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Private Equity and Emerging Markets Agribusiness: Building Value Through Sustainability

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Any views or opinions expressed in this report are solely those of the authors and contributors.

Abbreviations

DFI	Development Finance Institution
E&S	Environmental and Social
EHS	Environment Health and Safety
EM	Emerging Markets
ESAP	Environmental and Social Action Plan
ESG	Environmental, Social, Governance
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
GP	General Partner
LP	Limited Partner
NGO	Non-Governmental Organization
PE	Private Equity

Foreword

Feeding the world requires a strong agricultural industry. Cultivating and processing agricultural commodities—including crops, livestock, timber and more—is critical to society. From farming yields and quality standards to equipment and processing facilities, agribusiness is a growth opportunity around the globe, and the private equity industry is playing an important role in building this sector.

Agribusiness touches on many issues. It is vital for food security, job creation and economic growth, especially in rural communities. It provides fiber, building materials and bioenergy to help meet the world's rising energy needs. Large-scale commercial farming and processing—the types of operations that attract commercial and often international investment—will play an even more important role as the world's population continues to grow and more people enter the middle class and move to cities. With a focus on sustainability, these operations can generate great value to both investors and society, responsibly producing an array of goods demanded by consumers around the world.

Large-scale agribusiness, though, can also be uniquely exposed to environmental and social challenges, which must be properly addressed to run a successful business. Due to the size of its footprint, agribusiness can spark controversy over land acquisition (including conflict over customary land rights), local jobs, occupational health and safety, and human displacement. Agribusiness may also cause disruption to natural habitats and the valuable services provided by dynamic and healthy ecosystems. Unintended outcomes that should concern any investor include social conflicts and work stoppages, degradation of underlying natural assets, and challenges from key stakeholders. In short, investors may face significant risks when putting capital to work in this industry.

Good business managers are thoughtfully addressing these issues. Because of their natural resource use, agribusinesses can benefit from sustainability initiatives that focus on operational efficiencies. These efforts can lower costs, improve relations with local communities, and protect an ongoing license to operate. At KKR, we believe that businesses and private equity investors that adopt a sound policy and management approach to environmental and social matters are better positioned to anticipate and avoid adverse risks and impacts, and can achieve greater financial and social returns. To help guide the industry on these risks and opportunities, credible standards have recently been developed, including standards by the authors of this report, such as the International Finance Corporation's Performance Standards and Voluntary Agro-Commodity Standards.

This report has been written for emerging market private equity fund managers. It highlights trends in private equity investment in emerging markets agribusiness and promotes adopting environmental and social management systems to generate sustainable financial returns. While the report points out the environmental and social risks in primary production, it considers how such risks may reverberate through the value chain. These risks and opportunities are not exclusive to a particular commodity but relevant to all agro-commodities, including livestock, aquaculture and timber, the last of which is the focus of a case study in this report.

General Partners (GPs) should find this paper to be particularly relevant, especially those seeking or receiving investment from Development Finance Institutions. The material should also be helpful to Limited Partners (LPs), debt investors, commercial banks and others investing in emerging markets agribusiness.

The future of this industry is crucial and our role as responsible investors is increasingly essential. I believe that this report will help interested parties understand the current landscape and will inform their actions moving forward. It should be our goal as investors to find opportunities to solve societal challenges, and create shared and sustainable value in the process.

Ken Mehlman
Member and Head of Global Public Affairs, KKR

I. Sustainable Agribusiness: A Unique Value Proposition

Global trends such as burgeoning demographics, expansion of the consumer class, urbanization, and increasing energy and raw material needs have fueled unprecedented demand for agricultural products. The pull toward greater production is felt keenly in emerging market economies due to their fast-growing populations, increasing caloric intake, and shifting consumer preferences. As these trends continue and the global population soars to nearly 10 billion people by 2050, overall food production must increase by 70%, and production in developing countries will need to nearly double.[1]

Agribusiness is more than farming; it includes the manufacture and distribution of farm equipment and supplies, and the processing, storage and distribution of farm commodities. Together, the expectations placed on modern agribusiness provide a special opportunity for private equity (PE). PE firms can bring stable and patient growth capital to agribusinesses that may struggle to access finance given the uneven nature of their cash flows and the general unavailability of bank lending in many markets. PE firms can leverage industry expertise to help agribusinesses attain scale, strengthen banking relationships, and improve capital buffers, making more sustainable enterprises. For Limited Partners (LPs) that back PE funds, agribusiness can offer long-term financial and diversification value.

In addition to its commercial investment aspects, agribusiness plays a critical role in society. In emerging markets particularly, it drives employment, economic growth and food security. As Stuart Bradley, Senior Partner with the Sub-Saharan Africa-focused PE firm Phatisa notes, "Growth in agriculture is significantly more effective at reducing poverty than growth in other sectors." The majority of the world's poor are farmers, and they often live and work adjacent to major population centers with accelerating demand for agro-commodities. Yet these farmers frequently lack the capital, knowledge, technical inputs and infrastructure to profit from market trends. Consequently, agribusiness PE holds enormous potential to drive improvements in human development while representing an attractive commercial opportunity.

Despite both the promise and the imperative of expanding global food production, the growth of agriculture's footprint poses significant risks. Agricultural irrigation already accounts for 70% of global water withdrawals.[2] Agriculture and forestry together are responsible for much of global deforestation and account for one-third of global greenhouse gas emissions—more than any other sector.[3] In light of its resource requirements and the constraints on land and water consumption, the race to expand agribusiness can lead to serious local conflicts and the degradation of resources upon which communities depend. Food security, equity and access to food for local communities constitute additional risks, especially when agricultural production is oriented to export markets. Labor practices and working conditions in the sector are frequently criticized, with increasing scrutiny on the fairness of agricultural value chains and the provision of decent wages and livelihoods for farm workers. Climate change introduces additional complexity in terms of agribusinesses' contribution to climate change as well as its exposure and ability to respond to the impacts of severe and unpredictable weather patterns.

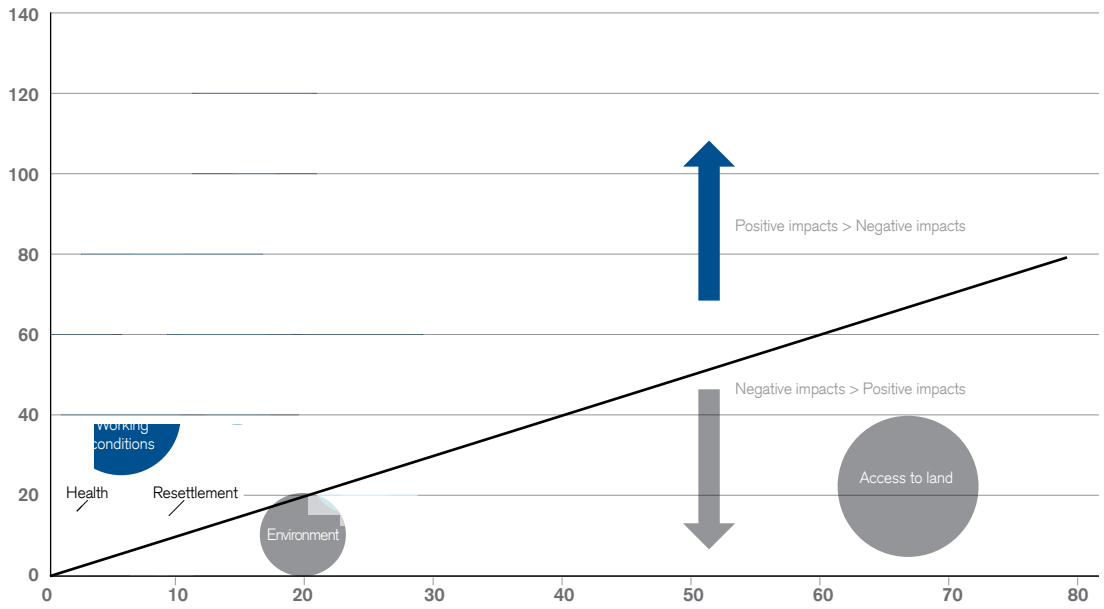
By managing these risks and understanding the value of sustainable agribusiness, investors can realize significant opportunities across the industry. Sustainable agribusiness may generate value through efficiencies, cost reductions, market access, a broader customer base and strong relations with local communities and regulators. A combination of existing environmental and social (E&S) standards—for example, those of the International Finance Corporation (IFC)—and credible sustainability certification systems[4] help define well-managed agribusiness and the economic benefits to be gained. In the case of palm oil, for example, the benefits of certification under the Roundtable on Sustainable Palm Oil were found to include operational improvements, a decrease in social conflicts, reduced labor turnover and enhanced access to capital.[5]

While the tangible benefits of sustainable agribusiness will likely interest any investor, the value of positive social impact should resonate especially with the growing community of institutional, public and private investors seeking a measurable development impact. This class of "impact investors" has directed US$46 billion of capital to investments across a variety of sectors that are meant to produce financial as well as positive social returns.[6] Additionally, over 1,300 financial institutions have become signatories to the Principles for Responsible Investment (PRI), of which over 500 are indirectly or directly invested in PE, including 150 specialized General Partners (GPs). These firms are obliged by PRI to report on how they integrate environmental, social and governance (ESG) matters into their investment processes. Evidence of PRI's effect on the market is found in requests for proposals by LPs, which increasingly ask for information and supportive evidence of ESG integration, indicating that ESG familiarity is becoming a competitive point in the asset management industry.

For PE investors to add and preserve value and ultimately realize competitive returns, strong E&S management is a logical win-win. By addressing sustainability issues in a thoughtful and deliberate manner, investors can avoid an array of potential business obstacles while building shared value among critical stakeholders that can influence the financial success of the agribusiness company.

Indeed, in a major field-based study on agricultural investment in emerging markets[7]—a study with particular focus on approaches to environmental, social and economic responsibility—a recurring theme was the value created through active management of E&S concerns. The study surveyed stakeholders across a range of agricultural investments and found a willingness to embrace agribusiness investments against a backdrop of fears about the use of natural resources (figure 1).

Figure 1: Stakeholder Perceptions of Positive and Negative Impacts of Larger-Scale Agricultural Investments, Classified by Issue



The vertical axis shows the number of stakeholders that mentioned the investment as having a positive impact on them with regard to that issue. The horizontal axis shows the number of stakeholders that mentioned the investment as having a negative impact. The size of the bubbles represent the relative frequency with which each issue arose in stakeholder interviews, whether in a positive, negative or neutral context.

Source: UNCTAD-World Bank Survey of Responsible Agricultural Investment (reprinted with permission).

The actual results of these investments mirrored the hopes and concerns of local communities. Key benefits included direct and indirect employment; support to outgrowers (local contracted farmers) to optimize agricultural yield; improved food safety and security; and increased local investments, including in infrastructure.

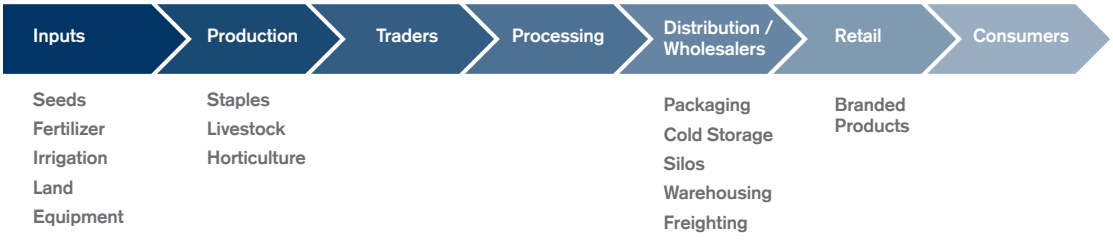
Key negative outcomes involved disputes over access to land, especially between investors and those with informal land use rights, and the consultation process over land acquisition. Additional negative outcomes included poorly handled resettlement, lack of consultation with and inclusion of local communities, lack of public disclosure on farmland leasing contracts, including terms and conditions, and on the environmental and social impacts of the proposed operations. Finally, lack of community grievance and redress mechanisms and inadequate assessment of environmental impacts, including cumulative impacts, added to the list of detrimental outcomes.

The intersecting risks and opportunities in agribusiness investing are not unique to one place, business or commodity. They are relevant in all geographies. They pertain to primary producers and to input providers, traders and processors, as well as consumer goods companies that deal directly with inquisitive and demanding consumers. Furthermore, the value of strong E&S management is not limited to row crops but applies to livestock, aquaculture and forestry sectors. In view of this complex landscape, this report intends to help PE investors better understand and implement effective E&S management, beginning with a description of PE trends in emerging markets agribusiness followed by a framework to address E&S risks and opportunities.

II. State and Trends of Private Equity in Emerging Markets Agribusiness

Dozens of PE and venture capital firms—both agricultural specialists and generalists—have found agribusiness to be an attractive sector. Though investments have been mainly concentrated in agro-commodity processing, activity has spanned all stages of the value chain (figure 2). PE can play an important role throughout the value chain—from serving as a critical source of financing that can optimize primary producers' capital structures to marrying expansion capital with operational expertise to help drive revenue growth and create efficiencies in agribusiness companies.

