DEPLOYING BLENDED FINANCE TO MOBILIZE INVESTMENT AT SCALE IN FOOD AND AGRICULTURE

March 2021
Acknowledgements

This report was jointly prepared by Bettina Prato, Senior Coordinator, SAFIN, Chris Clubb, Managing Director, Convergence, and Regina Rossmann, Associate, Convergence. The authors would like to acknowledge contributions from Jorgen Bengtsson (IFAD), Amanda Fernandez (Palladium), Tanja Havemann (Clarmondial), Alexandre Kaufmann (FAO), Christine Negra (Versant Vision), Nuno Santos (FAO), Samuel Ssenyimba (Bill and Melinda Gates Foundation), Luca Torre (GAWA Capital), Thouraya Triki (IFAD), Tancrède Voituriez (IDDRI), and Dan Zook (ISF Advisors).
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Introduction

The purpose of this paper is to outline practical steps and recommendations for deploying blended finance in food and agriculture to achieve mobilization of additional finance and development impact – both at scale.1 After a brief overview of the current landscape of agriculture finance and financing needs, the document lays out the rationale for using blended finance as one structuring tool to achieve scale in terms of both mobilization and impact. It then presents recommendations for how the donor community, impact investors and practitioners working on agriculture finance can more effectively use blended finance in this domain.

Section 1. The current financing landscape for agriculture and food systems

The development significance of agriculture and food systems – dimensions and scale

Agriculture – including crop and livestock production and forestry – is a sector of immense significance for the United Nations 2030 Agenda for Sustainable Development. From an economic standpoint, while World Bank data indicate that the sector represents around 4 per cent of global gross domestic product (GDP), in emerging economies it can contribute over one quarter of GDP. The sector contributes to the livelihoods of up to 2 billion people, and it accounts for 49 per cent of jobs in Africa and 30.5 per cent in Asia (ILO, 2020). Its significance in terms of employment is even greater for people living in poverty, over two thirds of whom work in the sector (World Bank, 2016). If we consider the full agricultural value chain, from input provision to processing, transportation and marketing, or the broader food economy, including services and the hospitality industry, the economic significance of the sector reaches a massive scale (IFAD, 2016).

Agriculture and food systems also have large social and environmental footprints. Agriculture is at least twice as effective as other sectors in reducing poverty (World Bank, 2015), and agricultural value chains are critical for food security and nutrition – the focus of the second Sustainable Development Goal (SDG2). They are major users of natural resources and both contribute to and are affected by their degradation and depletion. For instance, around 70 per cent of global freshwater withdrawals are in agriculture (FAO and World Water Council, 2015), and the sector is vulnerable to water scarcity and deterioration as well as a contributor to water pollution (FAO and IWMI, 2017). Finally, agriculture and food systems are on the front line of climate change. For instance, the Intergovernmental Panel on Climate Change assessed that agriculture, forestry and land use are collectively responsible for around a quarter of greenhouse gas (GHG) emissions (IPCC, 2014). The panel also projected a range of impacts of likely climate scenarios for the future of agriculture in different parts of the world, many of them negative in terms of livelihoods and food security.

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1 The authors are grateful to a group of agricultural and finance practitioners, convened by the Smallholder and Agri-SME Finance and Investment Network (SAFIN) for contributing their viewpoints during the development and review of this paper, while taking full responsibility for its content, including any possible errors contained herein.
Deploying blended finance to mobilize investment at scale in food and agriculture

Estimating the scale of investment needs in the sector

There is consensus that realizing the SDGs and the Paris Agreement on climate change requires a transformative agenda for agriculture and food systems. In this context, the importance of mobilizing more investments and aligning them to sustainable development objectives is often underlined. In 2015, the Addis Ababa Action Agenda on Financing for Development spoke of “enormous investment needs” around sustainable agriculture and addressing hunger and malnutrition, and it encouraged “increased public and private investments” (United Nations, 2015) in these domains. In the current process of preparation for the first-ever United Nations Food Systems Summit, finance and investments are considered a key lever of transformation across all dimensions of food systems.

Since the Addis Ababa conference, different attempts to estimate the magnitude of investment needs in food and agriculture have been made, both globally and at country level. A first group of estimates has sought to clarify how much financing is needed to achieve specific SDGs. For instance, Schmidt-Traub (2015) compared various sources estimating annual investment needs in and for agriculture (e.g. in irrigation vs. research and development), some of them including non-agricultural investments (e.g. in social protection) to end hunger. Among these, perhaps best known is an estimate by FAO, IFAD and WFP (2015) of around US$265 billion per year to reach “zero hunger” by 2030. UNCTAD (2019) estimated total investment needs for food and agriculture (including processing facilities, rural infrastructure, and research and development) to achieve related SDGs in developing countries at US$480 billion annually, with actual investment at US$220 billion, thus leaving a gap of US$260 billion. UNCTAD estimated that around 75 per cent of this gap could be financed, in principle, by the private sector – with the potential to mobilize US$195 billion annually. More recently, the CERES2030 initiative has launched a cost model to estimate how much is needed to achieve SDG2 and identify the most impactful approaches. The model focuses on three aspects of SDG2, namely ending hunger, doubling smallholder productivity, and achieving sustainability in agricultural practices (Ceres2030, n.d.).

A second group of estimates has looked at the unmet demand for finance of smallholder farmers, who are the majority of farm operators in the world, or small and medium-sized agricultural enterprises (agri-SMEs), which are driving value chain and food market transformation in many parts of Africa and Asia (AGRA, 2019). Such demand includes the need for savings, credit and insurance; in financial terms it can take different forms depending on the intended function (e.g. working capital, capital expenditure (capex), etc.). Mastercard Foundation, RAF Learning Lab and ISF Advisors (2019) estimate an unmet annual need of around US$170 billion for smallholder farmers in South and Southeast Asia, sub-Saharan Africa and Latin America, while Aceli Africa (2020) reports a financing gap of roughly US$65 billion across sub-Saharan Africa for agri-SMEs with financing needs between US$25,000 and US$1.5 million. Such estimates focus on the current demand or absorptive capacity of smallholders or agri-SMEs, rather than the investments required to transform their practices and business models to strengthen their contribution to the SDGs or to adapt to climate change. In the past few months, there have also been some efforts to estimate additional agri-SME financing needs associated with the COVID-19 pandemic (RAF Learning Lab, ISF Advisors and The Feed the Future Initiative, 2020; KfW Agriculture Finance Programme, 2020).

Finally, a third approach at estimating financing needs focuses on the transformational shifts in practices, technologies and business models required by the sustainable development agenda. One major example is a 2019 study by the Food and Land Use Coalition (FOLU), assessing costs, savings and new business opportunities associated with “ten critical transitions” in food and land use (including agriculture). The report estimated between US$300 and US$350 billion of investment needs per year, along with US$5.7 trillion of avoided “hidden costs” by 2030, and an annual business opportunity of US$4.5 trillion also by 2030. The transitions at issue included shifting to regenerative agriculture practices, healthy diets, diversification of protein sources, reducing food losses and waste, and strengthening rural livelihoods, among others. At present, this approach to estimating financing needs plays an important role in framing the role of finance in delivering on the various impact areas of the 2021 United Nations Food System Summit.
Annex 3 provides a stylized summary of the range of financing needs for the agriculture sector at individual transaction level. It shows that the ticket sizes required by different recipients of financing range from US$50 (e.g. for smallholder farmers) to several million dollars (e.g. for large-scale infrastructure projects).

Despite the heterogeneity of approaches and findings of these various estimates, two general conclusions can be drawn, namely that: (1) there is significant unmet demand for agri-SME and smallholder finance already under business as usual and/or to achieve SDG2; and (2) the financing needs and opportunities are even larger when looking at food system transformation.

Who finances the sector?

The landscape of providers of finance to agriculture and related value chains is diverse. It includes formal and informal financial service providers (FSPs), agribusiness companies (including agro-dealers, off-takers, etc.), governments, donors, commercial and impact-oriented lenders or equity investors, leasing companies, insurers, financial technology (fintech) companies and others. This landscape varies in composition depending on context. For instance, the 2019 UNCTAD report identifies the four largest sources of finance for investment in agriculture globally as commercial banks (providing US$701 billion annually on average between 2015 and 2017), foreign direct investment (US$36 billion), development flows (US$11 billion) and central government capex (US$9 billion). However, when looking at specific regions (e.g. sub-Saharan Africa), market segments (e.g. smallholder farmers or agri-SMEs) or value chains (e.g. commodities vs. food value chains), commercial banks play very limited roles compared to other sources of finance, including savings, informal lenders, value chain actors and non-bank financial institutions.

