

THE DUBAI INITIATIVE برنامج دبي

Policy Brief

Improving Small Farmer Access to High-Value Markets through Aggregation in Morocco

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IMPROVING SMALL FARMER ACCESS TO HIGH-VALUE MARKETS THROUGH AGGREGATION IN MOROCCO

Dubai Initiative – Policy Brief

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1. INTRODUCTION

As one of the fastest growing countries in Africa, Morocco enjoys a diversified economy with growing manufacturing and service sectors. However, like many similar emerging markets, it faces the challenge of integrating a large number of smallholder farmers into an increasingly sophisticated economy. This policy brief outlines opportunities for Morocco to improve the economic outcomes of smallholder farmers by expanding production of high-value agricultural products. The paper identifies challenges small farmers face in producing high-value products, proposes aggregation as a policy recommendation for improving participation in these markets, evaluates the benefits and limitations of this choice, and provides implementation recommendations to mitigate unintended negative consequences of aggregation.

Agriculture in Morocco

Agriculture has long been an important contributor to Morocco's economy, comprising 20% of GDP¹ and providing approximately 45% of employment². However, despite the sector's importance, Morocco has failed to fully capitalize on agricultural opportunities. The sector's 4% growth rate is primarily driven by exports, less than half of which have value-added or processing components in country.³ Most farmers have had limited access to the training, financing, and inputs that would allow them to adopt farming techniques proven to increase output in a manner that is environmentally sustainable. For example, the UN Food and Agricultural Organization FAO estimates that irrigation increases production on average by a value of approximately 1,173€ per hectare.⁴ Techniques that minimize the amount of natural resources needed for cultivation, such as drip irrigation, would ensure small farmers against poor yields in an increasingly drought-prone environment—yet most small farmers' land is solely rain-fed.⁵ Worker productivity in the sector has grown at a rate of 0.5% per year, while other North African producers, such as Egypt, have experienced growth of nearly five times this rate.⁶ This can be attributed, in part, to the composition of the agricultural sector. Smallholder farmers make up 70% of all farms,⁷ and 44% of Morocco's poor are agricultural workers.⁸ The poverty rate for the latter demographic is approximately 50% higher than the national average. As a result, there is under-investment in smallholder farms and land is not cultivated in a way that is either economically or environmentally sustainable for smallholder farmers.

Plan Maroc Vert

To promote growth and alleviate poverty, the Ministry of Agriculture adopted the Plan Maroc Vert (PMV) (Green Morocco Plan), a 12-year economic strategy, in 2008. The PMV identifies the country's key priorities in the agricultural sector, including attracting

an additional €13.5 billion in investment, almost doubling agriculture's contribution to GDP, and creating 1.5 million new jobs.⁹ Growth would not only focus on increasing environmentally and economically sustainable production volumes but also on supporting agribusiness and agro-processing industries to create more value-added services in country. The latter is particularly important, as Morocco's wage rate is two to three times that of other emerging economies, making it less competitive in the production of basic cash crop staples or unprocessed products. To remain competitive, the country must move toward producing higher value goods.¹⁰ The transition will allow Morocco to capitalize on its strengths: close proximity to EU markets, a growing national market, a relatively skilled labor force, and comparative advantages in several value chains, including citrus, fresh fruits and vegetables.¹¹

The PMV aims to work with smallholder farmers to convert land currently devoted to lower value crops (primarily cereals) to higher value crops, increase production on current land, and diversify production of new specialty goods, including saffron, honey, and medicinal plants. In addition, the PMV outlines plans to increase processing capacity in country and to develop Moroccan food brands, such as *Produits et Saveurs du Maroc* (Products and Flavors of Morocco), via producer associations to better differentiate Moroccan products in the global market.¹²

