

DATA BRIEF | APRIL 2022

Blended Finance for Food Systems

HIGHLIGHTS

- Food systems are the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal of food products. Food systems in developing markets are often defined by a predominance of smallholders, low productivity, and weak vertical connectivity.
- Blended finance can address the challenges limiting investment in developing market food systems by de-risking transactions, both improving project bankability and mobilizing finance to bankable projects.
- This brief analyzes 127 transactions targeting the agriculture sector and/or SDG 2 (Zero Hunger) that have been classified by the food value chain stage(s) targeted (see Figure. 1).
- Like the broader market, funds are the most prominent structure across the food value chain, while companies have been prominent amongst transactions targeting vertically integrated and storage and transport solutions.
- Food system transactions have a median size of \$34.1 million (vs. \$58.6 million for the overall market), with solutions targeting storage and transport (\$44.6 million) having the largest median sizes. However, solutions targeting growing have the largest proportion of transactions over \$100 million.
- Concessional debt and equity have been deployed most often across the food value chain, but technical assistance has been particularly prominent amongst processing and vertically integrated solutions.
- Development agencies appear more frequently lower down the value chain (growing and processing), while foundations / NGOs are most active higher up (storage and transport and trading and market access).
- To achieve scale, donors and MDBs and DFIs must boost their allocations to private sector mobilization in agriculture, and practitioners should advance vertically integrated solutions across key value chains.

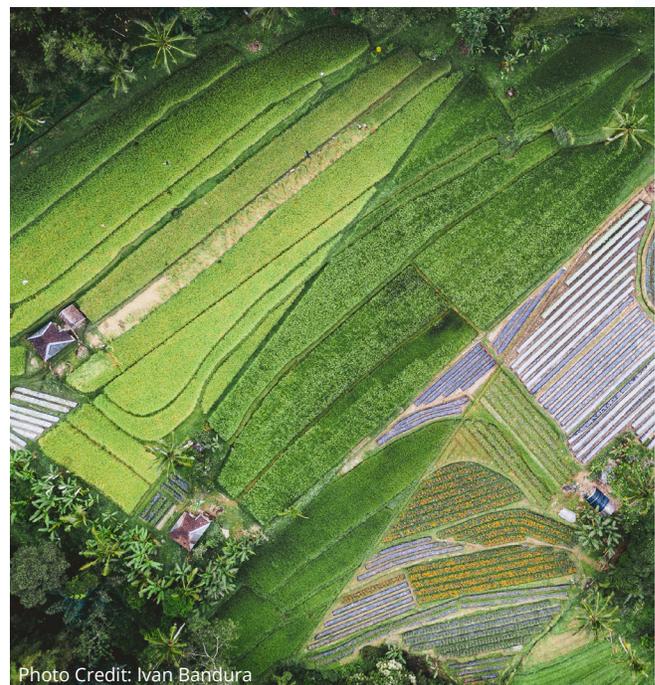
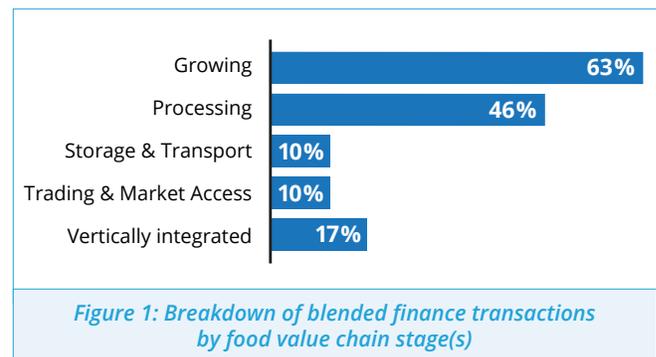
Introduction

HOW CAN BLENDED FINANCE SUPPORT THE GROWTH OF SUSTAINABLE FOOD SYSTEMS?

