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FLUCTUATING FORTUNES OF A COLLECTIVE ENTERPRISE

The Case of the Agroforestry Tree Seeds Association of Lantapan (ATSAL) in the Philippines

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ABSTRACT

The Agroforestry Tree Seeds Association of Lantapan (ATSAL) in Bukidnon province, southern Philippines was organized in 1998, facilitated by the World Agroforestry Centre (ICRAF). Farmers were trained on germplasm collection, processing and marketing of agroforestry tree seeds and seedlings. ATSAL has been marketing various tree seeds and seedlings with apparent success, and has provided training on seed collection and nursery management to farmers, government technicians, and workers from non-government organizations (NGOs). This paper reports on the initial results of an on-going study to assess the effectiveness of ATSAL's marketing strategy, including group dynamics, and the issues and challenges the group faces. It was found that during the first two years, ATSAL's market share of greatly demanded timber tree species increased significantly, thus helping to disseminate widely these important species among farmers. ICRAF's technical back-up was an advantage, increasing the Association's market credibility. Subsequently, ATSAL extended its market to the central Philippines, but failed to meet the demand for seeds due to organizational limitations. Market competition exists, where a non-member was able to take a larger market share than was the group. Nonetheless, ATSAL has established its name as a viable community-based seed and seedling producer, maintaining a stronghold in local and regional markets. Collective action is important for smallholders to break in, and gain market access, but is unlikely to sustain without effective leadership and some facilitation (in some cases even on-going), thus requiring expenditures on repairs and maintenance through continuous technical and leadership training for the collective, and technical back-up and facilitation by an intermediary. Finally, facilitating smallholder collective action is essentially an arduous task, requiring the supporting agency to hold a firm grasp of market realities, to invest in the maintenance of collective action, to provide continuous technical back-up, and to ascertain the conditions that make collective action succeed.

Keywords: Collective action, Niche marketing, Agroforestry seeds.

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FLUCTUATING FORTUNES OF A COLLECTIVE ENTERPRISE

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1. INTRODUCTION

Marketing through Collective Action

Collective action is seen in many community-level efforts in agriculture and natural resource management—from technology dissemination, promotion and protection of resource rights, and accessing information of new technologies, credit and marketing. In the context of a small-scale collective, the direction of its actions generally emanate from the economic and social benefits that members can obtain from their investments (Swallow et al., 2001). Farmers are persuaded to organize themselves when there are opportunities to improve their farms and the economic welfare of their family. Moreover, they work together to produce mutual benefit for the group when the return is sufficient to cover their individual costs. All these involve high levels of trust, commitment, and cooperation, which form the basis of social capital (Meinzen-Dick et al., 2004; Knox McCulloch et al., 1998). Viewed in these terms, collective action is a positive consequence of social capital.

However, conflicts within the collective can arise if the distribution of responsibilities and collective benefits is not equitable. Even if bounded by a shared goal, the competition of individual and common interests is still prevalent in any collective (Ostrom, 1990; Swallow et al., 2001), because members can further act in their individual interest while devoting few resources for their common interest. Olson further mentions that some members who see no incentive to actively cooperate take advantage of other members by making them carry most of the tasks (Olson, 1971). Leaders often bear a large part of these costs because they have the resources and capabilities while other members opt for a free rider strategy if they can benefit the collective good with little contribution. Because of this, reaching the limits of compatibility within the collective is possible, which may result in its collapse. Thus, effective feedback and communication among members is very important to repair, maintain, or enhance collective actions.

Collective marketing facilitates meeting market demand reduces the costs of getting the products to the market and also improves the bargaining power of farmers (Johnson et al., 2002; Knox-McCulloch et al., 1998; Agarwal, 1994). This implies competitive advantage for farmers, but collective marketing is not likely to be enough to allow smallholders to fully take advantage of market opportunity. Being attentive to market signals and opportunities is one important consideration, and this is something external organizations can do for collective action, because they can link farmers to wider economic networks (Swallow et al., 2001).

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Ultimately, the success and sustainability of collective marketing is a function of not only the supply and demand of produce, but also the coordinated actions of individual members and the support from external organizations. Other important determinants for its success include clearly bounded goals, clear set of rules and obligations, monitoring, commercial activities, mechanism for conflict management, self-reliance and autonomy, and institutional structure and governance among others (Stockbridge et al., 2003; Ostrom, 1990).

In the Philippines, our experience with ATSAL in Bukidnon province shows that smallholder farmers are not just active tree planters; they also produce, exchange among themselves, and supply to various users (such as the government and NGOs) large amounts of tree seeds for tree planting activities. Decentralized systems of tree seed production and distribution are crucial to expand tree planting in degraded marginal lands. However, farmers who have formed into collectives are often faced with organizational drawbacks. Complex group dynamics, ineffective leadership, and lack of business skills are recurring issues that limit their potential share in the market, paving the demise of collective action.

This paper draws on the experiences of ATSAL. An on-going study is undertaken to draw on lessons and implications for research regarding collective action of smallholders to improve their access to markets of agroforestry seeds and seedlings, so as to diffuse quality planting materials of agroforestry tree species, with the ultimate goal of expanding adoption and improving the productivity of agroforestry systems, and improving incomes.

