



Can Agribusiness Reinvent Itself to Capture the Future?

Despite a host of challenges, there's never been more reason to be optimistic about the road ahead for agriculture companies.

By Satish Shankar, François van Raemdonck and Dalton Maine

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These would seem like unsettling times for agribusiness.

Everyone from soy growers to meat packers now faces a mounting list of new hurdles. Commodity prices have never been more volatile. Arable land, water constraints and climate change pose increasing challenges. Food safety and sustainability have surfaced as major concerns. The industry requires lengthy investment cycles, but investor patience is diminishing. There's the continuing threat of unpredictable government intervention that could distort global trade. And amid these daunting challenges, companies are also struggling to understand the growing role that digital capabilities will play in the years ahead—and how to adapt.

Yet despite this scenario, agribusinesses are generating attractive returns. In the years from 2004 to 2014, according to Bain & Company analysis, the top five companies in each of four segments (crop inputs, crops, animal products, and trading and logistics) achieved average total shareholder returns (TSR)¹ that ranged from 7% to 42%. However, this is an industry with a huge variation in perfor-

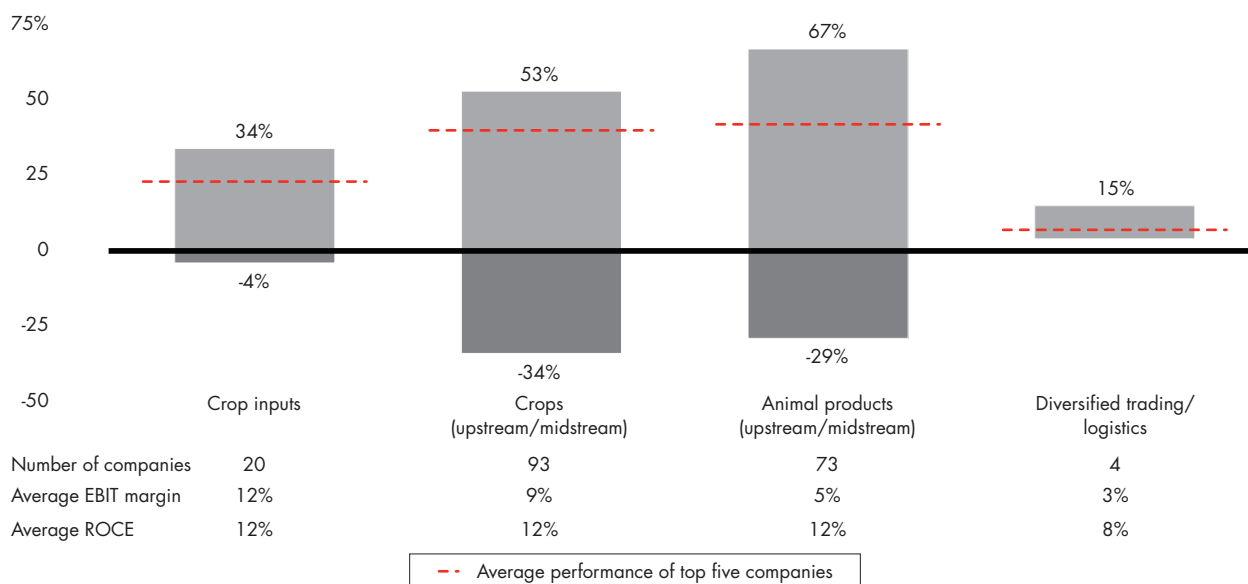
mance (see Figure 1). Our research showed that the best performer among the largest crop companies enjoyed a TSR of 53%, and the worst performer, negative 34%. A similar pattern played out in the animal products segment: The best performer saw TSR of 67% while the worst delivered negative 29%.

In some ways, there's never been more reason to be optimistic about the road ahead for agriculture. Despite the many challenges, the industry fundamentals paint a bright future. Over the next 40 years, global demand will require a 60% increase in major crop production. Supply and infrastructure gaps suggest that prices are likely to recover and even rise over time. Moreover, this is one industry in which many companies have just barely scratched the surface in their efforts to boost yields, improve supply chain efficiencies and increase value-added activities.

Merger and acquisition (M&A) activity, which has grown 23% annually during the past two decades, will continue to consolidate the major players, making the industry more global and integrated—and changing

Figure 1: On average, agribusinesses have generated attractive returns, but performance varies widely

10-year TSR distribution of agribusinesses across four subsectors, 2004–2014



Notes: Total shareholder return (TSR) is in local currency; based on analysis of global publicly listed agribusinesses with revenues greater than US\$1 billion in fiscal year 2014
Source: S&P Capital IQ, Bain analysis

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the rules. No longer a local game, agribusinesses must now have a worldwide perspective to compete effectively, with the nimbleness to adapt to shifting production sources and end markets.

