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**COOPERATIVES: A DEVELOPMENT STRATEGY?
AN ANALYSIS OF ARGAN OIL COOPERATIVES IN SOUTHWEST MOROCCO**

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COOPERATIVES: A DEVELOPMENT STRATEGY?

An analysis of Argan oil Cooperatives in Southwest Morocco

Zahir Dossa*

Abstract

Cooperatives, as both a strategy and an organizational form, often enable under-privileged individuals to collectively compete in a market through joint-ownership agreements and democratic decision-making. While cooperatives are promoted as social enterprises for their labour-centric emphasis, we also know that many fail due to a variety of factors including a lack of accountability, low wages, and difficulty competing in high-end markets. This paper assesses the model employed by argan oil cooperatives in southwest Morocco. Female-based cooperatives have been supported by donor organizations and development practitioners to promote environmental conservation of argan forests, foster social equity in the patriarchal society, and improve the local economy.

The study reveals that through donor funding and the development of associations to commercialize cooperative products, the cooperative model in Morocco has been largely successful. The rapid growth the cooperative movement has been able to achieve in the argan oil sector has stimulated social, economic, and environmental development. However, the findings suggest that these successes have resulted from cooperatives failing to meet basic tenets of cooperative organizations. This outcome can be attributed to the initial set of stakeholder priorities and local contexts. Due to the mixed results, one of the questions raised in this paper is whether the cooperative model should be viewed as a success or failure.

Although defending the argan oil cooperative model as a successful development strategy, the author proposes a new model that incorporates Internet-based strategies to further the cooperative movement. Established as an action research engagement, The Argan Tree is an argan oil cooperative that espouses value chain transparency and accountability through e-commerce. This innovative model has the potential to overcome setbacks that plague many cooperative models including: inequitable profit distribution to members, a lack of member awareness and participation in decision-making processes, and excessive profit margins captured by retailers. A pilot study conducted in 2010 suggests that Internet-based strategies can shift the development paradigm of cooperatives.

Keywords

cooperatives, sustainable development, argan oil, development strategy, e-commerce strategy

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1. Description of the case

1.1. Context and history

"I realized argan forests are going to disappear so I wanted to study how to commercialize argan", remarks Zoubida Charrouf about the impetus behind spurring the argan oil industry. The constantly expanding cosmetic product lines and luxury culinary brands surrounding "liquid gold" therefore stemmed from the goal to improve the status of the argan tree. The 80-million-year-old tree species, once spanned all of North Africa, preventing desertification and providing numerous benefits to the people cultivating it. Steadily declining over the ice age, argan trees can now only be found in the Sous valley - a region in southwest Morocco. Charrouf and Guillame estimate that the argan forests further diminished by 50% during the 20th century due to a heightened demand for fuel, over-grazing, and conversion to exportable crops. As a result, the argan forest was declared a UNESCO Biosphere Reserve in 1998.

Charrouf aimed to incentivize local populations to protect the argan forests by commercializing argan oil. Moreover, an increased demand for argan oil would raise prices of argan - financially motivating local communities to disengage from harmful practices to the forests. By using scientific processes to affirm local Berber knowledge of argan oil's medicinal and beautification properties, Charrouf was able to draw global attention to argan oil. Despite this, the process to produce argan oil was too arduous at the time to develop a significant supply. Mobilizing the mechanization of this process, Charrouf addressed another important issue central to rural Morocco: the socioeconomic status of women.

The majority of women in southwest Morocco are uneducated and illiterate. The lack of education and inability to speak Arabic make it difficult for Berber women to leave the countryside. In addition, as is customary in traditional Islamic societies, the socially-conservative and tightly-woven family units often discourage employment opportunities for women. Families are therefore dependent on a single source of income, contributing to an approximate rural GDP per capita of 1325 EUR¹ - 60% less than the overall GDP per capita.

