DISCUSSION PAPER

Scaling up critical finance for sustainable food systems through blended finance

Andrew Apampa¹, Chris Clubb¹, Bethany Emma Cosgrove², Gretel Gambarelli³, Hans Loth⁴, Richard Newman⁵, Vanesa Rodriguez Osuna³, Joke Oudelaar⁴, Angele Tasse⁶

- 1. Convergence
- 2. Alliance of Bioversity International and the International Centre for Tropical Agriculture (CIAT)
- 3. United Nations Environment Programme (UNEP)
- 4. Rabobank
- 5. International Water Management Institute (IWMI)
- 6. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Key Messages

- Sustainable agriculture is systemically underfinanced in developing countries disproportionately, relative to other sectors despite its critical contribution to many SDGs.
- This paper provides a pathway for scaling investment for food system transformation through blended finance by mobilizing commercial banks, non-bank financial institutions and their clients.
- The development finance community needs to collaborate with private financial institutions and investors to leverage limited public funding and increase investment.
- Investment in sustainable agriculture in developing countries is risky and therefore beyond the investment mandate of most private investors; de-risking through smart blended finance is an effective development tool.
- De-risking through blended finance will introduce new investors and demonstrate commercial viability of investment so blended finance can be phased out over time.

About this paper

CCAFS Discussion Papers contain preliminary research and are circulated in order to stimulate discussion and critical comment. They have not been subject to a formal external review. The views expressed in this document cannot be taken to reflect the official opinions of CGIAR and/or the contributing institutions. This work is licensed under a Creative Commons Attribution–NonCommercial 4.0 International License. Suggested Citation: Apampa A, Clubb C, Cosgrove BE, Gambarelli G, Loth H, Newman R, Rodriguez Osuna V, Oudelaar J, Tasse A. 2021. *Scaling up critical finance for sustainable food systems through blended finance*. CCAFS Discussion Paper. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).









Investment in sustainable food production in developing countries is heavily constrained by (1) high country and sector specific risks, (2) poor primary data and information asymmetries between financial institutions and potential borrowers in rural financial markets, (3) the mismatch between investment needs of farmers and producing companies and different pools of capital, e.g. development finance institutions, banks, pension funds, insurance capital, and (4) high transaction costs and small ticket size. These constraints lead to insufficient pipelines of bankable projects. One solution to remedy these deficiencies is blended finance.

This paper presents a snapshot of current challenges and opportunities associated with blended finance and calls for a radical sectoral shift in agriculture, using commercial banks, development finance institutions and other financial intermediaries as enablers for food systems transformation.

We propose six actions for blended finance^{*} to help enable and boost the transition towards sustainable food systems, contributing to positive environmental, social and economic outcomes. These actions apply to multilateral development banks (MDBs) and development financial institutions (DFIs) that traditionally have been and are active in this space. However, in addition to these public financial institutions (i.e. mostly, to some extent, owned by governments), we also show how blended finance can be used by private financial institutions (owned by non-government shareholders). This includes commercial banks and other institutions that offer financial services but have no banking license.

Blended finance can help de-risk some of the financial industry and private sector challenges but requires a multistakeholder partnership approach between financial sector actors, the food & agriculture industry, NGO's, multilateral organizations, donors, investors, as well as the technology sector to create the right enabling environment. These partnerships need to foster dialogue and gain a better understanding of each other's challenges and agenda, leading to more blended finance flowing to producers.

The primary target audience for this brief is the development finance community, commercial banks and other financial intermediaries; however, many other users may find the propositions made here useful in pursuing their mandates.

Platforms to foster blended finance for sustainable food systems

Platforms like the UN Food Systems Summit and the Finance in Common Summit, as well as collaborative networks such as the Good Food Finance Network offer great opportunities to different types of actors in the financial supply chain for food systems to work collaboratively and make tangible commitments towards sustainable, equitable and resilient food systems and change course for the upcoming decade.

Within the UN Food Systems Summit, five Action Tracks and four cross-cutting Levers of Change have been developed to address the main challenges of global food systems ¹. Action Track 3: "boost nature-positive food production at scale" is the place for engagement and action around agricultural solutions that enable to produce more food without increasing the environmental footprint of food systems through greater land use or greater use of production inputs. Meeting Action Track 3 objectives requires the development of financing models and instruments where food value chain actors, including farmers, are given access to capital and incentivized to invest in more sustainable production practices. To enable this and other crucial objectives, the Finance Lever has developed one imperative to "use catalytic capital to de-risk investments in innovative sustainable business models". This is a call to use blended finance and other de-risking solutions to reorient investments.

