepted the dual trading system that emerged in response to different market outlets. The traders placed more emphasis on kernels of poor quality used for traditional soap making, whereas the cooperative sourced stocks of kernels suitable for supplying the market with improved butter for cooking and cosmetics. The higher price for quality kernels paid by the cooperative was of interest to the traders. Traders did not yet offer higher prices to women who supplied quality kernels. The traders claimed that they could select quality kernels, but that the cooperative preferred to carry out quality assessment under its own control.

#### **4.3. Relationships with financial service providers**

The cooperative's new role not only reshaped its relations with women, both members and non-members, but also led to emerging forms of coordination with traders in the area. It was more difficult to trace whether and how the cooperative's relationship with supporting NGOs and financial organizations altered. Compared with other cooperatives that received support to enter international markets, COPROKAZAN seems to have created a certain level of autonomy for making independent strategic choices within the context of local social and material conditions (Sidibé *et al.* 2012).

The arrangement with the microfinance organization enabled the cooperative to really make the shift from making butter to sourcing kernels, and to seek opportunities to expand its area of operation. The microfinance organization renewed the arrangement in 2012. In the agreement that they facilitated between the cooperative and the micro-finance organization, the CIG assumed the role of buffer if there was any tension between the two contracting parties. The interaction with the CIG stimulated the revival of the national umbrella inter-organizational network of women

involved in shea activities called Sido (meaning in Bambara the shea parkland). The president of the cooperative was chosen as the first president of Sido. However, the link between the local arrangement and the national network was affected by the political turmoil in Mali. In discussions about the possibility of further loans of the same amount in 2012, the microfinance organization referred to the political crisis to reject the request by the CIG to replicate the experience with other cooperatives.

Recently, the cooperative explored the possibility of availing financial services offered by a bank rather than those of the micro-finance organization. However, the unpredictability of the shea sector's performance made banks hesitant to invest in it. Strategic sectors with powerful farmers' cooperatives, such as cotton and rice, still receive substantial financial and public support. This contrasts with the fragmented and uncoordinated shea domain, and the involvement of banks is further complicated by the fluctuations in shea production.

## 5. Discussion

Our study shows that working capital made a difference because it captured and expanded existing institutional practices in the cooperative, in particular the sourcing of kernels and butter, management of stocks, and negotiations with traders. The provision of finance to the cooperative catalysed an existing process of institutional change and strategic re-orientation. The effect of finance became visible in the reinforcement of emerging institutional practices inside the cooperative and in the incipient alterations of the cooperative's relations with external stakeholders, such as non-members, traders, and financial service providers. Our study, therefore, raises questions on the further development of the practices organized by the cooperative. Could it succeed in achieving lasting institutional change?

COPROKAZAN was able to maintain a certain level of strategic freedom in a sector in which public organizations and NGOs were influential. This makes the cooperative partly exceptional, because its rules and practices were less directed towards serving international niche markets, and partly instructive because the case identifies institutional practices and signals development pathways grounded in the social and technical realities in which the cooperative navigates.

Our earlier diagnostic study (Sidibé *et al.* 2012) showed that the actual practice of the cooperative comprised more dimensions than merely a membership involved in value-adding activities, such as making high-quality shea butter. Members of the cooperative, and especially its management and staff, had to handle the relationships with non-members and traders regarding fluctuating supplies. The cooperative's activities affected non-members who were essential for a continuous supply of a sufficient volume of kernels. Hence, although some women were formally excluded from membership, through their capacity to collect nuts and to supply quality kernels non-members formed an indelible part of the cooperative's performance. Moreover, the cooperative's emphasis on sourcing kernels, rather than on making improved butter, also altered its relationship with different traders. In times of scarcity, the cooperative tried to coordinate with traders to secure kernel supply. As a result, traders began to use their own networks for sourcing kernels for the cooperative, and they differentiated between qualities supplied to their existing market channels and to the cooperative. The provision of working capital catalysed the ongoing strategic re-orientation of the cooperative's performance and triggered new practices and rules (cf. Vellema *et al.* 2011). As a result, the institutional practices of the cooperative shifted from endeavours to include women in making high-quality butter to installing mechanisms and arrangements through which the cooperative, as an exclusive group, could obtain sufficient high-quality shea kernels.