To ameliorate this situation, Charrouf developed the first argan oil enterprise and structured it as a female cooperative. The Amal cooperative was equipped with a mechanized system for the pressing and filtration of argan oil, procedures originally performed by hand. The efficient production process alongside the growing awareness for argan oil spurred an international market concentrated in Europe. This market growth led to the birth of other argan oil companies, which were primarily private-owned. Due to their superior stock of managerial and technical skills, private enterprises outperformed cooperatives. An early study conducted by Lybbert et al. (2002; 2004) found that under this market mix, the argan forests did not improve nor did local communities benefit from the growth of the argan oil industry. In fact many communities were negatively affected by the rising cost of argan oil sold locally while trees were over-harvested due to rising prices of argan fruit. Although cooperatives benefitted local communities considerably in comparison to private enterprises, these effects were negligible due to the minimal number of cooperatives and their capacities. If rural development was to occur, a strategy to promote the creation of new cooperatives and enable them to compete would be necessary.

¹ Triangulated from data in CIA World Factbook: GDP = \$105 billion EUR; Agricultural Composition of GDP = 17.1%; Population = 32 million; Rural Population = 42%

1.2. Life cycle

The life cycle of cooperatives has significantly improved through two interventions - donor funding and the development of associations. Initially, women earned less than 1 EUR per day and had to also supply the cooperative with raw materials. Due to the poor quality of argan oil produced from hand-presses, cooperatives were forced to sell argan kernels, a semi-processed product that captured little of the value chain. Cooperatives with the ability to purchase machines did not fare much better because of their inability to brand and market oil. Cooperatives therefore resorted to selling oil in local markets, earning marginal profits.

By petitioning the European Union and the Agence de Developpement Social (Social Development Agency) in Morocco for funds, government officials and community development leaders were able to establish Projet Arganier (PA) - a government agency responsible for the financing and expansion of cooperatives. The injection of donor funding into argan oil cooperatives attracted managers with strong business competencies to the countryside, where they organized a group of women into cooperatives. Managers then submitted funding proposals to PA in order to mechanize their oil production process while completing the legal steps necessary to export oil. The success of PA is evident from the number of requests received, which far exceeded expectations. As a result, PA added the caveat that a cooperative had to be in existence for at least two years before it could be financed.

While donor funding surged the number of cooperatives, the birth of cooperative associations enabled their expansion. Internally, cooperatives lacked the technical knowledge and scale necessary to effectively brand and market their products. Consequently, nearly all cooperatives are grouped under associations soon after being formalized. Associations provide cooperatives with the sales, marketing, and branding capacities necessary to compete with private enterprises and therefore expand. Under this scheme, a cooperative effectively sells argan oil to its association, which resells it on the global market. Alongside donor financing, associations are responsible for the surge of cooperatives from 15 in 2003 to 154 in 2004.

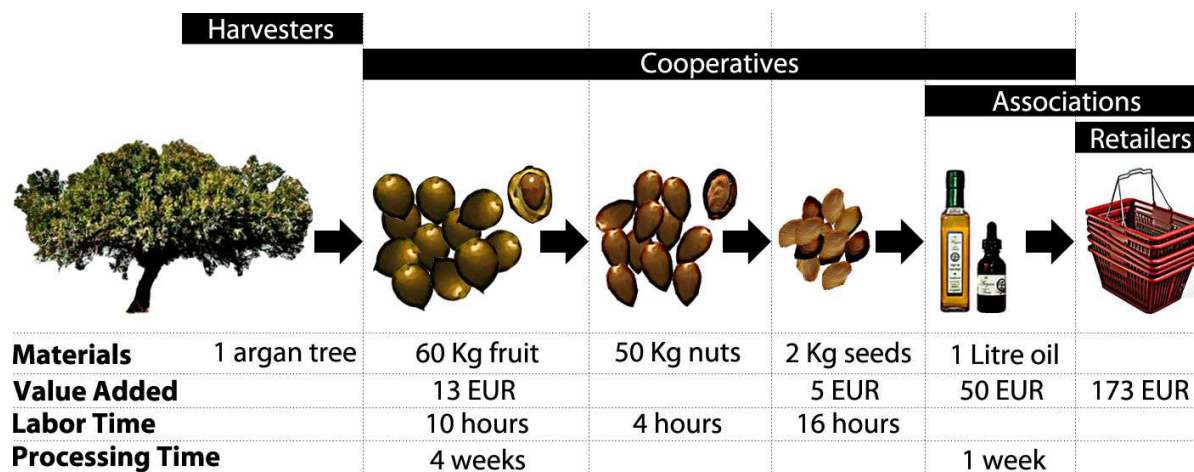
1.3. Core business model

The value chain for argan oil cooperatives, shown in Figure 1, begins with procuring argan fruit. Initially purchased from local harvesters for 15 cents per kilogram, argan fruit can be priced as high as 35 cents per kilogram after factoring in distance, transportation, and demand. The price of this fruit has risen significantly. Ten years ago, argan could be purchased for a tenth of its present day price. As the argan oil market expands and the availability of argan becomes more constrained, cooperatives will have a significant competitive advantage in the market. Furthermore, the high level of social capital that cooperatives share with suppliers often enables them to be more competitive than private or foreign-owned enterprises in markets with limited or volatile supply.

