Benefits, Challenges, and Enabling Conditions of Collective Action to Promote Sustainable Production and Marketing of Products from Africa’s Dry Forests

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Abstract

Collective action has been identified, by governments and nongovernmental organizations, as a mechanism to improve smallholder farmers’ bargaining power and access to input and output markets. In many developing countries, supporting collective action has and continues to be an important policy instrument. However, in the collection and marketing of forest products, recognition of and support for producer organizations, is limited. Data, from focus group discussions, key informant interviews, and an analysis of formal producer organizations’ functioning and organizational aspects, were used to examine the motives, benefits, challenges, and enabling conditions of collective action in promoting the sustainable production and marketing of shea, frankincense, and honey from dry forests in Burkina Faso, Ethiopia, and Zambia, respectively. Lessons and key recommendations, including those related to policy, are presented on how collective action through formal producer organizations could be assisted to promote responsible forest products collection and marketing practices that benefit small-scale producers in Africa’s dry forests.

**KEY WORDS:** Burkina Faso, collective action, dry forests, Ethiopia, forest products, markets, producer organizations, Zambia

Introduction

In recent years, there has been a reemergence of interest in collective action as a mechanism for achieving development in Africa, including collective action institutions for the production, marketing, and sustainable use of forest products (Bernard & Spielman, 2009; Kaganzi et al., 2009). White and Martin (2002) highlight the potential of these institutions for sustainable management and forest products marketing especially given the global trend toward forest devolution, with collective action defined as a set of actions and initiatives undertaken voluntarily in cooperation by a group of individuals in pursuit of a shared interest (Marshall, 1988). Recently, the focus on collective action institutions has shifted from production to market-oriented interventions particularly in light of emerging local and export markets (Barham & Chitemi, 2009; Penrose-Buckley, 2007); however, despite the renewed interest in these institutions, they remain poorly understood in development discourses in the forestry sector, with few examples of success (Antinori & Barton Bray, 2004; Kazoora, Acworth, Tondo, & Kazungu, 2009).
2006). Furthermore, there are few studies that compare these institutions across countries (Poteete & Ostrom, 2008), extracting contextual lessons, including those on the influence of both past and present policy. How policy at the national level (and more broadly in certain instances) influences collective action in the production and marketing of products from the African dry forests is a particular information gap.

Although smallholders have engaged in the use and trade of certain dry forest products for generations, new markets, both local and export, have emerged, offering opportunities to raise incomes (Vermeulen, Woodhill, Proctor, & Delnoye, 2008). This, however, requires smallholders to be linked to and able to participate successfully in these markets (Markelova & Meinzen-Dick, 2006; Markelova & Mwangi, 2010), which in turn requires overcoming market barriers that undermine small-scale producers in developing countries (Bernard & Spielman, 2009; Markelova, Meinzen-Dick, Hellin, & Dohrn, 2009). Although trade liberalization policies have gone some way toward addressing this, there are still numerous barriers particularly with respect to more profitable domestic and export markets (Markelova & Mwangi, 2010). Organizing into producer organizations (POs), one of several forms of collective action institutions, is considered as a potential mechanism to address some of the shortcomings, allowing small-scale producers to be competitive by addressing coordination challenges, barriers to market access, and other inefficiencies and by aiding market participation and performance (Barham & Chitemi, 2009; Macqueen et al., 2006; Te Velde et al., 2006). POs have been identified as a means to achieve economies of scale, combine resources and inputs, influence external agents in the value chain, and take advantage of niche market opportunities and to overcome the challenges imposed by adverse policy and market contexts (Gruere, Nagarajan, & Oliver King, 2009; Markelova & Mwangi, 2010). Furthermore, they are seen as possible means to achieve sustainable production and marketing of forest products that benefit small-scale producers who depend on forest products for their contribution to overall livelihood security (White & Martin, 2002). Some commentators suggest certain common enabling conditions that are necessary for successful collective action outcomes (Agrawal, 2001; Barham & Chitemi, 2009); however, measures to achieve and maintain these conditions remain poorly understood. Markelova and colleagues (2009) concluded that there is a need to better understand producers’ motives for forming POs as an institution of collective action, how POs develop and function, their potential for promoting sustainable production and marketing of forest products, and the obstacles they face in achieving sustainability.

Within this context and through an in-depth assessment of the formation, structure, and function of selected case study organizations (engaged in the collective production and marketing of exportable dry forest products in Burkina Faso, Ethiopia, and Zambia), this study examines what motivates smallholders dependent on forest products to join POs, the benefits they receive, the functions these POs perform in the respective value chains, the enabling conditions that need to be created to enhance their roles in the production and marketing of dry forest products, and the challenges they face in doing so. Thereby, the study aims to contribute to the growing discourse over rural POs (Gibson, Ostrom,
McKean, 2000; Ostrom, 1990; Poteete & Ostrom, 2008), particularly those involved in the forestry sector as well as to the dearth of cross-country comparisons on the collective production and marketing of forest products. Besides sharing lessons as to how the role of POs needs to be facilitated through an appropriate policy setting in view of promoting sustainable dry forests products collection and marketing in Africa, the study aims to identify key recommendations related to the motives, benefits, and challenges of collective action to promote sustainable production and marketing of products from Africa’s dry forests and woodlands.

Methods

The analysis presented in this article is based on information and data from a series of substudies (together forming a case study) that focused on three dry forest products in Burkina Faso, Ethiopia, and Zambia. For each of the selected products, two cases of collective action (focusing on formal POs in particular) were selected. These are detailed below. While the studies in each country focused on a range of aspects related to the products in question (e.g., gendered dimensions of the respective value chains, certification, and so on) (Kassa, Tefera, & Fitwi, 2011; Lemenih & Kassa, 2011; Shackleton, Paumgarten, Kassa, Husselman, & Zida, 2011), this paper focuses specifically on the organizational and collective action aspects, particularly with respect to the motives for and the benefits and challenges of acting collectively. Data were collected through a review of secondary and export data, focus group discussions, key informant interviews, and PO records and through analyzing the organizational aspects and functioning of formal POs. While similar research questions and instruments for data collection were designed and used in the different study countries, the details varied according to their contextual setting, the nature of the product studied, and the range and number of actors involved (Shackleton et al., 2011). As per the procedure for in-depth case studies, each PO was studied in detail, and all qualitative information was analyzed for consistency and then summarized and categorized against each of the thematic areas of interest.