Figure 2: Agribusiness Value Chain



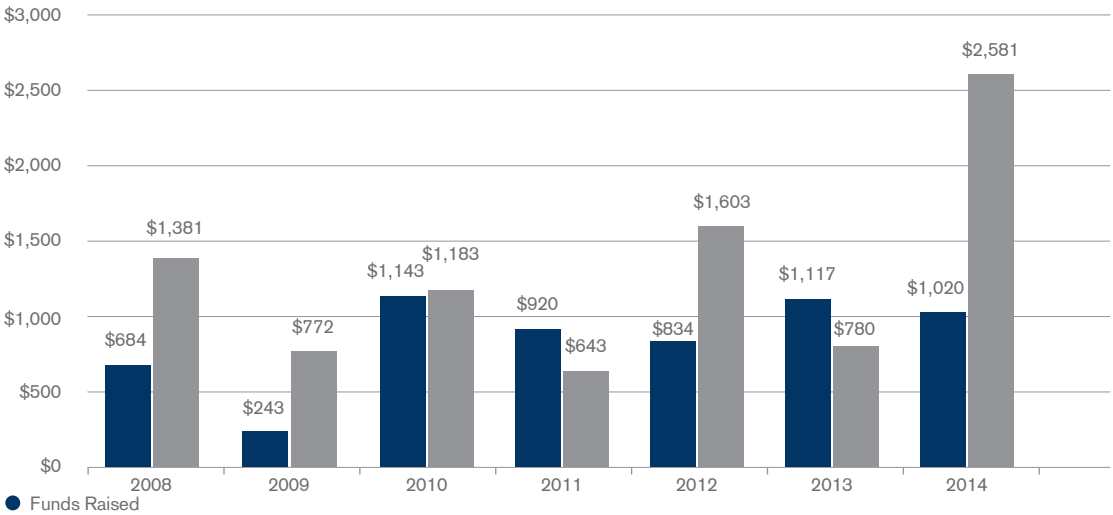
Source: Dalberg and EMPEA

Investment activity also extends across segments of the PE market. At the smaller end of the spectrum, firms like Sub-Saharan Africa-focused investor Kaizen Venture Partners have helped to turn around distressed coffee processing companies in Rwanda. In the middle market, AIF Capital—an Asia-focused PE firm—invested in Olam International, fueling the growth strategy of what is now one of the world's largest vertically-integrated agricultural commodity trading companies. At the larger end, through its investment in Modern Dairy, global investment firm KKR instilled good practices, creating a safe source of milk for Chinese consumers. Regardless of the segment, each private equity investor faces issues in sound management of E&S risks and opportunities, a process that requires time, focus and iterative improvement.

In spite of high-profile deals and a number of firms deploying capital, agribusiness PE remains a niche strategy in emerging markets. Since 2008, forty agribusiness-dedicated PE funds have closed on nearly US$6 billion in capital commitments (see Annex 1) during a period in which 1,424 emerging market funds raised US$289 billion in total capital. Agribusiness-focused funds thus accounted for roughly 2% of total industry activity.

With respect to investment, 153 PE firms (including generalist funds) have executed 283 agribusiness transactions in emerging markets since 2008, with aggregate annual investment figures ranging between US$643 million and US$2.6 billion (figure 3).

Figure 3: Agribusiness PE Fundraising and Investment, 2008-2014 (US$m)



Scale in US$ Millions

Source: EMPEA

Why Don't More Emerging Market Private Equity Firms Invest in Primary Production?

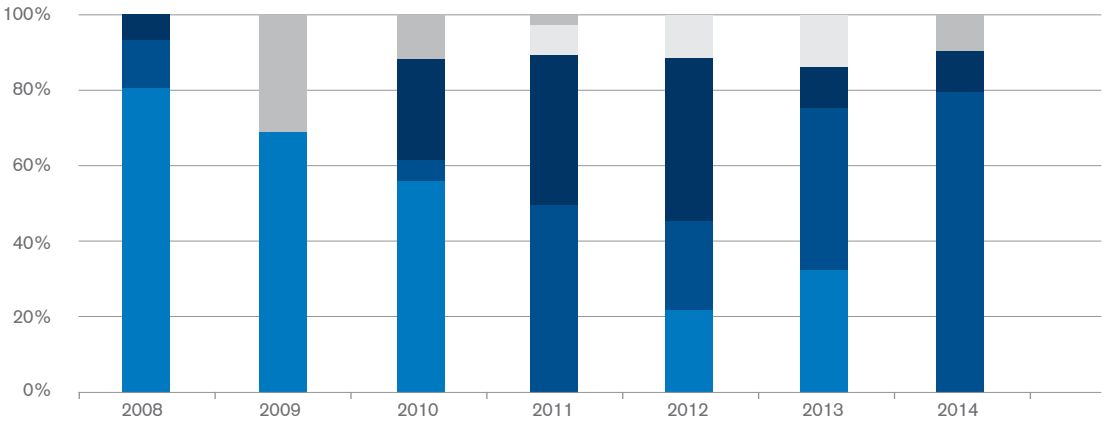
Despite the global supply-demand imbalance for agricultural commodities, relatively few PE investments in primary production took place in emerging markets over the last seven years, with the notable exception of the forestry sub-sector. While each region has its own idiosyncrasies, two core reasons account for the disparity: land ownership and an incompatibility between the economics of production and the return expectations of investors.

Aside from a few select markets (including a handful of countries in Latin America), investors have difficulty in obtaining titled land, which can impair asset security and inhibit returns from land-price appreciation. Informal land claims can only exacerbate the problem. Perhaps more telling is primary production's suitability for generating competitive PE returns. Upstream activities—particularly with row crops—tend to be low-margin and capital-intensive with unpredictable cash flows, and factors such as weather and disease can drive higher volatility. The potential for environmental and social controversies may also diminish investor interest. As a result, many PE investors pursue opportunities in value-chain investments where businesses exhibit more predictable cash flows, and inefficiencies can be corrected to create value.

Emerging Market Fundraising and Investment Trends

Geographically, Latin America-focused vehicles raised the most capital between 2008 and 2014—approximately US$1.9 billion in total—though there has been a discernible shift toward Emerging Asia and Sub-Saharan Africa-focused funds since 2010, which have accumulated US$2.1 billion and US$1.3 billion, respectively, over the last seven years (figure 4). With respect to single-country funds, Brazil-dedicated vehicles have attracted the largest amount of capital by far—nearly US$1.5 billion compared to US$356 million for China, the second-largest destination.

Figure 4: Agribusiness PE Fundraising by Geographic Focus, 2008-2014



Scale: % of Total Capital Raised
Source: EMPEA

Mirroring the trend in the emerging markets PE industry as a whole, a pronounced concentration of capital occurs in the largest fund managers. Since 2008, the ten largest funds account for US$3.8 billion (or 56%) of the total capital raised for agribusiness-dedicated vehicles, with the top 15 closing on nearly 71%. The largest emerging market agribusiness funds raised are targeting investments in Emerging Asia, Latin America and Sub-Saharan Africa (figure 5).

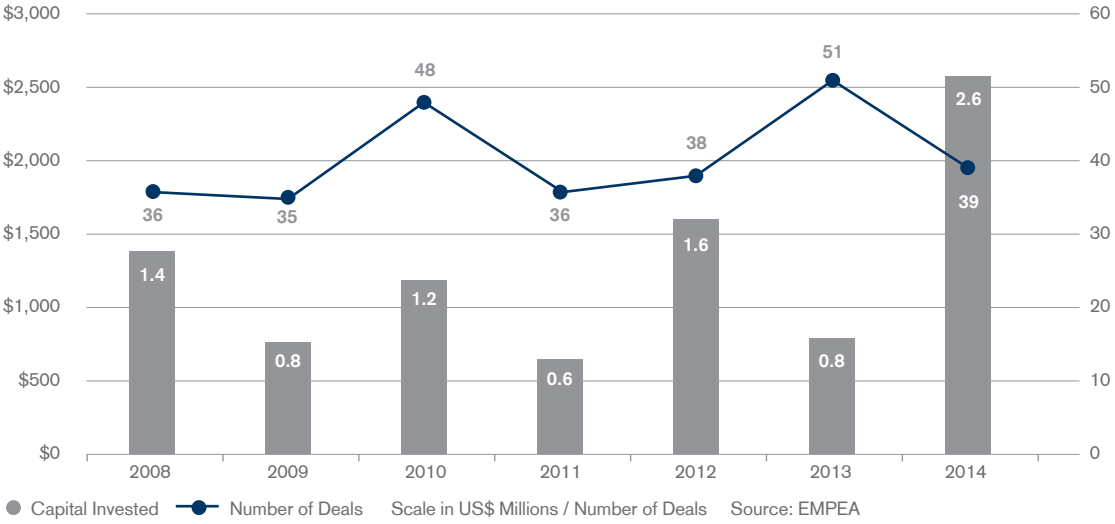
Figure 5: Largest Agribusiness PE Funds Achieving a Close, 2008-2014

Fund Manager(s)	Fund Name	Fund Type	Geographic Focus	Currency	Capital Raised (US$m)	Vintage Year
Black River Asset Management	Black River Food Fund 2	Growth	Asia	USD	700	2014
Black River Asset Management	Black River Food Fund	Growth	Asia	USD	455	2011
BRZ Investimentos	Brasil Agronegocio	Growth	Brazil	BRL	450	2010
Pampa Capital Management	Pampa Agribusiness Fund	Growth	Latin America	USD	365	2008
Vital Capital Investments	Vital Capital Fund I	Growth	Sub-Saharan Africa	USD	350	2012

Source: EMPEA

PE firms invested an average of approximately US$1 billion in agribusiness companies each year from 2008 through 2013. However, the amount of capital invested exploded to nearly US$2.6 billion in 2014, largely prompted by three deals in Emerging Asia, which accounted for nearly two-thirds of the total.[8] Annual agribusiness deal flow over the same period averaged 40 transactions across all emerging markets, with a general trend toward greater capital deployed over time (figure 6).

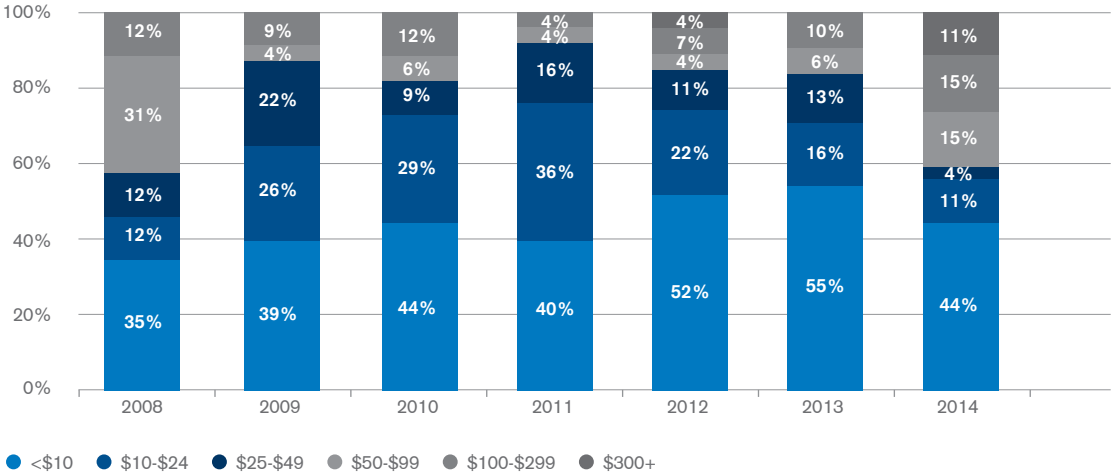
Figure 6: Agribusiness PE Investment by Year, 2008-2014



These aggregate figures, however, mask some notable findings concerning investment activity by geography, size and sector. For example, agribusiness transactions have taken place across 53 emerging market countries. Emerging Asia and Sub-Saharan Africa have been home to 73% of investment activity, accounting for 139 and 69 transactions, respectively, while Latin America (46), the Middle East and North Africa (13), and Central and Eastern Europe and the Commonwealth of Independent States (16) constituted the remaining 27% of investments. Four middle-income countries—China, India, Brazil and South Africa—accounted for 55% of deals.

Of the 193 deals for which EMPEA has transaction values, the vast majority have been investments of less than US$50 million, and this has been consistent until 2014 (figure 7). While it is too soon to definitively conclude that this launches a new trend of larger deals, a number of multi-billion dollar generalist funds have been raised for Emerging Asia over the last three years, which could soon drive deal flow above the US$100 million level.

Figure 7: Agribusiness PE Investment by Size, 2008-2014



Scale: % of Total Number of Deals

Note: Investment numbers exclude transactions for which no investment sum is disclosed.

Source: EMPEA

View from the Field | Emerging Asia

"Agribusinesses have significant seasonal risks; they are often of long gestation but have the potential to be highly scalable. Such businesses can depend on banking relationships once the company has grown larger. However, the high scale potential, wide variety in products, multi-layered value chain and significant need for equity before banking relationships can step in make PE and venture capital a very vaunted need both at early and scale stages of these businesses. Specialized fund managers can add value at each stage."