After being purchased from harvesters, argan fruit is set to dry over the course of at least 4 weeks to facilitate members in removing the pulp. As briefly illustrated in Figure 1, members tear off the flesh and crack open the nut, obtaining anywhere from one to three kernels. These kernels are collected to be pressed into argan oil while the pulp is fed to animals and the nuts are used as fuel. Obtaining the kernels is the most painstaking process in the value chain, requiring 30 kilograms of fruit and a full day of

work to obtain 1 kilogram. The female producers of argan are therefore vital in the value chain of argan oil. Members are compensated for each kilogram of kernels they yield. Aside from offering higher salaries than private enterprises, cooperatives provide Arabic classes, vacation days, and by-products of the production process to their members.

Figure 1 - Value chain of argan oil cooperatives



The remaining process after the kernels are obtained is usually mechanized, altering slightly depending on the type of argan oil. While both cosmetic and culinary argan oil are dry-pressed, culinary argan oil is derived from roasting the kernels beforehand. Both oils are filtered separately for approximately one week. Some cooperatives still use traditional tools instead of machines but the oil resulting from the process is of poorer quality and has a shorter shelf-life. Consequently, many associations will charge member cooperatives lacking machines a small fee to use theirs, highlighting yet another benefit associations offer.

Cooperatives sell the filtered argan oil in bulk to their associations. While cooperatives are able to sell their oil directly to purchasers as well, their outreach ability is limited and the vast majority of oil is sold to the association. An association then uses its brand, or the cooperative's, to sell the oil to a variety of partners in the global market. As demonstrated by the amounts in Figure 1, associations and retailers add the most substantial value in the value chain: 71%. The failure of cooperatives to create and capture more value in the chain reveals their lack of vertical market integration - a significant setback that is not unique to the argan oil industry.

1.4. Institutional structure and governance

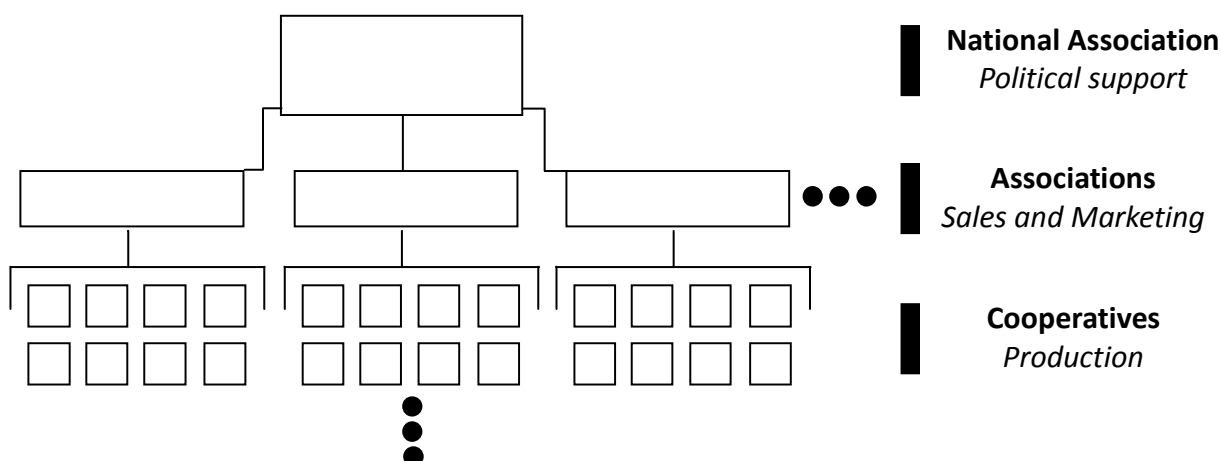
Institutional structure

There are over 150 argan oil cooperatives in southwest Morocco. As mentioned earlier, nearly all cooperatives belong to an association, which range in size from 5 cooperatives to 22. Associations have been pivotal in promoting the cooperative movement, as was discussed earlier. All associations are advocated by the national association, "Association Nationale des Coopératives Arganières". The hierarchy described along with the roles of each institution is illustrated in Figure 2.