The section below details the selected products and case study POs, highlighting why these were selected for comparison.

The Selected Forest Products

From each country, nontimber dry forest products traded in local, regional, and international markets, identified by government and/or nongovernmental organizations (NGOs) for their contribution to local livelihoods and the national economy, and associated with formal examples of collective action (i.e., formal POs) intended to increase benefits to producers were selected, including shea in Burkina Faso, gum olibanum (frankincense) in Ethiopia, and honey in Zambia. Shea is Burkina Faso’s third largest export commodity. Gums and resins
constitute the Ethiopian forestry sector’s most important export commodity, while Zambia’s honey sector is the third largest employer in some provinces (Table 1).

**Table 1. Overview of Uses and Markets of Selected Dry Forest Products**

<table>
<thead>
<tr>
<th>Shea (Burkina Faso)</th>
<th>Gum Olibanum (Ethiopia)</th>
<th>Honey (Zambia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional uses</td>
<td>Incense for ceremonies</td>
<td>Food, medicine, beer</td>
</tr>
<tr>
<td>New alternatives</td>
<td>Ingredients in food,</td>
<td>Honey, beeswax, propolis, and royal jelly</td>
</tr>
<tr>
<td></td>
<td>perfumes, beverages, and paint</td>
<td></td>
</tr>
<tr>
<td>Collection/production</td>
<td>Tapped and collected (by men) from natural stands and concession areas</td>
<td>Hives placed in forests or near homestead. Male dominated.</td>
</tr>
<tr>
<td>Processing</td>
<td>Cleaning, sorting, and grading. No further processing is done locally.</td>
<td>Limited local processing. Companies buy unprocessed honey</td>
</tr>
<tr>
<td>Local trade</td>
<td>Informal and formal. Formal trade dominated by producer organizations (POs) and local companies.</td>
<td>Informal and formal. Formal trade dominated by small-scale traders and companies. No POs trade.</td>
</tr>
<tr>
<td>Export trade</td>
<td>Regional and international. Informal cross-border trade. Formal trade to international markets (including fair trade and organic) dominated by associations and private companies.</td>
<td>Regional and international. Informal cross-border trade. Formal trade to international markets dominated by private/state-owned companies. No certification. No cooperatives export.</td>
</tr>
</tbody>
</table>

The Selected Case Study Producer Organizations

While it is recognized that there is a range of collective action institutions, this study chose to focus specifically on POs recognized as legal entities (as opposed to informal cases) in their respective countries as the structure and function of these organizations can be more easily identified and studied. POs can assume different forms ranging from specific producer cooperatives to broad multipurpose organizations (Bernard & Spielman, 2009; Kazoora et al., 2006). For the purposes of this study, six case studies were selected (two per country) from the main production areas. These were intended to serve as case studies for comparison across countries and products, and not necessarily as a representative sample of POs in each country (Table 2). In Burkina Faso, 2 of 25 umbrella organizations, under which most shea groups are federated, were selected. Both associations operate across six provinces in central Burkina Faso and to the south along the Ghanaian border. In Ethiopia groups and associations are not recognized as legal structures, therefore this study focused on 2 cooperatives out of the 14 specialized gum collecting and marketing cooperatives operating in the country. In Zambia, two associations were selected, one older Northwestern Beekeepers Association (NWBKA) and one that was established more recently Kapiiri Mposhi District Honey Association (KMDHA) (Table 2). Despite NWBKA being one of the first beekeeping associations at a global level to achieve organic certification, over the course of two decades, it disintegrated, losing its organic and fair trade labels and thousands of members. It is being reconstituted and therefore provides lessons on the challenges of achieving sustainable POs.
Results and Discussion

Factors Affecting the Structure and Size of Producer Organizations

As supported by Bernard and Spielman (2009), this study found that POs can assume a variety of different forms. Although their forms are at times dictated by the legal framework (e.g., in Ethiopia), the number of members, the objectives of the POs, their role in the respective value chains, as well as the markets themselves, also determine their form. Those factors, identified as key in the selected cases, are discussed below.

The Evolving Role of External Actors in Supporting Producer Organizations—All three countries promoted cooperatives across various sectors during the 1970s and 1980s (Dialla, 2005; Tordoff & Young, 1994) followed by a general trend of allowing producers to organize in other forms with a greater business focus (Bernard, Collion, De Janvry, Rondot, & Sadoulet, 2008). Ethiopia, however, remains an exception to this trend, with cooperatives still dominating and with the organizational and institutional forms of these structures still largely determined by government regulations. In Burkina Faso and Zambia, the roles of the government, the private sector, donors, and NGOs have evolved over the last decade and increasingly other forms of organization including associations have been promoted (Bernard et al., 2008). However, in both countries, the past role of the state in the formation and functioning of cooperatives, the numerous cases of failure, and the subsequent withdrawal of state support to cooperatives particularly in line with structural adjustment continue to influence emerging efforts (Markelova & Mwangi, 2010; Penrose-Buckley, 2007). This highlights the influence of the