While being essentially driven by the private sector (which includes small-scale farmers), agriculture has historically seen government involvement across all regions, given its public goods significance – particularly for food security. Governments have been involved in the sector via market price support and by financing research and development, infrastructure, agricultural education and advisory services – although public spending has not always matched commitments, and underspending is far from uncommon. Governments have also been involved in agricultural finance, both via policies and regulations (ISF Advisors, Aceli Africa, Feed the Future Initiative and USAID, 2020) and by using public funds to finance dedicated institutions or to de-risk or incentivize private finance. For instance, public development banks (PDBs) with a rural or agricultural mandate exist across regions, and their role continues to draw attention and mixed reviews. While diverse in terms of asset base, capabilities and structure – ranging from retail institutions serving agribusiness companies or agri-SMEs to wholesale banks – PDBs share a mandate of addressing market failures impeding financial flows in the sector. Government-funded risk-sharing facilities aiming to encourage private finance in the sector also exist, and several new such facilities have been set up, particularly in Africa, in recent years.

Besides addressing market failures, public finance plays an important role in the sector around delivering public goods such as well-functioning markets, infrastructure, and essential services such as health care and education. Specific aspects of research and development and advisory services, financial services (e.g. insurance) and nutrition often require public finance in various combinations with private finance, depending on the public good component inherent in each service and the possibility of achieving desired development impact along with commercial returns. Given their significance from an environmental and climate angle, agriculture and food systems can also be important components of the investment strategies of public green and climate finance. However, to date only a small share of this finance has flowed towards the sector, and there remains great scope to expand this share through interventions on both the demand and supply sides of finance (CCAFS and KOIS Invest, 2019).
Private finance already plays a major role in the sector, particularly in the form of self-financing, informal services and value chain finance – or finance originating from agro-dealers, off-takers, agro-service providers and fintech companies (Mastercard Foundation, RAF Learning Lab and ISF Advisors, 2019). Commercial banks have historically engaged in a limited way in agriculture in many developing countries, and only a little more in non-farm activities in agricultural value chains. Nevertheless, they continue to be much in focus in efforts to boost financial flows in agricultural value chains, given their unique capacity for financial leverage and their asset base. In recent years, mobile service providers (including money transfer operators) and agricultural technology (agtech) and fintech companies have become important players in the private finance space in India, East Africa, China and elsewhere. Similarly, the role of specialized investors such as private funds appears to be growing, particularly around structured supply chains. For instance, FAO (2018) found the number of funds (not all of them privately owned) investing entirely or largely in agriculture, particularly in Africa, to be growing rapidly after the 2007-2008 food price crisis. Yet this represents a small share of private finance invested in agriculture, though perhaps a larger share when looking at agri-SMEs, agtech or fintech.

Land use-based and technology-based investments are already part of the portfolios of some financial investors and also the focus of dedicated financial vehicles, particularly in mature markets. In some cases, these investments are expected to deliver a double green/financial bottom line. However, agriculture captures a very small share of investment assets designed for sustainable development impact – including, for instance, development impact and green bonds. The sector represents a somewhat larger share (9 per cent) of the assets under management of the community of impact investors globally, according to the Global Impact Investment Network (2020). Indeed, food and agriculture was indicated as a sector of interest by over half of the respondents in a recent GIIN survey, but the aggregate size of their assets is small compared to needs and to other financial flows in the sector.

On a much larger scale, business opportunities in agriculture and the broader food economy, linked particularly to demographic changes and the dietary transition in both developed and developing countries, have driven commercial interest in parts of the sector in past years. COVID-19 has had a disruptive impact on agricultural supply chains in many parts of the world, but it is not clear that it has substantially affected market fundamentals. Going forward, as already noted, there are potentially large untapped business opportunities associated with food system transformation, as well as with other major ongoing processes such as African regional market integration or urbanization. Accordingly, looking at investment needs and private finance in the sector requires attention to trends affecting agribusiness companies, agro-service providers and fintech and agtech companies, rather than focusing only on traditional categories of "private finance."

The above suggests that:

- Public finance (both self-standing and in combination with private finance) will continue to play important roles in supporting the transformation of agriculture and, more broadly, food systems.
- There is particular scope and need to expand the contribution of public finance earmarked as "green" or climate finance to investments in the sector.
- There is scope to increase the contributions of commercial financial institutions, impact-oriented investors and institutional investors in the sector.
- Value chain finance and non-financial actors (digital service providers, agtech companies, agribusiness companies, cooperatives and agro-service providers) need to be considered as part and parcel of the "private finance" landscape that needs to contribute to this transformation.
- Companies operating in the sector – particularly agri-SMEs – require a well-functioning financial ecosystem to grow from seed to growth finance, and different types of investors are best placed to intervene at different stages in this growth process and in this ecosystem.

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4 Examples of financial products in this space include the first certified agriculture green bond issued by FIRA Mexico in 2018 and the issuances of the Tropical Landscapes Finance Facility in Indonesia (http://tlffindonesia.org; https://www.convergence.finance/resource/0232ba26-a848-486f-b22a-bc28d2a8340e/view).
Thinking of scale in relation to finance and investment needs in the sector

Compared to the US$1+ trillion required annually to meet the investment gap in infrastructure, the investment gap in agriculture and food systems is smaller, but, as argued above, investment opportunities are large, and so is the development significance of the sector. In this context, in financial terms, we can think of scale in the agriculture sector in three main ways.

- **At the project (i.e. unit of investment) level.** The large majority of projects or recipients of funding in the sector (notably smallholder farmers and/or agri-SMEs) have relatively small financing needs. Financing amounts are large at the project level (e.g. above US$20 million) only for a small sub-set of projects, such as infrastructure projects, large companies and land use projects such as large agro-forestry programmes, for instance.

- **At the portfolio level.** This type of scale can be achieved in particular when finance is channelled through commercial financial institutions and funds that extend debt (and possibly equity) to actors operating in the sector, or when it flows through corporate value chain actors that manage a portfolio of projects or clients.

- **At the level of finance indirectly mobilized in the market.** In this sense, scale can refer to the volume of finance that is indirectly rather than directly leveraged by investments that, by their nature, can unlock the flow of finance as a positive externality to the individual investment. This can be the case of public or private investments that contribute to developing or testing highly replicable business models, designing replicable investment or financial products or solving critical pain points in the value chain (e.g. cold chain infrastructure, processing or other). While such investments may not be on a large scale in themselves, they can achieve scale at market level through their knock-on effects. Unlike finance mobilized directly at the unit of investment level, the volume of finance indirectly catalysed is harder to quantify, but there are efforts to think in structured ways about this approach to “scale” – for example, in terms of building inclusive markets (Amaya, Thuard and Koh, 2020).

For specific types of investors, challenges in achieving scale in the sector lie not only in the small size of most investable assets but also in the small scale and bespoke nature of investment vehicles specialized in the sector, which brings higher transaction costs and risks for them. For instance, institutional investors in developed countries generally seek opportunities of US$15 million to US$50 million at minimum, as smaller amounts may be inefficient for them. For these types of investors, but also for many development finance providers, the prevalence of small-scale, bespoke vehicles in food and agriculture is a discouraging factor. Engaging such investors and the large volumes of finance that they can deploy requires standardizing the design of financial structures in the sector, seeking scale through replication and adaptation of a limited set of archetypes (as has been the case in the energy sector), or consolidating existing or potential structures into sizeable thematic or geographic facilities or platforms.

**Thinking of scale in terms of development impact** is not necessarily in contradiction to thinking of scale in financial terms, despite the fragmentation and small scale of most economic units (and corresponding “units of development impact”) in the sector – for example, most women and men operating in the sector are small-scale farmers or agricultural workers. Large scale of impact may be achieved through large investment unit-size approaches that deliver major knock-on effects on food systems (e.g. in infrastructure), as well as through investments that indirectly catalyse major financial flows by solving major pain points in food and agricultural markets and/or in the financial ecosystem around the sector. Examples include investments directed at companies with innovative business models that deliver effective technology solutions, financial products or value

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5 While other sectors, such as water and education, form natural monopolies, the agricultural sector in developing countries is characterized by very small individual entities, hence the term smallholder farmers.