Although the cooperatives studied vary in size from 18 to 60 women, the average cooperative has 46 female members. Six of these members compose the leadership

board of the cooperative, which includes the president, vice-president, secretary, and treasurer. In addition to the members, each cooperative employs staff to operate the machinery, an employee to run the retail store, and a manager to oversee cooperative operations. Even though the organizational structure and proceedings of cooperatives are formalized under Moroccan law, their governance starkly contrasts that of an ideal cooperative based on internal and external pressures.

Figure 2 - Institutional hierarchy



Governance

Though heralded for the democratic decision-making they foster, cooperatives among marginalized communities are frequently managed and controlled by local elites. Consistent with the case literature, cooperative managers dominate the decision-making and cash flow of the cooperative. This unilateral governance prevalent among cooperatives is largely shaped by internal pressures and external pressures. The primary internal pressure applied within cooperatives is meant to emanate from the membership. In addition, there are three external pressures that affect organizations as identified by DiMaggio and Powell (2000): coercive (regulatory pressures), normative (community/donor pressures), and mimetic (isomorphic pressures). These internal and external forces are shown in Table 1.

Table 1 - Framework of internal and external pressures affecting governance

		<i>Indicators</i>
Internal Pressure	Membership	Profit distribution; level of power/control the manager has; voting rights and exercising of these rights by participants; amount of complaints/requests made by participants and responded to by management
External Pressures	Mimetic	How closely cooperative resembles other cooperatives in terms of salary, benefits offered, etc.
	Normative	Response to community/donor demands
	Coercive	How closely the cooperative follows the law, among other rules and regulations mandated by donor/government agencies

Gender dynamics and information asymmetry largely dictate the marginal internal pressure applied by the member base within the cooperative scheme. As stated above, the patriarchal society makes it difficult for women to actively participate in cooperative decision-making. In fact, while every cooperative is intended to be female-founded and run, cooperative managers are males who conduct business in the names of their wives and make unilateral decisions. Significant cooperative

procedures such as elections, which are meant to put leadership in check, are reduced to ceremonies - a common trend in the bureaucratization of domestic enterprises within developing countries. When asked about the cooperative leadership a common response was: "I don't understand all that [...]. Every year we do elections. They ask, do you want to keep them [the managers and the leadership board]? We all say yes". Intended to hold cooperative leadership accountable, male-run elections are transformed into quick, white-ballot procedures that reaffirm the status quo. As a result, neither the manager nor the board (which solely exists on paper) changes from the onset.

The dynamic of internal pressure is further exacerbated by the lack of member awareness towards the cooperative structure. Not a single member interviewed could describe what a cooperative was or their role in it. Members simply viewed their duty as they would any normal job, albeit being extremely appreciated for the rewards reaped. Although included in the formal bylaws of a cooperative, member education, meant to improve member knowledge of the cooperative structure, has been replaced with Arabic-language classes. Therefore, the lack of member awareness alongside gender inequities severely hinders the internal pressures that can affect cooperative behaviour.

The unbalanced combination of external pressures outlined in Table 1 also contributes to the poor governance structure of cooperatives. Mimetic pressures overpower normative and coercive pressures-reinforcing the power dynamics described. Isomorphism, a term mimetic pressures can be bundled into, is the concept that powerful forces act upon organizations operating in similar fields causing them to be similar to each other. Alternatively stated, "If you look at the competition long enough, you become them". Argan oil cooperatives, through the role of associations and PA, exemplify this phenomenon and consequently, are barely distinguishable from one another. All cooperatives studied are governed by an identical management structure and offer the same sets of benefits to their members in terms of salary, Arabic classes, etc. This universality is encouraged by PA and the associations, which "streamline" cooperatives by imposing various practices upon them while implicitly condoning others - particularly the power dynamics.