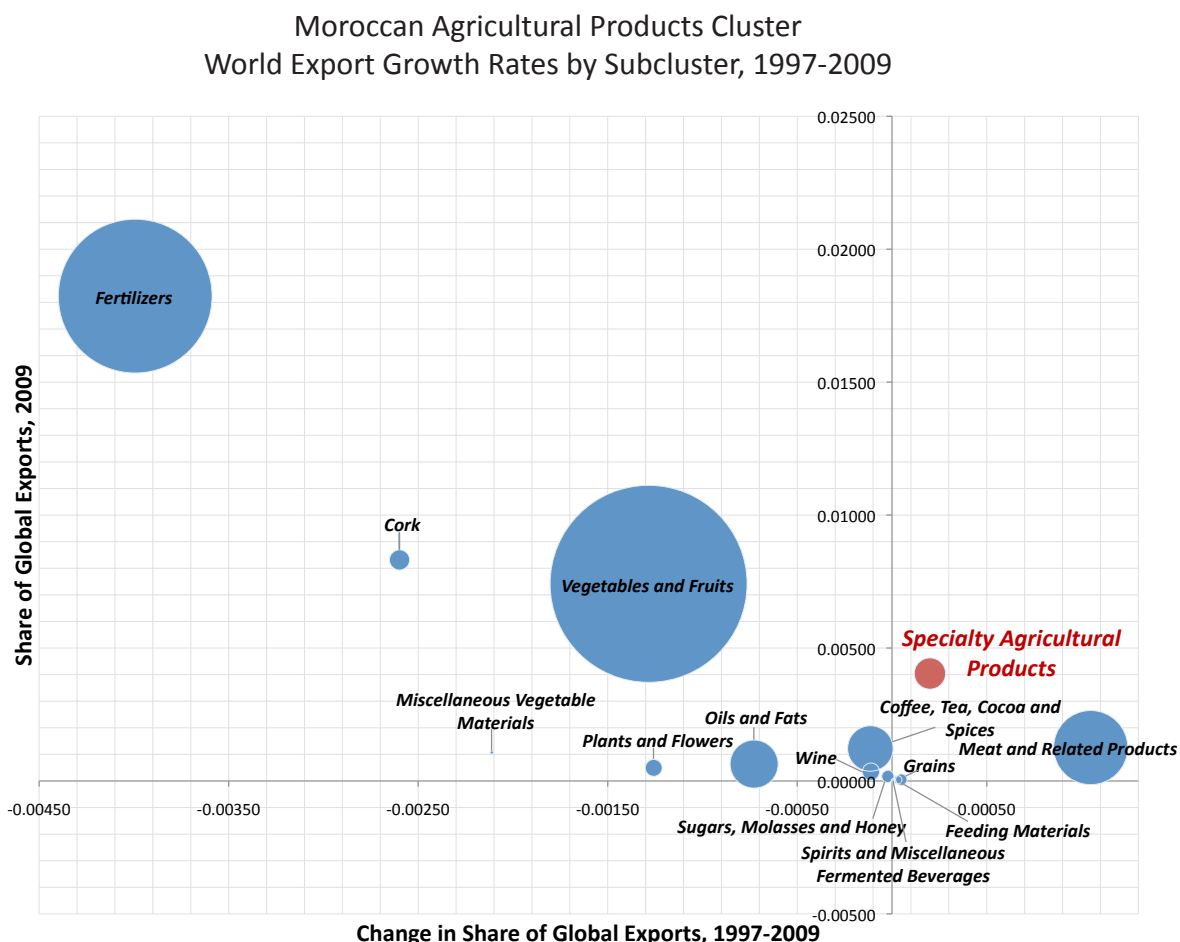
While these changes can increase Morocco's competitiveness, it is important to note that this transition alone will not necessarily lead to improved livelihoods for smallholder farmers.¹³ First, export-led agricultural development has often led to the exclusion of small farmers and agricultural workers in many economies. Even with government support, they have limited financial ability to produce exportable high-value crops, leaving this production primarily to larger sized farms.¹⁴ Many export destinations have begun to enact stricter controls that have increased the fixed cost of production; this provides further incentive for buyers to prefer large farms that can minimize unit costs.¹⁵ Second, smallholder farmers traditionally cultivate crops, such as cereals, for personal consumption. Production of cash crops for export, which is subject to production or price variability, may jeopardize the food security of these household and local consumers.¹⁶ (Transitioning to non-traditional crop production also carries significant risks for producers, which will be discussed in the next section.) Even if farmers are producing cash crops that they can consume themselves, they may not know how to incorporate these foods into their diet. Finally, specialization in one crop can have negative environmental effects as well as reduce farmers' ability to diversify risk in the case of production or price shocks.¹⁷

Aggregation

To transition toward higher value goods, Morocco is implementing an aggregation strategy to provide order and resources to many smallholder farmers. Aggregation is the process of networking smallholder farmers into a collective unit, either through self-organization or through linkages with other supply chain actors, to achieve economies of scale in production and distribution. Aggregators, which may be input suppliers, producer associations, cooperatives, or other agricultural actors, coordinate all value chain activities through supplying missing links in the market, such as affordable financing or transportation. While aggregators benefit from increased business from smallholders, small farmers benefit from decreased cost of agricultural inputs, increased access to new technologies and technical assistance, and reduced intermediary costs in bringing food from farm to market.¹⁸ In addition, aggregators that operate under a farmer cooperative structure may provide social benefits to its members, such as self-governance and participatory decision-making opportunities.