Vineet Rai, CEO & Managing Director, Aavishkaar

PE investors also tend to concentrate their activity by sector. As industry experts have observed, the three principal strategies for agribusiness PE are production, value-chain opportunities, and inputs/technology.[9] When viewed by sector, the majority of deals have been in "food producers," meaning primarily processors and retailers (figure 8).[10]

Figure 8: Most Active Sectors for Agribusiness PE Investment, 2008-2014

	2008	2009	2010	2011	2012	2013	2014
Chemicals	2	2	3	3	2	5	2
Food & Drug Retailers			2	2		1	1
Food Producers	24	30	34	27	33	40	27
Forestry & Paper	9	2	3	1		2	
General Industrials			2	1		1	

Source: EMPEA

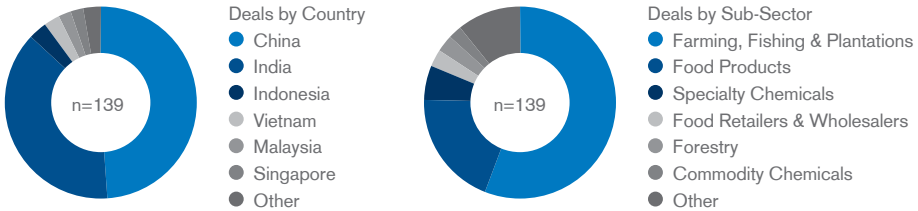
Regional Spotlights

Three emerging market regions are worth exploring in greater detail because they are popular destinations for agribusiness PE fundraising and investment: Emerging Asia, Sub-Saharan Africa and Latin America.

Spotlight on Emerging Asia – Concentrated by Country but Diverse by Sector[11]

Emerging Asia represents a multitude of countries, yet the vast majority—fully 87%—of deal activity has taken place in China and India (figure 9). This outcome may be due to the relatively advanced stage of development of the PE industries within these countries rather than the state of agribusiness opportunities. Although activity is heavily concentrated in these two countries, PE firms have deployed capital in 16 sub-sectors—the broadest array of agribusiness deals in any emerging market region.

Figure 9: Emerging Asia Agribusiness PE Deals by Country and Sub-Sector, 2008-2014



Source: EMPEA

Within Emerging Asia, dairy operations have been a popular target for investment, as have assorted protein producers and processors. Crop production, by contrast, has not received as much investment, which—at least in China—may be due in part to evolving government restrictions on foreign investment in agribusiness companies, and—in India—the societal importance of small-holder farmers.

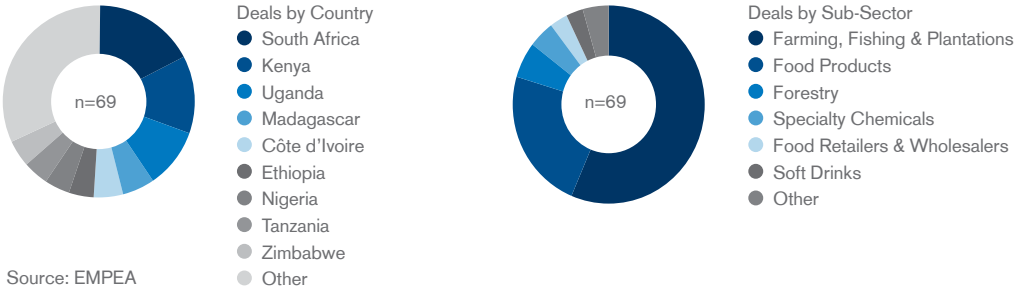
Elsewhere in Emerging Asia, the structure of the agricultural industry may be inhibiting capital flows to primary production. As Bill Randall, Managing Partner of Pacific Agri Capital, explains, "In Southeast Asia, outside of Indonesia and Malaysia, agricultural activity is predominantly small-holder driven; this gives the farmer a great degree of importance and an entrenched position in land rights, and so it is practically impossible to achieve scale." As a result of these hurdles, PE investors appear to be targeting companies at the input, processing, distribution, and retail stages of the value chain.

Spotlight on Sub-Saharan Africa – Diverse by Country and Sector

Unlike Emerging Asia's concentration of activity in two countries, Sub-Saharan Africa exhibits rich diversification, with 21 countries receiving investment—from the relatively developed market of South Africa to more frontier economies such as Burkina Faso and the Democratic Republic of the Congo (figure 10). Befitting the diversity of investment destinations, the region also exhibits a breadth of activity by sub-sector.

With its abundance of land, Sub-Saharan Africa has become a popular destination for global investors, most famously—though by no means exclusively—sovereign wealth funds from the Middle East seeking the continent's natural resources to enhance their own countries' food security; examples include Saudi Arabian land acquisitions in Sudan and Qatari deals in Kenya.[12] In the process, sovereign wealth funds, along with Chinese state-backed investors and corporate investors from developed markets,[13] have begun building infrastructure that the region's agricultural industry can leverage for export markets. This is an important development, as according to Phatisa's Stuart Bradley, "compared to other emerging markets, greenfield agricultural investments in Sub-Saharan Africa can be more challenging due to the lack of infrastructure and weak logistics."

Figure 10: Sub-Saharan Africa Agribusiness PE Deals by Country and Sub-Sector, 2008-2014



Source: EMPEA

Though international capital is addressing the lack of infrastructure, some of these non-PE investments have faced global criticism, with some decrying the deals as "land grabs" that involve a lack of transparency and a violation of traditional land rights. Indeed, the challenges of large-scale land acquisition, whether in Sub-Saharan Africa or other emerging markets, illustrate the need for emerging market agribusiness investors to integrate robust environmental and social risk assessment and management into their investment strategies.

Given the array of challenges, most PE managers avoid primary production and focus on other stages of the value chain. Carl Neethling, Chief Investment Officer of Acorn Private Equity, points out, "This is a sector that requires specialization to add value; we try to focus on the value-add side of the sector and stay away from primary production. One reason for our focus is that the closer an investor gets to primary agriculture, the harder it can be to obtain financial information that one can rely upon; moreover, it is often the case that the farmers we want to back are already successful and do not necessarily need an additional equity investment." While Sub-Saharan Africa possesses enormous opportunities in primary production, the pressure on PE investors to exit investments within a fund life-cycle and the nascence of both Sub-Saharan African agribusiness firms and the region's capital markets may inhibit investment in primary production for the near future.

Views from the Field | Sub-Saharan Africa

"One of the big trends in the region has been consolidation. The sector needs a few highly sophisticated farmers to achieve scale and thus become more attractive to private equity. At the same time, a lot of international and U.S. investors with large checkbooks are coming to buy huge chunks of land and business in an attempt to replicate the U.S., institutionalized agriculture model in Africa. Africa is not the United States—that model just doesn't work."

- Carl Neethling, Chief Investment Officer, Acorn Private Equity

"As the investment strategies of European development finance institutions (DFIs) have evolved—along with their heightened interest in Africa and growing concerns over food security—a gap in the market has emerged for development equity specialists like Phatisa. The larger private equity managers have traditionally focused on generalist funds and are less interested in specialist food and agriculture. As a result, development equity managers have created a niche for themselves by combining commercial capital with U.S./European development finance institutions (DFIs) and the African development banks, all of which are focused on industry growth, job creation, entrepreneurship, and improving environmental and social governance."

- Stuart Bradley, Senior Partner, Phatisa

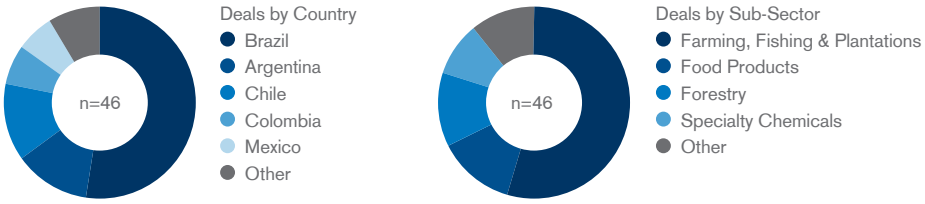
"When it comes to forestry, there is a mismatch between what institutional investors are looking for—which is to own timber—and the optimum way of working in Africa. For example, in North America in the 1980s, pulp and paper companies sold off their forests to pension funds and focused their efforts on increasing their return on capital for manufacturing assets. As it turns out, the owners of timberland made more money than the manufacturers over the last three decades, so there is a tendency against owning the manufacturing component of the value chain. But given the structure of the timberland markets in Africa it is difficult to generate favorable returns unless you control your value chain; in fact, if you don't, your operations can be at risk of being held up through the lack of available or continuous supply and consistent pricing. So I believe the historically successful model in the North American market is not as directly applicable when applied to Sub-Saharan Africa and other emerging markets."

- Ole Sand, Managing Partner, Global Environment Fund

Spotlight on Latin America – Diverse by Country but Concentrated by Sector

As in Sub-Saharan Africa, Latin American agribusiness investments exhibit diversity by country but are slightly more concentrated with respect to sector (figure 11).

Figure 11: Latin America Agribusiness PE Deals by Country and Sub-Sector, 2008-2014



Source: EMPEA

Of the three regions discussed, Latin America exhibits the greatest concentration of investments in forestry deals, which could be due to the climatic and soil conditions in South American countries. Based upon his experience with tree crops in Southeast Asia and South America, Pacific Agri Capital's Randall observes, "The tropical belt yields on both a per-hectare and food-caloric basis that can be produced in Latin America are far greater than anywhere else in the world." These growing conditions have created deal flow both in primary production of tree crops and in lumber processing companies.

Similar to other emerging market regions, a key constraint on agribusiness companies in Latin America is ensuring that their operations are fully capitalized. One distinctive feature of the region's agribusiness environment, however, is that unlike India, parts of Southeast Asia and Sub-Saharan Africa, investors in many Latin America countries can obtain freehold titled land. This makes it easier to pursue primary production opportunities and can facilitate an agribusiness firm's ability to achieve scale and vertical integration.

Looking Ahead

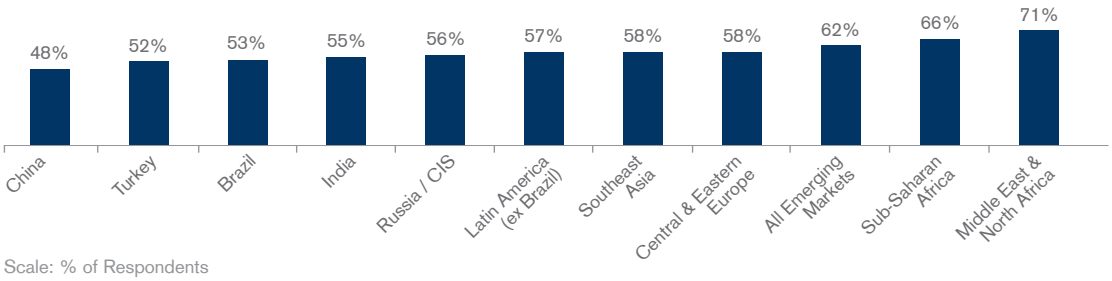
Anecdotally, one of the constraints on the growth of agribusiness PE has been the relatively limited number of exit channels. Apart from some high-profile public listings in Asia—China Modern Dairy, China Fishery and Guangdong Yashili Group—agricultural specialists note strategic sales and management buybacks have been popular strategies. However, with the growing number of generalist PE firms targeting investments in the sector—a trend likely to continue given the rising consumer class and its burgeoning demand for quality food products—secondaries may become a more viable channel, alleviating some exit constraints in the near term.

Additionally, the consolidation of highly fragmented primary production operations in a number of regions could attract greater PE investment in the sector, particularly in plays to achieve vertical integration. Investments pursuing the value-chain thesis are likely to be targets for PE in the years ahead, particularly those mitigating post-harvest loss such as warehousing, storage facilities and "cold chain" logistics and technologies. In addition to their potential returns, these investments can deliver positive outcomes such as enhanced food security and increased incomes to farmers.

Given the secular growth trends across emerging markets, agribusiness PE is likely to have a bright future. Rajesh Srivastava, Chairman & Managing Director of Rabo Equity Advisors, forecasts that activity in India and China may more than double over the next ten years, and believes, "Vietnam and Indonesia will probably attract US$1 billion per year in three to five years' time, with the largest emerging market allocations going toward Asia and Africa over the next five years."

Preliminary results from EMPEA's *2015 Global Limited Partners Survey* suggest that Srivastava's estimates may not be far-fetched. Nearly half or more of LP respondents are looking to build their exposure to agribusiness strategies in each emerging market region, while 62% of LPs plan to increase their agribusiness commitments toward emerging markets as a whole (figure 12). These figures exceed those for the cleantech, energy/utilities and industrials/basic materials sectors, and approach LP appetite for exposure to financials. With the growing number of PE investors interested in agribusiness-related companies in emerging markets, this will be a sector to watch.

Figure 12: Percentage of LPs Looking to Build Exposure to Agribusiness PE Over the Next Two Years, by Region



Scale: % of Respondents
Source: EMPEA *2015 Global Limited Partners Survey*

View from the Field | Latin America

"Latin America is home to many family-run businesses; and getting families to align and restructure can be a challenge. Historically, there also have been fewer transactions so it can be difficult to gauge valuations. But we are seeing more family-owned businesses becoming receptive to private equity and with a better alignment of interests. Technology continues to get better, and local business owners are beginning to see the possibilities for increasing the value of their assets. The one constraint they face is they don't have the capital to deploy toward technology and inputs. This is a perfect match for private equity investors."

- Bill Randall, Managing Partner, Pacific Agri Capital

Water: A Critical Liability or Strategic Advantage?