6 Types of private sector investors include commercial banks, sovereign wealth funds, pension funds, insurance companies, investment banks, private equity firms, asset/wealth managers, etc. For a typology of private investors, see Convergence. 2018. *Who is the Private Sector? Key considerations for mobilizing institutional capital through blended finance*. Toronto: Convergence. [https://www.convergence.finance/resource/1IfYfL5k5N0M8yWYUQ unveiling the view](https://www.convergence.finance/resource/1IfYfL5k5N0M8yWYUQ unveiling the view); and Convergence. 2020. *How to Mobilize Private Investment at Scale in Blended Finance*. Toronto: Convergence. [https://www.convergence.finance/resource/3cgafUuQ2Y9rFE-V2I8nFView](https://www.convergence.finance/resource/3cgafUuQ2Y9rFE-V2I8nFView).
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chain services that can have impact at scale on demand for finance and on de-risking investments across large geographies or across value chains, or investments in the capacity of local financial institutions to serve effectively, efficiently and sustainably large numbers of actors in food and agriculture, including small-ticket clients.

Section 2. The rationale for the application of blended finance to the sector

Convergence, the global network for blended finance, defines blended finance as the use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development.7 Blended finance is a structuring approach that allows actors with different objectives to invest alongside each other while achieving their own objectives (financial return, social impact or a blend of both). The core objective of blended finance is to deploy strategically development-focused funds – for example, official development assistance (ODA) – to mobilize private investors around investment opportunities in which they would otherwise not invest, thereby increasing the volume of finance for sustainable development. In general:

- Blended finance requires projects/entities that generate revenues that can be used to repay and remunerate private investors at a risk-return equal or superior to market rate
- Blended finance mobilizes private investment in bankable and near-bankable transactions – it is not used to mobilize investment in projects without reasonable possibility of bankability
- Risk mitigation in blended finance happens at project level and/or portfolio/vehicle level
- Blended finance creates solutions that directly address some challenges that impede private investment (including risk, costs, liquidity and other factors)
- Blended finance is not a panacea and has a number of prerequisites to work effectively.

It should be noted that in food and agriculture blended finance is often deployed with a rationale not only of de-risking but also of reducing transaction costs and addressing the poor economics of investment that often prevail in parts of the sector (e.g. loose value chains, some types of agri-SMEs).

Outlining the most prevalent types of risks characterizing the sector

The capacity of agriculture and related value chains to attract finance from a range of sources is affected by their exposure to a range of risks – some of them specific to the sector, others common to other sectors. Some of these are typically part of the rationale for the application of blended finance to the sector, while others can best be addressed through other approaches.

To start off, despite its heterogeneity, agriculture is characterized by high dependence on environmental and climate conditions over which limited control can be achieved. While efficient information systems, adaptive practices, and technologies designed for resilience (e.g. to droughts, floods, extreme temperatures, etc.) can deliver important results, agronomic risks remain an important feature of the sector, making relative uncertainty around expected returns relatively “normal.” As for climate-related risks, evidence such as that compiled by the Intergovernmental Panel on Climate Change (IPCC) suggests that this type of risk is increasing or likely to increase in many parts of the world and for many types of crops in association with climate change, both in terms of magnitude of impact (should a given hazard materialize) and in terms of uncertainty.

7 For a primer on blended finance, see Convergence (n.d.) Blended Finance. Available at: https://www.convergence.finance/blended-finance.
A second, highly prevalent type of risk not specific to this sector concerns prices, which are in turn affected by trends in market fundamentals. Agricultural **price shocks and volatility** can affect both global and local markets and result from climatic events, income shocks, conflict and fragility, epidemics, oil price fluctuations, and other factors also affecting prices in other sectors. Depending on product or commodity and market context, price-related risks are a relatively "normal" feature of investment in the sector. Closely associated with price risk is currency risk, which affects both domestic and international financiers and investors. Both types of risks, once associated with agronomic risks, can result in lower returns to investments in the sector compared to other sectors available to FSPs such as commercial banks, though return expectations can vary depending on context or value chain.

From the perspective of FSPs, a **third critical type of risk has to do with poor information about the capacity of operators** in the sector to deliver against their commitments as investees (in the form of returns) or borrowers (in the form of repayment). While present also in other sectors, in agriculture this type of risk is often more common due to the geographical fragmentation and/or remoteness of rural clients and the high costs of maintaining an efficient client information infrastructure for financiers, especially when lacking digital systems. Arguably, this is perhaps the most common type of risk confronting particularly FSPs without in-depth knowledge of the sector or a capillary presence in rural areas. These FSPs often face significant risks and costs in Know Your Customer processes, managing collateral requirements, and estimating likely returns to investment in specific business models, as well as in properly pricing risks and return expectations.

**Policy-related and political risks** are also a relatively common factor confronting FSPs and investors in the sector. The related hazards can materialize in the form of sudden or unexpected changes in policies that may increase costs or reduce returns associated with a specific type of business model or investment (including transition risks). For transnational lenders and investors, political hazards may also materialize in the form of shifts in government orientation towards foreign direct investment, including requirements, obligations, incentive systems and so forth. Finally, **financial risks** related to exchange or interest rate fluctuations are also important factors to consider, particularly for international investors (particularly when it comes to financing investment portfolios focused on untraded commodities) and for market investors facing alternative asset class opportunities in a given market.

Depending on context and on case-by-case considerations, including the existence of other risk management strategies (financial and non-financial), the suite of risks identified above and in Table 1 may be mitigated with blended finance at either the project or portfolio/vehicle level.

**Table 1: Main risks in agriculture finance**

<table>
<thead>
<tr>
<th>Macroeconomic risks</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency risk</td>
<td>Decline in the value of an investment due to adverse currency movements</td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>Decline in the value of an investment due to changes in global and local interest rate environments</td>
</tr>
<tr>
<td>Political risk</td>
<td>International and local political risks (e.g. on agricultural trade, sanctions)</td>
</tr>
</tbody>
</table>

The economics of investing in the sector – some critical factors

As noted, risk is not the only factor hindering the flow of private finance in the sector. The economics of investment, particularly in market segments or parts of the sector that can deliver important sustainable development impact such as smallholder agriculture and agri-SMEs in food value chains, is also a critical factor. This includes costs and returns to investment in various combinations depending on geography, market context, value chain, market segment and type of investment.

From an investor or FSP perspective, the most prevalent types of transaction costs associated with investing or providing finance to operators in the sector are information related.¹⁰ They have to do with the cost of obtaining information about potential clients or investees (including deal origination costs for investors or client risk assessment for lenders, and the costs of monitoring operations). Depending on investor/lender as well as on investee/borrower, information-related costs can result from geographical distance or dispersion, lack of formal credit history to properly assess creditworthiness, lack of standard accounting and financial management information or capacity, informal entitlements to physical assets (e.g. land), and limited FSP knowledge of a specific market or sector. For instance, a recent study suggests that origination costs are the highest share of the operating costs of some impact lenders active in the agri-SME finance space (Small Foundation, 2020). Perhaps unsurprisingly, reducing the costs associated with obtaining and managing client information is one of the most dynamic areas of application of digital technologies in agricultural finance.¹⁰ At issue are data availability, data quality and reliability, and the capacity to use data efficiently to inform investment decisions.

The other side of the economics coin relates to expected returns from lending or investing in the sector. In this regard, evidence shows that returns to investments in agriculture and related value chains vary greatly (CSAF, 2020), with higher returns or more consistently risk-adjusted returns often being associated with better-functioning markets (including better infrastructure or services), high-value commodities, well-structured value chains and larger companies or project sizes. Even then, returns can be significantly lower compared to opportunities in other sectors, such as banking, telecommunications or industry. The balance between risk and returns is typically harder to anticipate in early-stage investments (e.g. in start-up companies or unproven business models or technologies in the agtech and fintech space), and returns are often lower at the production stage in the value chain. Business model risks can also be higher in loose value chains with lower prevalence of

¹⁰ This includes the use of a range of types of technologies for data generation and data management, from blockchain to remote sensing, from big data to the use of digital identity markers.
enforceable contracts, for instance. However, the development impact of such investments can be particularly large – for example, when loose value chains are critical for local food security or when early-stage investments help develop business models that can bring new solutions to key market pain points (e.g. lack of local processing capacity, high cost/low local suitability of off-the-shelf technology packages, etc.).