2. THE CASE OF ATSAL IN THE MANUPALI WATERSHED, BUKIDNON PROVINCE IN THE SOUTHERN PHILIPPINES

Background

The Philippines is one of the most deforested countries of the tropical world. In the early 1900s, 70 percent of its land area (21 million ha) was covered with forests (Garrity et al., 1993; Liu et al., 1993). However, at present only about 6 million hectares of forested land remain (FMB, 2004). Thus, in the last century alone, the Philippines lost almost 15 million hectares of tropical forests. Extensive reforestation efforts began in the early 1970s with the implementation of numerous programs and projects through government-driven social forestry programs. However, as discussed by Garrity (1993) and Pasicolan (1996), after more than three decades of support, government-sponsored reforestation has largely been ineffective and inefficient. With the current external debt of US$ 67.6 billion, and in view of these results, borrowing money to plant trees is apparently not a good option.

In the Philippines, the bulk of tree seeds produced is used by individuals farmers, industrial forest plantations, NGOs, and national government agencies involved in reforestation and local government units with municipal-level tree planting programs. Other users of tree seeds, though in smaller amounts, include universities and research institutes. As government agencies and some leading NGOs have recently set up ambitious targets for reforestation (DENR, 1998; Haribon, 2005), and as farmers are gradually transforming large areas of grasslands into productive agroforestry systems (due to strong market demand for

tree commodities), there has been a large and increasing demand for seed and seedlings of a diverse range of tree species (mainly fruit and timber trees).[2]

Since 1994, the World Agroforestry Centre (ICRAF) was leading the biodiversity consortium of the USAID-funded Sustainable Agriculture and Natural Resource Management-Collaborative Research Support Project (SANREM-CRSP) in the Philippines. The project site was Lantapan, an upland municipality that was wholly contained in the Manupali watershed, Bukidnon province, in the southern Philippines.[3] Lantapan is characterized by high-rainfall, high elevation (average 600 masl), steep slopes, and nutrient-poor soils. It is bordered by the left bank of the Manupali River on the south, and a major protected area, the Mt. Kitanglad Range Natural Park (MKNRP) on the north. Several sub-watersheds drain from Mt. Kitanglad Range across the extensively cultivated lands to the Manupali River. The river runs into a network of irrigation canals operated by the Manupali River Irrigation System (MANRIS) (Catacutan, 2005; Coxhead and Buenavista, 2001).

Given the unique conditions of Lantapan, ICRAF's research focused on developing technical and institutional innovations for integrated watershed management, with emphasis on understanding the elements of a social contract between buffer zone communities and other stakeholders concerned with the protection of the resources of MKNRP (Catacutan, 2005; Garrity et al., 2002). On-farm trials were set up to evaluate the growth performance of various agroforestry tree species across different landscape positions in the watershed (Table 1). As part of a participatory research strategy, farmer-cooperators were involved in the selection of tree species to be tested, and were trained on seed collection and processing, seedling production techniques and nursery establishment.

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2 It is almost impossible to accurately estimate the national tree seed demand in a given year as it would require reliable estimates of many variables that vary widely such as the specie, planting system, planting density, target area (by the government and private institutions), survival rate, and so on. But to show the economic importance of tree seed and seedling production we may have a simple, conservative estimate: according to available statistics the average reforested area between 1972 and 2003 by the government and the private sector has been 52,150 ha per year, if we assume the government objective is to reforest an average of 20,000 ha per year, with 2,500 trees per ha and considering a 20 percent mortality, we would need 60 M trees. With an average price per seedling for forest trees ranging from 3 to 5 PhP per seedling: this would be US$3.5 to $5.7 million for government reforestation alone.

3 The southern part of the Philippines is Mindanao, the second largest island comprising several regions.

Table 1. Tree species evaluated in Lantapan (1998)

Scientific name	Common name
Acacia aulacocarpa	Aulacocarpa
Acacia auriculiformis	Auriculiformis
Acacia crassicarpa	Crassicarpa
Acacia mangium	Mangium
Albizia lebbeckoides	Black wattle
Eucalyptus deglupta	Bagras
Eucalyptus pellita	Pellita
Eucalyptus robusta	Robusta
Eucalyptus torelliana	Torelliana
Eucalyptus urophylla	Urophylla
Gmelina arborea	Gmelina
Grevillea robusta	Grevillea
Mesopsis eminii	Musizi

In about a year of working with farmers in nurseries and on farms to enhance the diversity and improve the management of tree-based production systems, it became obvious that there were limited seeds or planting materials available to farmers. Commonly, small quantities of seeds of locally-grown trees were collected by and exchanged among few farmers, and few others purchased seed or seedlings within and outside of Lantapan (Koffa and Garrity, 2001). Furthermore, proper seed collection and handling methods were unknown to farmers. A case study conducted by Koffa and Roshetko (1999) to assess the seed collection, processing, and diffusion practices of farmers in Lantapan found the major knowledge gaps in standardized methods for seed collection. For instance, most farmers were collecting seeds from only 1-5 trees, a practice that may reduce, in the short or medium term, the productivity due to inbreeding (Koffa and Garrity, 2001). The findings of this study were presented in a workshop attended by 15 farmer-cooperators from the on-farm trials and local seed collectors with an interest in learning about seed technology. After the workshop, the farmers decided, with facilitation from ICRAF, to organize themselves into an association of seed producers that is now known as ATSAL (Koffa and Garrity, 2001).