Although there are cases identified by Tendler (1984, 1988) where local communities were able to affect the governance of cooperatives, the same was not evident in Morocco. Interviews with local community members not involved in the cooperative industry revealed concern towards the "European political movement meant to disrupt the local traditions" in the countryside. The promotion of social equity and democratic processes, which are indeed foreign to the region, alienate local communities from the cooperative movement rather than encouraging them to influence cooperative behaviour. Because donor financing was primarily focused on expanding cooperatives and increasing employment, no further normative pressures affecting governance were placed on cooperatives. Consequently, the weak normative and coercive pressures (discussed in Sections 1.5 and 1.7) did not counter the strong mimetic pressures that dictated cooperative governance.

1.5. External relations

Cooperatives primarily engage with donors and public authorities. While cooperatives share a competitive yet distant relationship with their private counterparts, associations often look to private enterprises as role models. Observing best practices

from the private argan oil sector, associations replicate and disseminate strategies to their system of cooperatives. Although cooperatives often falter on their principles by adopting these practices, public authorities and donor organizations informally permit them due to the resulting community development outcomes.

Public authorities strongly support cooperatives from both a national and local standpoint. Viewing the cooperative movement as a strategy to encourage rural development, the national government created a political environment and attracted donor funding to enable cooperatives to flourish. At the local level, officials assist cooperative efforts based on the community development benefits cooperatives deliver to their locales. These officials conduct a balancing act of sorts by promoting cooperatives yet tolerating their faulty governance dynamics described in Section 1.4 above. To demonstrate this act, local officials are the personnel in charge of overseeing the “white-ballot” elections held by cooperatives every year. These officials confirm that there are no major issues members have towards the manager and the board before renewing the leadership through a quick, informal vote.

Donor organizations also share a similar relationship with argan oil cooperatives. Although in a position to levy wide-ranging controls over the cooperatives they provide grants to, donors such as the EU and the Social Development Agency focus on a few metrics while otherwise allowing cooperatives to operate the way they wish. Moreover, PA was founded on the imperative to improve the environment and create employment opportunities for women in rural regions of Morocco. Subsequently, the primary performance indicators PA aims to improve are the number of trees planted (performed through a government ministry) and the number of women employed. To ensure funds are used efficiently and the cooperative is economically solvent, a representative from PA makes monthly visits to each cooperative that receives financing. Understanding that women’s employment and education is dependent on the profitability of the cooperative, PA advises cooperatives in poor financial standing to join an association and adopt other known best practices. As has been demonstrated, it is not due to a lack of resources but rather a different set of priorities that causes donors and officials to not adopt a regulatory stance towards cooperative behaviour.

1.6. Economic data

The economic performance of a cooperative strictly depends on the mechanization of its production process. Furthermore, the improved quality and greater shelf-life that mechanized oil presses provide in conjunction with strict industrial policies that enforce quality testing of exported argan oil have nearly eliminated hand-pressed oil from the market. In addition, the higher efficiency achieved through mechanized presses significantly reduces labour time. However, not all cooperatives are able to afford oil press and filtration machines, particularly in their early stages. Extensive financial data for periods before and after mechanization was collected from a cooperative in the Agadir province, which shall be referred to as the Agadir cooperative. This data is consistent with partial data gathered from other cooperatives.

The Agadir cooperative consisted of approximately 15 women in 2004 when it was formed. Initially, members of the cooperative had to collect the raw argan fruit and break them to obtain the kernels. These kernels were then sold to other cooperatives or associations, yielding members only 1 Euro for every two days worked. “Women

didn't even want to be in it", recalls one participant in Berber. By transferring the cost of material procurement to individual members, the organization had no operational costs. In addition, the site of the cooperative was donated by a local community development association. The only source of revenues stemmed from the sale of argan kernels, yielding women 1 Euro for every two days spent collecting and processing argan fruit. No membership fees were charged in order to attract women to join.

Between 2006 and 2007, the cooperative received a grant of approximately 27-thousand EUR from PA to purchase oil press, filtration, and bottling machines. PA provided 1.3-million EUR in grants to 41 other cooperatives during this period, financing 86% of their expansion costs. This infusion of money rapidly transformed the Agadir cooperative, expanding from 15 members to 60. It reported 124-thousand EUR in profits for the 2008 fiscal year through the sales of approximately 4500 Litres of culinary and cosmetic argan oil - its sole source of income. Although an initial membership fee of 90 EUR is collected from new members, this is a negligent revenue stream considering that members are rarely added. The cooperative sustained a similar profit figure in 2009.