Thinking of risks and economic issues from a perspective of scale

From a perspective of thinking of scale in terms of both financial mobilization and impact, the following observations can complement the above brief review of risk in the sector.

- Agronomic risks can affect investments at all scales, but the capacity to address them (e.g. by purchasing technology-enabled solutions) is likely to be greater in larger investments, while smaller investments in particular may require interventions to mitigate or redistribute risk.
- High risks or limited risk management capacity resulting from poorly functioning markets, market shocks or currency-related factors can affect investments at different scales.
- Business model risks associated with information asymmetries or poor data can affect investments at all scales, but the costs associated with mitigating them are likely to be higher for smaller investments or clients.
- Poor economics are often particularly associated with financial transactions or investments that deliver high development impact in terms of inclusion (e.g. investments in small agri-SMEs or in producers and companies that work in food rather than cash crop markets, or companies that produce for local food markets rather than for international commodity markets).
- Poor economics can also be associated with financial transactions or investments that support business models delivering goods or services to bottom-of-the-pyramid consumers, where individual capacity to pay is limited, and where reaching economies of scale may require lengthy periods of testing and refinement of each model and/or high risk of failure.

The challenge of achieving scale via blended finance in this sector

Convergence curates the world’s largest database of blended finance transactions targeting developing countries – currently 569 transactions that have mobilized US$140 billion of total finance. An analysis of this database yields the following three observations concerning agriculture.

- The sector is under-represented in the database. Only 88 (i.e. 15 per cent) of global transactions focus on agriculture – much less than other sectors. The most common sub-sectors therein are finance for SMEs and smallholder farmers as well as funds, facilities and projects aiming to increase farm productivity and improve agricultural inputs such as seeds and fertilizer. Twenty transactions have a climate resilience dimension, and a small share of transactions relate to agro-forestry (9 per cent) or fisheries and aquaculture (9 per cent).
- Blended finance transactions for agriculture are smaller than in other sectors. Thirty-eight blended finance transactions in the database are less than US$25 million in size, causing agriculture transactions to have a smaller median transaction size than other sectors.13 Blending occurs at the individual project level or at the

11 Convergence tracks blended transactions at the time of financial close (not actual investment flows). For Convergence’s definition of blended finance and for an overview of the database, see https://www.convergence.finance/blended-finance.
12 In Convergence’s historical database, a blended transaction is classified as focusing on “agriculture” if it targets, at least in part, one or more of the following categories: 1) agricultural inputs/farm productivity; 2) agriculture finance; 3) agro-forestry; 4) agro-processing; 5) climate-resilient/sustainable agriculture; and 6) fisheries and aquaculture.
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portfolio level. Most project-level financing amounts in agriculture are small (e.g. less than US$500,000), thus there are few project-level transactions deploying blended finance. For the same reason, even when multiple projects are aggregated, total financing amounts are not large.

- **There are very few (four) large transactions in excess of US$200 million.** Compared to the overall blended finance market, blended finance transactions in agriculture rarely achieve scale in financial terms.¹⁴ As already indicated, this suggests that mobilizing private capital into the sector from investors with large investment capacity may require portfolio approaches and/or standardization and consolidation of existing structures, as well as risk mitigation instruments.

**Figure 1: Percentage of blended transactions by size**

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Transactions in agriculture</th>
<th>All blended finance transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5M</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>5-10M</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>10-25M</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>25-50M</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>50-100M</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>100-250M</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>250-500M</td>
<td>40%</td>
<td>35%</td>
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<tr>
<td>500-1,000M</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>&gt;1,000M</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Convergence Historical Deals Database, Oct 2020

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¹⁴ Convergence’s analysis of leverage ratios, calculated as the amount of commercially priced capital leveraged by each dollar of concessional capital, revealed that agricultural finance also had a lower leverage ratio than other sectors. While the average leverage ratio of the total sample of 72 transactions was 4.0, the average leverage ratio for the 7 transactions targeting agriculture was 3.3, while the 19 transactions for microfinance had an average leverage ratio of 4.6, and the 12 renewable energy transactions had a leverage ratio of 3.7. See Convergence. 2018. Leverage of Concessional Capital. Data Brief. Toronto: Convergence. https://www.convergence.finance/resource/351B1VD1s1YMGGl6tQ42ggS/view.
Section 3. Illustrative examples of blended finance approaches that can achieve scale

One can distinguish four types of blended solutions that appear to be designed with a focus on and/or reasonable potential to balance scale of mobilization with scale of impact, which the authors argue deserve particular focus as the community of practitioners and experts continues to build the evidence base around mobilization and impact of blended finance in this sector:\textsuperscript{15}

- **Integrated, multi-instrument financial schemes** designed to strengthen local financial institutions, mobilize funding and risk-sharing resources and incentivize them to grow their agriculture portfolios – addressing not only risk but also costs and pipeline development
- Financing and/or de-risking **large-scale infrastructure or company investments** with potential for large-scale transformative impact on livelihoods, environmental sustainability or nutrition
- **Blended funds** that explicitly target innovation and disruptive business models in agriculture and food systems – both value chain-embedded companies and technology or service providers
- Market development **platforms and programmes** designed to expand or deepen financial investment offerings for investors in the sector and/or to generate investable assets.

The following section describes each of these types of intervention and an illustrative example, with more examples to be found in annex. Each example is presented based on available information and in a framework of recognition that more in-depth analysis of these models and more generally on the impact of blended finance in the sector continues to be needed.

**Integrated, multi-instrument schemes designed to address supply- and demand-side obstacles to the flow of finance to agriculture, particularly agri-SMEs**

These schemes not only address risks but also costs and returns for different actors in the financial ecosystem, with an explicit effort to affect entire markets or at least broad segments of a given market (proxy for scale) and thus generate the kind of market-level de-risking of the sector that is critical both for scale and for sustainability of local impact. While the specific instruments used under different such schemes or facilities vary, they may include:

- Funding to local financial intermediaries or value chain aggregators to finance agri-SMEs\textsuperscript{16}
- Risk-sharing mechanisms where the underlying risk of the portfolio of agri-SME loans/credit is shared between the FSP or aggregator and the blended finance vehicle
- Foreign exchange risk mitigation for agri-SMEs related, for instance, to providing affordable local currency loans
- Financial incentives to encourage local FSPs and direct investors to sustain or expand their offerings to agri-SMEs (and/or to bring a specific impact lens to this offering)
- Capacity-building programmes to FSPs, central banks and other operators in the finance space
- Technical assistance to increase bankable and high-impact-potential pipeline and to improve project implementation.

\textsuperscript{15} The content of this section was discussed and validated at a consultation with participants in the 2020 SAFIN annual plenary meeting on 21 October 2020.

\textsuperscript{16} Debt/credit is in general a more scalable financing solution than equity and mezzanine capital for agri-SMEs.
Deploying blended finance to mobilize investment at scale in food and agriculture

Depending on its objectives and on context-specific market challenges, a scheme or facility may combine more instruments. While existing examples are primarily of schemes that aim to mobilize finance from FSPs, there are also schemes that aim to boost investment and/or strengthen capacity of aggregators, asset managers and impact funds. Some areas of concern around existing schemes include how to manage the complexity that characterizes many of them and how to ensure sustainability, especially when a scheme is dependent on donor funding. Moral hazard issues may also arise particularly in approaches with risk-sharing instruments, especially first-loss to catalyse investment to under-/unserviced areas. In addition to Private Agricultural Sector Support (PASS) Trust (see below), further examples (see annex) include Aceli Africa, the Program for Rural Outreach of Financial Innovations and Technologies (PROFIT) and the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL plc.).