ATSAL'S Objectives and Organizational Structure

The main of purpose of ATSAL members was to harness collective will, skills, talents, and efforts in meeting five key objectives: 1) to collect and process quality tree seeds to meet household requirements for tree farming and for the markets; 2) to establish, develop, and manage tree nurseries and plantations efficiently and cost-effectively; 3) to harvest, process, and market trees and tree products and to provide wood for home consumption; 4) to train other farmers in Lantapan and beyond with proper collection and handling of tree seeds, and the establishment and management of tree nurseries and plantations; and 5) to conserve steeply-sloping farmlands through the application of low-cost, efficient soil erosion control measures, employing the independent or combined effects of grasses, shrubs and

trees. In subsequent organizational meetings, the members agreed that their main product would be quality agroforestry tree seeds and seedlings. The Association also developed a protocol for maintaining product quality, involving proper seed collection and processing, seed germination trial, and a seed expiry specification. ATSAL also employed a money back guarantee scheme of sold seeds,[4] and a seed germination demonstration to attract the market. Within one year, ATSAL's membership increased from 15 to 40 farmers, and was mostly males (95 percent), with 46 percent aged 44 years and below, and 36 percent aged 45 to 59 (see Table 2). ATSAL is a heterogeneous group with 36 percent lowland migrant members (Visayan), 28 percent indigenous peoples (Talaandig tribe), and the remainder belonging to other ethnic groups. More than half (54 percent) of members have attended elementary education. Farming was the major source of income for 82 percent. In general, ATSAL members belong to the low-income bracket with an annual income between 50,000-75,000 Pesos (US$1,000-1,500). When farmers were asked the reasons for their participation in ATSAL, the most common response (45 percent) was to gain more knowledge about tree farming, followed by their interest to increase household income (see Table 3). It was interesting to note that the least response was to learn to market seeds and trees. Perhaps some members were interested in tree seeds only for their own use, or were simply not keen on marketing per se.

The majority of ATSAL members were land owners (70 percent), of which 54 percent have less than three hectares of land. Portions of these farms were planted with different fruit and timber tree species (see Table 4) arranged in blocks or aligned on contours and on farm boundaries. In general, ownership of planted trees and the seed production area is private.

The officers of ATSAL were the president, vice-president, secretary, and treasurer (see Figure 1). Sub-committees were also created for training and education, seed quality control, promotion and marketing, and germplasm production. The training and education committee was linked to ICRAF's training program, in order for the members to readily access training on seed collection and handling, seedling production, plantation establishment and management, and marketing. During its first year of operation, meetings were held on a weekly basis to train the members on different seed production technologies. Farmers were experimenting on different seed propagation techniques, and with various fruit and timber tree species. Clearly, accessing training on seed technology was an outright benefit of the collective. The President, a retired engineer and former village head (*barangay captain*), played an important leadership role. His position in society was advantageous—he was respected by ATSAL members, and his educational attainment made it easier for him to develop contacts and relate to clients. The sub-committee on quality control, promotion and marketing was led by an experienced seed collector and business-oriented farmer who had worked in a major reforestation project in Lantapan in the 1980s. He was full of knowledge about seedling production and was very enthusiastic in his marketing role. His committee was also in-charge of setting the quality standards of ATSAL's seeds,

4 Seeds that fail to germinate can be returned, or changed with newer stocks within the germination period.

and of marketing tree seeds and seedlings. On the other hand, the committee on germplasm collection and production ensured continuous supply of various agroforestry tree seeds.

Table 2. Socio-economic profile of ATSAL members *(N=39)*) (percentage)

Age	29-44 yrs	45-59 yrs	60-75 yrs
	46	36	18
		Groups	
Ethnicity	Talaandig	Visayan	Others
	28	36	36
Gender	Female		Male
	5		95
Education	Elementary	High School	College
	54	16	30
	Farmer	Private Employee	Government Employee
Employment	82	3	15
Farm size	< 3 ha	3-6 ha	> 6 ha
	54.2	31.4	14.2
Land tenure	Owned	Rented	Others
	70	10	20