Consider the changes in coffee production. Twenty-five years ago, 61% of the world's coffee came from the top five producing countries. By 2013, the top five accounted for fully 73% of all coffee produced. However, production has shifted from country to country. In 1990, Vietnam was not even near the top of the list. By 2013, it had eclipsed Mexico, Guatemala, Colombia and Indonesia to become the world's second-largest coffee producer after Brazil, contributing about 20% of the world's coffee crop. Meanwhile, end markets are swiftly changing, too. Increasingly, the customers of a particular crop are in a location other than the country where it is produced. There's mounting demand for more sustainable, healthier and safer food. Consumption in developing markets is growing dramatically; China is already the largest consumer of several commodities. If the OECD's and Euromonitor's projections are correct, and Asia and Africa add more than 2 billion people to their middle classes over the next 20 years and grow the number of city dwellers by more than 1 billion, the end markets for most crops and animal products will be transformed.

Looking to winners

Winning companies are keenly aware of these opportunities, and they fully acknowledge that tomorrow's agribusinesses will bear little resemblance to the agribusinesses of the past. Look at the recent success of global nutrition company Glanbia, based in Ireland. The company embarked on a new strategy to reduce commodity exposure and focus on higher-margin, lower-volatility, value-added sectors like the B2B market for whey protein, a by-product of its cheese production, and the B2C market for nutrition drinks. To solidify its position, Glanbia acquired companies in the whey and sports nutrition markets. The strategic shift exceeded expectations: The company grew its earnings 6% annually from 2004 through 2014, and its nutrition brands and

ingredients businesses now account for three-quarters of its revenues from wholly owned businesses.

Look also at the CP Group. Starting as a pure-play animal feed business in Thailand in the '50s and '60s, the company thoughtfully expanded along the entire poultry value chain and across geographies. In Indonesia, one of CP's most successful markets, the company has grown revenues from \$500 million in 2004 to \$2.4 billion in 2014, delivering nearly 70% TSR over that period, according to Capital IQ.

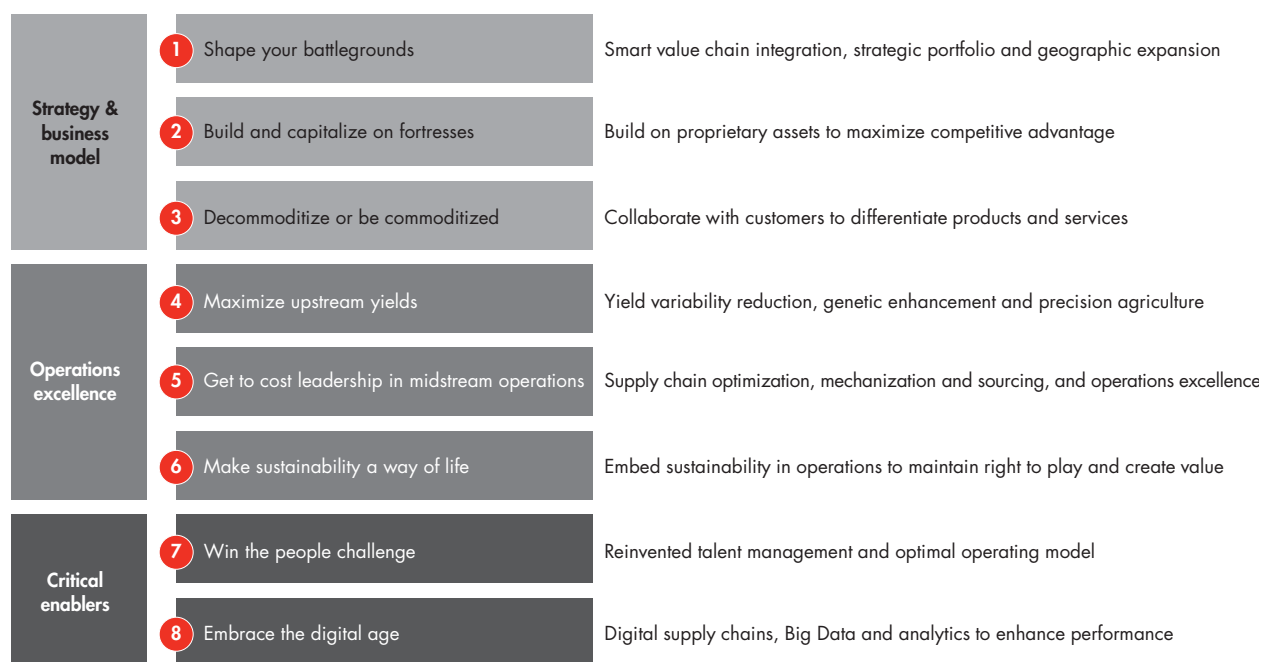
In this steadily shifting landscape, with widely varying company performance, there's no easy path to joining the ranks of winners. But based on our research and experience working with agribusiness companies across the globe to develop winning strategies for the future, we've identified eight rules that successful companies follow (*see Figure 2*).