Water provides a good example of essential risk mitigation in agribusiness. Regulatory and reputational risks from water use and pollution may stem largely from national circumstances. Yet physical water risk is more nuanced and depends on the status of the water basin combined with a company's water needs. Relevant information can be gathered through a variety of public tools. Risks can be significantly mitigated via practices such as efficient harvesting, irrigation, and recycling, as well as reduction or elimination of water pollution and delivery of alternative potable water sources. These practices can also save costs while ensuring continuity of operations. A well-developed Water Management Plan can demonstrate to investors and other stakeholders good water stewardship by an agribusiness that understands the state of its basin and other water risks; has secured sufficient supply; improves water efficiency; and manages its relationships with important local stakeholders and regulators.

III. Managing Environmental and Social Risks and Opportunities

Given the range of agribusiness investment strategies and the scope of E&S issues that arise, PE fund managers can reduce risk and capitalize on opportunities through structured, proactive assessment and management of E&S matters. This section presents a framework for GPs and others to manage E&S matters from pre-investment due diligence to exit.

The diverse E&S issues in agribusiness can often be seen as both risks and opportunities (table 1). Key issues for a given company will vary depending on geography, scale of operations and industry segment. For primary producers, for example, some of the greatest E&S risks may include land acquisition and conversion, labor practices and working conditions, and water and soil management.[14] For processors, top issues may include supply chain risks, labor relations, worker health and safety, and managing waste. Conversely, opportunities abound throughout the value chain to utilize E&S good practices to generate value.

Table 1: Key Environmental & Social Issues in Agribusiness: Risk vs. Opportunity

Issue	Risks from Poor/ Inefficient Performance	Opportunities to Create Value	Selected References
Labor practices and working condition	Strikes, staff turnover, loss of productivity, higher accident/ injury rates and costs, higher insurance costs Supply chain risk resulting in exclusion from some segments of the market, particularly international markets Poorer, inconsistent product quality	Improved competitiveness by attracting and retaining a high-quality work force, leading to increased production efficiency and product quality, and lower costs per unit of output Broader access to buyers and markets, especially via supply chain certification against voluntary standards	IFC Good Practice Notes: • Workers' Accommodation[15] • Non-Discrimination and Equal Opportunity[16] • Addressing Child Labor in the Work Place and Supply Chain[17] IFC Performance Standard 2 on Labor and Working Conditions Labor Standards of the International Labor Organization World Wildlife Fund, Profitability and Sustainability in Palm Oil Production (2012)
Community health and safety (including rural poor, indigenous and other vulnerable people)	Conflict and/or business interruption as a consequence of, for example, loss of access to resources or industrial nuisance Diminished food security for rural communities Adverse impacts on landless and other vulnerable people increasing reputational risks, market exclusion and loss of stakeholder support Public and environmental health impacts, including spread of waterborne diseases Food safety and quality in value added processes	Defined Stakeholder Engagement Plan and Community Grievance Mechanism to ensure strong communication/engagement with local stakeholders, align interests and expectations, and identify/address tensions quickly as well as the use of Community-Company liaison forums Outgrower programs that improve lives and economic linkages in local communities, including local food security Vehicle safety procedures to reduce accidents/injuries Security responsiveness protocol and training of security officers to minimize unintended conflict Assessment of the project's risks and impacts on availability of water resources to ensure sustainable water use Development and implementation of Food Safety Management System (e.g., Hazard Analysis and Critical Control Points (HACCP) / ISO 22000)	IFC Good Practice Notes: • Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets[18] • Addressing Grievances From Project-Affected Communities[19] IFC Performance Standard 4 on Community Health, Safety and Security IFC Performance Standard 7 on Indigenous Peoples CDC ESG Toolkit and Guidance Note on Vulnerable Communities/ Indigenous Peoples. IFC Introduction and overview of the Food Safety Toolkit World Health Organization (WHO) / Food & Agricultural Organization (FAO) Codex Alimentarious International Food Standards, Guidelines and Codes of Practice DNV International Food Standard

Table 1: Key Environmental & Social Issues in Agribusiness: Risk vs. Opportunity

Issue	Risks from Poor/ Inefficient Performance	Opportunities to Create Value	Selected References
Land rights and tenure	Social conflict and reputational risks associated with large scale land acquisition where tenure/ ownership is uncertain or contested Complexities and transaction costs associated with aggregating land and securing use rights, especially in situations involving poor governance and land administration, and lack of recognition of customary rights Reputational risk from human rights abuses	Use social impact assessments and, where needed, Resettlement Action Plans (in case of physical displacement) and Sustainable Livelihoods Plans (in case of economic displacement) coupled with public disclosure of land lease terms and conditions to avoid conflict and business interruption Community/social consultation and engagement processes prior to acquisition to ensure legitimate land use and understand aspirations of local residents (e.g., direct employment, outgrower programs, etc.) Shared infrastructure (roads, reservoirs, post-harvest storage, etc.) generates longer-term business benefits (labor pool, expansion, relations with regulators and communities, etc.)	CDC/ESG Toolkit and Guidance on Land Acquisition/Access to Land IFC Performance Standard 5 on Land Acquisition and Voluntary Resettlement Agence Française de Développement (AFD), Land Tenure and Development Technical Committee, Guide to Due Diligence of Agribusiness Projects that Affect Land and Property Rights World Wildlife Fund, Profitability and Sustainability in Palm Oil Production (2012) "Case B: Community Engagement" (p.32) Kilombero Valley Teak Company case study (below)
Pollution and resource use	Higher production costs as a result of inefficient agricultural inputs, including water and energy use Soil erosion, compaction and nutrient loss leading to diminished value of a farm Fines and court action as a consequence of water/air pollution Community opposition leading to business interruption Accidents and liabilities associated with improper waste handling Incorrect application of agro-chemicals and fertilizers leading to waste, fines and court action	Integrated Pest Management systems to reduce/optimize agro-chemical use and lower input costs in primary production Production efficiencies and cost savings through a Water Management Plan, energy management and the use/re-use of waste Sale of waste products for fuel and other uses Broader access to buyers and markets via direct and/or supply chain certification using credible voluntary standards Carbon market revenue from projects to improve soil or forest carbon sequestration; also lower production costs in farming through low till/no till practices	World Bank/IFC Sector-Specific EHS Guidelines for Agribusiness/Food Production and Forestry World Wildlife Fund The 2050 Criteria IFC Performance Standard 6 on Biodiversity and Natural Resources Management Sustainable Agriculture Initiative (SAI) Technical Briefings and Sustainability Performance Assessments

Table 1: Key Environmental & Social Issues in Agribusiness: Risk vs. Opportunity

Issue	Risks from Poor/ Inefficient Performance	Opportunities to Create Value	Selected References
Biodiversity and ecosystem services	Degradation of the local ecosystem through land conversion, pollution and/or erosion impairs water supply, pollination and other ecosystem services Community opposition and/or legal action leading to business interruption Real or perceived risks to native species from the use of genetically modified organisms (GMOs) Reputational risks and diminished access to buyers and markets	Through optimal yield on primary production farms, including outgrower supply, reduce the amount of land needed for cultivation and minimize land conversion Secure more reliable, long-term water supplies Use High Conservation Value assessments to avoid sensitive areas and protect ecosystem services in consultation with surrounding communities Broader access to buyers and markets via direct and/or supply chain certification using credible voluntary standards	Global Map on Environmental and Social Risk for Agro-Commodities Production (GMAP) [20] World Wildlife Fund The 2050 Criteria IFC Good Practice Handbook on Assessing and Managing Environmental and Social Risks in an Agro-Commodity Supply Chain IFC Performance Standard 6 on Biodiversity and Natural Resources Management
Climate change	Near term risks associated with changes in water (drought, flood), temperature, and animal and plant disease Reduced production as a consequence of physiological stress to plants/animals Increased investor, lender and market concerns in sectors that are recognized as having a significant GHG footprint (e.g., palm oil, dairy, rice and forestry)	Improved productivity/stability of supply through the use of stress-resistant crops Protection against drought and flood through informed risk management planning, including physical and/or financial hedging, insurance and diversification strategies	KFW-WWF Water Risk Filter Global Map on Environmental and Social Risk for Agro-Commodities Production (GMAP)

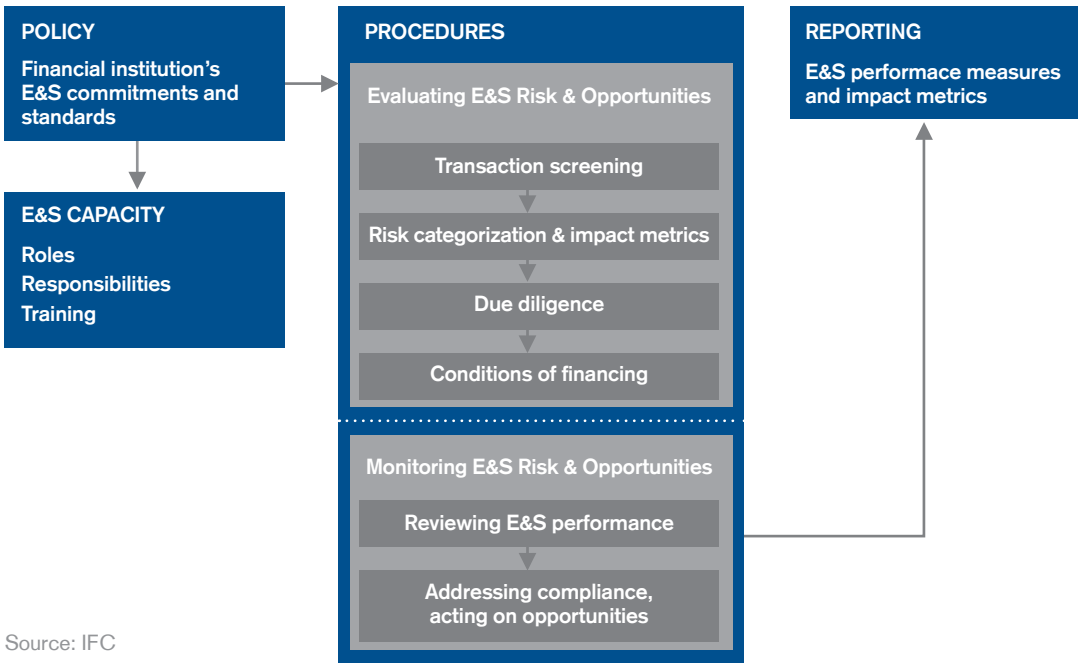
Source: CDC, IFC

Environmental and Social Management Systems

For PE funds, no standard blueprint exists for an E&S management system (ESMS), but common elements of an effective system are widely recognized. Importantly, an ESMS should be built on existing investment management processes to ease implementation and minimize costs. Key elements of an ESMS include the following:

- **E&S policy** that defines the performance-based standards and practices that will be applied to the fund's investments;
- **Procedures for E&S assessment and management** that ensure risks are adequately addressed, mitigation measures implemented, and opportunities identified and realized;
- **Monitoring and reporting processes** to ensure adequate reporting of E&S performance to management and investors and adoption of good practices and continuous performance improvements; and
- **Capacity to manage E&S issues** and realize opportunities across all assets and areas of operation, including direct suppliers, contractors and outgrowers.

Figure 13: Components of an Environmental & Social Management System (ESMS)



Source: IFC

Environmental and Social Policy

An E&S policy should apply to and guide all of the business activities of a fund and its investees. It is typically a concise statement of the fund's commitment to integrating E&S considerations across the investment process, and it is the foundation of a fund's ESMS. The policy should be approved and supported by the GP at the highest level of decision making and should define investment standards and criteria as well as accountabilities for E&S issues. The policy should also list any excluded investment activities, which may be required by LPs or the fund. A sample exclusion list is provided in Annex 2.

The policy should also:

- Emphasize that E&S opportunities/value drivers are an important aspect of the fund's expectations;
- Require that E&S considerations are incorporated into the activities of portfolio companies, for example, through legal and investment commitments to comply with E&S regulations, international performance standards and/or credible certification programs;
- Commit to ongoing monitoring and to improving overall E&S performance of the fund's portfolio companies; and
- Commit to strengthen staff capacity to identify and manage E&S risks over the life of the fund.

The policy should be communicated to all staff, investees and external stakeholders. Its implementation may be considered by some LPs to be part of a fund manager's fiduciary obligation.

Assessing, Managing and Capitalizing on Environmental & Social Issues

With an E&S policy established, a PE fund should outline the procedures for assessing and mitigating E&S issues in each of its investments, including capitalizing on the E&S opportunities outlined in table 1. Ideally, the procedures should build on the fund's existing investment processes and incorporate E&S considerations along the way. Where a multi-sector or generalist fund already has an ESMS, the integration of additional agribusiness-focused components, such as sector-specific due diligence questions or impact metrics, can simply be added.

The first step in the E&S due diligence process is typically the screening of proposed investments to (a) determine if the range and significance of E&S issues are consistent with the fund's E&S policy, and (b) provisionally categorize the transaction based on potential E&S risks (table 2).

For risk categorization, attention should be given to:

- Scale and location of operations, and broader environmental or social trends such as climate change or national labor market issues (including minimum wages) that could magnify E&S risks and opportunities;
- Greenfield versus existing operations, recognizing that greenfield assets may generate more risks[21];
- Cumulative or induced impacts related to the investment, for example, increased water demand within a catchment from similar agribusiness activities; and
- Value chain risks or issues, for example, downstream sensitivities to upstream labor practices, safe working conditions and biodiversity impacts.