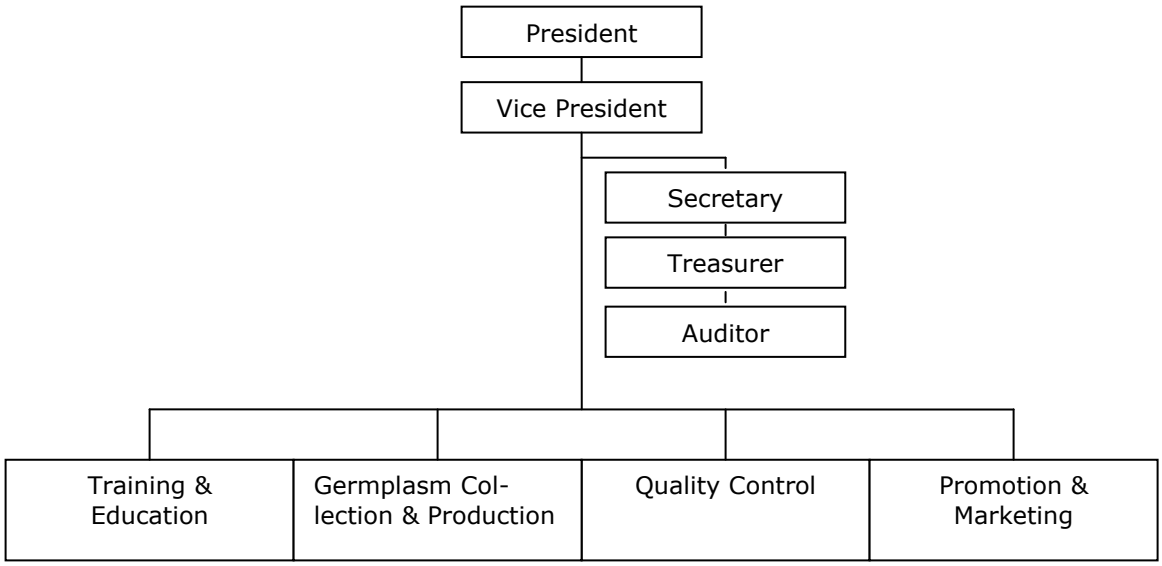
Table 3. Reasons for joining ATSAL in Lantapan, Bukidnon *(N=39)*

Reasons	Percentage
To gain additional knowledge on tree farming	45
To increase farm income	21
To gain additional knowledge on soil and water conservation technologies	9
To help strengthen the group	5
To protect the environment by planting trees	5
Encouraged by the cooperation in group activities (e.g. tree planting)	5
To learn how to collect seeds	5
To learn how to propagate seedlings	2.5
To learn how to market trees	2.5

Table 4. Fruit and timber trees planted by ATSAL in Lantapan, Bukidnon (2003)

Timber Trees		Fruit Trees
Exotic Species	Indigenous Species	
Bagras (Eucalyptus deglupta)	*Agoho* (Casuarina equisetifolia)	Durian (*Durio zibenthis*)
Camaldolensis (Eucalyptus camaldolensis)	*Apitong* (Dipterocarpus spp)	Lanzones (*Lansium domesticum*)
Pellita (Eucalyptus pellita)	*Lauan* (Shorea contorta)	Rambutan (*Nephelium lappaceum*)
Robusta (Eucalyptus robusta)	*Molave* (Vitex parviflora)	Mango (*Mangifera indica*)
Torelliana (Eucalyptus torelliana)		Marang (*Artocarpus odoratissimus*)
Black wattle (Acacia lebbeckoides)		Jackfruit (*Artocarpus heterophyllus*)
Mangium (Acacia mangium)		
Saligna (Acacia saligna)		
Falcata (Quercus falcata)		
Gmelina (Gmelina arborea)		
Grandis (Tectona grandis)		
Grevillea (Grevillea robusta)		
Mahogany (Swietenia macrophylla)		
Musizi (Maesopsis eminii)		