1. Shape your battlegrounds

To achieve profitable growth, it's important to know where to play. Agribusinesses need to define clearly their battlegrounds along three dimensions: value chain integration, portfolio participation and geographic footprint. Value chain integration and portfolio and geographic expansions benefit companies by giving them access to new profit pools and by creating cost synergies across the value chain. It also allows companies to build competitive advantages by securing sources and customers, ensuring quality control and access to market intelligence through increased market visibility. With agriculture supply chains increasingly globalizing, companies should shift from being pure producers to smartly integrated global players. As they make this shift, the best companies invest to understand their customers' needs, as well as market and competitor dynamics across the supply chain, and they use those insights to shape their business models.

Take Singapore-based Wilmar International. It started primarily as a trader in palm oil, but over the past two decades, the company systematically integrated its businesses across the value chain to tap into higher-margin profit pools, such as plantations and refining.

Figure 2: Eight rules for winning agribusinesses



Source: Bain & Company

It is now one of the largest palm oil plantation owners in Indonesia and Malaysia and the world's largest processor and merchandiser of palm and lauric oils. Integrating has provided several benefits to Wilmar, including economies of scale due to co-location of facilities; efficiency in the logistics and distribution network; trading arbitrage and flexibility, enabled by visibility of the entire value chain; and security of offtake from their plantations and midstream refineries. This strategy has helped Wilmar outpace industry growth. From 2005 to 2011, Wilmar's revenues grew tenfold, from \$4.5 billion to \$45 billion, making the company nearly three times larger than its nearest competitor.

Such smart integration requires an understanding of profit pools that vary by sector and shift over time. Indeed, companies that succeed in shaping their battlegrounds determine where and how far to expand, by anticipating potential shifts in profit pools along the value chain. They also balance their organization's capacity to handle the additional complexity of new businesses and locations, and they execute effectively to truly realize the expected benefits.

2. Build and capitalize on fortresses

In a future marked by increasing globalization and intensified competition, companies need to be able to depend on proprietary assets. The best agribusinesses dynamically identify, secure and build on those assets—everything from factories to licensed intellectual property—to grow and defend their market shares. Companies need to be first movers and also continually nurture and strengthen proprietary assets, both physical and nonphysical. Winners fortify them by layering multiple related adjacencies on top of their core offerings and by reacting quickly to market changes. For example, CHS, the US agricultural cooperative, controls key logistical assets like grain elevators, unit train loaders and ethanol plants that are natural delivery points for local grain producers. CHS capitalizes on these assets by selling agronomic inputs such as fertilizer to farmers, capturing incremental profits and further securing its relationships with farmers.

Consider again the CP Group in Thailand. As the company expanded along the value chain to be-

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come an integrated poultry player, it made several strategic moves to build proprietary assets. CP provides financial support to farmers by extending guaranteed loans to farmer collectives and implementing buy-back contracts with guaranteed returns of more than 12% with farmers—a move that creates high switching costs for them. Additionally, CP maintains an exclusive contract with a distribution channel of 7-Eleven convenience stores, in which it has a 70% share, and Makro hypermarkets, where it has a 35% share. These contracts help CP lock up distribution, preventing other competitors from entering the market. CP's focused strategy of building fortresses has helped it become the market leader in Thailand, with 35% share and \$5.2 billion in revenues from its poultry operations.

3. Decommoditize or be commoditized

Commoditization is a natural consequence of maturity in many industries. However, in businesses today, where it comes down to the simple choice of decommoditize or be commoditized, companies shouldn't be afraid of being different. Instead, they should be afraid of being the same as everyone else. This requires a fundamental shift in thinking. In the past, many companies took a producer's mindset, considering their products as commodities and focusing on how to get the most out of their assets. Now, many winning companies adopt a customer-led approach, understanding and working with their customers to differentiate their products and services.