E&S risk categorization may be aided by referencing past categorizations of similar companies and applicable regulatory codes where they exist. For example, the IFC has a public database of its projects with a reference on specific issues and due diligence focus for agribusiness investments based on transaction-specific circumstances.[22]

Assuming no red flags are raised in relation to the fund's policy requirements, including any review by the fund's investment committee, full E&S due diligence follows. For E&S risks and opportunities, due diligence is a critical step in charting the path of a successful investment. This report provides suggestions for conducting due diligence, but experience shows that overly prescriptive and formulaic approaches, for example, through strict reliance on checklists, are generally not sufficient. Practical, deal-specific analysis is always required.

Depending on the characteristics of the operation and the experience and capacity of the fund manager, the fund may undertake E&S due diligence itself, though the use of external experts is recommended for any complex project. A sample set of questions and issues that may be integrated into a due diligence exercise are provided in Annex 3.

Table 2: Environmental & Social Risk Categorization

Issue	1 – High Risk	2 – Medium Risk	3 – Low Risk
Definition	Investments with significant potential adverse social or environmental impacts that are diverse, irreversible or unprecedented Impacts cannot be readily mitigated or remedied (or if they can be, only at significant costs, management commitment and business complexities) Impacts that may be apparent in company supply chains (and therefore may not be easily resolved by the company alone)	Investments with more limited adverse E&S impacts that are typically site-specific and can be addressed through widely available technologies, or changes in management (i.e., changes in labor and human resources policy and practices)	Projects with minimal or no adverse E&S impacts
Leading Indicators of Risk	Investments that: Require involuntary resettlement of people, or significant economic displacement of livelihoods Rely on large-scale employment of unskilled, temporary, migrant or supply chain labor Require conversion of natural habitats (including via supply chains) or which could affect ecosystem services (for example, through water abstraction, large scale land or soil alteration), especially if these changes affect other users, particularly local communities or downstream users of water Create health and safety risks to local communities, including effects on food security Adverse effects on indigenous peoples and/or vulnerable groups	Investments that: Are generally existing/brownfield operations with multiple years of production/processing May require land acquisition (greenfield) but where clear title is evident and there is no indication of community dissent; also without physical/economic displacement Result in untreated waste water disposal and/or hazardous waste generation Require significant use of agrochemicals but where there is evidence of good industry practice Employ permanent or temporary labor (including during harvesting) but there is a commitment to comply with international labor standards Industries with a higher level of occupational health and safety risks	Investments that do not: Require land acquisition, Employ vulnerable or low paid workers Generate significant air emissions, waste water or solid wastes Create risks to local people as a result of processing or production (for example, vehicle movements, security personnel or failed infrastructure)
Indicative Investments	Large scale plantation (timber or agro-commodity) development or aquaculture operations Supply chain exposure to extensive large-scale livestock operations Traders involved in commodities that are implicated in poor labor practices (especially forced or child labor) or impacts to biodiversity Large-scale/industrial livestock slaughter Wild catch fishery	Food processing and dairy operations Upgrading existing infrastructure/ buildings Post-harvest storage, transport and logistics Breweries and bottling plants Commodity trading platforms	IT and software solutions Consultancy/advisory services

Source: CDC, IFC

Target companies may provide a wealth of useful E&S information to complement any newly-commissioned assessments that may be required, for example:

- Existing site assessments or feasibility studies (project- or business-related);
- Leases and permits;
- Company code of conduct, EHS and human resources policies;
- Management plans and performance data, e.g., water/energy use data;
- Data on accidents, fatalities, fines, litigation and/or worker/community grievances in relation to E&S matters;
- Technical specifications for equipment;
- Project or construction planning and concept documents;
- Pollution control plans and capital expenditure commitments;
- Stakeholder/community engagement plans;
- Contracts/agreements with buyers and investors and any E&S requirements therein; and
- Commitments and staffing to manage E&S risks and deliver on E&S opportunities.

In addition to the compliance and planning-related matters of an agribusiness investment—whether a farm, processing plant or other business investment—the scope of due diligence may need to extend beyond the property line. Such circumstances might include: 1) facilities associated with a primary production operation, such as seed operations, plant-stock nurseries or slaughterhouses owned or operated by the company or where such facilities have been developed by third parties solely to service the needs of the farming operation; 2) supply chains where labor or biodiversity risks are present; even where these risks cannot be directly addressed by the target company, for example, because of lack of commercial influence, the company should be aware of the issues and working to mitigate the risk over time; and 3) cumulative impacts, for example, to water supplies within a single catchment from multiple large-scale agricultural operations.

In cases of high- and medium-risk investments, fund managers should commission E&S due diligence, specifically Environmental and Social Impact Assessments (ESIAs), if not already required by national regulations. Such assessments are typically followed by the development of an Environmental and Social Management Plan (ESMP). In cases of large-scale primary production, Resettlement Action Plans (in the case of physical displacement) and/or Sustainable Livelihoods Plans (in the case of economic displacement) may also be warranted. A description of ESIAs and ESMPs is provided in Annex 4. Good practice includes the use of external experts in the case of high risk transactions. For investments involving significant risks, consultation and engagement with local communities and other stakeholders, such as civil society organizations, should be established. A variety of international good practice materials and guidance on E&S due diligence may apply at this stage. A partial list is provided in Annex 5.

Following due diligence, the fund manager should engage the target company to discuss the findings and gauge the commitment and capacity of the company to address deficiencies and act upon opportunities. These requirements can then be mapped out either in an Environmental and Social Action Plan (ESAP) or through other approaches (e.g., 100-day plan). Good practice includes the use of agreed-upon ESAPs in formal legal documentation. At a minimum the fund manager should obtain confirmation from the investee company that it plans to address any adverse E&S impacts within a reasonable time. Good practice also includes the use of appropriate remedies in the Investment or Share Purchase Agreement, side letters or other legal documents in the event that the portfolio company fails to implement the actions within the agreed-upon timeframe. These measures ensure that the fund's requirements are understood, interests and expectations are aligned, and investee capacity and commitments are demonstrated with supporting evidence.

Monitoring and Reporting

Beyond typical financial and operational monitoring employed by fund managers, active oversight of E&S matters is strongly recommended, especially because E&S risks and opportunities may shift significantly over the life of an investment. Monitoring and reporting should: (1) allow fund management to understand whether investees are effectively addressing E&S issues; (2) check the overall effectiveness of the company's ESMS; and (3) inform LPs and others interested in the E&S impact. Additional suggestions for monitoring and reporting procedures are provided in Annex 6.

Monitoring and reporting should cover both the risks and opportunities of the investment. On the risk side of primary production and downstream businesses, particular attention should be paid to labor and employment practices as well as to changes in natural resource use, such as demand for water or the availability and use of land in the catchment, since cumulative impacts on natural resources may affect operations and create reputational risks to the company. If an ESAP or similar requirements were prescribed during due diligence, the monitoring and reporting process gauges progress.

On the opportunity side, monitoring and reporting tracks E&S performance through impact metrics, also referred to as development outcomes indicators by some DFIs. Appropriate metrics will vary depending on commodity, type of investment, location in the value chain and other factors, but some suggestions are provided in table 3. An emerging good practice in the industry is reporting and disclosure of the E&S performance of a fund and its investments to external stakeholders, and impact metrics are a key aspect, especially for GPs seeking to capitalize on impact investing trends.

Table 3: List of Potentially Useful Impact Metrics / Development Outcome Indicators (Annual)

Environmental and Social Performance

Agricultural Production (Farmers)

1. Yield per hectare/acre by crop/commodity
2. Production volumes (yield) by crop/commodity receiving credible third-party certifications for sustainable management practices
3. Water use (volume) and efficiency
4. Agrochemical use (volume) and chemicals used
5. Energy consumption (volume), efficiency and energy-related carbon dioxide (CO2) emissions
6. Effluent quality
7. Number of smallholder suppliers, including supplier database, mapping, volume and applicable traceability/certification, as needed
8. Percent of revenue paid to smallholder suppliers
9. Sales to domestic (local market) buyers versus exporters
10. Injury and accident statistics, including lost time injury frequency rate data

Processors, Storage & Distribution, Retail

1. Waste (volume), including spoilage
2. Injury and accident statistics, including lost time injury frequency rate data
3. Water consumption (volume) and efficiency
4. Energy consumption (volume), efficiency and energy-related carbon dioxide (CO2) emissions
5 Responsible procurement policies and/or certification targets by commodity
6. Sales to domestic (local market) buyers versus exporters (for processors and retailers where relevant)

Economic Performance and Sector Development

1. Funding provided by the fund and by other investors:
   - Share of fund investments in agriculture
   - New equity funding (from the fund/from other sources)
   - New debt funding (from the fund/from other sources)
   - Type (initial investment/follow-on)
2. Job creation and taxes paid for portfolio companies:
   - Employees (total)
   - Female employees
   - Youth
   - Taxes paid to governments
   - EBITDA
3. Production/output (volume)
4. Number of community investments, technical assistance projects and/or enterprise development projects/services completed

Source: Credit Suisse, WWF

Capacity to Manage Environmental & Social Issues

Given the unique and often complex nature of E&S issues in the agribusiness sector, a fund may need to consider specific capacity-building measures to meet its policy commitments. These costs will need to be calculated and included in the fund's operational budget. Most fund managers recognize the value of in-house capacity supplemented by outsourced technical E&S skills as needed. Some funds—generally those that target higher-risk primary production investments—have developed in-house teams with significant technical E&S capabilities. Extending E&S capacity building to portfolio companies may bring additional value and be part of a GP's efforts to transfer expertise and foster operational improvements.

An important aspect of capacity building is to create broad E&S awareness and understanding within the fund's investment staff and committee members, as well as portfolio companies. Raising awareness and training should cover key E&S issues that are significant to the sector, including:

- Defining the scope of E&S due diligence, including supply chain aspects;
- The need for an effective consultation process, including a stakeholder engagement plan (especially where land acquisition is part of the investment) and a community grievance mechanism;
- An assessment of labor and working condition practices and issues, including in supply chains;
- Opportunities for value creation through better resource efficiency, improved labor practices and working conditions, etc; and
- Biodiversity and ecosystem service impacts.

As the fund matures, the training curriculum can integrate real-world experiences and situations encountered by portfolio companies, lessons learned, trends in the sector and new approaches.

Lastly, a GP should consider appointing an individual within the fund who has specific responsibilities to oversee (but not necessarily deliver) E&S compliance, since this improves consistency and efficiency of E&S management as well as quality control efforts applied to third parties. Also, funds should consider establishing Investment Committee accountability—either an individual Committee member or collective accountability—for decisions that have E&S implications.

Leveraging Development Finance Institutions and Outside Experts

For funds with DFI investors, opportunities may exist to leverage capacity-building programs and technical assistance; for example, CDC, IFC and other DFIs provide regular courses and mentoring on E&S issues, and CDC has an online toolkit for PE funds. A range of commercial courses are also available on labor, health and safety, and supply chain management in agribusiness. Online programs are available, such as those offered by the United Nations Environment Program Finance Initiative, IFC ("FIRST for Sustainability") and FMO. Lastly, the PRI Secretariat has working groups that provide insights into the agribusiness sector from the perspective of responsible investment.

When using external experts to augment internal capacity, the expert's track record should receive heightened attention since E&S issues in agribusiness are often complex and require specific skills. This is especially important when the completion of an ESIA, ESMP and/or Resettlement Action Plan is contracted to a third party services provider. The provider must be qualified to perform the work, meeting any national legal and regulatory requirements for business registration and professional certifications, the fund's own performance-based policy commitments, and requirements of international markets and investors/lenders. Professional service providers should have depth of experience, reputation, familiarity with E&S risks in the context of financial transactions, and the ability to meet international standards for ESIAs and ESMPs. A fund manager should also consider the consultant's familiarity with the operation of PE funds and experience providing high-quality E&S due diligence materials to guide and inform an investment committee.

Industry technical specialists—for example, those focused on food safety, labor and supply chains, energy, hydrology or technology-related due diligence—may offer better skills and insights than generalist E&S consultancies.

The use of third-party expertise is highly recommended in the following situations:

- Where people's livelihoods will be affected through the acquisition of land (i.e., through involuntary resettlement or economic displacement) even if they have no formal title or ownership rights to that land. These requirements apply in situations where the land is farmed or used intermittently (i.e., pastoralists, nomadic use).
- Where acquiring and/or developing land in areas with a water deficit, where the company's operations will require significant water supply, or where there is a high level of cumulative demand on water resources within the catchment.
- Where conversion of natural habitats or proximity to protected areas, critical or high conservation value habitats is evident, and where development may affect the area's ecosystem services.
- Where there are many agricultural workers (including migrant or temporary labor) or in commodities/geographies with a documented record of poor labor practices, including harmful child or forced labor in production or supply chains.
- Where there are opportunities for resource efficiencies (energy and water use in particular) that could generate savings (i.e., especially for activities that have high energy or water demands in production or processing).
- Where production from third-party suppliers purchased by off-takers requires traceability and certification of management practices against voluntary agro-commodities standards.
- Where those affected by land acquisition or use may be formally recognized indigenous peoples or other vulnerable groups.