CASE EXAMPLE: PRIVATE AGRICULTURAL SECTOR SUPPORT (PASS) TRUST

PASS Trust provides credit guarantee cover to local financial institutions to top up clients’ collateral to help them become eligible for loans. Although other credit guarantee schemes exist in Tanzania, PASS Trust is the only one offering banks a guarantee coverage ratio of 50 per cent to 75 per cent, with up to 80 per cent for projects owned by women or youth. While other guarantee schemes offer better rates, PASS Trust remains competitive through its unique combination of business development and financial services, deposit of cash in partner banks and swift response to claims. PASS Trust works with more than 15 commercial banks in the country. With its guarantee funds, it can attract other private sector funds for development objectives. It provides credit guarantees across the agricultural value chain and offers different products, such as traditional guarantees, portfolio guarantees and institutional guarantees. PASS Trust has forged close relationships with a range of stakeholders to establish blended donor funds (guarantees); sovereign guarantees (unfunded in the case of Sweden); commercial senior debt or private equity investments; and weather index insurance. At the beginning, the leverage with financial institutions was 1:1; in other words, for every loan it guaranteed, PASS Trust had to commit the full amount for which it had assumed risk. However, with increased financing from DANIDA and other donors, as well as a track record of paying claimed guarantees on time, its leverage increased to 1:3 in 2018.

So far, PASS Trust’s guaranteed loans have benefited more than a million agricultural entrepreneurs and created more than 2.5 million jobs. Due to the availability of guarantee funds, it also attracts private equity investors to its projects (usually from 20 per cent to 40 per cent, and in some cases up to 80 per cent). It has also improved market access for farmers – for instance, by using blended finance models in contract farming and off-taker agreements, as well as deploying the tools across different value chains.¹⁷

Box 1: Spotlight on portfolio guarantees

A guarantee provides banks/investors with a secondary level of comfort that the investment will be repaid if the obligor is not able to fulfil contractual obligations (payments). According to the Convergence database, only 28 per cent of historical blended finance transactions in agriculture make use of guarantees or insurance, thus there is scope for their increased use. In a portfolio guarantee, donor funds are used to provide credit protection for lending or risk-sharing programmes that cover several partner financial institutions and other clients (e.g. SMEs).¹⁸


Given that blended finance is applied at the programme level rather than to each individual transaction, this approach can be very efficient and allow for scale. One example is the African Guarantee Fund (AGF), which provides portfolio guarantees to local banks to risk-share on their SME loan portfolios. The AGF’s main product is for 50-50 pari passu loss-sharing on SME loans, but it is also prepared to participate on a first-loss basis and only for agriculture if donors are prepared to participate in their exposure to create this outcome.

Portfolio approaches are more effective in this context for three key reasons: (i) Only a small number of stand-alone transactions are large enough for private investors looking for investment sizes over US$10-US$15 million in this sector, while aggregating multiple transactions can achieve the needed critical mass. (ii) Diversification across transactions and/or across countries can reduce risk and risk-return variance. (iii) Development organizations have a long project approval cycle regardless of project size, which makes it worth experiencing for private investors only for the large amounts of finance typically associated with portfolio approaches.

Financing and/or de-risking large-scale infrastructural or company investments with transformative market impact

As noted above, large-ticket individual investments are not prevalent in the sector, but opportunities do exist to drive impact at scale by leveraging the large market footprint of individual agribusiness companies, attracting Foreign Direct Investment, company clusters (e.g. around specific value chains or around specific parts of multiple chains such as agro-processing) or infrastructure (e.g. large processing plants, out-grower schemes, etc.). Such investments can require significant volumes of capital and entail significant risks, particularly when they are designed to respond to gaps in the market and/or where they are not responding to but rather anticipating demand (e.g. for more nutritious or sustainably produced foods). Under such conditions, a strong rationale for blending may be found, and agribusiness companies and other value chain operators (rather than FSPs proper) can be seen as important targets of mobilization of commercial finance. Blended solutions in this type of model may include equity or co-equity investments, risk participation in dedicated value chain financing vehicles, technical assistance for new product design or testing of new business models, and other instruments.

CASE EXAMPLE: IFC MOUNTAIN HAZELNUTS

Mountain Hazelnuts is a company that grows hazelnut saplings in its nursery in Bhutan and distributes them to farmers to plant on fallow land. An agreement brokered through the Government of Bhutan allows farmers without land to participate in the project by leasing land from the government. Mountain Hazelnuts then provides agricultural inputs, training and regular supervision to ensure that farmers know how to most effectively care for their young shrubs. Once the trees flourish and bear nuts, the farmers sell the crop to Mountain Hazelnuts at a guaranteed minimum price.

When Mountain Hazelnuts approached the International Finance Corporation (IFC) for investment, the IFC found the operational risks to be too high for offering long-term capital to this relatively young, pre-revenue company. That is where the Global Agriculture and Food Security Program (GAFSP) came in. Its Private Sec-

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The Private Sector Window uses blended finance solutions and concessional funding to support both early-stage projects and established agribusinesses that can improve the livelihood of smallholder farmers. Under the agreement that was eventually hammered out, the IFC and the Asian Development Bank (ADB) each invested US$3 million of equity in the company, with Spitzer and other Mountain Hazelnuts shareholders converting US$3 million of existing bridge loans into equity. The GAFSP Private Sector Window matched the IFC and ADB investments with US$6 million in quasi-equity financing, in the form of cumulative redeemable preferred shares. The use of GAFSP blended finance was essential to mobilize IFC and ADB funding and to close the remaining funding gap for the project’s completion. Without this support, the deal simply would not have been completed. The investment was structured in a way that worked for all parties, with no cash outflow for the company and mitigated risks for the IFC and ADB. In the absence of alternative funding offers, it did not distort the market or edge out any competitor. The concessional quasi-equity instrument from GAFSP, together with the investments from the IFC and ADB, will help Mountain Hazelnuts reach its break-even point and ramp up profitability and cash generation. Once that occurs, the company will be in a position to accept commercial funding, especially trade finance, to support its operations.20

Capitalizing and de-risking blended funds that target companies with disruptive business models

Disruptive business models are critical in different parts of food systems, given the scale and depth of transformations needed to deliver on the 2030 Agenda and the Paris Agreement. However, disruptive models tend to be high risk from the perspective of traditional financial institutions, and even sector-specific investment vehicles are rarely equipped to fully support the process of funding the development, testing, refinement and eventual roll-out of new models, requiring specific “blended” solutions. While a proper segmentation of types of disruptive business models in the sector remains lacking, at present there is growing investor interest in technology innovators and in aggregators, agro-service providers or value chain-embedded "service provider models" across different markets – including developed markets as well as some emerging markets (e.g. India as concerns agtech companies). In general, these investors are driven both by the potential scale of market demand for new services and products as well as interest in achieving specific development impacts (e.g. smallholder livelihoods, nutrition, sustainable production models, biodiversity conservation or carbon sequestration). In some cases – for example, the IDH FarmFit Initiative (see below), the AGRi3 Fund or the Global Alliance for Improved Nutrition/Incofin N3F nutrition fund and a new “food systems” fund under development by ResponsAbility with the CGIAR – blended vehicles with a strong learning agenda and robust impact indicators, designed to enable learning on which models are most effective and scalable. This is part and parcel of their strategies to deploy capital while also feeding the financial absorption capacity of the market they are addressing, impacting potential pipeline (and the food systems in which it is embedded) by demonstration effect. With a different design, the Clarmondial Food Securities Fund (see annex) represents a model that can reach scale of both mobilization and impact by linking its financial offerings to the existence of inclusive and environmentally sustainable investment opportunities in the supply chains of existing agribusiness companies, including large corporates.