Figure 1. ATSAL's organizational structure

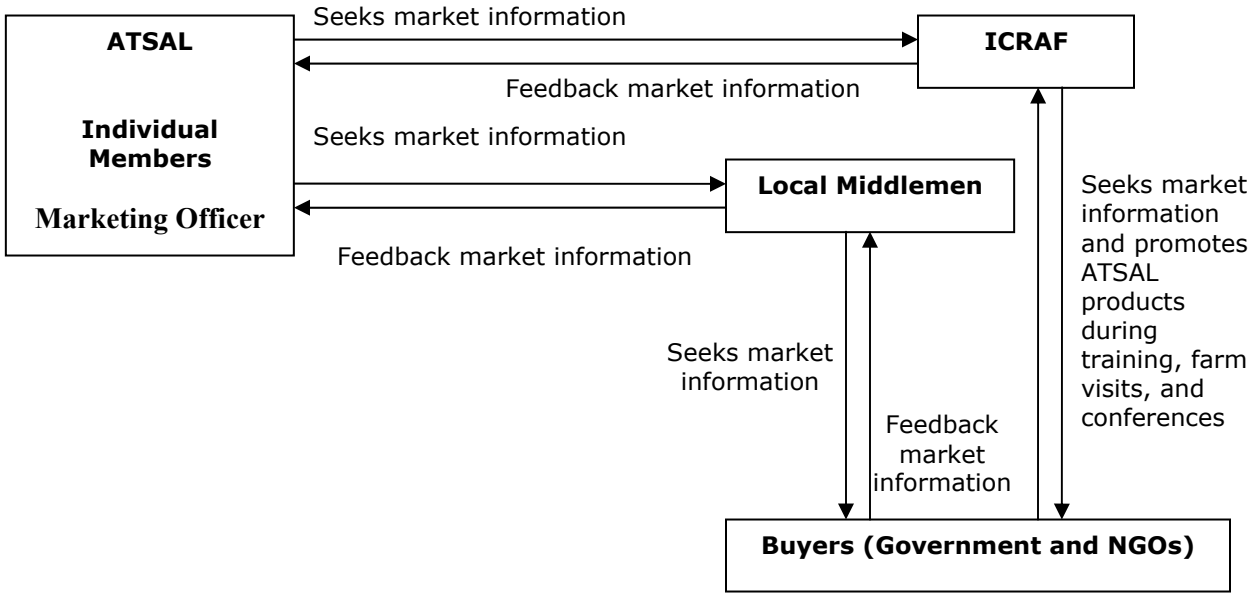


Marketing Strategy: Issues and Challenges

ATSAL's Marketing Strategy

As a way of helping ATSAL to break into the market, ICRAF introduced the Association to various national government agencies (NGAs), NGOs, local government units (LGUs), and research and development organizations at the local, regional and even at international levels. It was also tapped by ICRAF to train a multitude of LGU and NGO technicians, practitioners, students, and farmers on seed collection and processing, seedling production, and nursery establishment. As a result, ATSAL was able to raise its profile and establish a name as a viable community-based smallholder seed and seedling producer. The role of ICRAF was extremely important not only in providing technical back-up, but also as broker for ATSAL to establish a niche in the market place. For one thing, ICRAF's objective was to train farmers to raise and diffuse quality seeds of various agroforestry-tree species, but without hesitation, it also took a brokering role for ATSAL. Primarily, market information was accessed by ATSAL through ICRAF, who sought market information and promoted ATSAL to government and NGO buyers; hence many of ATSAL's customers were established through ICRAF (see Figure 2). In some cases, ATSAL's Marketing Officer accessed market information by deliberately participating in training sessions, farm visits and conferences. Intermittently, some members have also accessed market information from local middlemen—the latter were able to access information directly from government and NGO buyers.

Figure 2. Flow of market information



There were three marketing channels of ATSAL's products (see Figure 3). The first market channel was agreed upon by all members as their main marketing strategy. Mainly, this involved the Marketing Officer who was in contact with buyers, then collects the seeds or seedlings from the members to meet bulk orders and delivers them to buyers (market channel one). In some cases, the Marketing Officer had to travel to other provinces and regions to market their products, requiring additional transaction costs. Subsequently, two market channels evolved. The first involved the members selling their seeds and seedlings through a local middleman (market channel two). The second involved members that were directly selling their seeds and seedlings to buyers (market channel three). The second and third marketing channels do not seem to conform to collective marketing. Usually, this happens when farmer-groups that come to train in Lantapan immediately buy the seeds and seedlings from the farmer-members visited. Later, some members individually developed contacts with potential buyers. While this could be a manifestation of an improved capacity on the part of individual members, this courted conflict within the Association, particularly the efforts of the Marketing Officer. Apparently, there was competition between the members and the Association itself—this was a common fate of collective action, where members turn away to accumulate more benefits for themselves than for the collective.

Initially, ATSAL established a benefit-sharing scheme for sales made through the Marketing Officer (Table 5). Ten percent of the gross sales is collected for the Association's general fund, and is allocated for capacity building activities, meetings, and operating costs. Fifteen percent goes to the Marketing Officer as an incentive for making the sale, but part of this is also used to cover the transaction costs involved. Finally, the seed collector (member) gets 75 percent of the gross

sales. This was a significant economic benefit in participating in the collective, in addition to accessing training on seed technology. However, this sharing scheme was fading due to the members that opted for marketing channels two and three. As a compromise, they were required to report their sales to the Association's treasurer, and to pay 10 percent of their gross sales for the Association's general fund. The President disclosed that a verbal agreement was made between the Association and the individual seller that the latter can continue to use the name "ATSAL" to market the seeds, with the condition that it maintains ATSAL's seed quality standards.[5] Apparently, ATSAL's rules were less stringent, or the officers were simply sympathetic or did not want to control the opportunities of members to break into the market. This compromise helped to maintain the relationship between ATSAL officers and the members.