Aggregation is not a new concept, as development strategies across many countries have focused on increasing smallholder farmer incomes through collective organization, primarily through cooperatives, with varying degrees of success. However, it does provide new opportunities for Morocco. Most aggregators will likely be already imbedded within the local context, incentivizing them to work with smallholder farmers to sustainably increase production in certain value chains and improve smallholder farmers' livelihoods.¹⁹

Traditionally, high-value goods have been destined for export. While Morocco is currently losing world market share across all agricultural export clusters, specialty products are among the best performing products for export (see Figure 1). Specialty products may represent a small share of the global market, but the cluster has grown over time.²⁰ Through increasing productivity via increased human capacity, physical infrastructure, and technology investments, Morocco is likely to gain competitiveness in this sector. Demand for specialty products will also grow within the domestic market as GDP per capita and population continue to grow.

Figure 1. Moroccan Agricultural Products Cluster World Export Growth Rates by Subcluster, 1997-2009

Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics. Copyright © 2010 by the President and Fellows of Harvard College. All rights reserved.

2. BARRIERS TO ACCESSING HIGH-VALUE MARKETS

A successful producer of high-value goods must have access to information, inputs, and services that allow him to succeed across the entire value chain. He must be able to grow highly demanded products that can be easily differentiated in the market; meet the high standards of high-value markets in both product quality and quantity; and have access to value addition capability and marketing expertise. Because meeting these standards requires significant investment and often has high risks and implementation challenges, high-value markets, although profitable, have high barriers to entry for most smallholders.

Figure 2. Barriers to Entry

| High Cost of Differentiation | Meeting Quality and Quantity Requirements | Marketing & Sales |
|--|---|--|
| <ul style="list-style-type: none"> • No/limited capacity to conduct market research • High risk of entering differentiated market • High cost of adopting new technologies supporting differentiation | <ul style="list-style-type: none"> • High global standards in quality • Difficulty in maintaining consistent quantity • Difficulty in accessing market information and high cost of adapting to market changes | <ul style="list-style-type: none"> • High cost of finding distributors • Limited marketing power |

Product Differentiation

Limited Profitability of Saturated High-Value Markets. Many smallholder farmers exhibit herd behavior in choosing crops, producing goods that already have high supply in the global market place. While the intention is to produce a product that has an established market, smallholders often find it difficult to be competitive in such settings. Those choosing to enter saturated high-value markets (e.g., olive oil) are forced to compete on price. Since they are price takers, their profits are subject to the volatility of global demand and supply shocks. As a result, smallholder farmers, many of whom have limited financial resources and no insurance to cushion income during market downturns, are exposed to the similar sort of earnings volatility found in undifferentiated markets. Instead, farmers that cultivate products that have stable demand but limited supply have some power to set the price and adjust it based on market conditions to achieve a steady income. Therefore, participating in saturated high-value markets may lead to the same welfare challenges as engaging in undifferentiated markets: income volatility and limited profitability.

High Cost to Switching to High-End Goods. To succeed in a high-value market, smallholders may choose to produce either a differentiated product within the saturated market (e.g., high-quality olive oil) or a high-value product that has strong growing demand (e.g., argan oil). However, these strategies are costly and risky to implement. As smallholders often do not have the capacity to determine the appeal and market size of potential new products, they are hesitant to enter such markets. Even if smallholders are informed of products that are profitable (e.g., information disseminated by trade associations or partner organizations), the production of high-value goods may require unfamiliar production processes that may be costly or difficult to implement. Furthermore, there are particularly high opportunity costs for subsistence farmers to switch to high-end crops. As there is no guaranteed income and unsold crops often cannot be or are not consumed, a failed attempt to grow a high-end product could jeopardize the livelihood of the farmer.