Consumer mega-trends, such as the push for quality and food safety, open up opportunities to decommoditize. Dairy producer Yili developed supply sources outside of China to improve the quality and counter local concerns over milk safety. The emphasis on quality, bolstered by partnerships with foreign brands, has delivered higher margins and improved the brand's value. Yili's revenues have risen by 17% annually since 2010. Italian coffee producer Illy also differentiated itself by taking more control of sourcing: It buys directly from farmers, ensuring traceability, and pioneered the certification of coffee beans. European B2B chocolate

manufacturer Barry Callebaut has also made big strides in its effort to decommoditize. The company works closely with customers and consumers to understand their bespoke needs and then makes the most of its fully integrated model to develop, source and sell differentiated products like cholesterol-free cocoa butter and tooth-friendly chocolate to large food companies like Mondelez and to artisanal chocolate manufacturers.

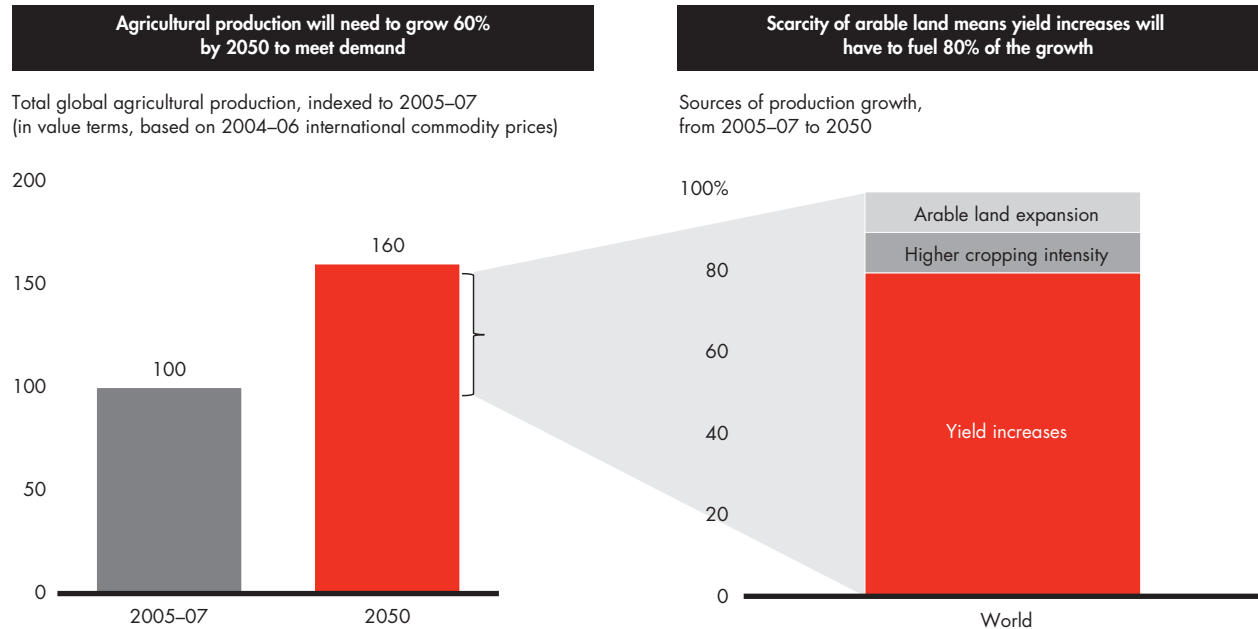
4. Maximize upstream yields

Demand for agricultural products is relentlessly increasing, but supply constraints mean top agribusinesses must radically think about how they can produce more with less. New research indicates that nearly 33% of the world's adequate or high-quality food-producing land has been degraded due to erosion or pollution over the past 40 years—a rate that far outstrips the pace of natural processes to replace diminished soil. Large tracts of arable land also have been damaged due to pollution across Asia and Africa, diminishing their potential for farming. The scarcity of high-quality arable land means companies will need to improve yield to support growth. The Food and Agriculture Organization of the United Nations estimates that over 80% of future production growth will need to come from yield improvements (*see Figure 3*).

There are three key ways to improve yields: reduce variability of realized yields, structurally improve yield potential through genetic enhancements and adopt next-generation precision agriculture techniques for optimizing yields.