<table>
<thead>
<tr>
<th>Country</th>
<th>Case Study PO</th>
<th>Date Established</th>
<th>Establishment</th>
<th>Size (at Time of Study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>Association Songtaab Yagré</td>
<td>1998</td>
<td>Established under the initiative of 10 women already involved in the production and trade of shea.</td>
<td>1,291</td>
</tr>
<tr>
<td></td>
<td>Union de Groupements de Productrices de Produits de Karité</td>
<td>2001</td>
<td>Established with external intervention to coordinate 18 existing women’s groups.</td>
<td>1,600</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Metema</td>
<td>2007</td>
<td>Established to facilitate individual producers’ access to designated forest areas. The current policy only allows private and state-owned companies and cooperatives concession rights on these forests.</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Quara</td>
<td>2007</td>
<td></td>
<td>346</td>
</tr>
<tr>
<td>Zambia</td>
<td>Northwestern Beekeepers Association</td>
<td>1989</td>
<td>Established in conjunction with North-West Bee Products, a community-owned company, with members holding the majority share.</td>
<td>3,226</td>
</tr>
<tr>
<td></td>
<td>Kapiri Mposhi District Honey Association</td>
<td>2004</td>
<td>Established recently with support from various stakeholders (e.g., the Zambia Honey Council, a national coordinating body, and the Forestry Department) in Zambia’s honey sector.</td>
<td>2,960</td>
</tr>
</tbody>
</table>
macropolitical–institutional environment over aspects such as group autonomy, structure, and the nature and level of support provided (Ostrom, 2004). With the exception of Association Songtaab Yagré (ASY) in Burkina Faso, all the cases were formed as a result of external (government or NGO initiated) interventions.

**Coordinating a Large Number of Members**—The four associations (two in Burkina Faso and two in Zambia) range in size from 1,291 (ASY) to 3,226 (NWBKA) members (Table 2). The cooperatives (Ethiopia) are smaller (120 and 344 members, respectively). The legal restrictions in Ethiopia regarding membership and geographical coverage of cooperatives, and the extent to which cooperatives may be involved in the export market, limit the number of members and influence the structure and functioning of cooperatives. The gum cooperatives are currently single-tiered structures and although in other sectors these structures are linked under broader unions, the gum sector currently has no union. Without a union, the extent to which these cooperatives capture the value chain is limited as only unions are permitted to export. Despite the restrictions, the size of the selected cooperatives is still larger than the optimal size (between 20 and 30 members) suggested by Markelova and colleagues (2009), although there is a lack of consensus in the literature as to what size is optimal. Some suggest that smaller organizations are suitable especially for marketing activities (Markelova et al., 2009). Large organizations are preferable in terms of economies of scale and therefore increased bargaining power and market competitiveness, although they face challenges including sharing responsibility and benefits equitably; increased transaction, communication, monitoring, and enforcement costs; decreased trust among members; divergent interests; and increased free riders (McCarthy, 2004; Poteete & Ostrom, 2004). As such these organizations become difficult to manage as a single entity. To overcome these challenges, small- to medium-sized organizations, coordinated under larger umbrella organizations, as is the case of the shea and honey associations, are often considered preferable (Merry et al., 2006; Poteete & Ostrom, 2004). For example, while ASY as a whole may have 1,291 individual members, at the basic unit of collective action (groups at the village level), the size varies from 15 to 30 individuals, consistent with Markelova and colleagues (2009).

The Burkina Faso and Zambia cases are multilevel and mixed structures that allow economies of scale and increase the bargaining power of producers (Penrose-Buckley, 2007) while maintaining communication and trust between members. These multitiered structures also support effective coordination and management (Penrose-Buckley, 2007). There is the need to balance organization size with its mandate, the interests of its members, the related transaction costs, the available skills and managerial experience, and the need to maintain relationships of trust.

**The Producer Organizations’ Role in the Value Chains and the Markets**—The organizational form of POs is also influenced by the role they play in the value chain and by the markets themselves. This can be seen in the cases of ASY and Union de Groupements de Productrices de Produits de Karité (UGPPK) (Burkina Faso), both of which trade to niche, quality conscious, international markets. Supplying these markets with the necessary quality and quantity of products has influenced their form. Formalization to meet the demand of niche markets influences PO form and
although costly, might have associated benefits including access to financial and technical assistance (Markelova & Meinzen-Dick, 2006).

ASY (Burkina Faso) highlights how organizations can “corporatize” through the formation of hybrid structures, whereby “hybrid” refers to the fact that ASY has created a separate private company owned by the association. In these hybrid structures, the production and commercialization functions are separated (Penrose-Buckley, 2007). NWBKA (Zambia) was originally established as a hybrid (in conjunction with an association-owned company, NWBP); however, numerous obstacles resulted in the collapse of this setup and currently NWBKA is a multtiered structure separated from the company. Additional organizational levels can be created to perform certain functions (Kazoora et al., 2006; Penrose-Buckley, 2007). For example, KMDHA has disciplinary, finance, and research and development committees, while ASY has a producer-owned company responsible for marketing. As POs advance toward branding, value-addition, and export, multtiered and hybrid structures become optimal.

The organizational form of POs need not be static: organizations may change their form and activities over time and in response to changes in the context in which they operate as noted in the case of NWBKA (Kazoora et al., 2006; Penrose-Buckley, 2007). It is suggested that there is no ideal structure, rather the context, the pros and cons of each structure, the producers’ motivations for collective action, and the available skills and managerial experience of the members that need to be considered (Antinori & Barton Bray, 2004; Markelova & Meinzen-Dick, 2006). Based on the study of the six case study POs, we emphasize the need for closer examination of the objectives and capabilities of POs, the legal and institutional context under which they operate, the levels of POs involvement in the value chain, and the specificity of forest products be carefully considered to better support collective action through formal POs and help POs play significant role in responsible forest products collection and marketing practices that benefit small-scale producers in Africa’s dry forests.

The Motivations for Joining Producer Organizations and Benefits to Members

In all three countries, producers identified a range of constraints to raising incomes through trading the selected forest products individually, highlighting their motivations for choosing to act collectively. As explained in more detail below, the study showed that producers act collectively in order to improve access to: (i) the forest resource; (ii) external support; (iii) markets including international and niche markets; and iv) information, training, and credit from service providers (Table 3). Other motives include increased coordination, increased collective voice, capacity building in terms of production and marketing, and increased quantity and quality to meet market demands. Through their POs, producers are able to overcome some of the legal, logistical, and financial limitations to accessing both the forest resource and local and international markets. Other studies have noted similar motivations (Kazoora et al., 2006; Komarudin, Siagian, & Oka, 2007; Thomas, Macqueen, Hawker, & De Mendonca, 2003). Thus, POs are considered as mechanisms to improve incomes and livelihoods, to encourage sustainable use, and to improve the position of the producers in their respective value chains. The case studies highlight

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that identifying motivations and incentives for organizing around marketing activities requires understanding the value chains in their entirety and the contexts in which the POs operate (Markelova et al., 2009). For example, in Ethiopia, access to the resource base, limited by regional state restrictions, is one of the greatest incentives for acting collectively, while in Burkina Faso access to the markets and to external support are key motivators.