Although it is too early to make firm statements, we can indicate that the continuation of the emerging institutional practices and their embedding in the cooperative's environment will

depend on a further differentiation of markets for shea. The expansion of the cooperative (not only towards the niche market for export, but also increasingly towards the domestic markets for higher quality kernels and butter for cooking) may increase competition with traditional traders, as market differentiation and demand for quality will otherwise move those traders to a niche market for low-quality soaps. Therefore, it is likely that a win–win situation for both the cooperative and traders can be maintained only to the extent that market differentiation, based on quality differentiation of kernels, will further evolve. Otherwise, the new organizational practices and rules in the working of the cooperative (its incipient institutionalization) may be aborted in the face of the larger powers that dominate the lucrative markets for shea.

Taking these observations together, we suggest that the provision of working capital not only enforced the unfolding new practices of policing, penalizing, and sanctioning by the cooperative, but also increasingly formalized them. The provision of working capital was accompanied by a stricter enforcement of rules. This became particularly clear in the practice of kernel quality control. The incident of the suspension of four villages shows that the management style of the cooperative became more rigid after the provision of working capital. In addition, the measures aimed at improving the extraction rate and quality to enable women to access high-value export markets, although potentially penalizing low-performing units, are indications of a more rigid management style. In this way, the cooperative moved towards becoming a specialized and exclusive nucleus in which the engagement with women in a network of aligned villages became subject to new rules that are increasingly recognized and followed by both these women and traders as a condition for doing lucrative business.

## **6. Conclusion**

This paper contributes to an ongoing debate among development policy-makers and practitioners on how to understand whether and how finance leads to development effects for specific target groups, in our case women involved in shea. The vast literature on rural finance tends to focus on the financial instrument itself as a causal factor for change. This study, however, suggests that developmental outcomes are unlikely to be solely attributable to an external input, in this case working capital, but emerge in the interaction of that external input with practices grounded in how organizations navigate social and natural conditions.

This organization has sufficient power to change the practices and rules underlying the activities managed by the cooperative. We show increasing specialization (based on women's access to high value export markets and kernel quality) by the cooperative, reflected in its sourcing and stocking practices. The performance of the cooperative and the catalysing effect of finance is illustrative of the role of institutions in reducing uncertainty in human interaction, in this case between cooperative management and members, non-members supplying kernels, and traders. The question remains as to whether further growth in the organizational performance of the cooperative will enable it to negotiate access to financial or other services on its own.

The unpredictability of shea kernel supply, to which the institutional practices in the cooperative essentially responded, still formed an impediment to microfinance organizations and banks offering credit to cooperatives. Brokerage by a multi-stakeholder platform helped the cooperative to gain access to financial services that supported its ongoing practices in the face of supply fluctuations. The study of the outcomes of the brokered arrangement of the cooperative and a microfinance organization revealed how working capital catalysed institutional practices – framed as intermediate outcomes – that can create conditions or contexts for potential longer term institutional changes, for example in the behaviours of traders or financial organizations. This insight can be further refined by looking at how the emerging institutional practices impact on gender at different levels in the configuration.

## Acknowledgements

We are grateful to the reviewers for their constructive comments that helped us to improve the paper.

## Note

1. Joking cousins or *cousins à plaisanterie* is a cultural practice in Mali and other neighbouring countries. It consists of a pact between family names or ethnic groups that allows them to tease one another but never to be aggressive or cause harm to one another.