Product Quality

Stringent Requirements for Exports. Recently, changes in global demand have created more opportunities for select producers. Food safety issues have led the EU and other countries to implement stringent guidelines on food imports, thereby eliminating producers who cannot meet these standards from export markets. Trends toward organic and fair trade products present new opportunities for responsible smallholders to participate in high-value, high requirement markets. However, some of these standards (e.g., fair trade, USDA organic certification) have imposed a higher barrier to entry for such farmers. Many lack the information on which of the many certifications would make their products most competitive, as well as the knowledge and financial resources to fulfill these guidelines. One particular certification, Ecocert, a French accreditation program for organic farming, is widely accessible and has accredited some small farmers in Morocco. This certification, however, is only valuable in the EU market and would not be widely recognized by consumers in other export markets, such as the US.

Limited Production Capacity. Due to their size, smallholder farms often cannot produce reliable supplies of goods at volumes commonly required by buyers. In Morocco, the average farmer cultivates less than two hectares of land,²¹ which limits his production capacity. He may cleverly try to coordinate with other nearby farmers to boost aggregate production volume, but use of different farming techniques may lead to product variability, which is unacceptable to most buyers. Also, collecting produce from different sources increases transportation and logistics costs. Because large producers can reduce logistical difficulty and costs and deliver large quantities of standardized product, they are much more attractive to buyers than small farmers.

Lack of Access to Information. To participate in high-value markets, producers must be well-informed of changing market demand and must be able to react to such changes quickly. However, smallholder farmers generally have high barriers to adjustment. Most smallholders are located in rural areas, with their only market access through intermediaries. As a result, they often do not receive reliable or timely information, making it difficult for them to adapt to new market trends. Often, even when this information is available, change is costly and time-consuming. As smallholders have limited financial and labor resources, adapting to dynamic market demands remains a significant challenge.

Market Access

Difficulty in Finding Buyers. Whereas larger producers are more easily integrated into value chain and distribution networks, smallholders lack this access and thus face greater challenges in reaching markets. Farmers generally live in remote rural areas and

travel infrequently to major urban centers, where most buyers operate. Smallholders often do not belong to the same business networks as buyers and as a result have limited opportunities to meet and develop relationships with buyers. While this constraint has been somewhat alleviated by the advent of regional and national agricultural fairs, many rural farmers with limited education may find interacting with sophisticated buyers intimidating. As the process of finding potential buyers is so logistically difficult, many farmers are hesitant to cultivate new types of produce.

Limited Negotiation Power. Smallholder farmers are often at a disadvantage when negotiating prices with sophisticated buyers. Farmers may undervalue their products because they have limited market knowledge and education or may be intimidated by the negotiation process. There is often a limited number of buyers interested in purchasing their products at the quality and quantity small farms are capable of producing, which increases the negotiation power of the buyers. Also, since the cost of finding buyers is so high, farmers may agree to a sub-optimal price to avoid further buyer search costs. Given power asymmetries inherent to the producer-buyer relationship, smallholder farmers acting alone (and not as a group, such as a cooperative) are often unable to negotiate a fair market price.

European Food Standard Requirements

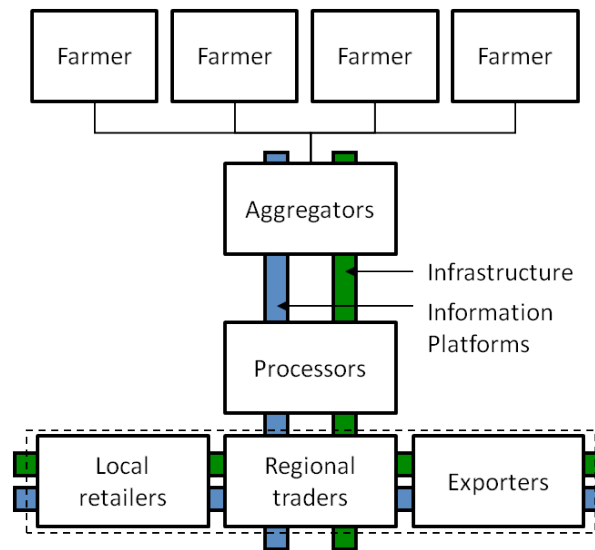
Exporting to European markets may be lucrative but challenging due to the litany of requirements for goods imported into the European Union, including stringent sanitary and phytosanitary requirements and traceability standards. For example, GLOBALGAP (formerly EUREGAP) is a standard for farm management practices created in the 1990s by European supermarkets and suppliers. An initial standard investment for a medium-sized farm to obtain this certification is estimated at US\$51,000, with annual recurring costs of nearly \$20,000. Such costs are very expensive for Moroccan small farmers, considering that such an investment would take a medium sized farm at least 2-3 years to repay. GLOBALGAP certification represents 8% of the total accumulated farm gate costs and 3% of processed costs, reducing profit margins.²² When more than one standard is involved, the costs in terms of time, capacity, and financial commitment are significantly higher, although some organizations now provide opportunities for streamlining the certification process (e.g., Trade Sustainability Alliance and IMO-Cert).