The Finance in Common Summit is a platform where Public Development Banks convene to reinforce their commitments in support of common actions for climate and sustainable development. The 2021 Finance in Common Summit will focus on the contribution of Public Development Banks to the transformation of agriculture and agribusiness for food security, adaptation to climate change and biodiversity conservation.

A more permanent place for continuous cross-border collaboration is provided by the Good Food Finance Network, a multi-sectoral community for collaborative innovation, working to bring sustainable food systems to the heart of the finance agenda. This Network is due to set up "catalytic groups" to accelerate the transition, including a group dedicated to blended finance.

^{*} Blended finance as "the strategic use of development finance for the mobilization of additional finance towards sustainable development in developing countries." (OECD-Definition-Blended-Finance). The core objective of blended finance is to deploy strategically development-focused funds to mobilize private investors to investment opportunities they would otherwise not invest in, thereby increasing the volume of finance for sustainable development (Convergence 2018).

Global food systems and the funding gap

The global food system will need to produce food more efficiently and sustainably to achieve the Sustainable Development Goals (SDGs) and meet the climate commitments of the Paris Agreement. The global population is expected to grow to 9 billion by 2050, increasing the demand for food by 70% and requiring at least US\$80 billion in annual investments to meet this demand ². Additionally, income growth in low- and middle-income countries is linked to changing dietary preferences towards higher value agricultural products, accelerating a transition towards higher consumption of meat, fruits, and vegetables, relative to that of cereals, requiring corresponding shifts in output and adding pressure on natural resources ³.

Global food systems contribute a third of total humanmade greenhouse gas emissions and agriculture alone accounts for 70% of freshwater withdrawals^{4,5}. Most agricultural practices today are unsustainable and have been a major driver of terrestrial biodiversity loss and contributed to at least 70% of deforestation terrestrial biodiversity thus far, as well as the degradation of 33% of soils globally ^{6,7,8}. Ensuring that food and land systems are transitioned to more sustainable models to alleviate climate risks, safeguard environmental ecosystems, improve food security, and create more inclusive rural economies is urgent and necessary.

Given the interlinkage between climate change and food systems (our food systems are impacted by climate change and also contribute to climate change), it is imperative that solutions apply a "food systems" approach across value chains (upstream, midstream and downstream) i.e. address the key drivers that affect climate change and prioritize outcomes that tackle climate change, such as land use, food loss & waste and consumer preferences.

Approaches, such as agroecology, agroforestry, sustainable land use, integrated natural resources management and climate-smart agriculture can provide part of the solution. Redirecting subsidies, technological improvements and reductions in the emission intensity of production can also help address food systems emissions ⁹.

The Food and Land Use Coalition estimates that US\$300-350 billions of annual investment capital to 2030, spread across themes related to healthy diets, nature-based solutions, reducing food loss & waste and financing smallholders, is required for the transition to sustainable food and land-use systems. This investment could unlock US\$5.7 trillion worth of economic and social gains to society ¹⁰.

Further, it is estimated that 270 million smallholders across different regions require US\$188 billion annually to cover their agricultural needs, such as agricultural inputs or investments in mechanization and US\$50 billion each year to cover non-agricultural household related expenses ¹¹.

Banks are the main providers of private domestic credit, followed by microfinance institutions. Although agriculture accounts for around 17% of GDP, less than 5% of domestic financial sector assets are provided to the agricultural sector ². The agricultural sector is considered as one of the riskiest sectors for banks, which leads to insufficient allocation of capital to finance existing agricultural business models. This finance gap will only increase considering the additional capital required for the transition to more sustainable practices.

Challenges and drivers of the funding gap

Realizing the SDGs requires a transformative agenda for agriculture and food systems. The importance of increasing investments and aligning them to sustainable development and sustainable agriculture is often underlined, but we are experiencing continuous very low levels of investment and anaemic levels of mobilization. Table 1 summarizes the main sources of development finance for agriculture, including mobilization.

Official development assistance (ODA) and traditional development finance (international financial institutions "IFIs", multilateral development banks "MDBs" and development financial institutions "DFIs") is critical in developing countries, but they are failing to materially increase sustainable finance and catalyze the required private capital at scale.

- Only around 2% of the US\$11 billion of ODA is allocated to mobilization / blended finance activities.
- IFIs, MDBs and DFIs have minimal amounts allocated to private investment mobilization for agriculture: only around 15% of US\$45 billion of MDB and DFI ownfinancing and 5% of the US\$19 billion of "direct private mobilization" annually are for agriculture.

