Blended Finance for Climate-Smart Agrifood Systems

A playbook for concessional capital providers

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ABOUT CPI & CLIC

Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has seven offices around the world in Brazil, India, Indonesia, South Africa, the UK, and the US. The ClimateShot Investor Coalition (CLIC) is a global coalition working to accelerate and scale finance for low-carbon, climate-resilient, and nature-positive agriculture and food systems globally. CPI is the Secretariat of CLIC.

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RELATED CPI WORKS

Landscape of Climate Finance for Agrifood Systems (2025)
The Triple Gap in Finance for Agrifood Systems (2024)
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The Climate Finance Gap for Small-Scale Agrifood Systems (2023)
Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses, and Fisheries (2022)

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EXECUTIVE SUMMARY

Agrifood systems are a major contributor to climate change and among the most climate-vulnerable sectors. Global agrifood systems contribute approximately 30% of greenhouse gas (GHG) emissions, making them the second-largest emitter after the energy sector (FAO, 2022). Agricultural producers, including fishers, landowners, smallholder farmers (SHFs) and small and medium enterprises (agri-SMEs), are among the most exposed to climate-related risks due to their direct reliance on natural resources and limited adaptive capacity. Climate change is already undermining their livelihoods through reduced crop yields, declining natural resource availability, and increasing volatility in production systems.

Transitioning agrifood systems holds substantial mitigation and adaptation opportunities. Investing in climate-smart practices across the value chain, from production and processing to distribution and consumption, can deliver significant mitigation and adaptation outcomes, while generating substantial co-benefits for gender equity, poverty reduction, and community health and nutrition. These interventions have the potential to fundamentally reshape extractive, post-industrial food systems and enable base-of-pyramid producers not only to withstand climate shocks but also to create and capture greater value from their production.

Climate-smart agrifood systems remain significantly underfinanced, constrained by fragmented markets, limited financial returns, and high perceived risks. While funding has grown steadily this decade, global climate finance for agrifood systems has reached only USD 95 billion (CLIC, 2025). This is merely 7.2% of the USD 1.31 trillion total climate finance across all sectors in 2021/22 (CPI, 2024), and 8.3% of the USD 1.1 trillion annual funding needed to align agrifood systems with a net zero (CPI & FAO, 2024). Existing capital tends to cluster in more established segments and regions—crops and livestock systems attracted over 40% of funding, while Western Europe and East Asia received nearly three-fourths of investment. In contrast, high-impact areas like nature-based solutions (NbS) and SHF adaptation remain critically underserved.

This underinvestment is not merely a function of capital volume, but also of mandate and adequacy of the financial instruments available. Governments must continue funding public goods that provide critical societal benefits but lack clear revenue models, such as low-emission infrastructure, rural road networks, watersheds, and soil fertility restoration. Private capital must accelerate the shift from high-emission models by investing in commercially viable, low-carbon solutions. However, while public and private actors must expand their roles, concessional capital is best suited for the critical missing middle: opportunities with substantial social and environmental impact but sub-commercial returns. These require de-risking, patient capital, and early-stage technical assistance (TA) to reach financial sustainability and unlock later-stage private investment.

Blended finance has emerged as a powerful tool to fill part of this gap, improving the risk-return profile of investments and catalyzing funding into underfinanced sectors. However, its use in agrifood systems remains fragmented, with limited deployment in underserved areas, particularly NbS and SHF adaptation. For concessional capital to be catalytic, it must be deployed in the missing middle to bridge the gap between public goods requiring government action and private markets requiring de-risking to operate effectively.

Transforming agrifood systems requires concessional investors to take a deliberate, structured approach. Given the complexity and local specificity of agrifood value chains, financing must be

carefully tailored to objectives, whether seeding innovation, funding infrastructure, or scaling intermediaries in underserved markets. There is a growing need for system-aligned blended finance approaches to increase the effectiveness of concessional capital. This includes developing aggregation platforms for smaller-scale investments and targeted financing mechanisms to reach hard-to-serve segments.

Building on field evidence and expert insights, this playbook is designed to support concessional investors to strategically and effectively invest in climate-smart agrifood systems. Concessional investors[1], including donors, bilateral development agencies, foundations, and some development finance institutions (DFIs), are critical to transition agrifood systems. However, they often face complex trade-offs, including balancing impact and financial sustainability, allocating the right level of concessional funding, assessing pathways to sustainability, and setting appropriate performance and impact targets. This playbook is intended as a practical guide to inform concessional strategies, recognizing that each investor will adapt according to their mandate and risk appetite.