Difficulty in Organizing Collective Action. Often, in growing sectors, there is a leading organization that promotes collaboration among stakeholders in an industry to increase sectoral competitiveness and productivity growth. These institutions for collaboration coordinate research, share best practices, set standards, and finance large invest-

ments that benefit the entire industry. The Netherlands, for example, has a long history of industry collaboration. It formed the Dutch Horticulture Association, the first trade association for cut flowers, in 1908. This organization has enabled the Netherlands to successively increase productivity, increase competitiveness, and maintain its position as the largest exporter of flowers in the world through collective action. However, such organizations are costly to finance and difficult to implement, as stakeholders always have an incentive to free ride on these public resources or there are competing interests for limited funds. In industrialized countries, private sector actors may lead such initiatives, but in most developing countries, public institutions primarily play the coordination role, as smallholders lack both the incentive and resources to do so.

3. AGGREGATION AS A SOLUTION: THE CASE OF L'OR ROUGE

While aggregation was proposed as a solution for the majority of Morocco's smallholders, most of whom are involved in commodity production (cereals), it holds significant promise for small farmers transitioning to new high-value products as well. We illustrate how aggregation could operate under a market with high-value goods with the example of L'Or Rouge de Taliouine, one of the most prominent producers of saffron. Founded in 2008, L'Or Rouge is located in the fairly isolated village of Taliouine. The company is led by locals and is highly embedded within the community, ensuring that its leadership is accountable to producers. In addition, the company's General Director, Driss Samih, has previous experience running a saffron cooperative, providing him the skills and contacts to help ensure the company's success. L'Or Rouge coordinates saffron production with approximately 1,200 family farms that altogether own 1,800 hectares devoted to saffron cultivation. Although the company is not yet officially an aggregator, it is currently applying for this certification and has been providing aggregator-like services since its existence. L'Or Rouge is providing a variety of services to its farmers and addressing many of the market challenges that smallholder farmers usually face. As such, it is a good example of how aggregation can improve farmers' livelihoods.

Figure 3. Value Chain for Aggregation

Building Capacity of Smallholder Farmers to Enter High Value Markets. Taliouine, the region where the majority of saffron is grown, is a very rural area that is a two-hour drive from the closest major city, Agadir. Most families have been living in the region for generations and have limited exposure to national and international markets. Formal education in rural areas is generally low. For example, the literacy rate for women in rural areas is 17%, compared to the national average of 40%.²³ Many of these farmers have very limited knowledge about market requirements, best practices for production, and harvesting techniques. Because the production of saffron requires specific expertise and is more highly demanded internationally than within Morocco, it is a difficult crop for farmers to successfully grow without assistance. “Labor and planting practices are extremely important [to ensuring product quality],” said L’Or Rouge’s General Director, Driss Samih. In order to produce this high-value product and command a superior price, the company has provided additional support to farmers, including the provision of training, inputs, quality assurance, and marketing capabilities for its farmers. As a result, L’Or Rouge is providing the services currently missing in rural agricultural markets.

Providing Access to Finance through Aggregation. In general, there is a significant under-investment in agricultural production by small farmers in Morocco, leading to low yields per hectare. Most farmers have extreme difficulty in accessing funds to invest in production. Most recent data show that government subsidies to smallholder farmers are one sixth the amount of the OECD average and have declined since the late 1980s. Access to credit for agricultural activities has also declined by 7%.²⁴ There are few financing “starter packs” for smallholder farmers, and most microcredit offerings are too small for sizeable capital investments in agriculture. In addition to a lack of feasible credit, many

farmers cultivate rented land, leaving them with little collateral for a loan.²⁵ L'Or Rouge is able to provide financial services to its farmers where the market has failed to do so. It regularly provides interest-free advances for input purchases, receiving payment when crops are harvested and sold. In providing such services, L'Or Rouge has enabled farmers to invest more in production by providing a critical service missing in the current agricultural supply chain.