TABLE 1. Main sources of off	ficial development finance	to agriculture sector	in developing countries ¹⁵
	inclut acvetopinent infance	. to agriculture sector	in acvetoping countries

Agriculture Project Type	Source 1 Official Development Assistance (e.g. USAID)	Source 2 International Financial Institutions (e.g. I BRD) and MDBs (e.g. AfDB)	Source 3 Development Finance Institutions (e.g. UK CDC)
Public sector (sovereign)	Grants and Sovereign Loans (~ US\$11 billion annually)	Sovereign Loans and Grants	None
Private sector (non-sovereign)	Commitments to blended finance (~ US\$150-300 million annually)	IFIs: None MDBs: Loans, Equity Investments and Guarantees (~ US\$3-5 billion annually)	Loans and Equity Investments (~ US\$1-2 billion annually)

Various agricultural stakeholders, including smallholder farmers and agribusinesses need capital to assist in the transition to sustainable practices. These financing needs can be met using a variety of instruments, i.e. grants, equity, debt, and risk mitigation products (guarantees and insurance products, including hedging). This capital is typically deployed through a mix of public and private actors.

The supply of private sector finance for sustainable agriculture finance and investment in developing countries comes mostly from either (i) domestic providers of finance (banks, microfinance institutions, private and public equity investors, pension funds, fund managers and retail investors) or (ii) cross-border financial intermediaries/investors (international banks, insurance and pension companies, sovereign wealth funds, private and public equity investors, fund managers and retail investors). All these investors assess potential investment across the risk and non-risk challenges described in Table 2, with systemic underinvestment as a result.

Financial institutions and investors assess these risks and challenges to determine whether a company/project is bankable, near-bankable or non-bankable.

Only 4% of the US\$379 trillion of Global Financial Assets are invested in the 145 Developing countries (ex-China), mainly because cross-border investors perceive country risk as very high: only 11% of the sovereign risk ratings of developing countries are Investment Grade (S&Pequivalent "BBB-" or better) with the median "B." For most potential cross-border debt investors, this risk translates into high expected losses beyond their investment mandate and criteria ¹³.

These "speculative" risk ratings have most impact on regulated financial instructions, like banks and insurance

companies. Since the central role of banks includes protecting capital entrusted to them (e.g. savings, current accounts), they are subject to heavy regulation by central banks. This translates into a strict "risk appetite" that is monitored and audited that limits committing mediumterm funding to high risk countries.

When discussing access to finance, there is an important distinction between large commercial farmers and smallholder farmer groups as they operate differently. For commercial farmers, access to working capital facility and medium-term capex loans is, to some extent readily available. For smallholder farmers and related SMEs and cooperatives, basic access to the financial system is often a challenge because of the lack of access to a bank account, credit (in local currencies) and insurance products. Access to lending products is restrictive given the lack of collateral, financial track record and distribution channels.

As an alternative way to reach out to farmers, corporate actors (e.g. input providers, traders and processors) take up the role of "financing agents": They act as aggregators, distributing loans to (smallholder) farmers (e.g. for seedlings, fertilizer) to secure their supply of commodities (e.g. cocoa, coffee, soy). Despite their role in short-term investments, these corporate actors are often not able to provide medium- and long-term financial solutions, as it is not part of their core business and capabilities.

Access to finance for a transition to sustainable practices is even more challenging given the unproven business case, the deployment of new technologies and the requirement of financing non-cashflow to foster conservation activities.

Farmers that wish to innovate in the context of food system transition are perceived to entail higher risk. For example, farmers seeking to integrate reforestation, agroforestry practices into their existing activities would

TABLE 2. Risk and non-risk challenges impeding agricultural financing ¹²

Project-specific risk	Project-specific non-risk challenges	Country risk issues
Business risks from underlying business model, including new untested business models or transition risks related to sustainability or failure to integrate environmental social and governance (ESG) considerations	Informality of company: Large majority of companies operate informally, not reporting 100% of revenues	Macroeconomic risk: Global emerging markets risk, national fiscal, inflation, etc.
Financial risk: Ability and willingness of borrower to repay obligations	Lack of conventional security for lender: Lenders lend against security, with preferred security being clear-tile land and buildings – often not available for agriculture	International, national and local political agriculture risks: Agricultural trade, sanctions
Agronomy risk: Reduced or unpredictable harvest (quality / quantity) due to agronomic practices, i.e. production and technical risks	Small borrowing amounts: Large majority of required borrowing amounts are likely less than US\$100,000 (possible less than US\$20,000)	Currency risk: Decline in the value of an investment due to adverse currency movements
Natural hazards: Unpredictable weather events, earthquakes, landslides	Lack of domestic financial resources for agriculture: Domestic credit is undersupplied, and then only small amounts collocated to agriculture	Political risk: Transfer, conversion, political insurrection, civil disturbance
Commodity Price Risk: Adverse movements of commodity prices		
Interest Rate risk: Decrease in ability of company to make debt service payments due to changes in global and local interest rates		

require longer tenor loans (and grace periods). For these farmers to access long term financing, the supply of financing is very low and pricing (interest rate) is very high reflecting the higher (perceived) risk and the regulatory capital requirements. The result is that the limited supply of financing is unaffordable.