Figure 3. Market channels of ATSAL products

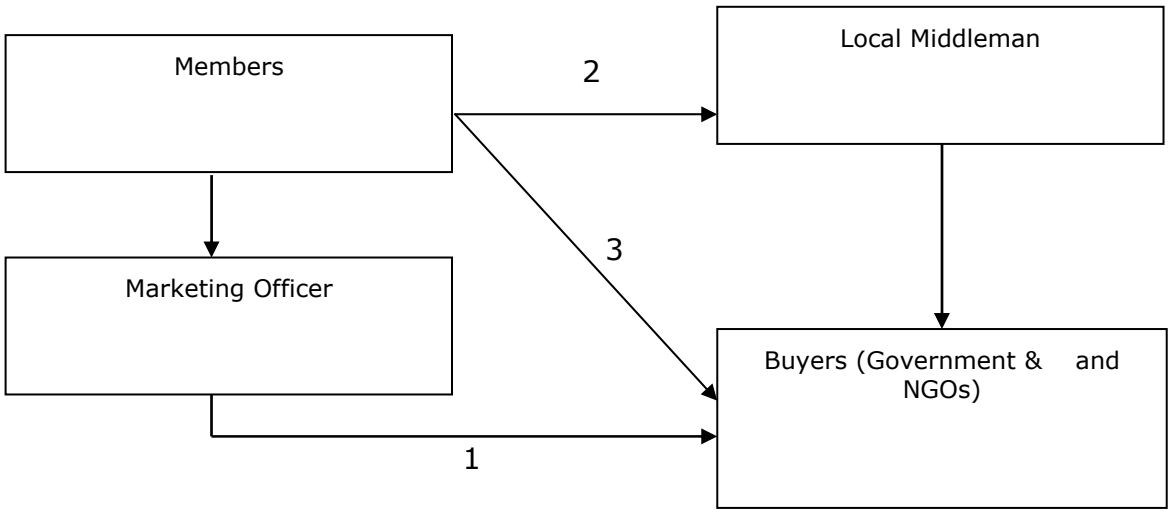


Table 5. ATSAL's benefit sharing scheme

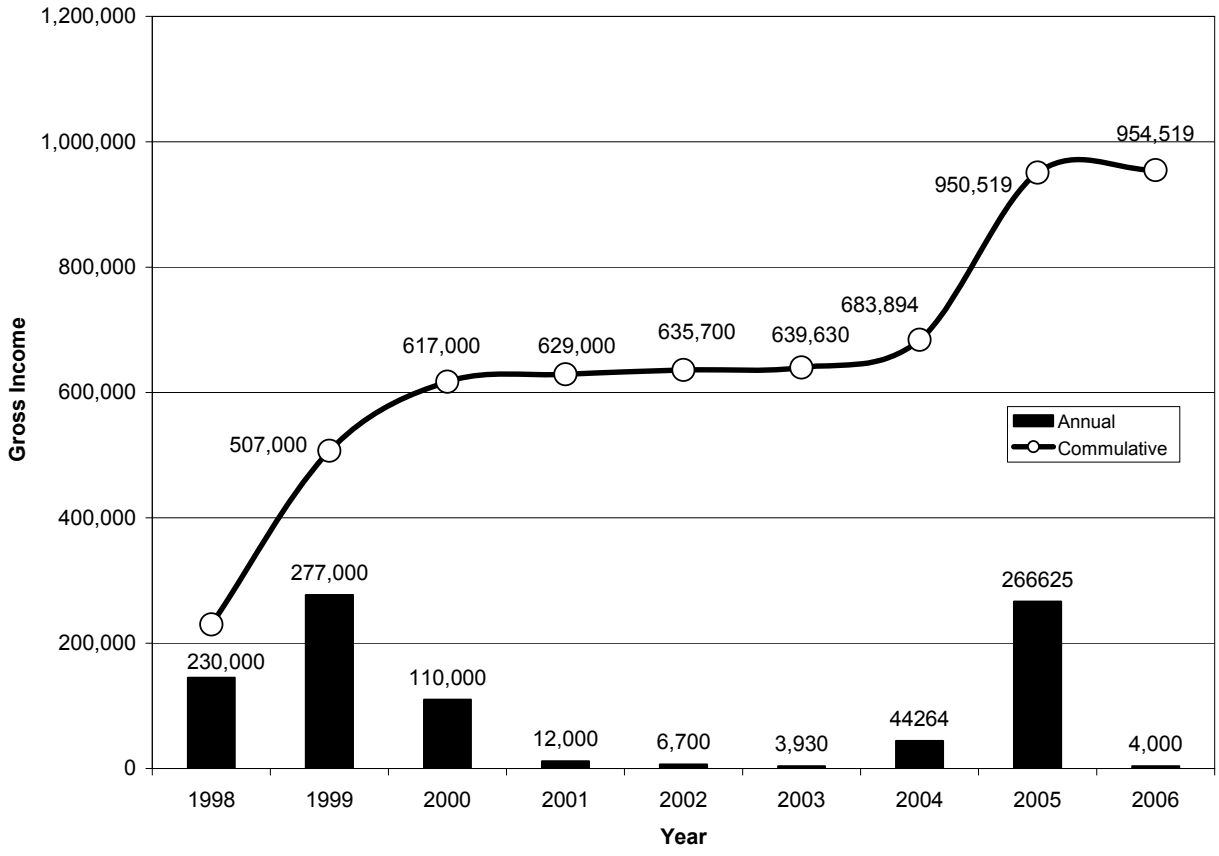
Category	Share (%)
Association's general fund	10
Marketing officer	15
Seed collector	75
Total	100

5 As mentioned earlier, ATSAL employed seed quality standard procedures such as the seed germination test.

Impacts, Group Dynamics, and Market Competition

ATSAL performed quite smoothly during its first two years of operation (1998-2000). The Association was specializing on production of quality seeds of mostly exotic timber tree species, and was able to create a market niche primarily for NGO, NGA, and LGU customers. From 1998 to mid 2006, the cumulative reported sales of various agroforestry seeds were more than 954,000 pesos (US$22,000), suggesting a significant increase in farmers' income (see Figure 4). In the Philippines, this record was unprecedented for a smallholder collective. The increasing sale of seeds during the first two years was attributed to its prepared market (buyers that had come to Lantapan). For ATSAL, this was favorable because the transactions were locally negotiated, with almost no costs involved. The leadership skills of ATSAL's President and the experience of the Marketing Officer were seen to have contributed to this remarkable growth. Apparently, ATSAL was effective at this scale of the market.