Food systems [are](#) the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal of food products, and the socioeconomic and natural environments in which they are embedded. They [operate](#) on the global, regional, national, and local levels, and are diverse and location-specific. With up to [821 million](#) people in the world hungry and an additional 2 billion people at risk of undernourishment by 2050, food systems in the developing world are beset by numerous challenges. Firstly, they are often [defined](#) by a predominance of smallholders, low productivity, and weak vertical connectivity, with farmers receiving low incomes and struggling with logistics, like poor storage facilities and transportation. This often stems from [low integration](#) between national policies and local implementation mechanisms, like infrastructure investments supporting farm-to-market transportation or access-to-market information. Inadequate access to agronomical technologies and knowledge [can also lead to food losses](#): up to 14% of the world's food production is lost before it reaches consumers, with food losses disproportionately affecting developing countries. Meanwhile, as Mauricio Benitez of responsAbility observes, there's been a recent paradigm shift in realizing how food systems are both impacted by and contribute to climate change. Finally, food systems are [systemically underfinanced](#) in developing countries, with [significant unmet demand](#) for agri-SME and smallholder finance, and [even greater](#) financing requirements for sustainable food system transformation.

Blended finance can help to address the [numerous challenges](#) constraining investment in sustainable food systems in developing markets (from the high country and sector-specific risks to the mismatch between the investment needs of farmers and different pools of capital) by de-risking agri-food transactions, both improving project bankability and mobilizing finance to bankable projects. This brief analyzes how blended

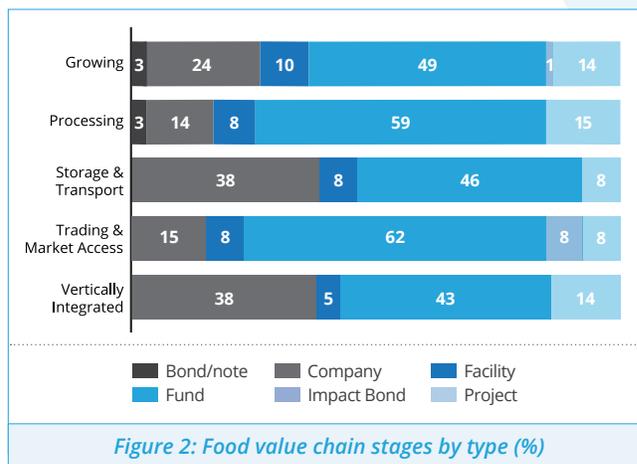
finance approaches have been deployed across the food value chain to date, presenting insights from interviews conducted with key stakeholders. The analysis centers on 127 agriculture and/or SDG 2 (Zero Hunger) transactions that have been classified by the food value chain stage(s) targeted, as Figure 1 shows. These 127 transactions constitute 18% of the broader market by number, while the sector's total committed financing of \$10.2 billion constitutes only 6% of the broader market by value, illustrating the sector's ongoing challenges with scaling.



Blending for Food Systems: Analysis

FUNDS AND COMPANIES PROMINENT ACROSS THE FOOD VALUE CHAIN

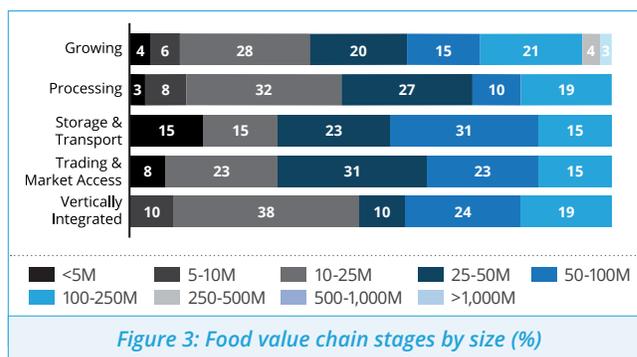
With their diversification benefits and investor familiarity, funds have been the [most common structure](#) deployed in blended finance. The same is true across the food value chain, as Figure 2 shows. Of the funds active in food systems, 43% have a multi-sector or general focus. Companies, meanwhile, have been prominent amongst transactions targeting vertically integrated (38%) and storage and transport (38%) solutions. Examples include [Milk Mantra](#), a dairy foods producer and distributor based in Odisha, India, which looks to improve consumer trust by using blockchain technology to [digitally monitor](#) their supply chains and thereby minimize adulteration. Milk Mantra [received](#) \$371,000 of technical assistance and \$10 million in structured debt financing from US International Development Finance Corporation (DFC) in 2020.



