



Five trends and their implications for agricultural coops

As markets shift, technology develops, and tastes change, the agricultural sector must adapt. Coops need to find their place in this new world.

Andrew Grant

The agricultural sector is changing as quickly as the world around it. Emerging markets are growing rapidly and have become major drivers of demand for food. Meanwhile, resource constraints are putting pressure on an already fragile supply-demand equilibrium, new technologies are emerging, and consumers in developed markets are taking a more active role in deciding what the industry produces. A more fundamental shift is redefining the industry, too, and propelling it into a new era: commodity prices, which had long been dormant, have soared over the past several years. This is generating new interest in agriculture from a wider range of stakeholders and is moving food production higher on the agenda for governments regardless of their stage of development.

To remain relevant to their members, agricultural cooperatives will need to quickly grasp and respond to these emerging trends. This article provides our perspective on five major forces shaping the future of agriculture and presents five key questions cooperatives should ask as they plan for the future.

The agriculture sector in 2020

Five major forces will shape the agriculture sector over the next decade.

1. **Feeding the planet: The productivity imperative**
Over the past ten years, food prices—which had been decreasing for several decades—began to increase. By all indications, this trend will

not abate over the coming decade, as demand continues to grow and supply tightens.

Emerging markets will exert the greatest influence on global food demand. These countries will drive 90 percent of the world's population growth, with China and India contributing 35 percent of it. As economic growth in emerging markets pulls an increasing proportion of their populations up into the middle class, per capita consumption will increase at a rate more than three times that of the developed world. These new consumers' entry into the middle class will increase demand for more resource-intensive foods, especially meat.

Meanwhile, agricultural land productivity is decreasing—a problem that will be exacerbated by resource scarcity and climate-related issues. Historically, yield improvements have been strong. But rapid land degradation, serious water deficits, and changes in climate have all contributed to a slowdown in yearly yield improvement, from 2.7 percent in the 1970s to just 1.3 percent in the 2000s. If the industry is to ease pressure on the supply-demand curve and capture the opportunities presented by higher food prices, it will have to find new ways to address the productivity imperative.

2. The rising priority: Governments' food agenda

Food is increasingly part of the government agenda, especially in emerging markets, where two major food crises in the past four years have exposed the fragility of the food supply-demand equilibrium. The factors that led to these crises—including slowing food production, increased population growth, rising oil prices, and adverse weather—are still relevant

today (exhibit). Government leaders in these markets have elevated concerns about food security to the national level, pledging to increase agricultural production and allocating a fixed percentage of their national budgets to agriculture. Already, Tanzania has committed to a target of 9 percent, Ghana to 10 percent, and Ethiopia to 13 percent. Anxious to avoid the social upheaval wrought by previous crises, emerging nations are securing additional agricultural land outside their home countries. Over the past decade, governments and corporations from emerging countries represented six of the top ten land acquirers. Their targets, often uncultivated land,¹ are in sub-Saharan Africa, East Asia, South Asia, and Latin America. Countries whose land is being acquired will likely seek to negotiate more stringent terms with land acquirers, guaranteeing right of first access to land output during leaner times. And land acquirers, for their part, may discover that their foreign-acquisition strategies do not always translate into improved food security.

In developed countries, food is on the political agenda as well, but in a different way. Westerners increasingly want not only to select the ingredients and additives they consume (further discussed below) but also to understand how their food is sourced. Consequently, governments will be asked to increase their focus on ensuring food quality, whether through regulations or supervising bodies. Corporations, in response, will defend their interests and lobby for lower regulatory costs. But companies might also find that new regulations present new opportunities. For example, food-safety requirements may lead to profitable ventures that help satisfy consumers' interest in end-to-end traceability.

¹ Charles Roxburgh et al., "Lions on the move: The progress and potential of African economies," McKinsey Global Institute, July 2010 (mckinsey.com).

3. Farming 2.0: New technologies, new markets

As in many other industries, new technologies are transforming agriculture from a labor-intensive industry to a capital-intensive one. Advanced robotics has helped automate labor-intensive tasks (such as milking cows and driving farm equipment) so that farmers are now able to monitor the technology that executes those tasks and intervene only when problems occur. Sensors and analytics are also increasingly common. Sensors capture key data (for example, nutrients in the soil or crop temperatures during storage and transportation), and dedicated software platforms process and analyze the information. Better data equips the farmer for better decision making. Moreover, these new analytical capabilities have further enabled the

agricultural sector to adopt microsegmenting, a concept that can help farmers maximize performance. Microsegmenting breaks the land into smaller parcels for which a detailed analysis and corresponding course of action are then developed.