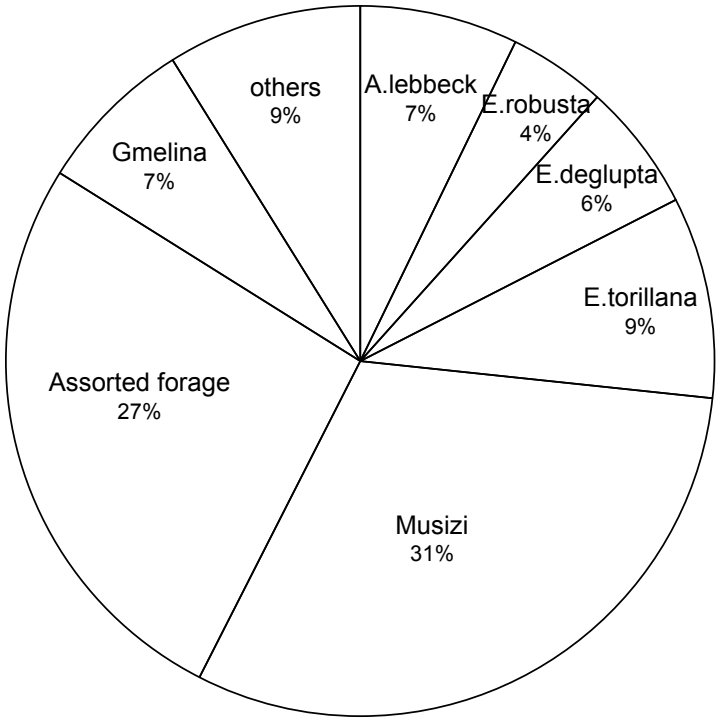
Figure 4. ATSAL's gross income (1998-mid 2006)



The top-selling tree seeds were *Maesopsis Eminii* (31 percent), followed by assorted leguminous forage species (27 percent), and mixed *Eucaplytus* species (see Figure 5). The distribution of seeds was quite dispersed in Mindanao and in the Visayas area, but some members also mentioned that there were unreported sales

from buyers in the Luzon area, indicating a national market. In 2000, ATSAL also sold seeds of *Tithonia diverfolia* to one NGO in Nairobi, Kenya, mediated by ICRAF.

Figure 5. ATSAL's top selling agroforestry seeds



By 2000, ATSAL had started to expand its market outside of Lantapan, particularly in the central Philippines, with initial success, but later failed to meet the demand for seeds and the logistical requirements for transporting seedlings. The transaction costs involved with external customers were a burden for ATSAL. The sales of seeds followed an S-pattern, increasing in the first two years and declining in 2000 and rising up only in 2005 (see Figure 4). This pattern could be attributed to several factors, which are discussed in turn.

First, some members that opted for market channels two and three were reportedly hiding their transactions, because they were reluctant to share their proceeds to the Association, indicating a competition between self-interest and collective good. It was also possible that the members were losing confidence due to alleged lack of transparency of transactions negotiated outside of Lantapan. Some members also complained on the high transaction costs involved in marketing seeds and seedlings outside of the municipality. The loss of trust in this case has diminished social capital, consequently deteriorating collective action. Some members also mentioned that the officers did not come to collect the money from them—the officers were seen to be less stringent to implement the rules. All these, suggest negative group dynamics or weak governance.

Second, ATSAL's marketing operation had started to decline in mid-2001 when the President left to work overseas and the Marketing Officer slowed down due to health problems. By then, the Association seldom had meetings, and the agreed marketing strategy was no longer observed. Consequently, other officers and members became inactive—some of them got ill, others were simply disinterested, and a number were employed outside of Lantapan and transferred their residence. The lack of effective leadership led the Association to become inoperative. About the same time, ICRAF's facilitation also became limited due to a change in focus. This was also seen to have affected the drooping Association.

Third, partly due to ATSAL's limited activities, a non-member, but enterprising farmer started to produce and market seeds and seedlings, and market competition emerged. This farmer was better-resourced to meet the requirements of external markets, causing ATSAL's market share to decline. Furthermore, he established market links outside of Lantapan, and with more resources, was able to meet the logistical requirements in marketing seeds and seedlings, including packaging and delivery. He also developed a farmer training center in Lantapan. This strategy was effective, locking-in the potential customers of ATSAL. Consequently, the members became more active in marketing their seeds through this farmer who acted as their middleman. To some extent, this farmer was also associated with ATSAL because he was a friend to many of its members, and informally took the role of ATSAL's Marketing Officer, who was getting ill at that time. On a positive note, ATSAL also paved the way for other enterprising farmers to break into the market. The reputation of the collective in this case opened up more opportunities for the community.

By 2001, the Landcare Association, a conservation group also facilitated by ICRAF had started selling seeds and seedlings to the same customers as ATSAL. To avoid conflict arising from competition, ATSAL members decided to reconstruct their marketing strategy in conjunction with Landcare, and eventually, affiliated to the municipal-wide Landcare Association. This move was seen to be advantageous to both groups, suggesting a bigger collective. To some extent, this revitalized ATSAL, leading to their registration with the Philippines' Securities Exchange Commission (SEC) in 2003. Further, ATSAL enlisted into a network of nursery operators in Mindanao to access the wider market, but with little success. The Association was unable to fix its organizational problems, because majority of the officers have remained inactive, and only few members were able to maintain their seed and seedling stocks. Organizational growth was thus hampered by the poor leadership of ATSAL officers.