DEAL SIZES OVER \$100 MILLION MOST PROMINENT IN GROWING STAGE OF VALUE CHAIN

Most agri-food projects or recipients of funding (notably smallholder farmers and / or agri-SMEs) have [relatively small](#) financing needs. Blended transactions targeting food systems (which largely focus on lower stages of the food value chain) therefore tend to be smaller in size (median size of \$34.1 million vs. \$58.6 million for the overall market). Solutions targeting storage and transport (median size of \$44.6 million) have the largest median sizes across the food value chain, but solutions targeting growing have the largest proportion of transactions over \$100 million (28%). Examples range from the \$500 million [Mercon Credit Facility](#), the [first](#) coffee-specific sustainability facility to close globally, to the €120 million Huruma Fund, the [largest](#) social impact fund in Spain, which supports access to finance for smallholder farmers in

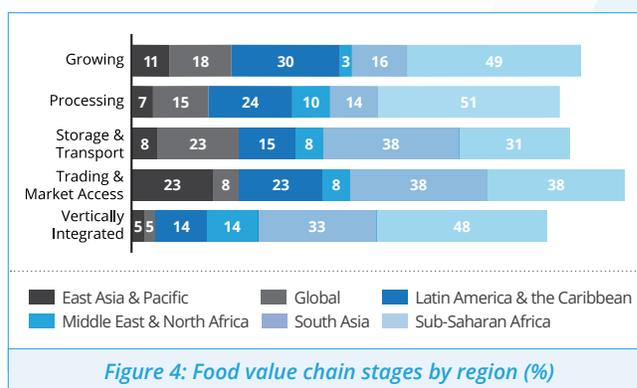
Latin America, the Caribbean, sub-Saharan Africa, and Asia, [backed](#) by a €10 million EU first loss tranche and a €7.7 million EU technical assistance facility.



SUB-SAHARAN AFRICA, LATIN AMERICA, AND SOUTH ASIA ARE PROMINENT ACROSS VALUE CHAIN

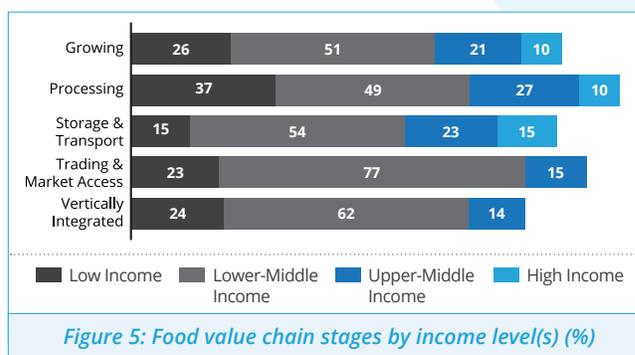
Sub-Saharan Africa, Latin America, and South Asia have been most targeted by blended transactions across the food value chain, as Figure 4 shows. Transactions with a systems-level approach to supporting regional value chains include the Ghana Commodity Exchange, a market platform protecting smallholder farmers from price volatility by [connecting](#) regional buyers and producers and securing competitive prices for agri-commodities. The exchange is complemented by a technical assistance-backed electronic warehouse receipt financing programme, which [enables](#) farmers to put up harvest yields in place of traditional collateral to access financing. Meanwhile, transactions that have scaled across regions include [Sistema.bio](#), which promotes agricultural sustainability by selling biogas digesters to smallholder farmers, with subsidiaries in Latin America, East Africa,

and India. Finally, prominent impact objectives like income growth and employment and financial inclusion have been consistently targeted across different regions.