Serving as Intermediaries for Crop Insurance. Insurance penetration is also extremely low in Morocco, which is particularly problematic for a country highly susceptible to drought. For farmers with limited access to irrigation, return on investment is uncertain, leading many to not invest in output-improving techniques. Because L'Or Rouge works closely with farmers, it is familiar with their capabilities and cash flows, removing many of the information asymmetries that make it difficult for banks to lend to this population. The company is currently investigating whether it can obtain crop insurance for its producers as an intermediary between banks and farmers.

Supporting Adoption of Best Practices in Saffron Production. L'Or Rouge also helps farmers mitigate risk, increase productivity, and adopt emerging trends that will improve their products' price in the market. Due to the region's increasingly dry climate, the company has worked with its producers to improve irrigation techniques, reducing water use by 50% in its farmers' fields. This not only decreases costs; it allows the brand to market itself as using environmentally sustainable practices. Plot production has increased as a result of the company's work with the Ministry of Agriculture. L'Or Rouge obtains high producing bulbs for its farmers from special research centers within the Ministry and has developed expertise in saffron bulb planting, teaching farmers more sophisticated techniques for replacing and replanting bulbs. Following increasing European demand for organic products, L'Or Rouge obtained EcoCert, one of the most common organic certifications in Europe. To further advance its qualifications as a sustainable organic supplier, the company is currently organizing the delivery of organic fertilizer to its farmers. Additionally, the company has developed sophisticated traceability procedures to meet international market requirements.

Managing Quality Control Processes. Saffron is a rare and labor-intensive crop to produce, taking an estimated 15 people to harvest 4kg of saffron. As a result, it commands a high price on the global market. However, a high price comes with high expectations. Morocco is able to cultivate superior saffron that has almost 40% more colorant than its biggest competitor, Iran, but the work-intensive nature of the production process means there are incentives to circumvent standards. L'Or Rouge has established extremely rigorous quality standards to protect their brand. Each farmer delivers his saffron, labeled only with his identification number, to the company's quality control laboratory. The labora-

tory then conducts three blind quality assurance controls, during which every filament is examined, debris is eliminated, and fake saffron is removed. In addition to providing post-harvest quality control, L'Or Rouge ensures that its farmers are using the best quality inputs and conducts farm-level audits to ensure that production is in compliance with international and Ecocert standards. The company's quality control management allows its producers to establish strong relationships with buyers in the market place through reliably providing high-quality products.

Implementing Quantity Management Processes. L'Or Rouge also manages production quantities of its producers based on market demand. It is currently producing around 700kg of saffron a year based on orders but has the capacity to increase farmer production up to 1 ton. L'Or Rouge communicates the quantity of saffron they will buy each year, serving as a trusted and guaranteed buyer for farmers who follow the correct production standards. By providing farmers with a more stable income, L'Or Rouge encourages farmers to continue to invest in their land and improve production techniques.

Branding and Marketing. Aggregators provide important expertise in managing branding initiatives and providing access to markets. L'Or Rouge provides marketing and branding to farmers that otherwise would not have these capabilities. The company has a significant amount of promotional materials detailing its product, health properties, and recipes for use. It regularly participates in international trade shows, which has resulted in the exportation of nearly 98% of their production. In addition, because L'Or Rouge has become a trusted dealer with international buyers, it has negotiated higher prices for its products, increasing farmers' income. By capitalizing on economies of scale, the aggregator is able to increase the negotiating power of smallholder farmers and save costs in promoting a singular, strong brand for many farmers, enabling all to have much greater market access.

Increasing Smallholder Income through Value-Added Services. L'Or Rouge also increases farmer incomes by conducting value-added services locally. All marketing, packaging, and other product creation is done within Morocco. The company has created a line of saffron-flavored goods, including honey, syrups, and concentrated saffron powder, to reach new markets and customers and further increase sales. By providing such services, the aggregator improves local human resource capacity, which has positive externalities (e.g., increase labor productivity) for the entire sector.