In steady state, the three main cost points for cooperatives are raw materials, member wages, and fixed salaries. Averaging 20 cents per kilogram and requiring 60 kilograms per litre of oil (see Figure 1); argan fruit is the most costly expenditure. In 2008, the cooperative purchased 275 metric tonnes of argan fruit totalling 60,600 EUR². During the same year, the salaries of women increased from 2,60 EUR per kilogram of kernels produced to 3,50 EUR. The resulting wages, including an average annual bonus of 75 EUR paid to each member, amounted to 37-thousand EUR. The machine operator and retail store employee earned fixed salaries of 1,000 EUR and 1,600 EUR per year, respectively. The final salary is self-awarded by the manager of the cooperative and most likely captures a significant portion of the profits of the cooperative. The Table 2 summarizes the economic data for the Agadir cooperative. It also includes extrapolated figures for the relative impact of each member along with that of the entire argan oil cooperative sector. These figures are discussed further in Section 2.1.

Table 2 - Economic data by cooperative, by member, and by sector (numbers are in EUR)

		<i>Agadir Co-op</i>	<i>Per member*</i>	<i>Argan Co-op Sector**</i>
Revenues	Argan oil sales	224.000	3,733	26.133.333
	Membership fees	-	-	-
Costs	Materials	(60.600)	(1.010)	(7.070.000)
	Member wages	(37.000)	(617)	(4.346.667)
	Salaries (excluding director***)	(2.600)	(43)	(303,333)
Profits		126.400	2,107	14.746.667

* Economic data per cooperative member is derived from Agadir cooperative figures and can be assumed to remain consistent across cooperatives as most if not all cooperatives are in a steady state (i.e. Are mechanized or have access to mechanization) and sell through an association.

** Economic data for the entire sector was extrapolated based on "per member" data shown above and total estimated membership (7.000 women).

*** The assessment did not exact the salary for the director, although background interviews suggest it is a significant portion of the profits.

² Amount of argan fruit purchased was determined through a reverse calculation from member salaries.

1.7. Policy environment

Rural poverty is a significant problem in Morocco. 44% live in rural areas with an estimated GDP per capita of 877 EUR. The government has developed policies to tackle this problem by improving the services delivered to rural areas and by adopting industrial policies that benefit these regions. However, improving services such as rural electrification, education, and social welfare has been limited in scope and impact. Moreover, such an approach relies on one of two fundamental assumptions: 1) jobs exist or 2) jobs will be created through the improvement of human capital (otherwise referred to as Say's Law). Instead, the government's industrial policies in these regions have been a much more effective approach to spurring local development. The industrial policies pertaining to cooperatives in the argan oil sector exemplify this.

Cooperatives, which were once completely foreign to Morocco, had been introduced by Europeans for the local development outcomes they often foster. In support of this movement, the government legalized the cooperative form of organization along with its bylaws, practices, and regulations in 1984, and further revised it in 1993. As a result of the protection cooperatives were guaranteed under Moroccan law, the government of Morocco and development leaders were awarded a grant from the EU to establish and finance a government entity, PA, responsible for the creation and expansion of argan oil cooperatives. The government's aim was to counter the dominance of private and foreign-owned enterprises in the argan oil sector, which did little in furthering rural development as discussed above.

Occurring in the reverse order than usual, the government supported argan oil cooperatives before being able to regulate them. Cooperatives have not been regulated due to a disconnection between the practices championed by political offices and their execution among rural societies. As previously discussed, rural communities lack the adequate skill sets to effectively implement cooperatives with their principles intact. Therefore cooperatives are melded into the only form of organization that is understood, accepted, and feasible: a private enterprise, albeit a socially responsible one. Local officials responsible for "regulating" cooperatives overlook these shortcomings due to the positive impacts cooperatives achieve. Thus, officials will legalize women argan oil cooperatives, which are actually run by males, and host annual elections, which are mere white-ballot ceremonies. It can therefore be argued that it is not the lack of support for cooperatives but the lack of regulation that is preventing argan oil cooperatives to reach their highest potential in contributing to local development. This argument is assessed in the following section.

