Syngenta and Sustainability: Implications for Corporate Strategy

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Motivation
This poster was inspired by a case study developed by Syngenta, a global crop protection and seed company, in collaboration with Purdue University. As a company dedicated to promoting innovation, delivering value, and being a leader in its industry, Syngenta faces both challenges and opportunities with respect to the sustainability debate. This poster presents the major issues of sustainability in a global context, in an agribusiness context, and finally in the specific case of Syngenta. The concluding discussion represents the perspectives of a group of agribusiness professionals that discussed this case study in an executive education program on the Purdue University campus.

Agriculture’s Capacity Challenges
Agriculture, and agribusinesses that are closely tied to the land, its resources, and its people, face a number of challenges and opportunities in the 21st century that revolve around promoting sustainability and ensuring a secure food supply. Major environmental, social, and economic challenges include:
- Population growth—population expected to reach 9 billion people by 2050
- Land availability—limited “new” land means capacity must come from productivity growth
- Water availability—agriculture is responsible for 70% of total water consumption but water quality, quantity, and distribution are limited (see Figure 1)
- Plant nutrient availability—agriculture uses non-renewable and energy intensive resources
- Economic growth—higher incomes increase demand for goods (see Figure 2)
- Nutrition and malnourishment—over 1 billion people in the world are malnourished, and that number is growing

Forces Driving the Sustainability Debate
Sustainability initiatives have become a global megatrend, and society has increasingly turned to agribusiness in addition to government as a major source of sustainable solutions. There are 5 major forces shaping the sustainability practices of companies:
- Stakeholders—groups such as consumers, shareholders, and employees influence a company’s reputation and freedom to operate
- Markets—ability to create value depends heavily on public perceptions of quality, safety, and health
- Science & Technology—science is required to accurately measure impacts, but technology is often seen as both a cause and a solution to sustainability issues
- Policy—regulations as well as incentives from government induce company action
- Supply Chain Partners—demands for transparency encourage tightly aligned chains, but there is often an unequal distribution of costs and benefits

Discussion among Agribusiness Professionals
In a facilitated discussion at an agribusiness executive seminar at Purdue University, roughly 60 executives shared their insights on Syngenta’s approach to sustainability and the implications sustainability has for all agribusiness companies. Highlights of the discussion:
- Education is the key to sustainability. Companies, governments, and educational institutions must educate individuals and societies about sustainable practices in order to move closer to developing uniform definitions and performance metrics for sustainability.
- Marketing has the power to define what is sustainable due to proximity to the final consumer, but producers control the sustainability of the supply chain.
- Perceptions of sustainability are inconsistent among individuals, companies, and society. For example, some think organics are sustainable while others believe genetically modified products (GMOs) are the only solution to feeding the world.
- Companies need to address both short term and long term value creation.

Conclusions
The specific case of Syngenta and the broad view of agriculture provide a number of insights into sustainability in the agriculture and food supply chain:
- In many respects, agriculture and companies such as Syngenta have always been sustainable—constantly focused on improving efficiency, reducing waste, protecting the land, and delivering value (see Figures 6 and 7).
- However, the focus is generally on the environmental and economic aspects of sustainability rather than the social aspect—social performance is the most difficult to observe and measure.
- Perceptions and values of sustainability not only vary by individual and organization—they shift over time as constraints change and information evolves.
- There is no one way to define or measure sustainability—success will ultimately depend on the ability to convey progress and value to stakeholders in a meaningful way.

References
Shaw, J., Dickinson, T., Schultz, M., Boettje, W., Rankin, A., & Jones-Blaire, B. (2010). Building and Implementing a Sustainability Strategy. CABI CS 10.3. Center for Food and Agricultural Business. Purdue University, West Lafayette, IN.

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