LOWER-MIDDLE INCOME COUNTRIES MOST TARGETED ACROSS FOOD VALUE CHAIN

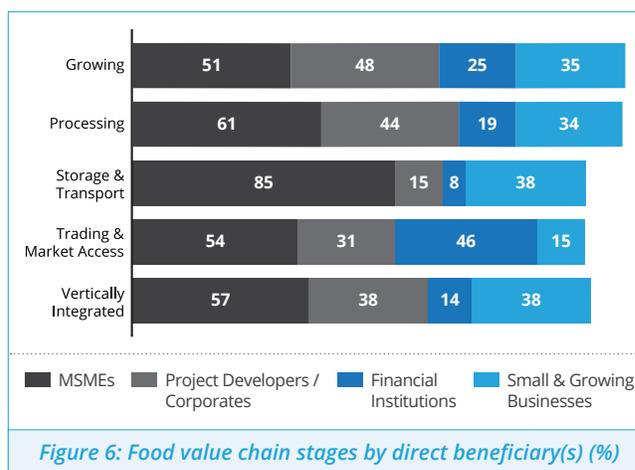
Blended transactions in the wider market [generally target](#) lower-middle income countries, and as Figure 5 shows, this is reflected across the food value chain. Various difficulties complicate private investment in low-income countries. Investors often [face](#) significant real and perceived risks to doing business, [from](#) weak enabling environments to costly and time-consuming pipeline origination and a lack of market data. Transactions targeting low-income countries can nonetheless be found across the food value chain, although most (62%) simultaneously target lower-middle income countries.



FINANCIAL INSTITUTIONS UNDER-TARGETED AS DIRECT BENEFICIARIES?

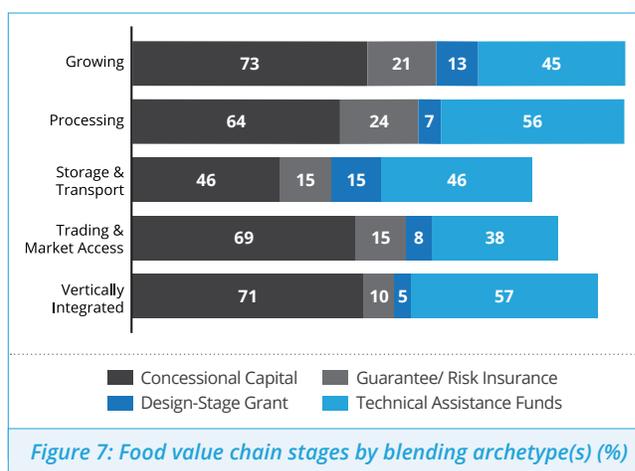
Financial institutions trail MSMEs and project developers as direct beneficiaries of transactions across most of the food value chain (small family farms and MSMEs [constitute](#) the backbone of agricultural value chains in most developing countries). However, reflecting on [Aceli Africa](#), which offers portfolio first loss cover and origination incentives to lenders funding agri-SMEs, one respondent notes:

“The advantage of the market incentive facility approach is that, with the market needing lots of different types of funds and products, you can back multiple (already active) funds and lenders at once and target support to actual rather than projected loans or investments. It’s also probably more efficient to provide a loan loss reserve to change the behavior of existing lenders than to provide first loss into a fund to attract other investors.”



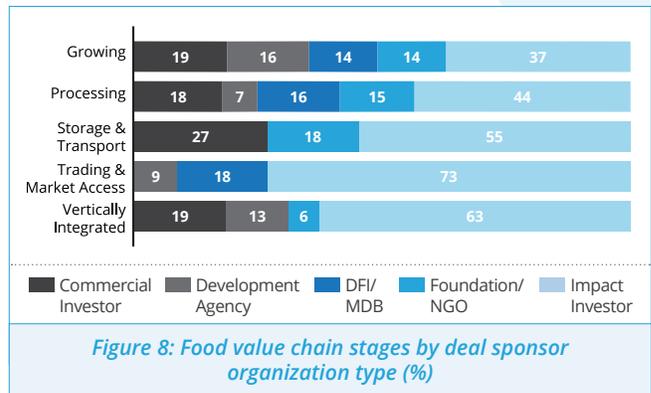
CONCESSIONAL DEBT AND EQUITY AND TECHNICAL ASSISTANCE MOST POPULAR

Concessional debt and equity have been deployed most often across the food value chain, but technical assistance has also been prominent, especially amongst processing (56%) and vertically integrated (57%) solutions. By [supporting](#) knowledge and capacity building, technical assistance can help to [boost](#) the investment readiness and sustainability of early-stage projects in an often uncertain and volatile sector. Examples include Mountain Hazelnuts, which [provides](#) hazelnut trees, agricultural inputs, and technical assistance (including [training](#) in climate-resilient farming techniques and financial literacy for [female smallholders](#)) to rural communities in Bhutan. It then [buys](#) all harvested nuts according to a guaranteed price structure and [processes](#) them for international export.