Additional Considerations

Certification

Credible certification systems may factor significantly in ESMS design and performance-based requirements. Certification may improve operational performance and profitability and align interests across the value chain. In sectors such as forestry and palm oil, the Forestry Stewardship Council (FSC) and Roundtable on Sustainable Palm Oil (RSPO) certifications, respectively, are increasingly important to accessing a broader range of markets and finance, and they may factor favorably in PE exits such as initial public offerings and acquisitions. Many certifications and standards, for example, Bonsucro (sugar) and Better Cotton Initiative, are supported by global corporate buyers such as Coca-Cola and IKEA with special procurement commitments.

Certifications also factor prominently in commitments to sustainable agribusiness by large global banks. For example, in 2014 a group of banks adopted a "Soft Commodities Compact",[24] in effect pledging to help their clients in the consumer goods sector reduce deforestation. The pledge hinges on certification systems for key commodities, such as palm oil, soy, beef and timber.

In some cases where credible mainstream certifications have not yet matured, positive E&S outcomes may be achieved through continuous improvement schemes, such as country-level Beef Sustainability Roundtables or the Global Forest & Trade Network for forestry. Buyer commitments and/or verification processes have arisen around some of these schemes.

Independent verification of compliance with credible standards is increasingly recognized as a proxy for good E&S performance and may cover legal compliance, community engagement, sustainable sourcing and so on. The use of certification systems may offset a GP's E&S monitoring and management costs while representing evidence of good industry practice to buyers, lenders and others. Databases such as the International Trade Centre's Standards Map outline and compare the growing body of certification standards in the market; additionally, the ISEAL Alliance is an umbrella organization that accredits agribusiness standards based on their operational performance.[25]

Insurance

Insurance instruments may complement E&S and other risk management frameworks used by PE investors to de-risk individual transactions and portfolio level aggregation. Insurance can address some of the factors that inhibit PE flows into agricultural production, such as weather and disease risks, land title and ownership complications, and post-harvest loss in warehousing and storage.

Basic financial products are readily available in emerging markets for viable financial stop-loss mechanisms and smooth earnings volatility from operational issues, while enforcing greater discipline in risk screening and allocation in investees. Insurance can respond to a range of PE investor concerns, with relevant products including political risk guarantees on portfolios (e.g., expropriation of assets or restriction on currency transfers); natural disaster cover at the portfolio company level (e.g., flood or fire loss to plantations, or business interruption at processing sites); operational liability at the fund manager and portfolio company level; and environmental or tax representations and warranty issues in investment exits.

For large-scale operations, sound E&S systems are essential for cost effective insurance programs. PE portfolios allow insurers to pool and diversify their agri-insurance business. Furthermore, with alignment of commercial objectives, insurers and fund managers may develop financial instruments to address risks inherent in agribusiness investment.

IV. Conclusion and Recommendations

In the years ahead, private equity may be expected to play an ever greater role in financing the imminent global expansion of agribusiness. Preliminary findings from EMPEA's *2015 Global Limited Partners Survey* suggest that LPs want to build their exposure to agribusiness strategies in emerging markets over the next two years. Though PE fundraising shifted in recent years from Latin America to Emerging Asia, EMPEA's survey shows that all emerging market regions are in focus for LPs, with a majority seeking greater exposure in nearly every market. Africa and the Middle East may be poised for the most growth. Furthermore, the amount of capital invested in recent years has climbed, including large deals that may signify a trend toward bigger investments.

With its long-term focus on building value, PE firms can bring stable capital and industry expertise to solve agribusiness challenges, such as uneven cash flow and the need for scale. For the sake of food security, ecological conservation and other critical societal goals, the growth of agribusiness needs a sustainable path. PE fund managers can help chart that path while enhancing and protecting the economic interests of their funds and investors.

To help PE fund managers optimize their approach to E&S risks and opportunities, the following recommendations are provided:

- E&S matters are increasingly important across all sectors, but they are now core interests for agribusiness investing and value creation, particularly in emerging markets. Agribusiness hinges on natural assets and ongoing positive relations with laborers, community members and other stakeholders, who may rely on the same natural assets that underpin the profitability of the company. Proactive E&S management can spell the difference between success and failure and should be implemented throughout the investment process.

- A well-designed and executed ESMS typically includes an E&S policy, assessment and management procedures, monitoring and reporting procedures, and development of internal capacity. Portfolio companies need to stay closely engaged throughout the investment process on the E&S objectives and plans.

- Fund managers should gain confirmation from portfolio companies that they plan to address adverse E&S impacts within reasonable timeframes. Good practice includes the use of appropriate remedies in the Investment or Share Purchase Agreement, side letters, or other legal documents in the event that the portfolio company does not follow through. Good practice also includes reporting and disclosure of the E&S performance of portfolio companies and the fund to external stakeholders.

- Since every business is unique and circumstances on the ground vary, formulaic approaches and checklists for E&S due diligence are generally not sufficient. Guidelines on E&S due diligence may help to understand risks and opportunities but can only complement deal-specific analysis.

- When considering the level of E&S impacts, particular attention should be given to: the scale and location of operations; greenfield versus existing operations; direct, cumulative or induced impacts related to the investment; and risks that may reverberate through the value chain, such as poor labor practices or biodiversity impacts.

- In cases where the E&S risk is substantial, fund managers should engage with communities early and commission E&S due diligence to take advantage of the expertise provided by qualified third-party experts. This is especially true in cases involving land acquisition that might cause involuntary resettlement or economic displacement. Other high-risk circumstances include developing land in areas with a water deficit or where there is a high level of cumulative demand on water resources within the catchment, and conversion of natural habitats in proximity to protected conservation areas and/or encroachment on indigenous lands. Stakeholder Engagement Plans are critically important, and grievance mechanisms are a vital tool for fund managers and portfolio companies to resolve concerns from local communities.

- Active monitoring and oversight of E&S matters through performance indicators, including impact metrics, is highly recommended, especially because E&S risks and opportunities can shift significantly over the life of a PE investment.

- Limited Partners can help protect the value of their investments by inquiring about the ESMS in use by GPs and prompting and examining E&S performance reporting.

Case Studies

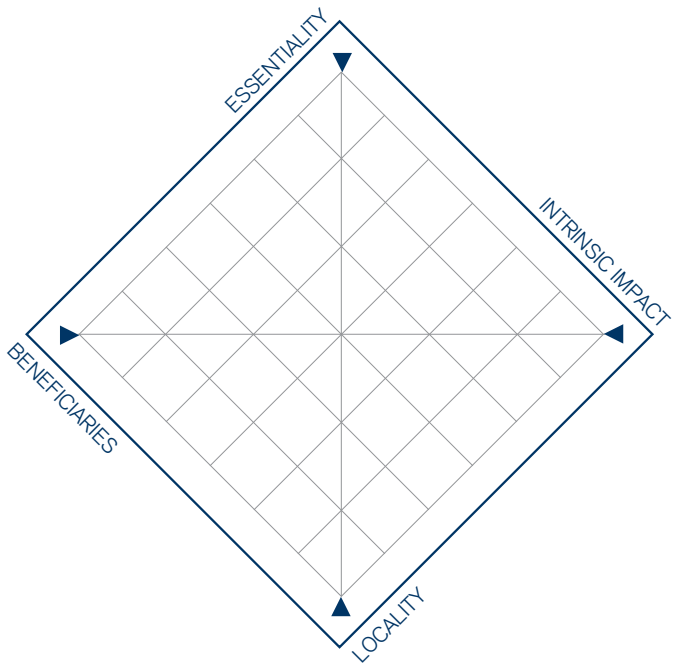
Case Study: Identifying Opportunities to Create Value through an Environmental and Social Management System: Vital Capital and Aldeia Nova

Vital Capital manages a US$350 million private equity fund making large-scale, "no-trade-off" impact investments, with the twin goals of improving quality of life and delivering risk-adjusted, market-rate financial returns.

In addition to using existing sustainability and health and safety guidance, such as that provided by IFC, Vital Capital has developed its own approach to implementing measurable social impact across its portfolio, including in agribusiness. Value creation is intrinsic to this approach: investment opportunities are screened and underwritten to maximize positive social returns, not only to mitigate negative externalities. This enables Vital Capital to develop and implement solutions that create tangible impact results for the communities in which it invests.

Vital Capital has developed a proprietary, four-dimensional assessment tool called the **Vital Impact Diamond**, which evaluates prospective investments across four value creation themes:

- **Essentiality:** Assesses the extent to which an investment addresses an unmet need and its role as the engine of social impact.
- **Beneficiaries:** Each investment is assessed to determine the socio-economic segmentation of beneficiaries and the scale of influence. The fund specifically targets underserved Sub-Saharan African communities.
- **Locality:** Measures the extent to which an investment engages and generates benefits for the local community. Crucial factors include the investment's ability to create local employment, produce commodities for local consumption rather than for export, and provide training that enhances sustainability.



- **Intrinsic Impact:** Evaluates the correlation between the financial return and social impact drivers. In line with its "no trade-off" approach, Vital Capital seeks investments that trigger a cycle of enhancement; whereby generating impact increases growth and financial success, which in turn increases impact.

Each dimension is composed of subcategories that are rated according to a pre-defined scale. Investments are rated between 0 and 3 according to how well they satisfy each dimension, based on an aggregation of their scores in each subcategory. The Fund targets companies that score highly in each dimension.

Complementing its pre-investment impact evaluation, Vital monitors its portfolio companies' ESG and impact performance through a third-party assessment using the Global Impact Investing Rating System, or GIIRS, a ratings and analytics platform for impact investing that provides comparable and verified social and environmental performance data on high-impact funds and companies.

Vital Capital's Environmental and Social Management System in Action: Aldeia Nova, Angola

Over seven million Angolans, or 40% of the population, are undernourished. One reason is that many agricultural products—eggs in particular—come from a limited supply of local producers, supplemented by low-quality imports.

Aldeia Nova, one of Vital Capital's portfolio companies, fuses agricultural production with a wide range of support services for smallholder farmers. This includes productivity and process improvement services, access to modern production methods, materials and equipment, social development services, and the operation of a large-scale agro-industrial center.

The Aldeia Nova agro-industrial center assists over 700 smallholder farming families by providing support for increased productivity. This includes, but is not limited to, animal feed, mechanical equipment, processing, packaging, marketing, productivity services, training and infrastructure. The center also provides 100% off-take for the resulting production, which is sold downstream, as a branded "Aldeia Nova - Made in Angola" product. Farmers are offered credit and are under contract with the company, thereby enjoying lower risk and more stable incomes.

The company employs over 350 local employees, who represent more than 96% of its total staff. It gives over 5,000 annual hours of training to employees, and training to local farmers, establishing strong local know-how, professional capabilities, and commercial and financial literacy, while building a foundation for long-term success and stability. Aldeia Nova scores highly on the four dimensions of the Vital Impact Diamond and received a top-tier rating on its business model from GIIRS.

Case Study: Kilombero Valley Teak Company: An Environmental and Social Management System in Action in Sub-Saharan Africa

Nestled among 14 villages and between the lush environs of Udzungwa National Park and the Selous Game Reserve (Africa's largest) in central Tanzania lies Kilombero Valley Teak Company (KVTC), a teak plantation and wood processing company. Established in 1992 by CDC Group plc, the United Kingdom's development finance institution, KVTC began with the planting of 100 hectares of teak trees. Today, under the majority ownership of Global Environment Fund (GEF)—a global alternative asset manager focused on energy, environment and natural resources[26] —KVTC oversees 8,162 hectares of teak plantations amidst 28,000 hectares of forested land.[27]

Managed by a strong team of Tanzanians and expatriates, KVTC also operates a sawmill and wood processing plant that produces a variety of timber and value-added products—including panels, floorings and decking products—for local and export markets.

Identifying Environmental and Social Issues During Due Diligence

GEF relies upon a robust ESMS to detect social and environmental risks in its prospective portfolio companies, and install the management tools to mitigate these risks. During its due diligence process for KVTC, GEF recognized increasing pressure on the plantation assets from a combination of land use and population issues, and identified several priority areas where KVTC's management systems needed strengthening. Following its investment, GEF introduced tools to implement the recommended changes. A further priority was the health and safety of KVTC's industrial and forestry workers, whose performance did not meet international good practices. GEF proposed that KVTC adopt the Occupational Health & Safety Advisory Services (OHSAS) 18001 health and safety system; the resulting improvements in health and safety performance have been demonstrated through annual independent audits.

For all of its forestry investments, the primary international guidelines that GEF relies on to manage environmental and social risks is the Forest Stewardship Council (FSC) standards. For historical reasons, KVTC is ineligible for this certification. However, as part of its shareholder agreement, GEF asked KVTC's management team to follow the standards anyway, and demonstrate compliance annually through an independent third-party audit. The FSC audits provide a detailed framework for managing the company's environmental and social impacts, and gives comfort to GEF and its LPs that the company is meeting international ESG standards.

A unique feature of agribusiness investments—particularly those engaged in primary production—is that companies often operate on land that may provide sustenance to wildlife and local communities, which can create conflicts and operational challenges. As Peter Tynan, Managing Director for Sustainability at GEF, affirms, "In agriculture and forestry, a framework for addressing E&S issues is absolutely critical to the core operations and value creation within your investment; you can't even work in this business without one."