This playbook outlines five high-impact investment 'plays' or practical strategies to drive systemic transformation for an agrifood systems transition. The five investment strategies are as follows:

- **Deploy a system-level investment approach**, with deep dives on Ireme Invest (Development Bank of Rwanda, Rwanda Green Fund) and the &Green Fund (SAIL Investments),
- **Support the large-scale restoration of natural capital assets**, with deep dives on the Blue Alliance Blended Finance Facility (Blue Alliance Marine Protected Areas) and the Livelihoods Funds (Livelihoods Venture),
- **Strengthen climate-smart infrastructure shared across value chains**, with deep dives on the Climate Investment Fund (CIF) (World Bank) and the Catalyst Fund Resilience I (Catalyst Impact Partners),
- **Expand technical assistance for climate innovation**, with deep dives on Commercial Agriculture for Smallholders and Agribusinesses (CASA) (UK Foreign, Commonwealth, and Development Office) fund and the Acumen Resilient Agriculture Fund (ARAF) (Acumen),
- **Incubate and scale local financial intermediaries**, with a deep dive on Financing for Agri-SMEs in Africa (FASA) (Investisseurs & Partenaires) fund.

These plays offer clear entry points for concessional capital providers to address persistent market failures preventing the flow of capital into climate-smart agrifood systems, such as fragmented pipelines, underfunded adaptation needs, and a lack of localized interventions. While not all examples specifically target the most vulnerable actors, many plays highlight strategies to reach underserved geographies, early-stage innovations, or SHF models, ensuring that inclusivity remains a key dimension. Each play is illustrated with real-world examples[2] and actionable guidance to help capital providers align their investments with systemic priorities.

The playbook also equips investors with a practical framework to design, implement, and reduce the time-to-market of blended finance strategies. This includes guiding questions, decision points, and curated resources on investing in climate-smart agrifood systems. The framework seeks to

1 For simplicity, all actors deploying below-market concessional capital are referred to in this report as "concessional investors", distinguishing them from "commercial investors" who seek market-rate financial returns.
2 While each case study is positioned under a specific play, many initiatives reflect elements of multiple plays. For example, most funds featured also deploy TA to support their investees, even if TA is not the central focus of the play under which they are presented.

encourage collective action and engagement across donors and development partners to scale effective models and enhance the enabling environment for climate investment.

Importantly, this playbook neither presents an exhaustive list of possible blended finance interventions nor covers all sectors, geographies, or types of interventions. It does not aim to provide prescriptive guidance, acknowledging that concessional investors operate with different mandates, instruments, and institutional contexts. Instead, it highlights high-potential pathways where concessional capital has had a transformative impact on climate-smart agrifood systems and references existing tools and knowledge to support further exploration.

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ABBREVIATIONS

ARAF	Acumen Resilient Agriculture Fund
CASA	Commercial Agriculture for Smallholders and Agribusiness
CIF	Climate Investment Fund
DFI	Development Finance Institution
EA	East Africa
FASA	Financing Agricultural Small and Medium Enterprises in Africa
FI	Financial Institution
FM	Fund Manager
FX	Foreign Exchange
GAIN	Global Alliance for Improved Nutrition
GCF	Green Climate Fund
GDPRD	Global Donor Platform for Rural Development
GHG	Greenhouse Gas
HDD	Historical Deal Database
IRR	Internal Rate of Return
LATAM	Latin America
MEL	Monitoring, Evaluation and Learning
MFI	Micro Finance Institutions
MPA	Marine Protected Area
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NPL	Non-performing Loan
SHF	Smallholder Farmers
SME	Small and Medium Enterprise
SSA	Sub-Saharan Africa
TA	Technical Assistance

DEFINITIONS

Agrifood systems: Agrifood systems encompass food and non-food agricultural products that sustain livelihoods, including crops, livestock, fisheries, and forestry. They span the entire value chain—from production and processing to distribution, consumption, and waste. Beyond agricultural production, agrifood systems operate within broader economic, societal, and environmental contexts, integrating institutions, stakeholders, and ecosystems that influence their sustainability and resilience. By capturing these interconnections, agrifood systems reflect the complex interactions, feedback loops, and trade-offs that shape food security, economic development, and environmental outcomes.

Agrifood systems transition: A shift toward more sustainable, resilient, and inclusive agrifood systems, encompassing GHG reduction and mitigation, adaptation to climate change ecosystem restoration, and improved livelihoods.

Blended finance: Blended finance is the use of concessional capital from public or philanthropic sources to increase private sector investment in sustainable development (Convergence). It does so by mitigating investment risk and/or enhancing returns for commercial investors. The deployment of concessional capital by donors and other impact investors typically falls into four common blended finance structures, each designed to address specific barriers to commercial capital. These are: design grants, concessional debt or equity, guarantees, and technical assistance.

Climate-smart: An umbrella term for practices and investments that contribute to the climate mitigation, adaptation and resilience of agrifood systems, supporting the broader agrifood systems transition.