2. Analysis of the case

2.1. Impact analysis

Impact of cooperative successes on sustainable development

Cooperatives in the Argan oil sector, despite their setbacks, have contributed significantly to local economic development, social equity, and environmental preservation outcomes. As of 2009, roughly 150 cooperatives were directly employing 7000 women with a market cap of over 26-million EUR as extrapolated in Table 2. Based on the interviews conducted, the average member earns an annual income of 617 EUR from her enrolment in a cooperative. While 617 EUR is slightly lower than the rural GDP per capita of 877 EUR, it is important to note that women only work 30

hours per week. Therefore, the average earnings per day in a cooperative is nearly twice the daily average rural GDP per capita. Thus, the average rural GDP per capita in villages where a cooperative is present has risen dramatically.

Through employing women, the cooperative movement has also improved the social status of women and strengthened social capital. Although initially averse to the cooperative movement, many community members when interviewed a year later were appreciative of the secondary source of income cooperative membership provides to households. Due to the better lifestyles women are able to provide for their families, each member interviewed was extremely thankful (to God) for having the opportunity to work in a cooperative. Not a single complaint or further desire was expressed. This level of contentment also stems from member cohesion among a cooperative. Although women do not exercise their voice in election matters or salary increases, they speak up as a group on matters such as increasing supply of raw materials or increasing membership. When concerned about limited supplies affecting their wages, women jointly press the cooperative to purchase more argan and prevent new women from joining. Described as a "union", the female membership is capable of having a voice that is rarely heard in traditional Muslim societies.

Having discussed the economic and social development outcomes of argan oil cooperatives, it is important to mention the positive environmental conservation behaviour that has resulted. The increasing value of argan fruit provides locals with a strong monetary incentive to conserve the forests and practice responsible grazing practices. Conservation practices are also enforced by cooperatives, which are directly impacted by waning supplies of argan. Accordingly, cooperative members, who are often responsible for endangering the argan forests, are educated on proper conservation schemes through PA's member curriculum. Extending beyond conservation, the government has begun a replanting effort of Argan trees through the assistance of the foreign aid funds received from the EU. As of 2007, 212,033 had been planted from these efforts - 33-times the amount planted in 2000 .

Impact of cooperative setbacks on sustainable development

Despite the positive development outcomes argan oil cooperatives afford, they stray from four basic cooperative tenets: 1) democratic decision-making; 2) equitable profit distribution; 3) open membership; and 4) member education on cooperatives. Interviews with pioneers of the argan oil cooperative movement attribute cooperative behaviour to the initial set of stakeholder priorities and local circumstances. Appeasing donors and the Moroccan government, the focus in developing argan oil cooperatives was placed on creating employment opportunities for women. Democratic processes to govern cooperatives were ignored and not re-emphasized by other stakeholders due to the lack of member knowledge and adverse community dispositions. This context in which initial cooperatives were established shaped the cooperative movement and was reinforced through isomorphic processes.

As referenced throughout in the paper, the setbacks uncovered are not unique to cooperatives in the argan oil sector. Although often ignored, the same is true about the successes. Furthermore, it is easy to overlook the successes of cooperatives when focusing on their failure to abide by cooperative principles. It is therefore important to challenge our assumptions on how cooperatives ought to behave and whether these characteristics should indeed be considered setbacks of the cooperative movement or if instead they should be considered prerequisites for its success in certain contexts.

That is, if cooperatives behaved ideally, would the same level of community development occur?

The author argues that the success of argan oil cooperatives can indeed be attributed to their abandonment of basic cooperative principles. Moreover, each of the four tenets that argan oil cooperatives violate (as identified at the beginning of this section) would have hindered the growth of the cooperative movement and therefore the development that followed. A lack of democratic decision-making within cooperatives enabled managers to make unilateral decisions, which otherwise would have encouraged lengthy debates among members, all of whom lack business expertise. The high salaries earned by managers may be inequitable when compared to members wages but were necessary to attract individuals with business expertise from the cities. The growth and success of the argan oil sector was largely based on the ability to draw on this talent base. The practice of closing new memberships after a certain point was also necessary so as to protect the livelihoods of current members and avoid diluting earnings. The high volume of women unable to join cooperatives ensuing from this practice spurred the creation of even more cooperatives, leading to greater development impacts. Even further, female members feel a sense of security, belonging, and pride under a closed membership model, leading to strong social bonds with her fellow members and neighbours. Lastly, the failure to educate members on cooperatives reinforces cooperatives to maintain the status quo, which while admittedly flawed, has been argued to enable their success. In substitution of cooperative learning, members are taught Arabic and how to preserve their local environment - tangible and productive skill sets that further contribute to local development.