Through its due diligence process, GEF recognized that KVTC's commitment to conservation must be maintained. Moreover, relations with surrounding communities were not as strong as they could be, potentially threatening the company's "license to operate" and even exposing the company to increased operational risks by disaffected local communities. Therefore conservation and enhanced stakeholder engagement became two additional areas of focus for GEF's E&S activities.

Conservation and Protection of Wildlife

Deforestation is a challenge across Sub-Saharan Africa as up to 90% of the wood harvested on the continent is used as fuel for basic energy needs. KVTC dedicates 30% of its landholding for commercial teak plantations, which in turn funds the conservation of the remaining 70% of the land. The company's efforts have paid off: since 1991 there has been less than 3% diminution of forest cover within the landholding boundaries. Contrast this with land immediately adjacent to KVTC's boundaries, where satellite analysis reveals land clearing for agriculture and grazing has depleted forest cover by more than 30%. The company is now partnering with international development organizations to educate and involve local communities in the management and conservation of KVTC's miombo forests.

KVTC also works with communities to protect wildlife. Due to land degradation and the encroachment of farmers and herders on animal habitats, KVTC's land offers one of the few remaining passageways for wildlife—including buffalo, elephant, lion and zebra—moving between the Selous Game Reserve and the Udzungwa Mountains. KVTC's activities help create a protected ecosystem in which wildlife can thrive. The company trained and works with local Village Game Scouts to monitor and record encroachment of the plantation's boundaries to conserve woodlands and reduce poaching.

Stakeholder Engagement

To enhance community relations, GEF engaged a consultant to conduct innovative surveys of surrounding villagers. As GEF's Tynan notes, "We took the 'Net Promoter Score' methodology from the business world and applied it to the social world, seeking to understand villagers' perceptions—and the drivers of their perceptions—toward KVTC."

This exercise led GEF to reconfigure KVTC's approach to stakeholder engagement to improve the company's "license to operate." KVTC has strengthened its communication with surrounding communities, and with workers and contractors. The company better understands and addresses areas of concern for stakeholders, and educates stakeholders about the company's activities and role in the community. For example, KVTC now sponsors a weekly local radio program about environmental and forestry topics— a more effective communication channel than the village council meetings that were solely relied on before—and holds regular meetings with workers, contractors and village members.

In addition, KVTC focuses community development efforts where there is a clear strategic link with the activities of the company. For example, the firm started an Outgrower Support Program, whereby local farmers can convert portions of their existing farmland to teak forestry. KVTC provides inputs, technical support and purchase guarantees for these local farmers, contributing to their livelihoods. At the same time, KVTC has partnered with the U.S. Agency for International Development on a project to improve farmers' agricultural productivity. The results have been impressive: participants have increased rice yields by 2 to 4 times, offsetting the yield loss from allocating land to teak production.

Snapshot of KVTC's Environmental and Social Enhancements

Economic Development	Social Development	Environmental Protection
Provides full-time employment to 300 people, with indirect employment of 200-300 subcontractors	GEF and KVTC engaged in robust stakeholder engagement surveys to identify and respond to local concerns	70% of KVTC's land is managed for conservation, funded by proceeds from teak production
Average monthly wages for KVTC's workforce—excluding expats—are nearly 3x the sector minimum wage	KVTC established a social fund, which is used for specific community projects in each of the surrounding 14 villages on an annual basis	KVTC is exploring the feasibility of a community partnership to manage the miombo forest areas
Signs purchase agreements with local small-holder teak growers, increasing household incomes	The social fund has addressed community priorities, such as building classrooms and community centers	28 trained Village Game Scouts—who come from 14 local villages—patrol KVTC's plantations to track wildlife movements and record incidents of encroachment, helping to reduce poaching and illegal logging
Provides inputs and technical support to teak outgrowers, increasing their knowledge and productivity	KVTC provides comprehensive medical coverage to employees and families, including malaria and HIV testing and education	KVTC's land offers refuge to wildlife migrating to and from the nearby Selous Game Reserve
	KVTC sponsors a local radio program to communicate with the surrounding population about KVTC and educate the public about environmental and forestry topics	

Annexes

Annex 1: Sampling of Agribusiness-related EM PE Fundraising Data, 2008-2014 (US$m)

Fund Manager(s)	Fund Name	Fund Type	Status	Region
Acorn Private Equity	Acorn Agri	Growth	Fundraising	Sub-Saharan Africa
Rabo Equity Advisors	India Agri Business Fund II	Growth	Fundraising	Asia
Black River Asset Management	Black River Food Fund 2	Growth	Closed	Asia
NCH Capital	NCH Agribusiness Partners II	Natural Resources	Fundraising	CEE & CIS
Kaete Investimentos	Guaraci Dairy (formerly Agribusiness Northeast Fund)	Growth	Closed	Latin America
Injaro Investments	Injaro Agricultural Capital Holdings	Growth	Closed	Sub-Saharan Africa
Databank Agrifund Manager (DAFML)	AAF SME Fund	Growth	Closed	Sub-Saharan Africa
Sahel Capital	Fund for Agricultural Financing in Nigeria (FAFIN)	Mezzanine	Fundraising	Sub-Saharan Africa
Omnivore Capital Management Advisors	Omnivore Partners	Venture Capital	Closed	Asia
Mandala Capital	Mandala Agribusiness Fund	Growth	Fundraising	Asia
Aqua Capital Partners	AGF Latin America Fund	Buyout	Closed	Latin America
Phatisa Group	African Agriculture Fund (AAF)	Growth	Closed	Sub-Saharan Africa
Black River Asset Management	Black River Agriculture Fund 2	Natural Resources	Fundraising	Asia, CEE & CIS, Latin America
Moringa Partnership	Moringa Fund	Growth	Fundraising	Latin America, Sub-Saharan Africa
New Forests Asset Management	Tropical Asia Forest Fund	Natural Resources	Closed	Asia
Guosen Securities	Guosen Securities RMB Fund	Growth	Closed	Asia
Brookfield Asset Management	Brookfield Brazil Timber Fund II	Natural Resources	Closed	Latin America
Silk Invest	Silk Invest African Food Fund	Growth	Closed	Sub-Saharan Africa
Vital Capital Investments	Vital Capital Fund I	Growth	Closed	Sub-Saharan Africa
Kaete Investimentos	Amazon Sustainable Development I	Growth	Closed	Latin America
Ecus Private Equity	Ecus Agri-Food	Growth	Closed	Latin America
SilverStreet Capital	The Silverlands Fund	Buyout	Closed	Sub-Saharan Africa
Pacific Agri Capital (PAC)	Pacific Agriculture Fund	Growth	Closed	Multi-region
CMIA Capital Partners	CMIA China Fund IV	Growth	Fundraising	Asia
Small Enterprise Assistance Funds (SEAF)	SEAF India Agribusiness Fund	Growth	Closed	Asia
Global Environment Fund (GEF)	GEF Africa Sustainable Forestry Fund	Growth	Closed	Sub-Saharan Africa
Resource Partners	Resource Eastern European Equity Partners I	Buyout	Closed	CEE & CIS
Voxtra	Voxtra East Africa Agribusiness Fund	Growth	Closed	Sub-Saharan Africa
Pearl Capital Partners (PCP)	African Agricultural Capital Fund (AACF)	Growth	Closed	Sub-Saharan Africa
Black River Asset Management	Black River Food Fund	Growth	Closed	Asia
Black River Asset Management	Black River Agriculture Fund	Natural Resources	Closed	Asia, CEE & CIS, Latin America
Brookfield Asset Management	Brookfield Brazil AgriLand Fund	Natural Resources	Closed	Latin America
Africa Agribusiness Investments (Agri-Vie)	Agri-Vie Fund	Growth	Closed	Sub-Saharan Africa
Rabo Equity Advisors	India Agri Business Fund	Growth	Closed	Asia
Sembrador Capital	AgroDesarrollo	Natural Resources	Closed	Latin America
Grupo ECOS	ECOS Forestry Fund	Growth	Closed	Latin America
BRZ Investimentos	Brasil Agronegocio	Growth	Closed	Latin America
Pampa Capital Management	Pampa Agribusiness Fund	Growth	Closed	Latin America
Brookfield Asset Management	Brookfield Brazil Timber Fund	Natural Resources	Closed	Latin America
AC Capitales SAFI	Agribusiness and Forestry Fund	Growth	Closed	Latin America

Source: EMPEA; data as of 31 December 2014

Geographic Detail	Fund Currency	Total Raised to Date	Most Recent Close
Sub-Saharan Africa	ZAR	37	Dec-14
India	USD	80	Dec-14
Asia	USD	700	Nov-14
CEE & CIS	USD	100	Sep-14
Brazil	BRL	4	Sep-14
Burkina Faso, Cote d'Ivoire, Ghana, Mali, Niger, Sierra Leone, Sub-Saharan Africa, West Africa	USD	49	Aug-14
Sub-Saharan Africa	USD	36	May-14
Nigeria	USD	33	Feb-14
India	INR	45	Jan-14
Asia, India, Southeast Asia	USD	100	Nov-13
South America	USD	173	Oct-13
Sub-Saharan Africa	USD	243	Sep-13
Asia, Australasia, Central & Eastern Europe (CEE), Latin America	USD	90	Sep-13
Latin America, Sub-Saharan Africa	EUR	69	Aug-13
Southeast Asia	USD	170	Jul-13
China	CNY	326	Jun-13
Brazil	USD	270	May-13
Sub-Saharan Africa	USD	32	Mar-13
Sub-Saharan Africa	USD	350	Oct-12
Brazil	BRL	49	Oct-12
Chile	USD	30	Oct-12
Malawi, Mozambique, South Africa, Sub-Saharan Africa, Tanzania, Uganda, Zambia	USD	215	Sep-12
Asia, Latin America, Malaysia, Peru	USD	100	Sep-12
China	USD	30	May-12
India	USD	79	Mar-12
Sub-Saharan Africa	USD	160	Jan-12
Central & Eastern Europe (CEE), Poland	EUR	235	Nov-11
East Africa	NOK	11	Nov-11
East Africa	USD	25	Sep-11
Asia, China	USD	455	Sep-11
Asia, Australia, Central & Eastern Europe (CEE), Latin America	USD	73	Jan-11
Brazil	USD	330	Dec-10
Sub-Saharan Africa	ZAR	108	Nov-10
India	USD	120	Jun-10
Chile	USD	28	Mar-10
Central America, Latin America, South America	USD	N/A	Feb-10
Brazil	BRL	450	Feb-10
Argentina, Brazil, Latin America, Uruguay	USD	365	Jun-08
Brazil	USD	280	Jun-08
Peru	USD	50	Mar-08

Annex 2: Sample Exclusion List (adapted from International Finance Corporation exclusions)

1. Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCBs, wildlife or products regulated under CITES.
2. Production or trade in weapons and munitions.
3. Production or trade in alcoholic beverages (excluding beer and wine).
4. Production or trade in tobacco.
5. Gambling, casinos and equivalent enterprises.
6. Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded.
7. Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
8. Drift net fishing in the marine environment using nets in excess of 2.5 km. in length.
9. Production or activities involving harmful or exploitative forms of forced labor/harmful child labor. (Forced labor means all work or service not voluntarily performed that is extracted from an individual under threat of force or penalty. Harmful child labor means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development.)
10. Commercial logging operations for use in primary tropical moist forest.
11. Production or trade in wood or other forestry products other than from sustainably managed forests.

A reasonableness test should be applied when the activities of the project or company would have a significant development impact but circumstances of the country require adjustment to the Exclusion List.

Annex 3: Sample Questions for Consideration During Environmental and Social Due Diligence

1. Has the company ever completed one or more of the following assessments or plans:
   - Environmental and Social Impact Assessment (ESIA)
   - Environmental and Social Management Plan (ESMP)
   - Environmental and Social Action plan (ESAP)
   - Stakeholder Engagement Plan
   - Resettlement Action Plan
   - Integrated Pest Management Plan
   - Wildlife/species conservation plan
2. In relation to labor practices and working conditions, does the company have any of the following:
   - Human Resources Policy and procedures applying to permanent, contractual and seasonal workers
   - Collective bargaining agreement
   - Permanent, contractual and seasonal worker's grievance mechanism
   - Internal and third-party occupational health and safety audit
   - Occupational health and safety requirements in contractor provisions and monitoring of contractor performance?
3. Has the company experienced any worker fatalities in the last three years?
4. Has the company ever resettled people, either voluntarily or involuntarily?
5. Does the company use water from a transnational water resource and/or operate in an area that is part of an integrated water resource plan?
6. Does the company hold all necessary permits for any of the following:
   a. Water withdrawals/consumption
   b. Water pollution emissions
   c. Air pollution emissions
   d. Disposal of solid wastes
   e. Storage and/or use of hazardous materials or waste
   f. Conversion of land, including timber extraction
7. Does the company hold all required property titles, deeds, and/or rights of way?
8. Who within the company is responsible for legal and regulatory compliance on E&S matters?
9. During the past ten years, has the company or any of its agents/employees been charged or cited for any regulatory or statutory violation or offense related to E&S matters by a government agency or authority?
10. During the past ten years, has the company been fined for or had a permit withdrawn due to any regulatory or statutory violation or offense related to E&S matters?
11. Has the company ever been involved in litigation related to E&S matters, including labor issues?

CDC's ESG Toolkit for PE fund managers includes additional guidance on E&S Due Diligence.