A sustainable transition for food systems financing requires a deep understanding of the banking sector and support in terms of risk sharing. Longer tenor structures and, in some cases, concessional funding, can help make these sustainable transition loans viable for both farmers and banks.

To increase the supply of domestic and cross-border investment to sustainable agriculture, blended finance solutions need to address the Risk and Non-Risk Challenges (Table 2). These solutions should lead to (i) transforming near-bankable into bankable projects, (ii) increasing the supply of finance and investment to bankable projects and (iii) enabling access to sector and agricultural transformation knowledge to the various stakeholders involved. At the same time, blended finance approaches need to improve the risk-return investment profile to acceptable levels for all actors involved to create a market-equivalent investment opportunity.

Blended finance as catalyzer of the desired food system transition

Given the high country and borrower risk, compounded by the novelty and uncertain economic returns of many sustainable production models⁹, the private sector will continue to fall well short of providing the financing required to achieve sustainable food systems. Without financing, market premiums and/or financial incentives to shift towards more sustainable practices, most producers are likely to continue to operate business as usual.

Because of the imperative of aligning "general agriculture" with the SDGs, massively scaling up blended finance mechanisms should lead to catalyze private capital on the one hand and incentivize producers on the other hand.

Blending public funding with private sector resources to de-risk some of these challenges is the best solution to finance sustainable investment at scale. This blended finance approach combines impact financing for SDGs with the much larger private sector financial resources and commercial banks' client portfolios. Effectively, the public catalytic concessional finance will only come into play when it can be blended with commercial finance.

There are two critical forms of commercial finance in blended finance transactions: (i) organizations that originate, arrange and manage financial assets ranging from US\$50 to US\$100 million to finance the companies/ projects and (ii) investors that can invest in these financial assets. The former are generally banks, microfinance institutions (MFIs), fund managers and value-chain financiers (and MDBs, DFIs and national development banks in public sector). And the latter can be the entire spectrum of the investment community.

Working with banks and MFIs at global, regional and local levels has its advantages. Banks are in constant contact with their client base (including in the food and agriculture industry) on financing needs. The corporate actors in the food and agricultural supply chain are directly linked to farmers, input providers (e.g. seeds, fertilizer) and off-takers (traders, processors). These corporate actors (sometimes referred to as "aggregators") can assess SDG interventions in their supply chains that "boost naturepositive food production at scale".

Banks can support their clients with the investments needed to implement those sustainable practices. Domestic banks can also have an easier reach to farmers, access to local knowledge, infrastructure and currency to provide appropriate lending programs. In summary, commercial banks offer a strong and natural loan distribution channel in the agricultural sector through their large existing client bases, their kitchen-table relationships and their infrastructure (branches, mobile solutions, cooperation with mobile network operators). This is the channel to scale, because it can help remedy the lack of a deep pipeline of bankable projects (see "Key Messages" above).

This scaling up effort by banks requires transactional simplification and standardization. Otherwise, transactional costs will be prohibitive, especially when a large group of stakeholders is involved. This can be accomplished, for example, by designing standardized loans to farmers in a specific sector including environmental and social impact targets, standardized approach to portfolio risk sharing of smallholder loans, but also standardizing and measuring environmental and social impact indicators. Research organizations have also an important role to play in developing tools and frameworks that can lower the transaction costs for investors, improving risk assessment and safeguarding impacts, especially when the target beneficiaries are smallholder farmers, including women and youth. These organizations are increasingly shifting towards demand-driven R&D delivering innovative, digital tools for portfolio level risk assessment, M&E and pipeline prioritization that can be incorporated into the investment decision making process of blended finance vehicles.

The transformation enabled by blended finance will encompass the following stages:

- 1. Blended finance mechanisms will increase finance and investment to bankable projects and improve near-bankable projects to become bankable.
- 2. The financed entities that build up a successful and robust track record will have a demonstration effect. The perceived risk by private investors of the whole sustainable food systems will decrease and as a result, overall investments in this segment will increase, attracting larger pools of capital and institutional investors.
- 3. Over time, the importance of commercial finance will increase as the role of concessional finance decreases: once proof of concept that sustainable food system approaches are profitable and reduce overall credit risks is achieved at scale, more commercial finance will be made available, without the need of concessional capital.