Farmers are also operating in a business environment that is increasingly sophisticated and globalized. High volatility in commodity prices, often triggered by a variety of factors—including weather-related events and a rise in protectionist policies—has been especially challenging. We believe not only that commodity prices will remain volatile for the foreseeable future but also that this volatility will be amplified by speculative capital as commodities trading moves from futures

Exhibit

The effects of price increases are putting agriculture higher on the government agenda.

Food-price index, 2003 = 100



Source: Food and Agriculture Organization of the United Nations food-price index; Peter Timmer, "Agriculture and pro-poor growth: An Asian perspective," Center for Global Development working paper number 63, July 2005; Ronald Trostle, US Department of Agriculture; World Bank

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markets into products (such as exchange-traded funds) that encourage nontraditional participation, extending even to retail investors. To minimize operational impact and stabilize financial performance, farmers will need to develop or gain access to new financial-risk-management capabilities.

4. From push to pull: The upheaval of the agriculture value chain

Until recently, producers were largely in control of what landed on consumers' plates. There was limited public information about products, food was sourced locally, and quality was important but not a primary concern. But consumers, particularly in developed nations, have an increasingly strong say about the industry's production, and producers compete for their business. Consumers now have access to a seemingly unlimited amount of information about food and they are assertive about food quality and attributes, food's value for money, and food-sourcing practices. The image of farmers peddling their products is no longer an accurate one. Increasingly, consumers ask for specific products and expect producers to adapt.

In response, stakeholders throughout the food value chain will soon need to become much more consumer savvy. They will need to learn to distinguish between passing fads and permanent changes in consumer expectations.

(Organic food may best illustrate this point; the organic and natural segment has been the epicenter of the revolt in consumer tastes. Despite all the attention, the segment remains a niche market—its market share in the United States rose just a small amount from 2006 through 2010, from 5 to 6.5 percent.) Becoming more consumer savvy also suggests the ability to quickly deploy marketing and public-relations capabilities to address consumer concerns (being able to react to food scares related to animal diseases in a timely manner, for example).

5. Big ag: Getting bigger

Farming is undergoing an important shift in ownership. In the United States, for example, by 2017 more than half the people who owned a farm in 2007 will be 65 or older, past the age when most people retire. With younger people increasingly reluctant to follow in their parents' footsteps, the farming sector will see an acceleration of consolidation, further increasing the proportion of large farms. This shift will also enable the entry of two new classes of owners. The first new class of owners will be individual strategic investors and countries (primarily those that are emerging) looking to acquire foreign land to secure their national food supply. The second class of owners will be institutional investors and investment firms lured by the potential returns to be gained from increasingly scarce agricultural land and

rising food prices. These new owners will likely have different priorities and requirements from those of traditional farmers.

Implications for agricultural coops

The variety of agricultural cooperative models and the many sectors in which they operate (including input distribution, collectors and traders, and processors) suggest that there is no simple way to present the questions that result from the trends highlighted above, but a few overall themes do emerge. In the following, we discuss five key questions that stakeholders should consider to be prepared for tomorrow's reality.

1. Can cooperatives renew and maintain their membership base in light of shifting trends in ownership?

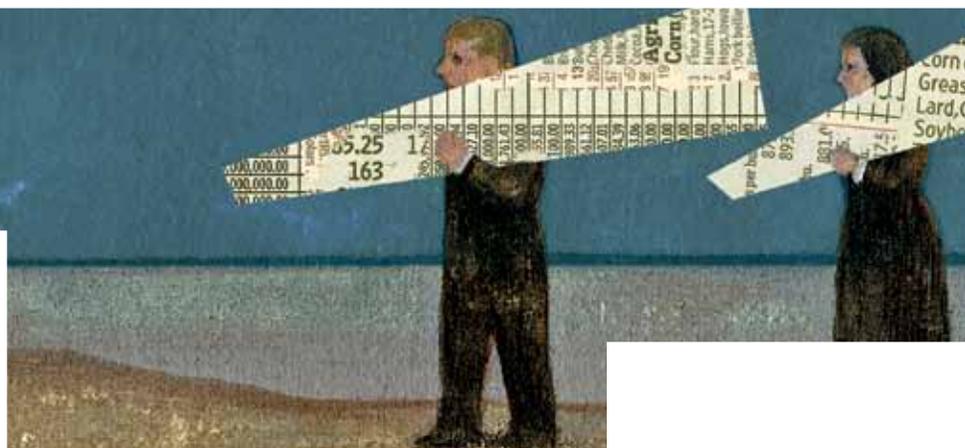
The new generation of younger farmers with different profiles and ambitions, as well as the rise of new kinds of owners such as investors and governments, pose a risk that coops must be ready to mitigate. As the interests of their members start to diverge, coops need to focus on offerings that are relevant to each of their members' segments.