In our experience, reducing yield variability can create significant value. Working with a large plantation player in Indonesia, we found that yields could vary tenfold across adjacent plots, despite uniform soil and weather conditions. This is caused by a lack of codification of agronomy best practices—for example, land preparation, equipment preparation, fertilizer application and so on—and an inconsistent quality in supervision across plots. In this instance, improving the yields of underperforming plots was worth a 30% to 40% increase in overall yields, creating tremendous value for the business.

Figure 3: To meet 2050 projected demand for food, 80% of production growth must come from yield increases



Source: Food and Agriculture Organization of the United Nations (FAO), World Agriculture Towards 2030/2050: The 2012 Revision

In addition to reducing variability and generating continuous improvements in genetic materials, one of the key techniques for improving yield is to deploy new precision agriculture techniques. Precision agriculture involves using technology solutions to collect and analyze a large amount of detailed geospatial and temporal crop information to enhance agronomy practices. The information collected and analyzed may vary widely, including such inputs as farm topographical data, soil density, nutrient information, fruit quality and maturity. Sophisticated analytics and control systems then allow farmers to implement optimal agronomy practices, taking advantage of such new developments as GPS-enabled self-driving machinery to pinpoint accuracy in field locations.

One fruit producer uses farm topographical information for field traffic control and water management. Analysis of farm topography allows better planning of vehicle paths through the fields, increasing overall yields and improving costs. In addition, this data is also being used to improve water drainage, which reduces waterlogging and allows better growing condi-

tions. For another company, precision agriculture helps manage fertilizer and water quality. Data captured through sensors placed in fields at varying depths provides a real-time look at surface and ground water pollution. The faster, better-informed decisions enabled by precision agriculture helped the company increase its yield of fresh fruit bunches of oil palms by 5% in a single year.

Precision agriculture can help agribusinesses increase yields while lowering inputs, with applications throughout the entire farming process, from farm preparation and planting through to harvest. While these techniques are still nascent and it will take time for them to become economical, winning companies will innovate on this front, finding profitable models that allow them to capture value.

5. Get to cost leadership in midstream operations

Scratch a leader in any industry, and you will likely find a low-cost position. Cost discipline is essential to generate margins to reinvest in growth, especially in com-

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modity markets. As agribusinesses struggle to deal with intensified competition and capture value across processing operations, a sustainable low-cost position is a big factor separating the winners from the laggards. Our research has found that costs can vary widely across manufacturing plants, both within and across companies. For example, when we analyzed operations at two competing palm oil producers in Southeast Asia, we found that milling costs at a plant at one company was nearly three times more than that of a plant at a rival company.

Companies need to factor environmental costs into their business equations, especially as governments prepare to impose taxes on carbon usage and other environmental stressors.

Scale is a key factor in cost position. And the role that scale plays is different in different situations. Facility scale matters in industries like fertilizers. For example, in China, companies are building large facilities that are much more efficient than small facilities at spreading fixed costs. But local scale is more important in retail agronomy. A multisite presence can allow sharing of labor, equipment and logistical assets. Finally, in many downstream sectors, such as milling and crushing, regional or national scale is important. It allows facilities to specialize in certain products or have the flexibility to serve customers from multiple facilities to optimize logistics and inventories.

To stay competitive, companies also need to minimize processing costs through strategic sourcing, supply chain optimization, operations excellence and by relying on mechanization and data analytics to improve efficiencies.

6. Make sustainability a way of life

Over the past decades, a growing awareness of resource scarcity and climate change has raised the importance of sustainable agriculture. It is now top of mind for consumers, customers, suppliers and their communities, as well as for millennial generation employees, who are demanding that their employers demonstrate sustainable practices.

Sustainability and other environmental issues are increasingly impossible to ignore. The FAO estimates that more than 40% of the world's rural population now lives in water-scarce regions. Even traditional agricultural centers in developed markets like California face water constraints. In a recent case, the months-long haze over Southeast Asia, caused by Indonesian farmers burning their land, cost that country's economy an estimated \$50 billion. Companies need to factor environmental costs into their business equations, especially as governments prepare to impose taxes on carbon usage and other environmental stressors.

Indeed, governments are swiftly enacting legislation aimed at requiring sustainable products. Many European countries now only allow certified sustainable palm oil (CSPO) in their stores, for example. And as a result, CSPO sales have grown by an annual 24% since 2009. In the years ahead, sustainability will become a must to play in several crops.

Some agribusinesses have already learned how to make sustainability a core part of their strategies, even using it as an opportunity to create differentiated value and competitive advantages. Consider the enduring benefits achieved by New Britain Palm Oil Limited (NBPOL) after the company opted to construct its business model around CSPO and embed sustainability into its operations. (A core element of how NBPOL achieved this was by reaching out proactively and working closely with leading environmental organizations.)