Blended finance: lessons learned, best practices and opportunities for scale

Convergence, the global network for blended finance, has compiled a database of 650+ blended finance transactions in developing countries. According to this database, in the SDG era (since 2015), 13 blended transactions on average each year have targeted agriculture, accounting for around US\$1.2 billion in financing per annum ¹⁴. Overall, the Convergence database records 146 blended transactions that have targeted the agriculture sector and/or SDG 2 representing aggregate financing of US\$13.4 billion (Figure 1). Some of the key lessons learned of blended finance cases in the agricultural sector include:

Agriculture transactions are typically smaller compared to the blended finance market. Agriculture represents 22% of total blended transactions, but only 9% of financing volumes (Convergence), demonstrating the relatively small size of transactions targeting the sector.** Some examples from the Convergence Matchmaking Platform are listed in Table 3.

Most of the underlying projects or recipients of funding in the sector have small financing needs, less than US\$1 million – likely amongst the lowest compared to other sectors/SDGs.

Hence, **mobilizing financing through blended finance to critical projects requires aggregation at a portfolio level.** This type of scale can be achieved in particular by channelling finance through financial institutions and funds that extend debt (and possibly equity) or directly to corporate value chain actors that can manage a portfolio of projects.

** Agri-transactions have a median size of US\$38 million (compared to US\$57.1 million for all transactions); with over half (57%) less than US\$50 million (44% for all transactions) and 26% in the US\$10-25 million range.

Accordingly, **funds are the most common blended finance vehicle type for agriculture***** (Figure 2) accounting for 53% of agri-transactions, compared to 39% of total blended finance transactions ¹⁵.

Rural communities and smallholder farmers appear as the end beneficiaries in 86% of agri-transactions, with nearly half of agri-transactions targeting micro, small and medium enterprises (MSMEs) (49%) as direct beneficiaries. Agri-transactions most often target agricultural inputs / farm productivity (36% of agri-transactions) and agrifinance (35%), although climate-resilient / sustainable agriculture (18%) is becoming increasingly important, with agribusinesses under increased pressure to ensure sustainability within their supply chains, down to the primary farmer.

*** Funds are the most common blended finance vehicle type for agriculture because standardized funds can better mobilize at scale, often by financing local banks and MFIs with retail distribution networks to better reach local farmers.



FIGURE 1. Market size and growth of blended finance for agriculture ¹⁴.

TABLE 3. Examples of blended finance for agriculture

Historical blended finance transactions		Blended finance transactions currently fundraising			
Mercon Coffee Facility	US\$450 million fund	SDG 500 Fund	US\$510 million fund		
Silverlands Fund	US\$450 million fund	Samunnati	\$343 million facility		
African Agriculture Fund	US\$246 million fund	Octobre Liquidity facility	US\$183 million		
Africa Agriculture Trade and Investment Fund	US\$146 million fund	One Acre Fund	US\$159 million		
IFC Blended Finance Project for Hazelnuts in Bhutan	US\$12 million loan program	Food Securities Fund	US\$101 million		
Convergence operates a platform to match project sponsors, private investors and development organizations to blended finance transactions in fundraising mode – currently 80 transactions. For more information, contact Convergence Blended Finance.					



FIGURE 2. Agriculture transactions by blended vehicle type.

With agriculture finance highly decentralized and having many providers, and preferred blended finance solutions capable of scale occurring mainly at the fund level, achieving scale requires investments in funds that can finance a large number of providers. Achieving scale will also be helped by investing in funds that support innovative business models in food and agriculture, especially by targeting key nodes within the sector or specific value chains that can de-risk the entire sector and signal possibilities for the wider market. However, innovation in agriculture must be balanced against efficient finance structures that are simple and replicable.

Investing in capacity building of (i) financial intermediaries providing financing directly to companies/projects and (ii) producers is key to scaling up financing for sustainable agriculture. The starting point to mobilize larger amounts of investment into sustainable agriculture is to identify the main financial intermediaries that can provide direct financing and value-chain financing, and then to increase their expertise, funding and risk-bearing capacity to finance more sustainable agriculture companies/projects. At the same time, technical assistance for producers and de-risking is needed to improve near-bankable projects to bankability. Scaling up also requires identifying the most effective and efficient vehicles or models that have demonstrated success, and then funding those approaches with catalytic/concessional development funds that can attract private investment to achieve scale.