## References

- AMPJ, 2002. Expérience de l'AMPJ dans le renforcement des capacités techniques et d'organisation des femmes de Zantiébougou. *Atelier international sur le traitement, la valorisation et le commerce du karité en Afrique*, Dakar, Sénégal, 4–6 Mars. Available from: <ftp://ftp.fao.org/docrep/fao/008/y5952f/y5952f00.pdf> [Accessed 3 January 2014].
- Badini, Z., et al., 2011a. *Historique de la filière karité au Burkina Faso et des services offerts par les partenaires techniques et financiers aux acteurs*. VC4PD Research Paper #11. Wageningen: Wageningen University and Research Centre.
- Badini, Z., et al., 2011b. *Le marché du karité et ses évolutions: quel positionnement pour le REKAF*. VC4PD Research Paper #12. Wageningen: Wageningen University and Research Centre.
- Bhatt, N. and Tang, S.-Y., 2001. Delivering microfinance in developing countries: controversies and policy perspectives. *Policy studies journal*, 29 (2), 319–333.
- Bingen, J., Serrano, A., and Howard, J., 2003. Linking farmers to markets: different approaches to human capital development. *Food policy*, 28 (4), 405–419.
- Burns, J., 2000. The dynamics of accounting change: inter-play between new practices, routines, institutions, power and politics. *Accounting, auditing & accountability journal*, 13 (5), 566–596.
- Carney, J. and Elias, M., 2006. Revealing gendered landscapes: indigenous female knowledge and agroforestry of African shea. *Canadian journal of African studies*, 40 (2), 235–267.
- François, M., et al., 2009. Le beurre de karité au Burkina Faso: entre marché domestique et filières d'exportation. *Cahiers agricultures*, 18 (4), 369–375.
- Gerring, J., 2004. What is a case study and what is it good for? *American political science review*, 98 (2), 341–354.
- Greig, D., 2006. Shea butter: connecting rural Burkinabè women to international markets through Fair Trade. *Development in practice*, 16 (5), 465–475.
- Hounkonnou, D., et al., 2012. An innovation systems approach to institutional change: smallholder development in West Africa. *Agricultural systems*, 108 (2012), 74–83.
- Hulme, D., 2000. Impact assessment methodologies for microfinance: theory, experience and better practice. *World development*, 28 (1), 79–98.
- IMF, 2008. *Mali: poverty reduction strategy paper*. Washington, DC: IMF.
- Koloma, Y., 2007. *Microfinance et réduction de la pauvreté en Afrique Subsaharienne: quels résultats au Mali? Document de travail, Groupe d'Economie du développement – Lar Efi du Développement*. Pessac: Université Montesquieu– Pessac IV.
- Lawrence, T.B., Hardy, C., and Phillips, N., 2002. Institutional effects of interorganizational collaboration: the emergence of proto-institutions. *Academy of management journal*, 45 (1), 281–290.
- Lawrence, T.B., Suddaby, R., and Leca, B., 2009. Introduction: theorizing and studying institutional work. In: T.B. Lawrence, R. Suddaby, and B. Leca, eds. *Institutional work: actors and agency in institutional studies of organizations*. Cambridge: Cambridge University Press, 1–27.
- Lusby, F. and Derks, E., 2006. Shea kernels from Mali: a value chain case study. *Small enterprise development*, 17 (2), 36–46.
- Mayne, J., 2001. Addressing attribution through contribution analysis: using performance measures sensibly. *Canadian journal of program evaluation*, 16 (1), 1–24.
- Ministère-Du-Développement-Rural, 2001. *Shéma directeur du secteur du développement rural (SDDR)*. Bamako: Ministère du Développement Rural – Cellule de Planification et de Statistique.
- Morduch, J., 1998. *The microfinance schism*. Development Discussion Paper 626. Cambridge, MA: Harvard Institute for International Development.
- Offe, C., 1996. Designing institutions in East European transitions. In: R.E. Goodin, ed. *The theory of institutional design*. Cambridge: Cambridge University Press, 199–226.

- Rohlfinger, I., 2012. *Case studies and causal inference: an integrative framework*. Basingstoke: Palgrave Macmillan.
- Scott, W.R., 1995. *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Sidibé, A., et al., 2012. Innovation processes navigated by women groups in the Malian shea sector: how targeting of international niche markets results in fragmentation and obstructs co-ordination. *NJAS–Wageningen journal of life sciences*, 60–63 (special issue), 29–36.
- Ton, G., 2010. *Resolving the challenges of collective marketing incentive structures that reduce the tensions between members and their group*. ESFIM Policy Brief #4. Available from: [edepot.wur.nl/192394x](http://edepot.wur.nl/192394x) [Accessed 17 December 2013].
- Ton, G., Vellema, S., and deRuyter-deWildt, M., 2011. Development impacts of value chain interventions: how to collect credible evidence and draw valid conclusions in impact evaluations? *Journal on chain and network science*, 11 (1), 69–84.
- Vellema, S., Beekman, W., and Doorneweert, B., 2011. *Buying, ploughing and coordinating: how to make the 2-tier cooperative business model work in the Zambezian rice value chain?* VC4PD Research Paper #9. Available from: [http://www.wageningenur.nl/upload\\_mm/2/e/6/3eee3671-73d8-4bd6-86b1-43efaa9bd54f\\_VC4PDResearchPaper9MozambiqueRice.pdf](http://www.wageningenur.nl/upload_mm/2/e/6/3eee3671-73d8-4bd6-86b1-43efaa9bd54f_VC4PDResearchPaper9MozambiqueRice.pdf) [Accessed 17 December 2013].
- Vellema, S., et al., 2013. Value chains, partnerships and development: using case studies to refine programme theories. *Evaluation*, 19 (3), 304–320.
- Yaron, J., Benjamin, M., and Piprek, G., 1997. *Rural finance: issues, design and best practices*. Washington, DC: World Bank, Agriculture and Natural Resources Department.