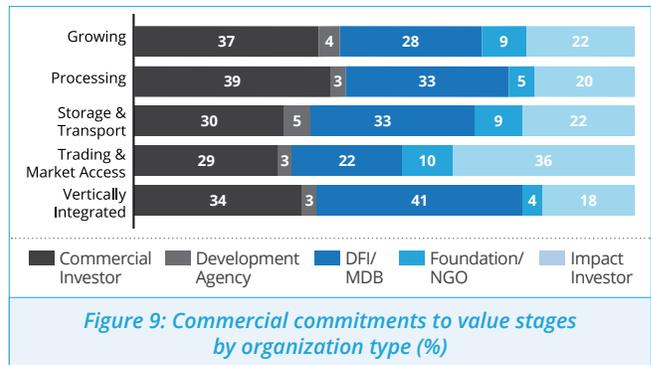
IMPACT INVESTORS: KEY DEAL SPONSORS ACROSS THE FOOD VALUE CHAIN

Impact investors have been the most active deal sponsors across every stage of the food value chain, led by investors like Sarona Asset Management and Sembrador (2 transactions each), with impact investors particularly prominent for trading and market access (73%) and vertically integrated (63%) solutions. However, KfW and IFC (DFIs), The Nature Conservancy (NGO), and USAID (development agency) have sponsored the highest number of food system transactions overall (three each). Common deal sponsor domiciles include the US (29 transactions), India (11), Kenya (10), and the Netherlands (10).



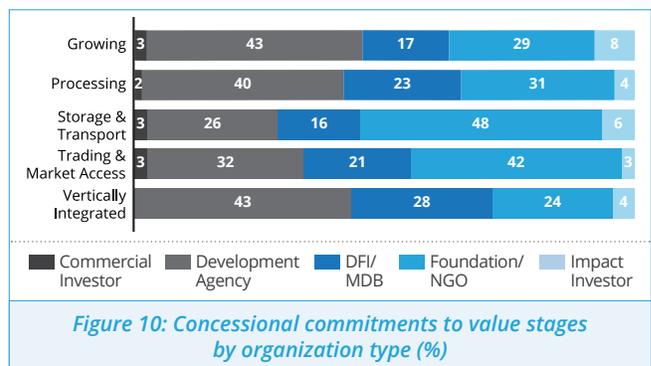
COMMERCIAL INVESTORS AND DFIS / MDBS MOST ACTIVE COMMERCIALY ACROSS FOOD VALUE CHAIN, APART FROM TRADING AND MARKET ACCESS

Each blended transaction mobilizes capital from one or more private sector investor(s). Commercial investors (particularly commercial banks and asset managers) and DFIs have been the most prominent contributors of commercial financing to transactions across the food value chain. However, impact investors account for a plurality of commercial commitments to transactions targeting trading and market access solutions (36%). Leading providers of commercial commitments include Dutch development bank FMO (25), US DFC (20), and IFC (20).



DEVELOPMENT AGENCIES ARE MOST ACTIVE SOURCES OF CONCESSIONAL MONEY LOWER DOWN THE FOOD VALUE CHAIN; FOUNDATIONS / NGOS MOST ACTIVE HIGHER UP

Development agencies account for a plurality of the concessional commitments provided to transactions targeting lower stages of the food value chain: growing (43%) and processing (40%). Conversely, foundations / NGOs account for a plurality of the concessional commitments provided to transactions targeting higher stages: storage and transport (48%) and trading and market access (42%). Leading providers of concessional commitments include USAID (29), FMO (21), and the German Ministry for Economic Cooperation and Development (BMZ) (13).



Reflections

How can finance be mobilized into food systems in developing markets at scale? To start, [aggregating](#) financing for smaller-scale food system solutions within easily replicable portfolio structures that can channel funding to financial intermediaries and agri-food companies will be [key](#) to mobilizing private capital at scale (as with [other sectors](#)).