Annex 4: Overview of Environmental and Social Impact Assessments and Management/Action Plans

Environmental & Social Impact Assessments (ESIAs)

The main purpose of an ESIA is to identify the range, magnitude and likelihood of adverse E&S impacts from a company's operations. It is typically focused on risk but may readily include opportunities in its scope. An ESIA is advisable (and may be contractually or legally required by LPs) for target investments categorized as high risk. ESIA's may be advisable for medium risk projects as well. ESIA's are often associated with new construction, or "greenfield" projects, but they may apply to any and all stages of a business operation, including planning and design, construction, decommissioning, closure and post-closure.

ESIAs for some types of operations may be required by a government regulator, in which case ESIA's should conform to the requirements of the host country's laws and regulations, including relevant disclosure of information and public consultation requirements. It should also comply with the performance-based requirements that a fund employs, e.g., IFC Performance Standards, as well as relevant certification systems.

ESIAs generally cover the following seven elements:

1. Description of the operations, whether existing or proposed, including physical characteristics, land-use requirements, production processes, etc.; also, any related facilities that may be required, e.g., dedicated access roads or water supply.
2. Baseline description of the natural environment and communities likely to be significantly affected.
3. Identification, prediction, and analysis of the likely significant impacts on the environment and communities resulting from the operations or project.
4. In cases that involve new greenfield projects, an outline of the main alternatives and an indication of the reasons for its choice, taking into account the E&S effects.
5. Description of measures envisaged to avoid, mitigate and manage significant impacts.
6. Description of the assessment process itself and any significant uncertainties about the company's operations and their E&S effects, including the extent and quality of available data, key data gaps, uncertainties associated with predictions, and technical deficiencies in the operations.
7. A non-technical summary of the above information that is concise and comprehensible to the public.

The geographic/physical scope of an ESIA should cover the area likely to be affected by activities and facilities that are directly owned or operated by the company (or its contractors) and are a component of the business operations as well as facilities that are not part of the business operations but would not have been constructed or expanded if the operations did not exist and without which the operations would not be viable. It should also cover unplanned but predictable developments caused by the operations that may occur later or at a different location as well as cumulative impacts from other existing or planned operations. In the case of agribusiness, for example, a large-scale primary production operation will likely spur infrastructure investments, which in turn may attract more primary production and processing facilities.

The ESIA process should initiate consultation with stakeholders, especially communities that are directly affected by the operations/project. Effective consultation is two-way and should begin early in the process of identifying environmental and social risks and impacts and continue on an ongoing basis under an ESMP as risks and impacts arise.

ESIAs employ a mitigation hierarchy with respect to adverse E&S impacts. An ESIA identifies and describes a set of measures to be taken to avoid, minimize or compensate/offset for risks and adverse E&S impacts, in order of priority and with timelines. The mitigation hierarchy will favor the avoidance of impacts over minimization, and, where residual impacts remain, compensation/offset, where technically and financially feasible.

For operations with potential significant adverse social impacts, e.g., involuntary resettlement, an ESIA will identify individuals and groups that may be directly and differentially or disproportionately affected by the operations because of their disadvantaged or vulnerable status. Where individuals or groups are identified as disadvantaged or vulnerable, the ESIA will propose measures so that adverse impacts do not fall disproportionately on them and they are not disadvantaged in sharing the development benefits and opportunities. This may be a critical factor in agribusiness operations in emerging markets.

Annex 4: Overview of Environmental and Social Impact Assessments and Management/Action Plans (Continued)

Environmental & Social Management Plans (ESMPs)

An ESMP typically follows an ESIA where both are required by national regulations or contractual agreements, for example, with lenders or off-takers. The purpose of an ESMP is to ensure and guide follow-through on measures to avoid and minimize adverse E&S impacts. In cases where an ESIA has been completed, the ESMP should reflect the ESIA's findings and recommendations. In addition to describing the measures to avoid, mitigate and manage the impacts, the ESMP may include performance indicators, targets and/or criteria that can be tracked over defined time periods, with estimates of the resources and responsibilities for implementation, including staff training. Recognizing the dynamic nature of business operations and projects, the ESMP should be responsive to changes in circumstances, unforeseen events and the results of monitoring and reporting.

The terms "ESMP" and "ESAP" (environmental and social action plan) are sometimes used interchangeably and may cause confusion. They are similar in that both serve to lay out specific, time-bound actions to address E&S impacts that were previously identified in an assessment or audit. The difference is that the term ESMP is typically associated with regulatory/legal requirements, whereas ESAP is a term typically used by DFIs when working with a GP or portfolio company on meeting the DFI's E&S performance standards. The two are not mutually exclusive. A portfolio company may have completed an ESMP as required by law, and a DFI may subsequently require an ESAP to close any gaps with its standards.

Funds should review the implementation of ESMPs at least once annually. Monitoring may be done on a more frequent basis depending on risks, impacts and compliance requirements. The results of monitoring should be properly recorded by the fund. If monitoring reveals deficiencies in the implementation of an ESMP, the fund should identify time-bound corrective measures and communicate these to the portfolio company.

During the course of monitoring, an adjustment to the risk categorization may be appropriate based on changes in operations or circumstances.

Consultation, Participation and Disclosure of Information

Consultation with stakeholders, including local communities and any vulnerable groups that may be affected, should start during ESIA preparation and stakeholder analysis. In the case of high impact clients, the affected communities should be given the opportunity to participate in key stages of design and implementation. Therefore, stakeholders should be consulted to obtain their input to the preparation of the draft Terms of Reference of the ESIA, the draft ESIA report and summary, and the draft ESMP.

An ESMP should include a credible grievance and redress mechanism to address concerns regarding the E&S performance of the company. The grievance mechanism needs to be sufficiently independent, empowered and accessible to the stakeholders at all times during the business operations/project cycle, and all responses to grievances should be recorded and included in E&S reporting to the fund.

In the interests of transparency and disclosure, key documents such as ESIAs should be made public at relevant stages of their development. Disclosure should start early in the impact assessment process and conform to national or local regulations and international standards.The portfolio company should provide periodic reports to affected communities that describe progress with implementation of the ESMP on issues that involve ongoing risk to or impacts on affected communities and on issues that the consultation process or grievance mechanism have identified as a concern to those communities.

Annex 5: International Environmental and Social Good Practices Related to Agribusiness

1. International Finance Corporation/World Bank Group
   a. General Environment, Health & Safety (EHS) Guidelines
   b. Sector-Specific EHS Guidelines
      i. Agribusiness/Food Production
         - Annual Crop Production
         - Aquaculture
         - Breweries
         - Dairy Processing
         - Fish Processing
         - Food and Beverage Processing
         - Mammalian Livestock Production
         - Meat Processing
         - Plantation Crop Production
         - Poultry Processing
         - Poultry Production
         - Sugar Manufacturing
         - Vegetable Oil Processing

      ii. Forestry
         - Board and Particle-based Products
         - Forest Harvesting Operations
         - Pulp and Paper Mills
         - Sawmilling and Wood-based Products

   c. IFC Performance Standards
      1. Assessment and Management of Environmental and Social Risks and Impacts
      2. Labor and Working Conditions
      3. Resource Efficiency and Pollution Prevention
      4. Community Health, Safety, and Security
      5. Land Acquisition and Involuntary Resettlement
      6. Biodiversity Conservation and Sustainable Management of Living Natural Resources
      7. Indigenous Peoples
      8. Cultural Heritage

   d. IFC Good Practice Notes
      1. Assessing and Managing Environmental and Social Risks in an Agro-Commodity Supply Chain
      2. Workers' Accommodation
      3. Non-discrimination and equal opportunity
      4. Addressing Child Labor in the Work Place and Supply Chain
      5. Addressing Grievances From Project-Affected Communities

2. CDC
   a. ESG Toolkit
   b. Agriculture guidance note (value chains)
   c. Land briefing

3. World Wildlife Fund's The 2050 Criteria: Guide to Responsible Investment in Agricultural, Forest, and Seafood Commodities

4. Agence Française de Développement (AFD), Land Tenure and Development Technical Committee, Guide to Due Diligence of Agribusiness Projects that Affect Land and Property Rights

5. The Core Labor Standards of the International Labor Organization

Annex 6: Monitoring and Reporting of Environmental and Social Information: Suggested Procedures

Post-investment monitoring should ensure that conditions of investment approval are met and continue to be achieved over the term of the investment. Over and above monitoring, another objective is to engage portfolio companies, advise on (and learn about) E&S good practices, and strengthen awareness of the fund's E&S requirements.

Monitoring is also a useful opportunity to check on development outcomes indicators, or impact investing metrics, so the fund can assess the positive environmental and social impacts of the investment activity.

Monitoring of a given portfolio company will vary depending on the E&S issues identified during the due diligence phase, risk categorization, any measures recorded in an ESMP, and changes in circumstances that may result in increased risk/impact over the course of the investment. Monitoring may include a combination of conducting a site assessment and periodic E&S compliance reports by the company. Qualified third-party consultants may be used to perform monitoring.

ESIAs and ESMPs are key references. Copies of all ESIA and ESMP documents should be retained by the fund, in part because LPs may require access to them.

Sample list of items for post-investment periodic monitoring

1. Risk categorization at the time that investment occurred and has the risk categorization ever been modified?
2. Since the last time the portfolio company was monitored, have any significant changes occurred in staffing and responsibilities on environmental and social matters?
3. Since the last time the portfolio company was monitored, have any of the following occurred in relation to environmental and social matters:
    a. Regulatory non-compliance
    b. Fines or subpoenas
    c. Loss of a permit
    d. Pollution events, spills, accidents, and/or emergencies
    e. Grievances against the company
    f. Changes in operational or regulatory circumstances
4. During the period, did the company commission or complete an ESIA, ESMP, Resettlement Action plan, climate change vulnerability assessment, and/or any related study?
5. Based on any existing ESIA, ESMP and/or related study/plan, describe all significant actions and progress achieved during the period:
6. Were any significant challenges or difficulties experienced during the period? Any serious incident reporting?
7. Are any corrective actions required?
8. Have any public consultations and/or disclosure actions occurred during this period?
9. Is an adjustment to the risk categorization required?
10. Were any changes made by management to relevant policies or procedures?
11. Has the portfolio company produced any environmental or social performance reports?
12. What types of technical assistance from the fund would be most useful to support environmental and social performance by the portfolio company?

Where conformance with the requirements of the fund, regulators and/or certification programs cannot be demonstrated, a Corrective Action Plan may be necessary. A target completion date for each specified action in the plan should be agreed upon.

Reporting to Investors in the Fund and Public Engagement

Subject to confidentiality limitations, GPs should disclose documents on environmental and social matters unless there are compelling reasons not to do so. Any ESIAs, ESMPs and Resettlement Action Plans developed in the course of the fund's activities should be disclosed to the public.

With respect to E&S performance, the fund may want to prepare an Annual Report for investors and the public that covers some of the following items:

1. Investment activity, including E&S due diligence completed, new investments, risk categorizations, and closed investments.
2. Development outcome indicator data, or impact investing metrics.
3. Results of any public consultation processes completed by a portfolio company in connection with its operations.
4. Mitigation of significant impacts identified for high and medium risk investments.
5. Monitoring results for portfolio companies and any remedial action plans required.
6. Any changes in risk categorizations.
7. Any grievances and/or legal actions against portfolio companies and related to environmental and social issues, including responses/actions by the fund; and
8. Any changes in the ESMS, unexpected results (positive or negative), performance of the ESMS itself, lessons learned, and/or general management views on environmental and social performance.

Notes and References

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8. One of these three deals includes KKR's US$400 million private investment in public equity (PIPE) deal for the Chinese vertically integrated chicken producer Fujian Sunner Development
9. Tynan, P. and Kalkandjieva, D. (2009) "Agribusiness Private Equity: The Fertile Sector." *EM PE Quarterly Review*, Vol. V Issue 4. Washington, DC: Emerging Markets Private Equity Association (EMPEA)
10. EMPEA has mapped all sector classifications to the FTSE Industry Classification Benchmark (ICB). "Food Producers" includes two subsectors: (1) Food Products, and (2) Farming, Fishing & Plantations. The latter is not necessarily limited to primary production
11. Emerging Asia includes all Asia, excluding funds whose primary investment focus is Japan, Australia and/or New Zealand
12. China's sovereign wealth fund, China Investment Corporation, recently announced its intentions to prioritize investments along the entire agribusiness value chain. See Anderlini, J. (2014) "China's sovereign wealth fund shifts focus to agriculture," Financial Times, 17 June 2014
13. Cotula, L. and Polack E. (2012) The Global Land Rush: What the Evidence Reveals About Scale and Geography. London, UK: International Institute for Environment and Development (IIED)
14. For a detailed list of E&S risks and mitigations by sector, one resource is: World Wildlife Fund (2012) The 2050 Criteria: Guide to Responsible Investment in Agricultural, Forest, and Seafood Commodities. Washington, DC: World Wildlife Fund (WWF)
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22. See: http://www.ifc.org/projects
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24. To read the Soft Commodities Compact, see: http://www.cisl.cam.ac.uk/business-action/sustainable-finance/banking-environment-initiative/pdfs/the-bei-and-cgfs-soft-commodities-compact.pdf
25. See: http://www.standardsmap.org; http://www.isealalliance.org
26. GEF acquired CDC's 77% majority shareholding in March 2011
27. Finnfund, Finland's development finance institution, is the minority shareholder

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