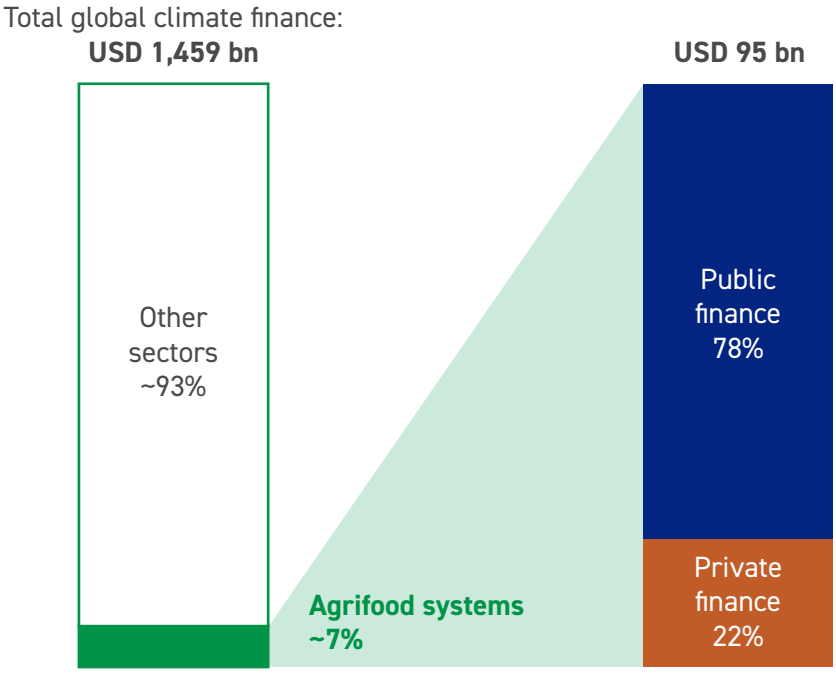
Recipients: Direct beneficiaries of climate blended finance transactions, including corporates, funds, financial institutions and agri-SMEs.

Vehicles: Concessional capital can be deployed in blended transactions across several vehicle types. These can be either directly into projects or companies, or indirectly via intermediaries such as funds-of-funds, funds, facilities, or bonds. This playbook primarily focuses on investment intermediation.

1. BLENDED FINANCE FOR AGRIFOOD SYSTEMS

Global agrifood systems receive less than USD 100 billion annually in climate finance, representing approximately 7% of global climate finance (Figure 1). In 2021/22, climate finance to agrifood systems reached USD 95 billion, growing from a low base of USD 28.5 billion in 2019/20 (CPI, 2025). Public funding remained the dominant source of investment[3], with only 22% of flows from the private sector, highlighting a persistent gap in commercial investment. In addition, flows to small-scale farmers and producers, which contribute up to 70% of food production in low- and middle-income countries (LMICs) (IFAD, 2023), stood at merely USD 5.5 million in 2019/20 (CPI, 2023).

Figure 1: Global climate finance to agrifood systems (2021/22)[4]



Smallholder farmers (SHFs) and small and medium enterprises (agri-SMEs) comprise the majority of global agrifood value chains and play a critical role in food production. However, these actors are disproportionately vulnerable to climate change due to their reliance on natural resources and limited adaptive capacities. They are also underserved by financial institutions and mechanisms to transition to sustainable practices that protect their livelihoods and mitigate agrifood emissions. This scenario underscores a climate justice issue: farmers with the smallest carbon footprint and contribution to global greenhouse gas (GHG) emissions often have the least access to resources necessary for adaptation.

A plethora of technical, infrastructure, and nature-based solutions exist to address this disparity (see Figure 2). However, these opportunities are underfinanced due to fragmentation, low

3 While a large part of the public funding is likely concessional, public finance can also be provided at commercial terms and should not be assumed to be fully concessional.

4 Sources: ISF Advisors analysis, based on CPI data. CPI, 2024. Global Landscape of Climate Finance. CLIC, 2025. Landscape of Climate Finance for Agrifood Systems 2025. Ibid. Totals may not sum to USD 95 billion (or 100%) due to rounding of individual categories and the exclusion of "unknown" allocations (USD 1.9 billion or 2%)

commercial returns, and a lack of risk-sharing mechanisms. The climate adaptation and mitigation opportunities outlined across crops and livestock, forestry and land use, and marine ecosystems and fisheries, set the stage for the investment "plays" that follow—practical strategies concessional investors can use to overcome financing barriers and scale climate-smart solutions.