Lastly, standardization and consolidation / integration are needed to reduce transaction costs and attract investors. The small scale and bespoke nature of investment vehicles, including blended vehicles, in this sector is an important limiting factor, as it brings along higher transaction costs and risks for investors. Blended finance solutions should therefore prioritize standardization and the reduction of transaction costs. Scale can then be achieved through the replication and adaptation of a limited set of structure archetypes, similar to the experience of other sectors (e.g. renewable energy). Finally, the consolidation or integration of similar or complementary structures (e.g., similar thematic or geographical approaches) into sizeable facilities and platforms would also help to attract more institutional investment into agriculture.

BOX 1

TWO BLENDED FINANCE CASES IN THE AGRICULTURE SPACE

The **AGRI3 Fund** was incorporated in 2020 by UNEP, Rabobank, IDH (the Sustainable Trade Initiative) and FMO (Dutch development bank). The fund looks to mobilize financing from financial institutions and blends public and private capital to enable projects that would otherwise not materialize due to their risk profile. The public-private partnership aims to unlock \$1 billion for forest protection and sustainable agriculture, and to bridge the gap between the needs of farmers and the limitations of banks. The fund de-risks loans from banks to various actors in the agricultural value chain, while the ultimate beneficiary is always the farmer willing to transition to more sustainable practices. The technical assistance facility (managed by IDH) supports pipeline development, monitoring and evaluation, and capacity building for producers to transition to sustainable and climate-smart agriculture ¹⁶.

Utilising a different blended finance approach, the **Tropical Landscape Finance Facility (TLFF)*** consists of a loan facility that funds early-stage projects using credit-enhancing instruments of development investors to leverage private finance. Once the projects reach maturity and generate sustainable cash flows, they are aggregated and repackaged as medium-term notes sold by BNP Paribas to patient capital investors in tranches according to risk capacity. The facility aims to reach US\$1 billion by offering long-term loans to projects in renewable energy and sustainable agriculture whose outcomes include improved livelihoods, reduced deforestation, improved agricultural efficiency, and restored lands. In 2018, TLFF launched its inaugural transaction: a US\$95 million loan to help finance a sustainable natural rubber plantation in two heavily degraded landscapes in Indonesia, which will train, employ and provide stable revenues to farmers while also protecting tropical rain forests on the plantations ¹⁷.

*A partnership between ADM Capital/ADM Capital Foundation, BNP Paribas (BNPP), UN Environment Programme (UNEP) and World Agroforestry Centre (ICRAF).

BLENDED FINANCE AS AN EFFECTIVE TOOL TO MOBILIZE CAPITAL FOR GENDER EQUALITY AND ACCELERATING WOMEN'S SOCIO-ECONOMIC EMPOWERMENT

Women make up 43 percent of the global agricultural workforce. However, female farmers receive only ten percent of total aid for agriculture, forestry, and fishing, and as little as five percent of all agricultural extension services ¹⁰. Research suggests that if women had the same access to productive resources as men, they could increase yields on their farms by 20–30 percent, potentially resulting in 100-150 million fewer hungry people in the world ¹⁹. This requires investors to take a gender-smart approach, that mainstreams gender analysis in the investment decision-making process, to provide the necessary capital to women-owned and led companies so that women farmers are empowered across the entire food system. Blended finance can be an effective tool to incorporate such approaches, as it can de-risk solutions that simultaneously address sustainable food production, climate resilience, and gender equality. Examples include the Land Degradation Neutrality Fund, which is supported by first-loss capital to invest in projects that reduce or reverse land degradation, while advancing gender equality from project design through to implementation ²⁰. Industry wide initiatives such as the 2x Challenge, also provide important sources of capital which can be applied through blended finance solutions to address gender gaps in financing ²¹.

Action plan to increase investment in sustainable food systems

The authors propose a six-point action plan to increase investment in more resilient and sustainable food systems. All actions are simple but critical, fully within the control of the development community and can be realized within the next 18 months using existing financial resources.

 Donors commit to allocate 10-20% of their ODA funding to private investment mobilization
 Sustainable agriculture in developing countries requires traditional ODA grants. The development community should commit to allocate at least 10-20% of its agriculture ODA to private investment mobilization. If 15% of the US\$11 billion of agriculture ODA would be allocated to private investment mobilization achieving six times leverage, then an additional US\$10 billion of private investment would be invested. The US\$9.4 billion of traditional ODA and US\$10 billion of private investment would achieve more development impact than US\$11 billion of ODA alone.