NBPOL entered into long-term contacts with customers seeking sustainable palm oil. Linking its brand with CSPO has positioned the company to grow its customer base when the market completely demands the sus-

tainable product. NBPOL was recently acquired by Sime Darby, a large Malaysian palm oil company, at an 85% premium—paid in part because of the company's unique expertise in CSPO.

Indeed, when done right, sustainability can be a source of significant value. But it doesn't happen by accident. Truly embedding sustainability requires making it a top corporate priority and communicating its importance throughout the organization. It also requires setting the right key performance indicators and factoring the cost of sustainability into project assessment and reporting, measuring the impact and being transparent about progress. Companies also need to adjust their operating models and supply chains to incorporate sustainability. For example, Nestle established a sustainability governance and advisory structure to guide its sustainability commitments.

7. Win the people challenge

To survive and thrive, agribusinesses need to operate in dispersed locations, diversify and integrate their value chains—a new reality that adds complexity to their businesses. They also live in a world of long investment horizons and high levels of uncertainty due to price volatility and regulatory uncertainty. This combination of complexity and uncertainty requires many companies to revisit their operating models and streamline their decision-making processes.

However, the major organizational challenge for agribusinesses now and in the years ahead is the scarcity of talent. The industry's cyclical nature, the need to often accept assignments in rural areas and the misconception that this is a sleepy industry have all presented challenges in competing for top talent throughout the value chain. It's not surprising that the average age of farmers approaches 60 in developed countries, where populations are also maturing. But surprisingly, that's the same average age for farmers in Africa, where 60% of the population is younger than 24. And just as farmers are aging, the number of agriculture graduates is on the decline; it dropped nearly 40% in the past two decades. Meanwhile, farmers in countries as diverse as Japan and South Africa continue to leave farm work to seek higher-paying jobs in the city.

The talent crisis comes at a time when the industry is becoming much more sophisticated and top performers have the ability to exert a bigger influence than ever before. Some companies are leaping ahead of others in devising solutions to address these challenges. Olam, which operates in more than 60 countries, has a unique talent model for managing far-flung operations. The company has assembled an international cadre of about 900 managers called the Global Assignee Talent Pool (GATP). Olam invests heavily in recruiting, training and creating fulfilling careers for its GATP managers, who are empowered to make decisions locally, in keeping with Olam's distributed leadership model. In an industry struggling with a huge talent deficit, Olam's approach is a major competitive advantage.

8. Embrace the digital age

In India's rural state of Maharashtra, a group of 400 farmers relies on smartphones and WhatsApp to participate in an online network that helps them connect with one another and with experts to learn ways to become more effective. They use their smartphones to reach customers, to discover new markets for their goods and to share real-time information about such matters as pricing and pesticide effectiveness.

These Indian farmers are ahead of the curve. The fact is, many agribusinesses lag when it comes to using technology in their internal processes and systems, particularly across diverse, dispersed and remote operations. However, as regulators, suppliers and customers demand higher levels of visibility and transparency, the digital imperative is more important than ever.


Whether it's about getting the basics right, such as digitalizing documentation, or implementing more advanced systems, like real-time inventory tracking and Big Data, agribusinesses can learn from digital-forward industries like financial services and consumer products.

We see three key ways that companies can use technology to enhance their business. They can interact digi-

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tally with stakeholders, providing an online platform where farmers, suppliers and customers can digitally connect. They can create a “smart view” of the entire value chain to help them reduce waste and optimize product flow. Finally, they can invest in Big Data and analytics to capture the full potential from their operations—be it in precision agriculture, trading strategies or consumer preferences.

Winning consistently in the dynamic and evolving global agricultural sector can be difficult, and financial outcomes vary greatly among key industry participants. Lessons learned from those that consistently succeed

show that these eight imperatives can help guide agribusinesses through uncertain times. If the past has taught us anything, it's that in agriculture, as in so many other industries, leading companies are those that proactively plan to operate in a new and unfamiliar landscape. They invest to understand clearly the dimensions of their mounting challenges and the shifting opportunities. From soy farms to beef processors, from coffee plantations to olive oil processing plants, amid commodity price fluctuations and new government regulations, water shortages and emerging digital capabilities, the message for the future couldn't be clearer: Standing still is not an option. 

¹ TSR is defined as stock price changes, assuming reinvestment of cash dividends

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