Future Aggregation Services. In the long term, L'Or Rouge should increase the services it provides to farmers to increase their overall sustainability. Since relying on one crop can put farmers at risk in case of disease, price fluctuations, or other shocks, L'Or Rouge should work with its farmers to diversify the kinds of crops they are cultivating. Crop rotation is also good for long-term soil quality and environmental sustainability. L'Or

Rouge should continue to work with farmers to transform their produce into value-added products that garner a high price. In particular, they should develop contingency products that could be cultivated when saffron production faces a negative shock. For example, perhaps saffron honey requires less actual use of saffron, enabling the company to sell more product when crop quantity is limited.

L'Or Rouge demonstrates the potential for aggregators in Moroccan agriculture, particularly in more competitive specialty value chains. The services the company provides have been integral to its success, enabling its farmers to transition to high-output, high-quality saffron production under a well-known brand. As a result, the company has been able to increase its market share and its product offerings, while increasing the incomes of some of Morocco's poorest populations. L'Or Rouge's success is largely predicated on forming a close-working relationship with its farmers in a fairly isolated and small community. The organization's leadership is local, increasing their accountability to producers and transparency in business dealings. As such, L'Or Rouge serves as a strong model of the role aggregators can play in fostering high value products that support smallholder farmers—a positive outcome that is obtainable when aggregators are embedded within the society they are helping and their services are tailored to the local context.

4. LIMITATIONS AND CHALLENGES WITH AGGREGATION

While aggregation provides significant opportunities to address the challenges that many smallholder farms face when entering high-value markets, there are also limitations to this approach.

The Aggregator as a Potential Monopolist and Monopsonist. As aggregators develop across different value chains, there will likely be a move towards consolidation to achieve economies of scale. This will reduce competition among aggregators in the market, enabling a dominant player to act in a monopolistic or monopsonistic manner. As a result, smallholder farmers may be forced to buy seeds, equipment, and supplies from the aggregator at an inflated cost and to sell their crops at the end of the season at a sub-optimal price. To maximize the positive benefit of aggregation to the farmers, smallholder interests must be balanced with those of the aggregator through contracts or other measures that stipulate fair prices for inputs and outputs.

The Aggregator as a Middleman. The long-term role of the aggregator in the value chain remains unclear once farmer capacity has been strengthened. As smallholder farmers become increasingly sophisticated, they may become self-sufficient and no longer need the services provided by aggregators. The aggregator then becomes a rent-seeking middleman that does not contribute additional value, creating an unnecessarily layer in

the supply chain. However, since capacity-building requires significant investment in time and financial resources, particularly in developing economies, this concern may not be relevant for the short- or medium-run.

Over-Dependence on Aggregators. Although aggregators are an important conduit to input and distribution networks, overdependence on aggregators may compromise the success of the entire market. First, farmers' over-reliance on the aggregators may hinder their long-term capacity development. Second, the aggregation model concentrates risk on a few actors, which leaves the entire value chain vulnerable to shocks, such as drought or crop infestation. If the aggregator is bearing most of the risk for the success of the value chain (by offering insurance to smallholder farms), adverse market conditions or poor company management would not only harm the aggregator, but could also devastate the entire sector. While larger aggregators may be able to manage market fluctuations through insurance and other financial instruments, smaller aggregators may not have the ability to bear concentrated risk. In a volatile sector like agriculture, small aggregators must have access to tools and knowledge on how to manage and diversify risk.

Varied Sizes and Roles of Aggregators in Different Markets. While some value chains have obvious aggregators (e.g., L'Or Rouge for saffron), others may not have an obvious actor to take on this role or may be led by much less experienced aggregators. This means that not all aggregators will offer the full range of services to smallholder farmers. While some larger aggregators may provide expensive insurance products or technical expertise to their smallholder constituents, many emerging or small-scale aggregators may not have such human or financial capital. To ensure the success of both aggregators and smallholders, the provision of these important services must come from another source. The government, civil society, or private sector may play a supportive role in supplementing the services of the aggregator by offering financial instruments to mitigate risk, sharing best practices, or building smallholder farmer capacity. To address differences in regional climate, producer relationships, and other measures affecting production, approaches must be tailored to each individual environment.

To ensure the success of aggregation, these limitations must be addressed in the development of agricultural policy.

5. POLICY RECOMMENDATIONS

Aggregation has the potential to improve smallholder farmers' access to high-end markets, but successful implementation of this model requires support and guidance from Morocco's Ministry of Agriculture. The Ministry must develop policies that provide a supportive environment for aggregation, enabling it to evolve into a model that is beneficial to both farmers and aggregators.