Key to the success and sustainability of collective action arrangements is translating these motivations into benefits. Although many benefits are obvious, they were not noted uniformly across the cases, and each case is shown to face serious challenges in realizing these. The associated benefits are discussed below with the constraints faced by POs discussed in the following section.

In all six cases, collective action has contributed to some extent to improved production capacity through facilitating access to the forest, training and logistical support. In Burkina Faso and Ethiopia, collective action has contributed to

<table>
<thead>
<tr>
<th>Key Benefits</th>
<th>Barriers</th>
<th>Examples from the Case Studies</th>
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<tbody>
<tr>
<td>i) Reduced transaction costs and improved access to market information</td>
<td>• Relatively limited market access and the related transaction costs undermine the benefits smallholders derive from market opportunities</td>
<td>• Reduced transaction costs by collectively arranging transport from local bulking centers to processing centers and markets (shea associations). • Markets sourced and buyers and producers linked (beekeeping associations). • Reduced costs of achieving organic and fair trade certification and the related access to niche markets (shea associations). • Access to market information facilitated.</td>
</tr>
<tr>
<td>ii) Improved capacity to meet market (including regional and international) requirements</td>
<td>• Low capacity to meet market requirements undermines the ability of small-scale producers to benefit from market opportunities</td>
<td>• Training provided to members on sustainable harvesting and appropriate processing/value-adding techniques thereby improving the quantity and quality of resource (all cases). • Internal systems developed to ensure regularity of supply (shea and beekeeping associations).</td>
</tr>
<tr>
<td>iii) Improved bargaining power</td>
<td>• Low capacity of individuals to negotiate with buyers and service providers</td>
<td>• Members collectively agree to the buying/selling price (shea and beekeeping associations). • Producer organizations negotiate on behalf of their members ensuring a fair price (all cases). In the case of the gum cooperatives, this resulted in a 70% increase in the selling price in 1 year.</td>
</tr>
<tr>
<td>iv) Enhanced ability to compete in high-value markets</td>
<td>• Lack of knowledge and capacity to respond to market opportunities</td>
<td>• Improved ability to tap into high-value markets due to organic and fair trade certification (shea associations). • Improved ability to diversify products and markets through value-addition technologies (shea associations).</td>
</tr>
</tbody>
</table>
sustainable use and management through the provision of trainings on sustainable harvesting and tapping techniques. In Ethiopia, the cooperatives negotiated with local authorities to get concession rights to nearby forests that were previously off limits to anyone other than private and state-owned companies, while the shea associations in Burkina Faso have improved organic production capacity by securing access to organically certified collection areas and by ensuring production standards are adhered to. It should be noted, however, that in Ethiopia, the current lease period on the concession areas is too short to encourage long-term sustainable use and that use rights differ from control/decision-making rights. The shea and honey associations have both contributed toward improved processing capacity (there is no local processing of gums in Ethiopia), although the honey associations are restricted by limited buyer demand. Buyers prefer to purchase unprocessed honey, which they process according to their standards. There is a potential role for the associations in establishing processing centers where honey can be processed in accordance with these standards. The shea associations process organic, fair trade and conventional butter. The processing equipment allows the associations to produce a greater range of products to meet a wider variety of markets. Processing has the potential to increase market reach, market access, and price (as in the case of the shea associations); however, it also requires technology and skills for value adding (Kazoora et al., 2006; Penrose-Buckley, 2007). These costs need to be weighed against the potential benefits.

Many of the identified benefits relate to increased marketing capacity in general and increased vertical integration in the respective value chains in particular (Kaganzi et al., 2009; Komarudin et al., 2007) (Table 3).

As described in Table 3, collective action helps reduce transaction costs, increase product quantity and quality, and improve the bargaining power of producers. These findings are in line with the observations of other authors (Chauhan, Sharma, & Kumar, 2008; Macqueen et al., 2006). According to Kazoora and colleagues (2006), meeting standards increases the likelihood of accessing niche markets with better prices. This is particularly evident in Burkina Faso, where the shea associations dominate the local, regional, and international trade. Improved access to market information and the dissemination of this information to PO members allows producers to respond to market opportunities (Gruere et al., 2009). The increasing opportunities that information and communications technologies bring into the marketing chain support this dissemination of information. For example, in Zambia, producers benefit from a mobile phone-based short-message service (SMS), which provides information on potential buyers and their prices, thereby promoting informed bargaining by the POs. Other commentators have also highlighted the potential of new and innovative information and communication technologies in facilitating marketing (Barrett, 2008; Johnson & Berdegue, 2004). Achieving economies of scale and developing new and maintaining existing markets were identified as other key motivators for acting collectively. These are in agreement with the findings of others (Johnson & Berdegue, 2004; Komarudin et al., 2007). Collective action has also enhanced the ability of shea, gum, and honey producers to compete in high-value markets. Markelova and Mwangi (2010) emphasize the role of collective action in reaching larger domestic urban, regional, and international markets (as opposed to local
markets) and in long market chains where the gains of acting collectively outweigh those of acting individually.

Other benefits of collective action found in this study include: (i) access to external support (including donor funds and technical and logistical support), (ii) improved human and social capital, (iii) risk sharing, and (iv) access to technological and institutional innovations. In Ethiopia, an additional benefit is hidden subsidies from government (e.g., free auditing and training for cooperatives), although these are not always provided efficiently. POs also serve a social role. This is particularly evident in the case of UGPPK, which has several social outreach programs, thereby also benefiting nonmembers. A considerable challenge lies in providing the benefits on a sustainable basis, and as noted by Penrose-Buckley (2007), it may take time for members to realize the advantages of collective action, therefore they need to be committed in the long term.

