

Bruce Kahn, Portfolio Manager, Sustainable Insight Capital Management (SICM)

United States



Opportunity

Some say that certain agriculture investments can address environmental and social challenges. Others may go further and say the investment theme of agriculture as a whole has a sustainability orientation. We tend to agree with the latter because we understand that agribusiness across the value chain (from seed inputs to processing to distribution) must recognize the need for increased production in the context of key sustainability issues: demographic trends, climate change, and resource scarcity.

Food production, manufacturing, and distribution that is socially just and environmentally sustainable leverages new technologies and new business models. This co-evolved system borrows from the agro-industrial complex and from the “locavore/sustainable/organic”

movement. It uses advanced best management practices to boost agricultural productivity and efficiency to meet the growing demand for food, feed, fuel, and fiber.

Geospatial analysis helps optimize agronomic conditions, land pricing, and input availability with labor and capital inputs allowing for economic efficiency. The production system also uses Geographic Information Systems (GIS) to allow precise application and placement of important inputs such as fertilizers and advanced seeds that not only increase yield and productivity but also improve nutrition.

Advanced machinery, such as variable rate application of inputs, reduces tillage of the land while allowing for the precise amount of chemical inputs to avoid excess nutrient application. These tools allow us to more effectively use inputs while conserving and optimizing water use.

And finally, biological agents that are region-specific allow us to control and manage pests with minimum exposure to harmful chemicals. “Smart” agriculture couples advanced materials with highly efficient management of inputs. “Climate Smart” agriculture adapts this system to rapidly changing temperature and precipitation regimes to allow maximum resilience of our agricultural production system.

How Does an Investor Access Agriculture?

Accessing the growth of the agricultural industry requires exposure to multiple asset classes, each with its own risk-return profile. First, owning farmland can provide capital appreciation and current yield while protecting against inflation and currency movements and may provide uncorrelated returns with other markets. Of course, one needs to hire operators and control for input price volatility as well as be prepared for long-term illiquidity (up to 30 years). And some farmland investments in developing countries are contested for their impact on local communities, thereby adding reputational risk to the investor.

Second, agricultural commodities themselves, such as futures contracts in the grain markets or livestock markets, are poor vehicles for gaining direct exposure to the growth of the agribusiness theme. Passive strategies do not work well without significant backwardation to generate roll return, and active strategies are highly volatile and have limited appeal, so they may have a limited place in an overall portfolio. These markets are mostly used for natural hedgers.

Third, the private equity (PE) asset class holds some promise as agriculture is a large and fragmented sector with extraordinary growth potential, but requires significant capital and management and, typically, deal sizes are much smaller than the regular appetite for

private equity investors. Further, there have been a limited number of successful exits in the sector, thus thwarting significant attention from the large PE shops. Given that, there is a potential early-mover advantage to generate strong returns as more PE funds enter the markets.

And finally, the public equity asset class offers access to growth in agriculture since there is a broad investible universe which is focused on the core agricultural value chain and the companies are well covered by the capital markets and therefore have efficient access to growth capital. Public equities will not have the same degree of uncorrelated returns as the other asset classes, thereby requiring a skillful manager that will produce returns from company-specific attributes rather than common factor movements of the public markets.

Role of Investors

Sustainable agriculture ensures that production keeps up with both demographic changes and resource scarcity while providing economic development and investment portfolio growth. And agricultural production is big business, encompassing land, equipment, crop inputs (chemicals and seeds), expert production (farmers maximizing crop yields), value-added processing, and sales and distribution. Agricultural sustainability depends on a number of factors, including agriculture practices, governmental policies, population trends, management of key resources, crop yields, and customer demand (such as for meat or other resource-intensive products).

Agriculture investors can effectively work with multiple stakeholders to address environmental and social challenges. The convergence of the agro-industrial complex with the sustainable agriculture movement produces an advanced agriculture that simultaneously enhances production in developed and developing countries, reduces agricultural waste, and provides meaningful jobs. These trends are improving the lives of the subsistence, emerging-economy farming community by providing education and training—building out agri-infrastructure and providing access to capital and to markets and to growing the use of technology deployed at scale.

In agriculture, specific issues are paramount for the operations of any firm along the value chain. Water use, toxic emissions, impact on biodiversity and carbon emissions are key environmental factors that affect the sustainability of operating companies along the value chain. Social issues include labor conditions, safeguards against negative livelihood impacts, and impact on community dynamics, such as helping subsistence farmers benefit from global agricultural supply chains by engaging through out-grower schemes.

When considering these factors in conjunction with other market factors, skillful investors will seek to optimize risk exposure to the degree of risk management of these issues and

determine the changes of the portfolio's risk profile, such as exposure to beta, style, country, and expected returns, etc. Of course, this type of management requires proper assignment of the portfolio's benchmark in order to measure manager skill, rather than theme selection.

BIOGRAPHY

Bruce has over 25 years of experience in environmental and investment research and management. Currently, he serves as a Portfolio Manager at Sustainable Insight Capital Management (SICM), a global investment management firm that combines a disciplined alpha-generating process with sustainable investing principles. Previously, Bruce was a director in Deutsche Bank's Asset Management division, where he acted as an investment strategist conducting research on sustainable investing, including clean tech, water, and agriculture as well as ESG/SRI strategies across several asset classes. Prior to that, he managed assets at Citi Smith Barney in sustainable investments, including agri-business and cleantech for foundation/endowment, HNWI and institutional clients.

Bruce is a Trustee and Chair of the Finance Committee of the Robert and Patricia Switzer Foundation and previously served as Trustee of the Jesse Smith Noyes Foundation. He also serves as a member of the Board of Visitors for the Gaylord Nelson Institute of Environmental Studies at the University of Wisconsin–Madison and is on the Technical Review Panel of National Renewable Energy Laboratory. He also serves on the Advisory Council of the Sustainability Accounting Standards Board and Mercer Investment Consulting's Sustainable Opportunities Fund.

He holds a BA in Ecology & Evolutionary Biology from the University of Connecticut, an MS in Fisheries and Allied Aquacultures from Auburn University and PhD in Land Resources from University of Wisconsin–Madison. He is a recipient of both a J. William Fulbright Scholarship and a National Science Foundation Fellowship in ecological economics and is an Adjunct Professor at Columbia University's Earth Institute in the Sustainability Management Program, where he teaches Sustainable Finance, Statistics for Sustainability Management and Sustainable Agriculture.