Generate research and innovation in high-end products. As aggregation is a relatively new approach for Morocco, there are few best practices for successfully implementing this model, particularly with high-end products. To encourage economic growth in the agricultural sector, there must be adequate investment in research and innovation that supports aggregators in their efforts to improve output and productivity. Such research should be a coordinated effort by all agricultural sector actors, not merely the government. To ensure research addresses high priority issues, smallholder farmers must be involved. The government should promote the following activities.

- Support development of institutions of collaborations to coordinate research, set standards, share best practices, and make sector-wide investments
- Coordinate an expert committee on agricultural research focusing on successful aggregation techniques, composed of representatives from large, medium, and small aggregators, smallholder farmers, agronomists and other experts, government officials, and community business organizations, to meet regularly to share findings and ensure that research is targeted at the most pressing issues in Moroccan agriculture
- Develop a 5-year strategic plan, under guidance from the expert committee, to guide distribution of research funding for aggregation; ensure that plan has enough flexibility so that strategies can be tailored for individual region and value chains' needs
- Commit an aggressive budget to research and development on productivity growth in high-end food products
- Work with local research institutions and partner with universities around the world to support research agenda
- Involve smallholder communities and visionary farmer leaders in research and development process

Encourage emergence and development of aggregators. To distribute risk more evenly throughout the value chain and to ensure that agricultural entities can sustain periodic shocks, government policies should promote competition among aggregators within each value chain. With adequate incentives, multiple aggregators will emerge for different products and in different regions. Through increased competition, aggregators would improve sector efficiency, diversify risk, and create a more equitable aggregator-smallholder relationship.

- Provide short-term tax incentives or subsidies so that capable aggregators enter the market
- Foster the development of new aggregators by providing or funding business incubation services, especially for emerging high-profit products

- Work with local non-government organizations and community groups to encourage the transition of local cooperatives into aggregators

Support risk management services for small aggregators. To help aggregators and farmers diversify risk and survive negative shocks, the government should provide support in developing risk-management practices and tools.

- Co-finance insurance programs or provide third-party guarantees on loans to make insurance affordable and effective for aggregators of all sizes and smallholder farmers
- Offer financial instruments to manage risk through national and commercial banks
- Establish a revolving fund for loans to struggling sectors during “bad years”

Promote good governance within aggregated value chains. Since the difference in capacity between aggregators and farmers inherently favors the aggregator, it is important to establish policies that check aggregator power, preventing monopolistic and monopsonistic behavior. While each aggregator will define its internal governance structure, the government should provide general guidelines on acceptable principles and regulate aggregated value chains.

- Adopt regulatory policies to prevent monopolistic and monopsonistic behavior by aggregators
- Develop monitoring institutions to ensure enforcement of regulatory policies
- Provide tax incentives for aggregators that promote smallholder interests (e.g., allocation of small equity stake of the aggregator to smallholder farms; providing smallholders with voting power, similar to organizations such as Divine Chocolate and Mondragon)

Disseminate information on aggregation. Given limited coordination among all the actors involved in different value chains, the government should create information centers and forums to organize different stakeholders. Forums would allow actors in different value chains to share best practices and techniques, encouraging the cross-pollination of ideas across the sector. The centers would serve as a centralized place where farmers and aggregators could learn about different relevant services provided by both the government and private entities.

- Support the revitalization of Centres de Travaux, agricultural training centers, that support all actors in the agricultural sector; centers should provide targeted technical assistance to smallholder farmers, who are currently the weakest link in the value chain; these services would include agronomy educa-

tion, training programs, and business support for smallholders and aggregators interested in joining aggregated valued chains

- Provide forums, such as trade shows and conferences, to bring together aggregation stakeholders (e.g., aggregators, smallholder farmers, distributors, retailers)
- Recruit and teach local NGOs and community organizations to train smallholder farmers and cooperatives on aggregation techniques

Under a supportive business environment and limited by appropriate checks-and-balances, aggregators could provide more opportunities for smallholder farmers to access lucrative high-end product markets. However, effective implementation of aggregation for high-value products requires a supportive ecosystem, composed not only of aggregators and smallholder farmers, but also integrating government, civil society, and private sector actors to provide services that can diversify risk and increase output. In doing so, Morocco would be able to improve productivity in high-quality value chains in adherence to international standards and capture a larger export market share in agricultural products through specialty goods.

ENDNOTES

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