**Constraints Faced by Producer Organizations**

The potential of forest-based POs is often constrained by weak economic contexts (e.g., poor infrastructure, taxes and regulations, market isolation, poor financial services, and so on). The constraints identified in this study are summarized in Table 4.

Some of the constraints to market access often remain beyond the ability of POs to solve (Penrose-Buckley, 2007). The most important constraints faced by POs remain lack of transparency in objective and rule setting and inequality in benefit sharing. The ASY leaders and members were reluctant to discuss the distribution of benefits and dividends suggesting a possible lack of transparency and maybe inequities. Unlike the experiences with NWBKA (Zambia) and its misuse of the fair trade premiums, both shea associations claim that their members are informed of the use of these premiums. The gum cooperatives face obstacles to ensuring equitable benefit sharing for several reasons. First, the price negotiations are conducted only at the executive committee level, which some members feel is not transparent and they are not aware of the final profit margins. Second, lack of capacity in the cooperatives to keep proper records of the contribution of each member and that of the government to conduct timely financial audits create problems. Cooperatives cannot pay dividends to members before financial auditing by government authorities. Thus, addressing policy and institutional constraints and improving the record keeping and benefit-sharing mechanisms are key to increasing incomes that producers generate from the dry forests, thereby providing incentives for them to responsibly manage forest resources. Macqueen and colleagues (2006) also highlight the need for clear procedures for costs and benefits to avoid financial mismanagement and elite capture. In their review of POs in Burkina Faso and Ethiopia, Bernard and Spielman (2009) found that organizations are weak in delivering benefits largely because of weak managerial capacity. There is the need for POs to design and implement effective and legitimate benefit-sharing mechanisms (Poteete & Ostrom, 2004).
Enabling Conditions for Sustaining Collective Action

The success and sustainability of collective outcomes is dependent on the policy environment creating enabling conditions (Agrawal, 2001; Barham & Chitemi, 2009; Markelova & Mwangi, 2010; Merry et al., 2006; Penrose-Buckley, 2007). In light of the constraints discussed above, and taking into consideration the motivations for and benefits of collective action, as well as the factors that influence the

Table 4. Major Constraints Faced by Case Study Producer Organizations (POs)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Details</th>
</tr>
</thead>
</table>
| Lack of accountable leadership and transparency in decision making | - Leaders tend to be less accountable to PO members and in some cases refuse to resign.  
- Responsibility and benefit-sharing mechanisms are not openly discussed and agreed upon fuelling doubt about corruption and creating mistrust. |
| Underdeveloped infrastructure                   | - Poor transport networks and limited access to modern technologies hinder market access and increase transaction costs.                                                                                   |
| Lack of information on production potentials and markets | - Inadequate information on the resource base and potential yield levels, on sustainable harvesting practices, and on handling and processing techniques to maintain and improve quality undermine capacity to increase incomes and to promote sustainable forest management.  
- Lack of information on prices, quantity, and quality requirements of buyers and alternative markets undermine capacity to bargain and to benefit from existing market opportunities. |
| Competing land use systems                       | - The dry forests (e.g., in Ethiopia) have become frontiers of commercial farming expansion. Demand for labor is increasing, which significantly undermines the competitiveness of the gums and resin subsector and its capacity to supply adequate volumes of gums and resins. |
| Security of tenure                               | - Companies are given short lease periods on concession areas, and communities are not given forest tenure rights (e.g., in Ethiopia). This reduces the incentive for responsible forest management and may damage the resource base due to overharvesting. In some areas, communities convert forests to crop fields to have claims on the land and ensure tenure security. |
| Capacity shortfalls                              | - Poor harvesting/production and processing techniques including limited knowledge and capacity for value addition and best practices.  
- Weak capacity to meet demands of buyers in terms of quantity and quality, time of delivery and to achieve and maintain certification.  
- Weak technical and entrepreneurial capacity and bargaining power of producers.  
- Poor literacy levels to keep proper transaction records.  
- Lack of management and technical skills to manage organizations.  
- Limited capital to benefit from economies of scale. |
| Regulatory barriers                              | - Lack of appropriate policy and regulatory frameworks and/or poor implementation of existing rules and regulations.  
- Changing, stringent, or expensive regulations and marketing standards (including fair trade and organic) or no officially approved product standards in the case of Ethiopia.  
- Bureaucracy and weak administrative support and poor coordination in and support from various sectors such as extension and credit services, law enforcement, and so on.  
- Lack of competition between buyers.  
- Weak governance regarding access to and use of the resource base and operations in the marketing chain. |
| Others                                           | - Cost of renting/buying equipment and not enough equipment to benefit all members (e.g., to add value through processing of honey).  
- Underdeveloped markets, domestic and international market instability and fall of prices.  
- Cost of entering new markets including international and niche markets.  
- Conflict between local norms and business objectives and rationales. |
form and function of the selected case study POs, this study highlights four key enabling conditions:

**Past Successful Experience**—Although each of the POs studied is fairly new (except NWBKA), each of the selected countries has a long history of collective action, although not always successful, often because of extensive political interference (e.g., socialist cooperatives in Ethiopia). As such, many rural producers approach new collective arrangements with skepticism. In Ethiopia, for example, producers are reluctant to buy more shares in cooperatives because of past failures. Therefore, the capital base of many cooperatives remains weak, while members of the honey associations are skeptical about the use of their membership fees. This suspicion of collective arrangements stemming from failed past experiences and its influence on current group success has also been noted by other commentators (Macqueen et al., 2006; Penrose-Buckley, 2007). More experienced and functioning groups are often better positioned to take advantage of emerging opportunities, benefit from collective trust, and have improved chances of success (Barham & Chitemi, 2009; Gruere et al., 2009; Poteete & Ostrom, 2004). The failings of the past need to be better assessed to determine how current and future POs can succeed.