2. Shareholders govern MDBs and DFI with targets for total investment and mobilization to sustainable food systems Only a small percent (estimated at 5-10%) of MDB and DFI financing transactions for agriculture include private direct mobilization. The shareholders of MDBs and DFIs should govern them to require 50-75% of their transactions to mobilize private direct finance – possibly 100% in Upper Middle-Income Countries where mobilization is easier. If they provide around US\$5 billion of financing to private sector agriculture projects, and they increase their mobilization to a factor of 2, then an additional US\$10 billion of private investment could be mobilized. Combined with the amount above, an additional US\$20 billion of private investment could be mobilized using existing official development finance resources.

3. Development community and private sector directly collaborate including mapping the financial intermediation chain for sustainable food systems and then boosting investment through the chain Development finance actors need to map the financial intermediation chain for sustainable agriculture including:

- the demand for capital by agriculture companies and projects, including value chains and smallholder agriculture such as debt from banks, microfinance institutions and value chains and equity from equity fund managers.
- the supply of investment capital to the agricultural sector (domestically and internationally) from commercial banks, non-bank financial institutions, institutional investors, asset managers, fund managers, commercial banks, MDBs and DFIs. Emphasis should be placed on the financial institutions that originate and arrange the direct financing to the companies and projects such as institutions that have outreach to the different types of farmers (large, emerging, smallholder) and to more downstream SMEs, corporates and, companies in the value chain.

Development finance actors need to build a bridge between the development community and a small number of private-sector financial institutions with comparative advantage in agriculture, e.g. by setting up working groups / collaborative tables to improve mutual understanding and jointly boost high-impact investments in a cost-efficient way.

4. Development community creates Call for Proposals to allocate collaboratively their scarce catalytic ODA financial resources to the best mobilization proposals. The best blended finance proposals, based on combination of lessons learned (presented in prior section for transactions in agriculture) and new innovations, should be determined through competition and then funded. The main criteria should be high development additionality and financial additionality ¹⁸, scale private investment, standardization and temporary intervention to permanent solutions without concessionality. All organizations involved in the financial intermediation chain should be invited to submit proposals. Standardization of a handful of best practice blended/ layered capital structures to create a well-understood asset class for investment by mainstream investors is critical.

5. Champion public knowledge hubs for successful financing solutions that foster sustainable food systems The finance and development community (including research organizations, extension service providers and NGOs) need to collaborate through multi-stakeholder working groups to develop a common understanding and methodologies concerning sustainable food systems and blended finance. Knowledge sharing and dissemination should be managed through well-coordinated, donor funded, public knowledge hubs.

Development community need to create and share

 a wealth of data and knowledge on sustainable food
 systems: a) Public capital providers and government
 donors should align on standardized and simplified
 ESG criteria built off sound scientific evidence, b)
 Donor funded R&D programmes should support the
 development of digital tools for risk assessment and
 management that can be applied at portfolio level
 to lower transaction costs for investors, c) Donor
 programmes and government agricultural extension
 services should systematically share agricultural field
 data to support investor due diligence, d) Public capital
 providers perform a systematic re-view of previous/

ongoing donor programs to intermediate and introduce potential pipeline to relevant finance actors.

• The finance and investment community share relevant information on blended finance transactions to strengthen the case for main-streaming institutional investors: a) develop a track record in the sector and at portfolio level, b) collect and disseminate primary data that allows public and private investors to more accurately value risk-return profiles and assess impact.

6. Build inclusive and resilient agricultural value chains through evidence-driven incentives and coordinated technical assistance programmes

Firstly, financial institutions that lend to corporates and MFIs need to incorporate ESG criteria and incentives linked to their loans that improved traceability and resilience, especially regarding supply chain origin. Aggregators, off-takers and MFIs provide access to finance and market linkages between smallholder farmers and supply chains. This relationship is key to facilitating the dissemination of technical knowledge and services, such as climate adaptation interventions and insurance products for smallholder farmers. Such guidance on ESG criteria, incentives, interventions should be informed by the public knowledge hubs (mentioned in action point 5).

Secondly, donor capital and government subsidies should strategically allocate for technical assistance by targeting both capital providers, such as regional and local banks, and capital receivers, such as farmers/SMEs. Pipeline development programmes and R&D projects can support and accelerate the investment-readiness of early-stage investments, especially those that cater for smallholder farmers. These programmes need to be coordinated through corporates/banks and supported by research organizations and NGO's.