Improving transparency will also be critical. Over half (55%) of food system transactions captured in Convergence's dataset do not report impact data publicly or have an unknown reporting status, adding to the perceived risk of a sector where projects are already often of a size and a risk level beyond many investors' comfort zones. On this issue, one respondent notes that: *"It should be a minimum requirement of organizations receiving public funding to share data on their portfolios. Because of the lack of data, donors assessing the efficiency of different funding choices face a much harder task."* Meanwhile, observing that DFIs often absorb concessional financing from donors without engaging in third party private sector mobilization (which Convergence has discussed [elsewhere](#)), Frank Nagel of Rabo Partnerships notes that: *"It would be more efficient if commercial banks could get direct access to concessional instruments. Now they're often not allowed direct access, whereas it may be too cumbersome to get access through DFIs."*

Richard Lackey of the World Food Bank makes a different point concerning the slow pace of change in the financial structuring of food system transactions. First, Lackey notes that donors should demand that local governments build digital backbones integrating national cross-sector datasets, which would enable investors to trace the

varied impact of interconnected trends on development outcomes. Beyond this, he argues that we must also create systems enabling and requiring different parties along the food value chain to cooperate: *"Many developing markets struggle with agricultural basics like proper soil management and proper planning techniques because the agricultural system has not been properly integrated. Blended finance's vision is of investors with different risk appetites collaborating on different financial ends of a single transaction. However, building integrated agricultural systems by connecting stakeholders in different parts of the agricultural value chain in a single project is just as important as connecting stakeholders with different risk appetites in a single blended transaction. This needs to be driven by development banks, who can support the design of structures integrated in this way. Focusing on single projects and programs will take forever. To reach scale, we need to do system-wide things that take entire regions at one time and start vertically integrating key value chains."*

Finally, Convergence (alongside other organizations) has also [noted](#) the need for: (i) donors to boost their agriculture ODA funding allocations to private investment mobilization; (ii) MDB and DFI shareholders to require at least 50-75% of their financing transactions for agriculture to mobilize third party private sector finance; (iii) the development community to map the financial intermediation chain for sustainable agriculture; create calls for proposals to allocate catalytic funding to the best mobilization proposals; and champion public knowledge hubs sharing data on successful financing solutions for sustainable food systems; and (iv) donors to strategically allocate for technical assistance by targeting both capital providers and capital receivers.



Photo Credit: Ninno Jack Jr.

Methodology & Notes

- 1. Convergence's database:** Convergence maintains the largest and most detailed database of blended finance transactions that have reached financial close. Given the current state of information sharing, it is not possible for this database to be fully comprehensive. We have made efforts to capture all relevant blended finance transactions; however, there are likely more transactions that have not been captured.
- 2. Scope of available data:** This brief analyzes 127 agriculture and / or SDG 2 (Zero Hunger) transactions that have been classified according to their stage(s) in the food value chain. Classifications refer to the food value chain stage(s) at the project / investee level and transactions can be associated with multiple food value chain stages. Vertically integrated deals are transactions that: (i) operate and / or provide services at sequential points on a particular or defined food value chain; or (ii) target investees that operate and / or provide services at sequential points on a particular or defined food value chain. Agriculture and / or SDG 2 (Zero Hunger) transactions that could not be classified into a food value chain stage (e.g., due to insufficient information on the projects / investees targeted by their portfolios or a "non-food" focus) were excluded from the analysis. This brief also draws upon stakeholder interviews conducted with Mauricio Benitez, Sectoral Specialist, Food Systems, at responsAbility; Richard Lackey, CEO and Chairman, World Food Bank; and Frank Nagel, Head of Impact Finance at Rabo Partnerships.
- 3. Target regions and countries:** Convergence tracks region and country data by stated region(s) and countries of focus at the time of financial close, not actual investment flows. Often, regions and countries of eligibility are broader than those explicitly stated.

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CONVERGENCE is the global network for blended finance. We generate blended finance data, intelligence, and deal flow to increase private sector investment in developing countries.



BLENDED FINANCE uses catalytic capital from public or philanthropic sources to scale up private sector investment in emerging markets to realize the SDGs.