**Capable and Accountable Leadership**—On paper, the leadership of all six POs is vested in their respective leadership bodies; however, in practice, there are examples of leadership being vested more heavily in particular individuals (e.g., ASY and NWBKA). The ASY chairwoman was the driving force of ASY’s formation and its original chair. She continues to provide direction and strategic vision, and ASY has grown and diversified more successfully than other associations as a result. The manager of NWBKA has assumed considerable responsibility in terms of decision making and the initial development of the reformed NWBKA. Both these leaders have used their skill and experience to contribute toward the development of their respective associations. This is in line with Kaganzi and colleagues (2009), who argue that strong leadership with centralized decision-making processes leads to better outcomes because strong leaders identify markets and maintain market links and quality standards and provide technical expertise, drive, and continuity. There is, however, a lack of consensus in the literature as to whether or not participative or individual leadership is preferable (Penrose-Buckley, 2007). Others argue that participatory governance is a means of enhancing sustainability of collective action and effectiveness of POs by adjusting decisions to local conditions and customs, a desirable outcome in itself (Markelova et al., 2009).

Although all six cases have democratic elections outlined in their constitutions, only two (i.e., UGPPK and KMDHA) exercise participatory governance. Given that the POs in this study are all fairly recent (except NWBKA), adherence to democratic processes (as an indicator of participatory governance) was difficult to gauge. There are, however, indications that succession has been and will remain an obstacle to the POs. For example, the previous board of NWBKA remained unchanged for 10 years despite the constitution stating the board should be reelected annually. Additionally, the chairperson of NWBKA has been difficult to replace as he is the chief of one of the districts in which the association operates, suggesting a conflict between traditional and democratic governance. For the replacement of leaders of
gum cooperatives, auditing by an external body is required, and as this is rarely done regularly, regular elections are rare highlighting how the external environment (i.e., required government auditing processes) can influence governance at the PO level. Delays or lack of auditing may open avenues for cooperative leaders to misuse funds. Antinori and Barton Bray (2004) describe lack of accountability and corruption as a primary manifestation of tension in POs. Elite capture and the tension between traditional and democratic governance, as noted with NWBKA, have been observed elsewhere (Barham & Chitemi, 2009; Syamsuddin, Neldsavrino, Komarudin, & Siagian, 2007). In general, irrespective of the type of leadership, what is most important is that the leadership is accountable, strong, and autonomous and that there is grassroots ownership and trust in leadership (Macqueen et al., 2006; Penrose-Buckley, 2007). The adherence of leaders to the constitution in terms of democratic elections, together with the degree to which they allow for transparency in terms of decision making, benefit sharing, and price negotiations, is seen as an important reflection of accountability and commitment to good governance (Macqueen et al., 2006).

In addition to accountable leadership, capable leadership is also important, particularly when managing multitiered and hybrid structures such as the shea and honey associations (Antinori & Barton Bray, 2004). Failure to manage such structures effectively can result in loss of trust in the organization and to its ultimate collapse (Markelova & Mwangi, 2010; Penrose-Buckley, 2007) as was noted in the case of NWBKA. Despite NWBKA being one of the first beekeeping associations at a global level to achieve organic certification, over the course of two decades, internal conflict and mismanagement resulted in its disintegration, including the loss of its organic and fair trade labels and thousands of members. Skilled leadership is particularly important in larger POs where coordination challenges and management inefficiencies may increase, while peer-based accountability, monitoring, and sanctioning may weaken (Markelova & Mwangi, 2010). Turnover of skilled leaders can undermine the efficiency of POs if they are replaced by less skilled people. In Ethiopia, there is a problem with leadership turnover as good leaders are often picked up by the political machinery, thereby weakening the cooperatives. To minimize the impact of turnover, the broader leadership structures must be strengthened.

**Transparent Decision Making and Rule Setting**—Although all the case studies have systems in place to support transparent decision making and rule setting, transparency and participation were not noted in all cases despite these being considered critical elements to ensure a sense of ownership, encourage compliance, and promote sustainability (Komarudin et al., 2007; Markelova & Mwangi, 2010; Markelova et al., 2009). In Ethiopia, the legal frameworks are clear as to how to take decisions at different levels and the roles and function of the different bodies. However, despite these legal provisions, practical measures to ensure proper elections and capacity to keep proper records and audit cooperatives in a timely manner remain as the major challenges. Various commentators highlight the need for clear records, transparent decision making, accountability mechanisms, and democratic processes especially for equity and financial discipline (Kazoora et al., 2006; Macqueen, 2008).
Effective and Need-Based External Support—In all six cases, there has been some degree of external influence in the objectives and rule-setting processes by donors in the case of Burkina Faso and Zambia and government in the case of Ethiopia. Of the selected case studies, only ASY was self-initiated, although it also received considerable external support to train producers, to improve access to the forest, to purchase inputs and equipment, to reinforce internal and external communications, to acquire and maintain certification labels, and to set up systems of quality control and traceability (Markelova & Meinzen-Dick, 2006). The cases of ASY and UGPPK suggest that long-term support helps POs attain potential self-sustainability. Ethiopia’s cooperatives are supported by government during their establishment and legalization. NWBKA (Zambia) received external support from the outset and grew into a successful PO before collapsing two decades later. The association is now being restructured with donor assistance. Possibly, the rapid growth of NWBKA because of external support became unsustainable and failed to allow for organic development, including of capacity and incentives for collective action. Rapid expansion without a parallel increase in administrative capacity can result in the collapse of initially successful examples (Markelova & Mwangi, 2010).

Although external support has played an important role in the development of the case studies and continues to play a role in their operations, the following points of caution need to be taken into account:

1. Dependency. External support can lead to a dependency syndrome, whereby organizations fail to strive for self-sustainability (Bruns & Bruns, 2004). Often POs stagnate and in some cases collapse with the withdrawal of the support, accelerated by the lack of mutual interests often associated with “home-grown” collective action (Kazoora et al., 2006; Syamsuddin et al., 2007). Such is the case of NWBKA and KMDHA, which have limited income-generating activities, while the shea associations have diversified their income-generating activities and are therefore able to cover a greater proportion of their costs. UGPPK would be closer to self-sustainability but has decided to redistribute approximately 75 percent of its turnover to its members. ASY is increasingly diversifying its markets to reduce its dependence on donors. POs need to retain some level of autonomy and cohesiveness (Kazoora et al., 2006), and donors need to have a clear exit strategy (Macqueen, 2008; Markelova et al., 2009).