Endnotes

- UN. 2021. The Food Systems Summit. https://www.un.org/en/foodsystems-summit
- 2. World Bank. 2020. Agriculture Finance & Agriculture Insurance Brief. https://www.worldbank.org/en/topic/financialsector/brief/ agriculture-finance
- FAO. 2018. The future of food and agriculture Alternative pathways to 2050. Summary version. http://www.fao.org/global-perspectivesstudies/resources/detail/en/c/1157074/
- Crippa M, Solazzo E, Guizzardi D, Monforti-Ferrario F, Tubiello FN, Leip A. 2021. Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food* 2:198–209. https:// ecbpi.eu/wp-content/uploads/2021/03/Nature-food-systems-GHGemissions-march-2021.pdf
- 5. World Bank. 2020. Water in Agriculture. https://www.worldbank.org/ en/topic/water-in-agriculture
- IPBES. 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Díaz S, Settele J, Brondízio ES, Ngo HT, Guèze M, Agard J, Arneth A, Balvanera P, Brauman KA, Butchart SHM, Chan KMA, Garibaldi LA, Ichii K, Liu J, Subramanian SM, Midgley GF, Miloslavich P, Molnár Z, Obura D, Pfaff A, Polasky S, Purvis A, Razzaque J, Reyers B, Roy Chowdhury R, Shin YJ, Visseren-Hamakers IJ, Willis KJ, and Zayas CN (eds.). IPBES secretariat, Bonn, Germany. 56 pages. https://doi. org/10.5281/zenodo.3553579
- FAO and UNEP. 2020. The State of the World's Forests 2020. Forests, biodiversity and people. http://www.fao.org/documents/card/en/c/ ca8642en/
- 8. FAO. 2015. Soils are endangered, but the degradation can be rolled back. http://www.fao.org/news/story/en/item/357059/icode/
- 9. FAO. 2017. The future of food and agriculture Trends and challenges. http://www.fao.org/3/i6583e/i6583e.pdf
- Food and Land Use Coalition. 2019. Growing Better: Ten Critical Transitions to Transform Food and Land Use. https://www. foodandlandusecoalition.org/wp-content/uploads/2019/09/FOLU-GrowingBetter-GlobalReport.pdf
- 11. Shakhovskoy et al. 2019. Pathway to Prosperity, Rural and Agricultural Finance. State of the Sector Report. https://pathways.raflearning.org/ wp-content/uploads/2019/11/2019_RAF-State-of-the-Sector.pdf
- Havemann T. 2019. Blended Finance for Agriculture. Landscape Report. Smallholder and Agri-SME Finance and Investment Network, 10.
- 13. OECD and UNEP. 2020. Framework for SDG Aligned Finance. https:// www.oecd.org/development/financing-sustainable-development/ Framework-for-SDG-Aligned-Finance-OECD-UNDP.pdf
- Convergence. 2021. Blended Finance and Agriculture. Data Brief. https://www.convergence.finance/resource/0fdfc957-abd8-4a55-a315-36ac28cb1559/view
- 15. Convergence. 2020. The State of Blended Finance 2020. https://www. convergence.finance/resource/1qEM02yBQxLftPVs4bWmMX/view
- 16. Agri3 Fund AGRI3 Fund aims to mobilise additional public and private capital at scale, to contribute to sustainable agricultural value chains and avert deforestation. https://agri3.com

- Steiner A, Aguilar G, Bomba K, Bonilla JP, Campbell A, Echeverria R, Gandhi R, Hedegaard C, Holdorf D, Ishii N, Quinn K, Ruter B, Sunga I, Sukhdev P, Verghese S, Voegele J, Winters P, Campbell B, Dinesh D, Huyer S, Jarvis A, Loboguerrero Rodriguez AM, Millan A, Thornton P, Wollenberg L, Zebiak S. 2020. Actions to transform food systems under climate change. Wageningen, The Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). https://hdl.handle.net/10568/108489
- Sánchez Torrente L, Habbel V, Rocío Pérez JJ, Doswald N, Bertzky M, Gotz G, Orth M, Richter J, Fernández de Velascov G, Harten S. 2020. The State of the Evidence on Blended Finance for Sustainable Development. An Evidence Gap Map. DEval Discussion Paper 3/2020, German Institute for Development Evaluation (DEval), Bonn. https://www.deval.org/fileadmin/Redaktion/PDF/05-Publikationen/ Discussion_Paper/2020_03_EvidenceGapMap_BlendedFInance/ DEval_Discussion_Paper_3_2020_Evidence_Gap_Map_of_Blended_ Finance.pdf
- Food and Agriculture Organization. 2011. The State of Food and Agriculture 2010-11. Rome: FAO. http://www.fao.org/3/i2050e/i2050e. pdf
- 20. The Land Degradation Neutrality (LDN) Fund. PRI Awards 2019 case study: Land Degradation Neutrality Fund | Case studies | PRI (unpri. org). https://www.unpri.org/showcasing-leadership/pri-awards-2019case-study-land-degradation-neutrality-fund/4845.article
- 21. 2x Challenge. 2021. Invest in Women Invest in the World. www.2xchallenge.org