As a collective, ATSAL was unprepared to bear the costs of market competition in large-scale markets. However, the absence of collective marketing has given a break for business-oriented members to market their own products directly to buyers. By using the name of the collective (ATSAL), individual members were able to break into the market; correspondingly, they helped, to maintain ATSAL's presence in the market. This is a natural course in the context of free enterprise, especially if only few entrepreneurial farmers are being trained on marketing, but in this situation, resource-poor farmers will remain deprived or excluded of market opportunities. Hence, there is ample scope for collective marketing for poor smallholders and for their group to thrive in the free market;

effective group leadership and some facilitation are essential for their efforts to succeed.

In January 2005, the first President of ATSAL who had return to Lantapan presided over a meeting with the members, and a new set of officers were elected. The waning Association analyzed their problems and identified the elements of an effective marketing strategy, such as: 1) continuous training of members on seed technologies; 2) employing a seed quality certification process among its members; 3) diversification of products, including sawn timber and small wooden furniture; and 4) participation in training sessions, farm visits, and conferences organized by ICRAF and its partners. The sharp increase of sales in 2005 could be attributed to the revitalized collective (see Figure 4). Although its marketing operations remained concentrated within the locality, regional customers have continued buying ATSAL's seeds.[6] Generally speaking, ATSAL's popularity remained high despite fluctuating performance. Apparently, the slack in collective marketing didn't mean a collapse of the group, or of the spirit of collective, but a manifestation of weak organizational structure and poor governance. This needs serious attention, if ATSAL is to sustain its presence in the market for a longer term.

3. COLLECTIVE ACTION FOR EFFECTIVE NICHE MARKETING

Niche marketing is about the specialization of a certain product to satisfy a specific market segment. To capitalize on a niche market is to find readily accessible customers, that is potentially growing, and that is not owned by one established merchant. On this premise, we examined ATSAL in terms of: 1) its competence to produce quality products, in this case seeds and seedlings; and 2) its ability to collectively deal with niche marketing.

Although ATSAL is relatively small in size (from 15 to 70 members), and much less sophisticated compared to their commercial counterparts, it has demonstrated technical competence as producer of quality seeds and seedlings of selected fruit and timber tree species. The group was specializing on production of quality seeds and seedlings of agroforestry tree species by: 1) establishing a seed production area within individual farms, where identified mother trees are marked for collecting seeds; 2) applying technically-sound processing techniques, including handling and storing; 3) standardizing the quality of marketable seeds through seed germination tests; and 4) experimenting on different seedling propagation techniques. Viewed in these terms, ATSAL has a specialized product that can compete in the market. ATSAL has thus met the basic requirements for niche marketing by meeting customer satisfaction with quality seeds and seedlings. The maintenance of product quality could be attributed to access to ICRAF's training and experimentation on various seed production technologies. The message here is that where smallholder collective lacks financial capital, technical competence is its only capital and comparative advantage to break into the market. This implies however, the need for an intermediary agency to provide continuous technical back-up, to enable smallholders to maintain the quality of their products.

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6 These regions include the central, southern, and Caraga regions in Mindanao, and the Visayas regions in Central Philippines.

From the foregoing discussion, the issue confronting ATSAL was neither the lack of technical competence to produce quality seeds, nor the lack of market per se, but its organizational weaknesses. For ATSAL, the timing of trainings and farm visits by various groups in Lantapan was propitious, giving them readily accessible customers, and creating for them a niche within this market segment. Its expansion in the central Philippines was more to do with increasing the number of customers within the same market segment (NGA, NGO, and LGU buyers). Hence it can be said that over the years, ATSAL has maintained its niche in this particular market segment, and despite its organizational limitations and fluctuating performance, has gained a stronghold in the local and regional markets, making it renowned as a viable community-based seed and seedling producer. However, expansion to the bigger market, such as on a national or international scale, will require organizational stability and efficiency. For a smallholder collective like ATSAL, the odds to success at these scales of the market could be low, considering complex market forces, for which they have little or no control. Even if smallholder collectives are strong, its long-term success and integration into bigger markets will thus require more mediation and support from external organizations.

4. ORGANIZING SMALLHOLDER COLLECTIVE ACTION

Like ATSAL, collective action is important for smallholders to break in, and gain market access, but is unlikely to sustain without effective leadership and some facilitation, thus requiring expenditures on organizational repairs and maintenance. Such expenditures could be in the form of continuous technical and leadership training for the Association, and technical back up and facilitation by an intermediary—a supporting institution that has a broad network of partners with which, to link the collective, and more importantly, has technical expertise on product quality improvement, in this case agroforestry tree seeds and seedlings. Clearly, ATSAL's comparative advantage as a smallholder collective is its expertise in producing quality tree seeds, through technically sound seed technologies. Without such reputation, it was not possible to maintain its presence in the market. Thus, technical competence is a key determinant for smallholder collective to sustain a niche in the market. With ICRAF's diminishing technical back-up to ATSAL, government extension agencies could provide technical back-up, and could also help to facilitate the organization of community-based tree seed producers similar to ATSAL. Organizational management within the collective is also an important issue. Without rules and procedures, collective action can easily dissipate. Thus, facilitating collective action of smallholders in marketing is essentially an arduous task, requiring the supporting agency to hold a firm grasp of market realities, to invest in organizational maintenance, to provide continuous technical back-up, and to ascertain the conditions that make collective action succeed.

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