It is therefore due to "cooperative failings" that the growth of the cooperative movement in southwester Morocco far exceeded the most aggressive expectations by donors. Should this expansion not be encouraged if cooperatives provide better community development outcomes than other forms of enterprises as demonstrated above? A discussion about the appropriateness for democracies is re-emerging, with many critics arguing that democracy is not fitting for all countries. Taking this strain of argument deeper, are democracies appropriate in all contexts and organizations? Even if appropriate, are the democratic ideals upheld by cooperatives feasible in all contexts? In order to answer, we need to first understand the enabling conditions that make cooperatives feasible and effective in particular environments. From there, we can begin to understand how cooperatives, or employee-centric firms, can be adapted to their environments or vice versa.

2.2. Prospects of evolution

Returning to the challenge of developing successful cooperatives that behave ideally, even in developing contexts; the author has developed a new cooperative model that incorporates Internet-based strategies. The Argan Tree is a cooperative of 18 women that produce argan oil and are directly connected to consumers in North America through <http://theargantree.com>. This action research engagement has the potential to overcome setbacks that plague many cooperative models including: inequitable profit distribution to members, a lack of member awareness and participation in decision-making processes, and excessive profit margins captured by retailers. Namely, Internet-based strategies that enforce equitable value chains through transparency and the elimination of market intermediaries can circumvent these obstacles to potentially strengthen cooperative organizational forms towards achieving

real sustainable development.

The value chain transparency espoused by the Internet-based cooperative model serves to increase the accountability within cooperatives and to positively influence consumer buying behaviour. By publishing the cost breakdown and revenue distribution³, the model increases member awareness and inhibits managers from misallocating finances. Alongside improving cooperative accountability, this level of transparency improves consumer purchasing behaviour by informing customers where their money goes. To foster a deeper relationship with consumers and drive purchasing behaviour further, biographical data with statements specific to each of the members are published on the related website⁴. A brief exploration reveals that one widow uses the money to pay for electricity and send her children to school, while another woman is replacing the broken door to her home as her husband is unemployed. Highlighting this rich, social impact through Internet medium offers an advantage to Fair Trade and other certification labels due to the avoidance of expensive, lengthy procedures and because of the depth of information conveyed. Even further, consumers get a tangible understanding of the social impacts from their purchases. A pilot study performed in 2010 demonstrates the potential of this new model in improving consumer purchasing behaviour. In this limited study, consumers who visited the "Meet the women page" purchased over twice the amount than consumers who did not.

Extending beyond impacting consumer behaviour and improving accountability, the cooperative model makes important strides to improve profitability through reducing market intermediaries. In the argan oil sector, associations and retailers retain a significant share of the profits by commercializing products for cooperatives (see Figure 1). Under the Internet-based model, marketing through online medium does not require extensive administration. As a result, the women of the cooperative earn 60% of the revenues - 20 times more than they would earn in a traditional cooperative scheme. Even further, consumers are able to purchase products at lower prices. Argan oil sold at The Argan Tree is priced 55% and 32% lower than the retail average for cosmetic and culinary oil, respectively⁵.

Despite balancing social and economic outcomes, cooperatives that employ Internet-based strategies require considerable technical assistance at the offset. Due to the limited expertise available at affordable prices, expanding the cooperative and scaling the model will be challenging. While a system that automates various technical procedures can partially overcome this hurdle, the model may, ironically, require the creation of an association - albeit a socially responsible and economized one.

Contrasting the two cooperative models in their current state, we can observe a trade-off between maintaining cooperative ideals and scaling; by forgoing one, we are awarded the other. The streamlining of Internet-based models has the potential to achieve rapid expansion while upholding cooperative principles, but further research needs to be conducted. In the meantime, development practitioners championing cooperatives will often be faced with the difficult decision of either promoting ideal cooperatives that have a difficult time succeeding, or relaxing certain principles in order to let them thrive.

³ See: "Where your money goes" <http://theargantree.com>.

⁴ See: "Meet the women" <http://theargantree.com>.

⁵ A sample size of 16 was used to determine the retail average prices of cosmetic and culinary argan oil.

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