CASE EXAMPLE: IDH FARMFIT INITIATIVE

The IDH FarmFit Initiative aims to pave the way for senior investors – including banks, companies and institutional asset managers – to take calculated risks on smallholder farmers. It comprises three elements: (1) IDH Farmfit Business Support, which provides technical assistance to companies and banks and helps them develop cost-efficient smallholder inclusive business models; (2) IDH Farmfit Intelligence, which shares

key insights on how to make smallholder value chains more efficient, effective and impactful; and (3) the IDH Farmfit Fund, which takes high-risk positions in deals aiming to improve smallholder livelihoods in Africa, Asia or Latin America. Specifically, the US$110 million fund takes the highest-risk positions in an investment, supported by a second-loss guarantee facility from the United States Agency for International Development (USAID). The coalition supporting the fund encompasses major value chain companies, including Unilever, Mondelez and Jacobs DE; finance, including Rabobank; and development agencies from, among others, the United States, the United Kingdom, Denmark and the Netherlands. The fund is backed by the Dutch Ministry of Foreign Affairs and guarantees from USAID. It invests in a variety of sectors (food, staple and cash crops, including cocoa, coffee, cotton, palm oil, tea, aquaculture, soy, cassava, rice and other commodities) and offers guarantees, subordinated loans, equity or mezzanine financing at tenors up to 10 years. The funds can be used for asset finance, input loans, working capital, capex, renovation and rehabilitation (IDH, 2019; n.d.).

Platforms, facilities or programmes designed to expand or deepen the market, on either the investment product or the pipeline side

This last category includes platforms that combine a rigorous analysis of investment opportunities and potential market drivers of sustainable financial flows, with the facilitation of partnerships and the design and execution of financial solutions around those opportunities. As such, they typically work across the financial sector and the “real economy,” and they aim not just to de-risk specific transactions but to leverage the market role of actors in agribusiness or in the land use space to anchor new investment models that can deliver both commercial returns and development impact. Relevant examples working through this leverage anchor point include the Tropical Landscapes Financing Facility (TLFF) and the Palladium Project Development Facility model. Such platforms or facilities may offer particular promise in developing investable assets matched by adequate financing products closely linked to specific development impacts (e.g. reforestation, carbon sequestration, etc.). Because they start from the identification of real-economy investment flows and of (actual and potential) market demand as anchoring points for new financial flows, they all rest on an in-depth understanding of key actors in specific investment ecosystems and seek to establish new forms of collaboration among these actors, as a precondition for both financial mobilization and development impact. As such, similarly to the first type of model, they also address both demand- and supply-side constraints to finance and may use blending to achieve both types of impacts.

CASE EXAMPLE: PALLADIUM FOREST REGENERATION PROJECT DEVELOPMENT FACILITY

The Forest Regeneration Project Development Facility (PDF) is a platform designed by Palladium to support entrepreneurs and defenders of Brazil’s forests by blending finance, deploying technical assistance and identifying, structuring and implementing a set of investable forest regeneration opportunities that transform supply chains through a set of partnerships with large companies, SMEs, service firms, smallholder farmers and sources of finance.

Palladium plays the role of Catalyst in the Regeneration PDF, partnering with a core funder (the Foundation arm of a large Brazilian company) to leverage a set of companies, donors, nonprofits and community actors under a systemic, regeneration facility that can eventually operate commercially. The core funder made a commitment to restore 100,000 HA of Brazilian forest over 10 years. To accomplish this, Palladium was tasked to map, evaluate and recommend a set of forest investment opportunities targeting agroforestry-focused businesses and obtain long-term offtake commitments from international and national buyers of sustainably-produced forest products meeting quality and traceability standards, as well as to identify potential financial co-investors for the PDF, including a range of companies involved in agroforestry development that share the forest protection and community livelihood ambitions of the core funder.
With these initial commitments, Palladium has identified a robust pipeline of investment opportunities among commercial enterprises representing innovative business models that both regenerate forests and offer positive financial returns. Now Palladium is entering into the implementation phase as operator of the PDF.

Setting ambitious forest regeneration and sustainable sourcing targets sets the stage to shift Brazil’s forest producers away from traditionally small, year-by-year contract farming arrangements into longer-term, structured and larger scale farm investments, around which financial institution partners in the PDF can design new and profitable products and services with technical assistance from the PDF.

**Figure 2: Palladium Project Development Facility**

Key features:

- Focus on structuring specific projects
- Arrange financing for individual projects with track record helping to raise capital for the PDF
- PDF de-risks projects with off-takers and first-loss guarantees
- Offers vehicle for blended finance
- Cost-plus performance and capital-raising fees.
New financing at scale upstream in supply chains will allow many thousands of farmers to use regeneration practices to grow sustainably produced products in agroforestry models on less land, in a mix of business models that promote and monetize standing forests. Specific projects involve farmers and communities as stakeholders, as the assurance of stable prices and secure markets for their produced goods provides both a business opportunity and a sustainable pathway out of poverty that is also recovering the forest.

While many impact investors set up or raise funds and then seek to develop a pipeline of opportunities, in this approach the PDF structures financing and partners for specific projects, which in turn creates a track record for raising additional financing for the Facility. This allows the PDF and its portfolio of projects to scale over time. This growth path provides a market-based and iterative growth pathway for the facility, in contrast to the “start large and seek pipeline” traditional fund design model.

Section 4. Recommendations for concessional capital providers and donors

Implications for providers of concessional finance, in the framework of government-led strategies and visions for the transformation of the sector

As noted earlier in this paper, it is important to recognize the important public goods associated with food and agriculture and, consequently, that the sector requires not only sound public policies but also public finance both for direct investment and to enable and support private FSPs and investors. This is the context in which blended finance can be an important part of the “toolbox” that governments have at their disposal to advance sustainable development objectives for agriculture and food systems. While the specific role of the public sector with respect to each local agri-finance ecosystem will vary depending on context and stage of development of the sector (ISF Advisors, Aceli Africa, Feed the Future Initiative and USAID, 2020), inter alia, everywhere the deployment of blended finance in these ecosystems will need to be integrated into local public sector strategies and development objectives – including those related to the 2030 Agenda and those that may emerge around the upcoming United Nations Food Systems Summit. In this context, providers of concessional capital for blended transactions – whether local or international – should:

- **Adhere to best practice blended finance guidance** (notably the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) Principles on Blended Finance and the development finance institution (DFI) principles for blended concessional finance), starting from laying out clearly the case (i.e. market failure) for each use of blended finance as an alternative to, for instance, direct programming
- **Include a perspective of pursuing scale of mobilization and of impact** when they consider opportunities to engage in blended finance transactions – for instance, by avoiding fragmentation of investments and financial flows when possible and appropriate
- **Support and fund more risk-sharing partnerships with local financial institutions** to help them deliver finance in under-financed market segments or investment areas with important development significance (e.g. smallholder farmers and agri-SMEs) in ways that are sustainable beyond the time span of individual transactions
- **Test and/or take to scale new investment frameworks** that link agriculture to other parts of food systems (e.g. landscape approaches) to expand investment opportunities and diversify revenue streams (e.g. carbon sequestration) while mitigating investment risks for investors
• **Prioritize affordable local currency solutions** to avoid exposing local borrowers to large, unheeded foreign exchange risk, while striving to reduce the cost of local currency loans and of hedging for commercial investors participating in blended structures.\footnote{At the moment, too much debt is flowing in hard currency, thus exposing borrowers to sizable, unhedged foreign exchange risk. One example not specific to the sector is the European Bank for Reconstruction and Development’s SME Local Currency Loan Programme, a US$500 million programme aiming to develop capital markets and encourage local currency lending in the countries in which the bank invests.}

• **Make greater use of risk-sharing and guarantees when blending in this sector**, especially at portfolio level and in combination with other instruments, while being cognizant of their limited track record in the 50-50 pari passu formula and when used in isolation, and **consider expanding the target of guarantees from FSPs to supply chain actors such as aggregators**

• In general, **seek to combine tools to increase the scale of mobilization and of impact**, including de-risking instruments and incentives such as pay-for-success approaches

• **Scale up support to a robust learning agenda around blended finance**, including by designing blended finance transactions to contribute to data generation, standardization of metrics and approaches, and data-sharing across the financial ecosystem, so as to improve the knowledge base around which models are most effective and efficient, reduce the incidence of bespoke design, and foster a competitive environment for investors seeking concessional finance.

On the last point, it should be noted that the current conversations around finance for sustainable food system investments encouraged in part by preparations for the United Nations Food System Summit provide a good context for donors and other actors to nurture a robust narrative on the importance of more and better data and tools to translate data into decision-making tools and metrics as part of a transformative financial architecture for food. In this emerging narrative, blended finance features as a type of financing solution whose design requires better data foundations, as noted above, but also as an opportunity to use concessional finance to test new types of investment structures that can themselves generate new data (including risk, leverage and portfolio data) that can de-risk or improve both public and private investments well beyond the scope of blended structures. In other words, the Summit process provides an opportunity to underline both the importance of continuous learning about blended finance and the potential of blended structures as a space for learning for the entire community of actors interested in investment in food systems.