2. Type of support. The results highlight that support may include a soft component (e.g., trainings and information) or a hard component (e.g., provision of/access to credit, input, and infrastructure) supporting observations from the literature (Bernard et al., 2008). The latter is generally more difficult to provide, although both the shea and honey associations have benefited from infrastructural support. As noted in Table 3, training and access to information have contributed to the improved marketing capacity in all the selected case studies. In Ethiopia, training on proper tapping practices has not only benefited the cooperative members but has also contributed toward the sustainability of the resource base. The type of support offered needs to be neutral and demand driven (Macqueen et al., 2006), and supporting organizations need to take care not to impose on the producers’ objectives. The weakening of traditional institutions through excessive external support can undermine
collective action arrangements (Meinzen-Dick, Di Gregorio, & McCarthy, 2004).

3 Support provider. Government support for the Ethiopian cooperatives is potentially more sustainable than donor support in Burkina Faso and Zambia as government institutions will be there for the foreseeable future. However, the nature of the government support in Ethiopia is currently ineffective and bureaucratic, with considerable delays in election processes, government auditing, and the distribution of benefits to cooperative members. As government already determines the structure, the benefit-sharing mechanism, and the responsibilities of the different committees, its influence might become excessive. In Ethiopia, the instability and constant restructuring of government institutions that support cooperatives has led to a lack of continuity in information, documentation, and technical support. In Burkina Faso and Zambia, market liberalization was marked by the withdrawal of government support for POs with no other party to fill the gap. Markelova and Mwangi (2010) highlight that there is still some debate on who is best placed to provide support to POs—the government, NGOs, or the private sector. Ultimately, who provides the support depends largely on the type of services, whether the services constitute private or public goods, and whether market failures exist or not.

External support needs to be coordinated for complementarities and synergies and should focus on assisting POs to: (i) understand and cultivate factors that enhance internally induced collective action; (ii) establish and maintain adequate records and agreed upon equitable responsibility and benefit-sharing mechanisms with the benefits of collective action outweighing the benefits of acting individually; (iii) provide a range of support services appropriate to the objectives and skill of the members and relevant to the needs of the business; (iv) link to other POs, the private sector, civil society, government and NGOs; and (v) build their technical, administrative, and institutional capacity to ensure long-term financial sustainability and social equity. These suggestions are also in line with other authors (Meinzen-Dick et al., 2004; Ostrom, 2004; Syamsuddin et al., 2007). The state, donors, NGOs, and the private sector have different roles in supporting POs, while the participation of all three suggests the need for innovative institutional arrangements to allow for coordinated and complementary support (Markelova & Mwangi, 2010).

Conclusions and Recommendations

POs have the potential to facilitate collective action and contribute toward improving the livelihoods of rural producers. Although collective action plays an important role in correcting market imperfections, its sustainability depends on factors that motivate people to act collectively, the benefits as perceived by the producers themselves, the organizational forms of collective action that operate in a given context, the challenges these organizations face, and the enabling conditions for these organizations to be internally accountable and competent in the market. Furthermore, the legal setting and policy environment influence the form and functions of POs. There are no blueprints that exist that can reliably be used to solve collective action problems and no “one-size-fits-all” strategy for rural POs (Ostrom,
2004; Poteete & Ostrom, 2008). It is therefore critical that policy makers, practitioners, and supporters of POs understand how these institutions are functionally organized and governed and how they can constructively engage in pro-poor development strategies (Kazoora et al., 2006). Further strengthening of POs requires understanding the local context and history, the legal setting and policy environment, motives and benefits, and challenges and enabling conditions to sustain collective action. This section summarizes the key findings of the study and makes specific recommendations aimed at facilitating collective action through formal POs to promote responsible forest management and forest products marketing practices that benefit small-scale producers in the dry forests of Africa.

**Finding 1: Producer Organizations Have a Role to Play as They Provide a Range of Benefits**

The findings suggest that POs as institutions of collective action of small-scale producers in Burkina Faso, Ethiopia, and Zambia play important roles in improving access to resources and markets and building their capacity in the production and marketing of forest products.

Although the range of benefits differed between the cases, improved access to the resource base, to external support, and to markets and building technical capacity and bargaining power constitute the major motivations for small-scale producers to act collectively through POs. The major benefits that POs provided to their members relate to reducing transaction costs, increasing capacity to meet market requirements, improved bargaining power, and ability to enter and stay in the market. By improving access to the resource and production capacity of producers, by opening up new marketing opportunities through innovations to existing value chains or entry to new markets, POs improved the production, processing, and marketing capacity of producers.

**Finding 2: Past History and Current Context Create Enabling or Constraining Situations**

The political, social, and economic context (both past and present) in which POs operate can have a considerable impact on producers’ motives to join POs. For example, the past failings of cooperatives have created skepticism among producers about this form of organization. Context can also influence the motivations for collective action (e.g., the restrictions on tapping gum by individual producers in the Amhara region of Ethiopia is a major driver for joining gum cooperatives).

**Finding 3: Producer Organizations Take a Range of Forms**

Although no ideal form of PO exists for facilitating collective action (Antinori & Barton Bray, 2004), a number of factors influence organizational form including the existing legal requirements, the number of members, the function and services of the organization, and issues of governance and management. An appropriate form is one that enables members to achieve their objectives effectively and efficiently within the legal limits that they operate.
Finding 4: Ensuring Accountability and Transparency and Building Capacity at Different Levels Are Important

The major constraints faced by POs include lack of accountability of the leadership and transparency in decision making, low commitment of leaders, disunity, elite capture and poor financial management, and underdevelopment of infrastructure and market systems that result in high transaction costs. A lack of capacity, not only within the POs themselves but also among government departments and other service providers, is a major challenge. This suggests the need for broad-scale capacity development (e.g., to manage the resource base sustainably, to produce quality products, to keep proper records to ensure the accurate division of dividends, to effectively communicate with buyers and service providers, and so on). In general, functional, entrepreneurial, organizational, and management skills are inadequate and need to be developed.