Our **GLOBAL MEMBERSHIP** includes public, private, and philanthropic investors as well as sponsors of transactions and funds. We offer this community a curated, online platform to connect with each other on blended finance transactions in progress, as well as exclusive access to original market intelligence and knowledge products such as case studies, reports, trainings, and webinars. To accelerate advances in the field, Convergence also provides grants for the design of vehicles that could attract private capital to global development at scale.

FOOD SYSTEMS INITIATIVES FROM THE UN JOINT SDG FUND

BUILD MALAWI WINDOW – A SPECIALIZED STRUCTURED BLENDED FINANCE VEHICLE FOR AGRIBUSINESS

Malawi records one of the lowest rates of investment in Africa. This impedes most small and medium-size businesses (SMEs) from accessing finance and consequently growing. This programme will structure Malawi's first blended finance impact fund and accompanying technical assistance facility to help the country end poverty, reduce hunger and increase employment. Incorporated in Luxembourg to attract global capital and managed by Bamboo Capital, the BUILD Fund Malawi has a target capitalization of US\$35 million and has received US\$8 million from the Joint SDG Fund. The fund is composed of a US\$15 million first loss layer and a US\$20 million mezzanine tranche. Through a combination of senior/subordinated loans and mezzanine equity, as well as pre and post investment

technical assistance, the impact fund aims to support SMEs, especially in the agriculture and related manufacturing and services supply chain. First investments ranging from US\$250,000 to US\$2.5 million in size are expected in 2022, based on a rigorous due diligence and screening process of over 100 potential SMEs.

Through the blended investments, the programme aims to create 3,000 jobs (30% minimum for women and youth), integrate 75,000 small-scale producers into investees' supply chains, increase participating small-scale producers' income by 30%, expand fiscal space with aggregated income taxes of US\$19.3 million, and strengthen 15 supply chains in the country.

SUSTAINABLE PINEAPPLE VALUE CHAIN DEVELOPMENT IN SURINAME

With US\$2.2 million provided by the Joint SDG Fund, and in partnership with development banks and local financial institutions, this programme will help untap the potential of the pineapple value chain in Suriname. It will implement several solutions, including an innovative guarantee collateral facility to ease access to credit, a business incubator, and a farmer-owned cooperative to develop a sustainable and resilient value chain for the country's pineapple industry. The collateral support facility will de-risk commercial banks loans to pineapple farmers by providing security cash collateral covering 20-50% of the value of loans. The 2-year loans will cover farmers' input and services costs to improve their agronomic practices under an outgrower scheme managed by the Pineapple Innovation Hub.

Through these integrated mechanisms, the initiative will enable farmers, processors, and others in the pineapple value chain to increase their productivity, competitiveness, and market access in a sustainable and transformational manner, with a focus on generating incomes for Indigenous communities. By 2030, the combined impact will result in at least 1000 hectares being cultivated for 20,000 MT of organic pineapple production, leading to an increase in farmers' incomes, while reducing the environmental pressure on primary and secondary forests by shifting cultivation towards permanent organic farming systems.

BLENDED FINANCE SOLUTIONS INCUBATED BY THE JOINT SDG FUND

Five proposals incubated in 2020-2021 through design grants and technical support have a primary focus on food systems, offering country tailored solutions.

- **Angola's Catalytic Finance Initiative** proposes two staggered impact funds primarily investing in the sustainable poultry value chain, simultaneously reducing food costs and improving food security and employment.
- **Iraq's Eco-Innovative Gender Responsive Economic Growth Initiative** proposes a guarantee system to support small businesses in the agriculture sector.
- **Mexico's Innovative Financing Schemes: Strengthening the Agro-Industry & The Social Economy in the South-Southeast Region of Mexico Initiative** proposes a guarantee fund and supporting ecosystem to increase access to finance for underserved rural segments in Southeast Mexico.
- **Sri Lanka's Sri Lanka SDG Programmatic Bond** crafted a US\$1 billion sovereign bond issuance programme, the proceeds of which would combat malnutrition and poverty.
- **Zambia's Tobacco Control Social Impact Bond** proposes a social impact bond that would support tobacco farmers' transition to a safer, viable and sustainable alternative livelihood.