### Practical implications and an agenda for action for donors

Beyond the above recommendations, the authors suggest four areas of action for donors in particular:

• **Scaling up donor allocations to food and agriculture, including blended finance allocations**. Depending on country context and where each country stands in terms of agricultural and financial sector development, donors may need to continue to play important roles through financing and other means to accompany the development of agriculture and food systems. This may include concessional finance and international relief assistance, policy engagement and technical assistance. With respect to concessional finance, the OECD estimates that around US$11 billion of ODA is allocated by OECD DAC members directly to agriculture (Seek Development, 2020) (more if some rural development and climate-related work is included). The majority of these funds should continue to be allocated directly, but donors should consider allocating a share for blending informed by the above recommendations. Depending on context and object of investment, one or the other approach may provide greater impact per unit of concessional funding, which requires a clear diagnosis of risks, costs, and pathways to commercial return, direct development impact and secondary impact, before deciding whether to use blended finance or direct programmatic investments. **That said, if 20 per cent of existing agriculture ODA funds were allocated for blended finance with six times leverage, an additional US$13 billion could be mobilized annually for the sector, contributing substantially to narrowing the...**
sector-specific SDG investment gap and with potential large-scale demonstration effect (notably if deployed with a robust learning agenda as recommended). This amount would be greater than all OECD DAC members’ contributions to agriculture and more than double aggregate support for the sector. The possibility of drawing more climate finance from the donor community to the sector should also be pursued.

- Increasing donor collaboration (and their support to coordination among DFIs and other players in specific transactions) to harvest the results of historical experimentation with blended finance in the sector, focusing coordinated support around high-potential models on that basis. As described above, the Convergence database identifies 88 blended finance transactions that have mobilized around US$6 billion of total funding to agriculture.\textsuperscript{22} Other initiatives exist in the landscape that can also be explored, including initiatives involving DFIs from emerging economies. Donors can collaborate to identify, assess, and coordinate support around those vehicles that demonstrate greater capacity to combine development impact with scale of mobilization potential (e.g. over US$100 million of private sector finance), with due consideration of the risks associated with going to scale while learning on blended finance in the sector continues to evolve. At the same time, donors should continue to support experimentation and capitalization of blended finance structures that may not achieve large scale of direct mobilization but that fall into the four models presented in Section 3, with a robust learning agenda as recommended above. To this end, a collaborative effort among donors and other interested actors may enable in-depth investigation of: (i) vehicles already implemented in agriculture or food systems more broadly; (ii) vehicles under incubation that could achieve financial close in the near term at scale; and (iii) vehicles under design that could achieve financial close in the short or medium term.

- Strengthening a “portfolio” approach in their support to blended finance vehicles, and including corporate value chain investments in that approach. As discussed in the previous section, it is important for blended vehicles to target not only financial intermediaries but also value chain actors whose business models directly or indirectly enable financial flows, particularly towards agri-SMEs and smallholder farmers. Accordingly, donors should continue to support financial intermediary vehicles that provide funding and risk-sharing capacity to banks, alternative lenders, microfinance institutions (MFIs) and funds, but also corporate value chain vehicles that provide funding and risk-sharing capacity to corporate entities (e.g. food processors, manufacturers, wholesalers, aggregators and cooperatives). In the coming months, preparations for the United Nations Food System Summit may provide a good context to expand the focus of “portfolio” vehicles supported by donors to corporate value chain actors, given the concurrent engagement of different parts of the private sector (financial and non-financial) in the process.

- Strengthening engagement with local private investors in developing countries, using blended finance to de-risk and lengthen their investment horizon capabilities. The ratios of private credit as a percentage of GDP and of private credit to agriculture as a percentage of GDP in developing countries are very low. In principle, there is a lot of domestic capital that could be mobilized to agriculture in developing countries, and this should be the primary focus area of resource mobilization. These funds are often in the formal financial sector in the form of deposits at banks and MFIs, but they are invested in assets other than agriculture and SMEs. The second priority area of focus should be cross-border investors, with a particular focus on debt investors.

\textsuperscript{22} This includes grant funding as well as concessional and commercial debt and equity.
Section 5. Conclusions and general considerations for future learning in this space

The importance of a continuous agenda for learning in this space, to be pursued while also stepping up investments and coordination around models and practices designed to combine scale of impact and of mobilization, is recognized throughout this paper. This final section looks at how the community of experts and practitioners in this space looks at priority areas for further refinement of the blended finance toolbox and of its use in the future. In this regard, a number of recent publications converge around three main areas of thinking around, respectively, the proper role or positioning of blended finance; “fit-for-purpose” approaches to the design and management of blended finance solutions; and the role of an “enabling environment” for blended finance to achieve transformative impact at scale.

Concerning proper positioning, the ongoing debate among experts and practitioners includes: (i) how to place blended finance most appropriately in the toolbox of financial and non-financial instruments to align finance and investment flows in food and agriculture to the 2030 Agenda; (ii) how to inject a long-term, patient perspective into the use of blending for areas of development impact where the risk-return balance is unlikely to make commercial sense in the short or even medium term; and (iii) how to develop incentives and thresholds to scale down the use of blending where markets signal sustained interest in internalizing development impact (e.g. around climate-related transition risks or, at least in some high-income economies, around nutrition), while staying vigilant about actual capacity to internalize impact. Also under this heading, some recent publications have looked at how to position blended finance as part of the response to the impact of COVID-19 on smallholder farmers and agri-SMEs. For instance, a July 2020 brief by experts at the FAO Investment Centre (FAO, 2020) looks at the role of blended funds both in the short term and in supporting longer-term recovery. It points to the importance of funds as a type of blended structure that can achieve important scale of impact when focused on relatively small ticket sizes but rarely reaching the financial scale required by major institutional investors, and suggests the need to strengthen the financial capabilities of existing funds, if appropriate through COVID-19-specific windows.

Under the second heading, Havemann, Negra and Werneck (2020), for instance, have explored the importance of learning better how to tailor different instruments from the blended finance toolbox to different assets, areas of desired impact and business opportunities, and addressing diverse expectations concerning financial return and impact and diverse risk-return tolerance and time horizons among private investors. Theirs is not a call for a bespoke and fragmented approach to designing blended finance solutions as a general practice, but rather an important recognition of the need to continue to explore and test models, while aiming for progressively greater scale through replication where possible and relevant, in line with this paper. A call for continued focus of blended finance not only on consolidating learnings and going to scale when possible but also on innovation – both in terms of structures and in terms of support to innovative business models (Amaya, Thuard and Koh, 2020) – is likely to remain important in the near future, as investment opportunities across food systems grow more diverse.

Finally, there continues to be great attention to what will constitute an enabling environment for more and better use of blended finance in this sector. This includes recognition of the need for innovative partnerships among different actors in the agri-finance and blended finance landscapes, improved quality of data to inform agricultural investments and harmonization of standards around bankability and impact. Improving awareness and familiarity with concepts related to blended finance and enabling policies (including at Central Bank regulatory level) are also important to foster an enabling environment for blended finance in the future.
References


Seek Development. 2020. *Agriculture*. Available at: https://donortracker.org/sector/_agriculture.


DEPLOYING BLENDED FINANCE TO MOBILIZE INVESTMENT AT SCALE IN FOOD AND AGRICULTURE

ANNEXES
Annex 1: Additional case studies

Examples of aggregated risk-sharing mechanisms that incentivize financial institutions to grow their agriculture portfolios

This annex presents the detailed financial analysis related to the investment models proposed for FPOs / farmer collectives and agro MSMEs (1). All amounts are in millions of Rs (unless otherwise indicated) and reflect a five-year horizon. The tables presented below include:

**Aceli Africa** is a financing facility that uses targeted incentives to increase lending from local financial institutions and international lenders to agricultural SMEs. Aceli covers the first losses across the lender’s portfolio of qualifying loans and offers origination incentives that compensate lenders for the lower revenues and higher operating costs on loans ranging from US$25,000 to US$500,000. Aceli also facilitates technical assistance at both the pre- and post-investment stages. See [https://aceliafrica.org/](https://aceliafrica.org/) and the Convergence Case Study: [https://www.convergence.finance/resource/3STNch6soavaiCmx2E90UG/view](https://www.convergence.finance/resource/3STNch6soavaiCmx2E90UG/view).