Coops might begin by seeking to understand in more detail the segments to which their

members belong, as well as finding the best way to design an offering that appeals to all of them. Coops might modify their investment approach to ensure that capital investments and returns better reflect utilization and the risks taken by each member segment. They might consider eliminating cross-subsidies between their smaller and larger members to reduce the chances that larger farmers might delay decision making, as well as to ensure long-term alignment of interests and cohesion of membership. Finally, a service model that offers an alternative operating approach for farms looking to consolidate could position the cooperative effectively for the impending generational shift in ownership.

2. How can cooperatives capture the growth opportunity in emerging markets?

Agricultural cooperatives are by nature regional entities, based mainly in developed countries. Because the fastest growth appears to be elsewhere, cooperatives should consider whether they can benefit from increased links with emerging markets. Such a move might offer direct benefits to members through access to higher-value or unique markets for products, or a more diversified customer base. But to do so, cooperatives need a competitive edge that will distinguish



them from the players already operating in these markets. Which business model will work best for cooperatives—a greenfield approach, a partnership with a local or international firm, a joint venture with another cooperative, the purchase of a local distributor or processor, or a partnership with the government of a target market? In the end, coops will need to carefully evaluate the value proposition of each model against the particular needs of the chosen emerging market.

3. Which advanced capabilities could cooperatives turn into a strategic advantage?

Mastering new technologies will require new skills, as will the “financialization” of commodities trading. Coops will need new abilities in financial risk management and advanced analytics in order to serve their members and remain relevant to the full spectrum of grower needs. Cooperatives must determine how to optimally deliver value-added products and services better than traditional players, based on their unique relationships with and insights about their members. Another question concerns how best to offer these skills to their members, in ways that create value for them over the long term. Should the cooperative simply

provide these services to members, or should it help members build these skills for themselves? Can cooperatives develop a significant competitive advantage, increase member loyalty, or preempt competition by positioning themselves as a provider of these services?

4. How can cooperatives anticipate shifts in consumer tastes?

In a consumer-driven environment, agriculture’s stakeholders will need to continually monitor the market to understand changes and identify emerging trends. This will be particularly true for farmers, who require plenty of lead time to adapt. Cooperatives and their members will need to become more consumer savvy and increase their interactions with end customers.

Cooperatives should determine if they have sufficient market intelligence and analytical capabilities to anticipate shifts in customer preferences and value pools. If not, they might consider better collaborations with retailers or food processors. After that, questions arise: how can cooperatives best leverage market information to add value to members? Could cooperatives better coordinate production patterns (timing, characteristics) to ensure all

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members meet quality requirements and are maximizing the value of their production? If not, should they consider new incentives or control mechanisms such as sharing production information among members? Should coops move downstream in the value chain to get better access to new markets, customer information, or control over processing quality?

5. How can cooperatives better prepare members for regulatory change?

Food surpluses in one region can address shortages in another, but many agricultural analysts agree that a revision of tariffs and quotas is critical to boost international trade. Deregulation is not straightforward, however, and support for it varies considerably from sector to sector and country to country. For instance, certain milk-producing countries in Europe would likely oppose deregulation, which they believe would put their farmers at a disadvantage versus others.

To help their members prepare for regulatory change, cooperatives should have a clear understanding of the international regulatory landscape and how changes would impact

the competitive position of their members. They should determine if forums or lobbying efforts could help them play a more active role in shaping the regulatory agenda. They may also consider training programs to help members understand and prepare for impending regulations. Cooperatives could even go so far as to participate in the creation of standards and productivity reforms that will help position them against a new regulatory regime.



Several major structural forces will redefine the agricultural sector over the next decade. As they react and adjust, leaders of agriculture cooperatives should think about how the distinct characteristics of their organizations can help them gain a competitive advantage and better fulfill their mission in the long term. ○