Finding 5: Identifying Enabling Conditions Is Key to Supporting Producer Organizations

In a given context, enabling conditions relevant for sustaining collective action must be identified. Our observations across the six case study POs indicate that appropriate size of the PO, past successful experience of collective action, capable and accountable leadership, transparent decision making, and rule-setting processes that support equitable responsibility and benefit sharing are among the major enabling conditions for sustaining collective action in the form of POs. More broadly, as highlighted in the Ethiopian case in particular, an enabling political and economic environment is also recommended (Markelova & Mwangi, 2010).

Finding 6: Well-Thought and Complementary External Support Can Play a Key Role

The case studies highlight the role of external support in catalyzing collective action, in providing information, building capacity, and providing technical assistance and market support. Such interventions are especially useful given the formality required mainly by the export markets. Similar conclusions were also made by Bernard and colleagues (2008) and Markelova and colleagues (2009).

In line with these findings, the following recommendations are made in relation to POs engaged in the collection and marketing of products from Africa’s dry forests:

- Demand-driven support should be provided to improve the performance of POs. Cultural, ecological, and political and legal contexts of countries need to be considered when assessing the requirements for supporting collective action arrangements. Although demand-driven support can be highly productive (Macqueen et al., 2006), POs’ functionality can be impaired if external support imposes structures and incentives that are not sustainable. The support provided should involve interventions at different levels and aim at addressing a range of policy, legal, regulatory, and institutional frameworks. These recommendations are also in line with observations of Macqueen (2008), Macqueen and colleagues (2006), and Poteete and Ostrom (2008).
• When designing organizational form, it is important to consider the function and objectives of the POs as well as the challenges and benefits associated with that particular structure. Size, efficiency, participatory decision making, and democratic processes need to be carefully balanced to ensure maximum benefits. Legal limits that recognize only one legal format to promote collective action (e.g., cooperatives in the case of Ethiopia) require rethinking.

• Training support should focus on building technical, administrative, and managerial capacity of members and especially leaders of POs to improve internal governance of organizations and accountability of leaders and to strengthen their commercial orientation. Besides training, additional support needed includes: (i) removing policy and legal barriers and developing special legislation and support that meets the needs of POs, (ii) improving access to resources and security of tenure and capacity to monitor responsible use and management of forests, (iii) improving access to and uptake of low-cost production and processing technologies, (iv) building technical capacity to produce more and consistent quality products, (v) reducing bureaucracy and improving access to affordable credit and legal services, (vi) improving capacity to access and stay in the market, and (vii) developing capacity, confidence, and competence of service providers. Most of these are in agreement with other authors (Anderson et al., 2004; Barham & Chitemi, 2009; Barrett, 2008; Kazoora et al., 2006; Macqueen, 2008; Poteete & Ostrom, 2004; Thomas et al., 2003).

• The roles of the state, the private sector, donors, and NGOs in supporting POs must be clarified. The support that POs get from these agencies must be complementary and well coordinated. NGOs could assist in building capacity through training and logistical and financial support. The private sector could actively nurture long-term business partnerships with POs and enable organizations to meet quality and certification standards of formal markets, while government must create an enabling environment and partnerships between the public, the private sector, NGOs, research institutions, buyers and support services providers, and POs. Government should contribute to building capacity at different levels, improving infrastructure and market development, promoting responsible forest management, governing the forest products value chain (in terms of entry and exit, quality control, contract enforcement, accessible and low-cost conflict resolution mechanisms, and so on), and reducing barriers to credit and inputs. In the long term, however, the role of governments needs to change from directly providing support to focusing on creating linkages with the market, support services, and policy processes as well as opening up opportunities for the private sector to provide services (e.g., auditing of gum cooperatives, which the government has failed to perform in a timely manner).

• Good links between the different levels of the organizations as well as between the organization and other bodies need to be developed and maintained. Options must be explored for POs to add value and to improve their access to extension and credit services and to market information so that their capacity to enter and stay in domestic and export markets can be strengthened.
• Legal and institutional mechanisms must be put in place to ensure timely auditing and regular elections by an appropriate body to minimize corruption and to facilitate timely benefit sharing among members. Members should also participate actively in POs to ensure a greater sense of ownership.

• Market information needs to be made more accessible through, for example, the development of appropriate information and communication technologies (e.g., the SMS-pricing system for honey in Zambia), and there is the need to design effective and efficient microfinance institutions specifically geared to rural producers engaged in the trade of forest products.

• Also, there is the need to develop the capacity, confidence, and competence of service providers (Anderson et al., 2004) including extension and credit, management services, organization support, technical assistance, marketing, and finance to provide services that meet the requirements of low-income producers in a less bureaucratic manner. This is in agreement with others (Markelova & Mwangi, 2010; Scherr, White, & Kaimowitz, 2003).

In conclusion, collective action in the form of POs is an important but not an all-encompassing solution for improving production, processing, and marketing of products from the dry forests of Africa as the success of these POs depends on certain factors. This is in line with other authors (Kaganzi et al., 2009; Penrose-Buckley, 2007). Enhancing the role of these organizations to provide small-scale producers with economic incentives to sustainably manage dry forests through the production and marketing of forest products requires appropriate understanding of the potential these organizations have and the challenges they face. It needs to be based on a thorough assessment of the context and with commitment to building their capacity and creating an enabling environment that promotes their internal governance and their capacity to enter and compete in the market. The legal aspects of countries governing the formation and function of formal POs, the history behind POs and the experiences that producers have had, the leadership quality and capability, as well the appropriateness and adequacy of external support influence the role POs could play. There is a need for clear policy to facilitate the formation of POs, through internal governance, and coordinating the support that government and nonstate actors could provide in enhancing their roles in sustainable production and marketing of forest products. Additional research is needed on the trade-offs between participation and quick decision making, between group size and economies of scale, and how to build the capacity of POs to also play a more prominent role in responsible forest management. The gaps and overlaps in policies affecting the production aspects and the marketing system of forest products need to be examined further.

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