The **Program for Rural Outreach of Financial Innovations and Technologies (PROFIT)** aimed to open up access to capital and provide technical assistance so that small-scale rural enterprises in Kenya could become more profitable and more capable of attracting private investment. Using two blended finance instruments (a risk-sharing facility and a credit line), coupled with technical assistance, PROFIT created incentives for lenders to issue more agricultural loans and provide more services and support in rural areas. Participating financial institutions were able to increase the volume of their agricultural lending, diversify their services and products, focus on innovation to reduce the cost of services, and provide technical assistance for business services to producer groups.

The **Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL plc.)** is a USD$500 million Non-Bank Financial Institution wholly owned by the Central Bank of Nigeria. Established in collaboration with the Federal Ministry of Agriculture and Rural Development and the Nigerian Bankers’ Committee in 2013, NIRSAL’s mandate is to stimulate the flow of affordable finance and investments into the agricultural sector by de-risking the agribusiness finance value chain, fixing agricultural value chains, building long-term capacity, and institutionalizing incentives for agricultural lending through insurance, technical assistance and rating, among others.

**Examples of blended funds that target agribusiness companies with disruptive business models**

**Clarmondial’s Food Securities Fund** is an open-ended investment fund that uses a blended finance approach to provide working capital to agricultural companies that operate in emerging markets and aggregate produce from farmers, particularly smallholders. By offering loans that cover the entire agricultural cycle, the fund enables its borrowers to provide increased pre-harvest support to farmers. By making loans conditional to improvements on environmental, social and governance performance, it promotes the uptake of sustainable and climate-smart agriculture. The development of the fund was supported by Convergence, USAID, the US International Development Finance Corporation (DFC) and others. See [https://www.foodsecuritiesfund.com/](https://www.foodsecuritiesfund.com/).

**The Agri3 Fund** is a blended fund that provides de-risking financial instruments and tailor-made technical assistance for forest protection, reforestation and sustainable agriculture. The three-tiered fund consists of a junior/first-loss equity tranche, a mezzanine equity tranche and a senior debt tranche. Activities of the finance fund, such as deal analysis, execution and monitoring, are managed by Mirova Althelia. The accompanying technical assistance facility is managed by IDH, The Sustainable Trade Initiative. See [https://www.idhsustainabletrade.com/landscapes/agri3-fund/](https://www.idhsustainabletrade.com/landscapes/agri3-fund/).
Examples of blending in large-scale debt funds

The eco.business fund provides (hard currency) debt financing to local financial institutions and businesses engaged in the promotion of biodiversity conservation, sustainable land use and climate change mitigation. The fund has two sub-funds, one for Latin America and the Caribbean, and one for sub-Saharan Africa. Priority sectors include agriculture, fisheries, tourism and forestry. The sub-funds also deliver technical assistance to investees. Managed by Finance in Motion, this permanent capital vehicle has reached a size of over US$330 million, with capital from impact investors such as Calvert Impact Capital, DFIss (KfW, IDB, DFC and FMO) and commercial banks (ASN Bank, GLS Bank). See https://www.ecobusiness.fund/en/the-fund.

The Land Degradation Neutrality Fund is a US$120 million risk-layered fund managed by Mirova that provides long-term financing (debt/equity) for sustainable agriculture and forestry projects. The fund leveraged a partial guarantee from IDB Invest over US$15 million and concessional debt from AFD, the Government of Luxembourg and others to mobilize capital from commercial banks such as BNP Paribas and Crédit Agricole du Maroc.

Examples of use of portfolio guarantees

The One Acre Fund is a non-profit organization that supplies smallholder farmers in East Africa with asset-based financing and agriculture training services to reduce hunger and poverty. It has raised a mix of commercial and concessional financing to fund its activities. Investors include the impact investor Ceniarth LLC, the John D. and Catherine T. MacArthur Foundation and the A-Z Impact Foundation. A partial guarantee issued by the DFC (formerly OPIC) helped adjust the risk-return profile for investors in the senior debt tranche. See https://oneacrefund.org/.

Locafrique Credit Facility: In 2013, USAID and the Government of Senegal signed a loan guarantee agreement that provided Senegalese farmers with access to financing for agricultural equipment to boost productivity and increase food security. The leasing agency Locafrique provides up to US$5.6 million in guarantees for loans under Locafrique’s agricultural portfolio between 2013 and 2023. This was the first-ever lease portfolio guarantee developed by USAID. See: https://2012-2017.usaid.gov/senegal/news-information/press-releases/usaid-supports-historic-loan-guarantee-fund-agricultural.

Sustainable Landscape Guarantee Programme: Rabo Foundation and USAID/India partnered with two local financial institutions to support loans totalling the Indian rupee equivalent of more than US$15 million through a loan portfolio guarantee structure. The financing is geared towards private SMEs, cooperatives, producer companies and MFIs that are directly or indirectly engaged in sustainable landscapes through agriculture, forestry and other land uses. Rabo Foundation participates as a first-loss guarantor, while USAID acts as a second guarantor, sharing risk equally (pari passu) with the partner financial institution at the portfolio level, after application of first loss. See the SAFIN case study: https://5724c05e-8e16-4a51-a320-65710d75ed23.filesusr.com/ugd/f6ddfc_632d78c9ad514681a661d6fbc0125b4c.pdf.
# Annex 2: Stylized summary of financing needs and typical providers for the sector at transaction level

**Table 2: Stylized summary of the range of financing needs in agriculture at individual – public and private sector – transaction level**

<table>
<thead>
<tr>
<th>Ultimate recipient of financing</th>
<th>Primary financing needs</th>
<th>Typical financing amount (US$)</th>
<th>Major financial intermediaries providing financing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private sector – Underlying project implemented by a private sector entity (e.g. a smallholder, MSME, mid-cap or large company)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smallholders</td>
<td>Working capital, pre-harvest, capex and land acquisition</td>
<td>50 - 10,000</td>
<td>MFIs and corporate value chains;</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>Working capital, pre-harvest and capex (including shared machinery)</td>
<td>100,000 - 1 million</td>
<td>occasionally local banks and other financial intermediaries, fintech</td>
</tr>
<tr>
<td>MSMEs for agriculture and agribusiness (excluding cooperative enterprises)</td>
<td>Working capital, pre-harvest, capex, expansion and land acquisition</td>
<td>10,000 - 1 million</td>
<td>MFIs, local banks and Corporate Value Chains, few local non bank financial intermediaries and international impact investors, national development banks</td>
</tr>
<tr>
<td>Mid-caps and large companies</td>
<td>Working capital, pre-harvest, capex, expansion, land acquisition and financing smaller entities</td>
<td>250,000 - 10 million</td>
<td>Few MFIs, local banks, national DFIs and corporate value chains</td>
</tr>
<tr>
<td>Foreign direct investors</td>
<td>Working capital, pre-harvest, capex, expansion, land acquisition, financing smaller entities and FDI</td>
<td>5 million - 100 million</td>
<td>Cross-border banks and international DFIs, international impact investors and private equity funds; occasionally local banks</td>
</tr>
<tr>
<td>Agricultural commodity traders</td>
<td>Working capital, commodity financing, silos and warehouses, and transport infrastructure</td>
<td>10+ million</td>
<td>Cross-border banks and international DFIs; occasionally local banks</td>
</tr>
<tr>
<td><strong>Public sector – Underlying project implemented by a public sector entity (e.g. a smallholder, MSME, mid-cap or large company)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sovereign</td>
<td>Infrastructure, irrigation and national financing programmes</td>
<td>10 million - 100 million</td>
<td>Capital markets, cross-border commercial banks, national DFIs, World Bank and international DFIs</td>
</tr>
<tr>
<td>Sovereign and sub-sovereign</td>
<td>Infrastructure, irrigation and sub-national financing programmes</td>
<td>5 million - 100 million</td>
<td>National DFIs, World Bank and international MDBs</td>
</tr>
</tbody>
</table>

*Source: Authors' conceptualization.*