Figure 2[5]**:** Adaptation and mitigation opportunities across agrifood sectors

	Crops & Livestock	Forestry & Land Use	Marine Ecosystems & Fisheries
Input Supply & Pre-Production	• Drought-resistant seeds • Biologicals including biofertilizers and biopesticides • Sustainable feed and feed additives for low methane emission in livestock	• Native species nursery • Sustainable input supply (e.g., biochar, organic compost)	• Sustainable fishing gear (low by-catch nets, fish aggregating devices) • Hatcheries for climate-resilient fish species • Sustainable feed
Production	• Drip irrigation systems • Precision sensors &input application technologies • Regenerative agriculture practices (low/no tillage, cover cropping rotational grazing) • Silvopastoral livestock systems	• Reforestation and restoration • Satellite monitoring of deforestation and fire hazards • Nature-based wildfire management solutions	• Sustainable aquaculture • Mangrove, seaweed and seagrass restoration • Marine protected areas, blue corridors for migratory fish
Post-Harvest & Processing	• Solar-powered, temperature-controlled storage and warehousing solutions • Biogas digesters and related waste-to-energy systems	• Sustainable timber drying • Efficient wood processing • Waste-biochar pyrolysis	• Ice plants, landing sites • Solar-powered processing • Waste-energy systems at processing sites
Logistics & Trade	• Supply chain traceability platforms • EV and clean energy powered delivery fleets	• Community forestry platforms • Carbon credit mechanisms	• Traceability systems • Efficient cold chains
Retail & Distribution	• AI-driven demand (modelling and predictive sourcing technologies) • Sustainability certification and labelling	• Access to sustainable markets • Sustainable wood certifications and labels	• Access to sustainable markets • Sustainable seafood certifications and labels

5 Sources: ISF Advisors analysis; FAO. 2021. Practical guide on climate resilient practices; J.P. Morgan. 2024. Portfolio Insights: How investing in natural capital management can support food system sustainability. Note: the following examples are illustrative and not intended to be an exhaustive guide to investment opportunities in agrifood systems. Actual opportunities vary significantly by geography, agroecological context, climate risks, value chain structure, and enabling environment, including public policies.

Concessional investors have increasingly directed capital towards these solutions through blended structures. However, total volumes remain limited and unevenly distributed across sub-sectors and climate objectives. From 2014-23, USD 17.9 billion of blended capital flowed into the agriculture sector[6], representing 8.4% of overall volumes (Convergence, 2024). Most transactions targeted climate-smart or sustainable agriculture (40% of 2021-2023 deals) and agriculture inputs or farm productivity (25%). At just USD 20 million, the small median deal size reflects the sector's fragmentation and prevalence of small-ticket investments.

Furthermore, despite agriculture's vulnerability to climate risks, adaptation finance has not scaled to meet needs. Adaptation deals attracted only USD 6.1 billion from 2014-23 and continue to face low private mobilization, with an average leverage ratio of just 2.12, compared to 3.6 for mitigation-focused transactions. (Convergence, 2024).

There are multiple sources of capital required to bridge the trillion-dollar climate finance gap for agrifood systems (CLIC, 2025). Public finance is generally the best-suited form of capital for pure public goods, such as watershed management, public land restoration, and ecosystem services. Given their risk-return profile, mature, revenue-generating models, such as large downstream agribusinesses, may be sufficiently served by private capital.

However, many critical climate-smart solutions sit in a financing missing middle. These solutions, such as nature restoration and sustainable agriculture, offer sizeable social impact but limited immediate returns. They are not fully financeable by scarce public resources and perceived as too risky or early-stage for private capital, making them ideal candidates for blended finance strategies that combine concessional and commercial capital.

This playbook focuses on blended finance approaches and provides practical guidance to crowd in private investment. By reducing risk-return imbalances, aligning incentives for long-term investment, and bundling fragmented opportunities, blended finance can catalyze the unlocking of capital and bridge the persistent financing gaps across agrifood systems.

Insights strongly emphasize intermediation strategies as a pathway to scale. Financial intermediaries, such as fund managers, local financial institutions, or financing facilities, are uniquely positioned to reach underserved segments, manage risk, and allocate capital efficiently across a diversified pipeline. Unlike one-off investments in projects or companies, intermediation structures enable concessional investors to pool resources and crowd in additional capital, delivering scalable, long-term climate outcomes.

An ideal strategy takes a systems approach combining planning, data, and financing elements. No single lever can overcome the considerable challenges in changing embedded behaviors, business models, and power structures in agrifood systems. Further detail on strategies in planning and data to compliment financing efforts can be found in publications such as The Triple Gap in Finance for Agrifood Systems (CPI, 2024), and Role of Government in Rural and Agri-Finance: Transitioning to private sector involvement (ISF Advisors, 2020).

6 Convergence estimates are built using a different methodology than CPI's for climate finance tracking and, therefore, yield a different value. The agriculture subsectors tracked by Convergence include agriculture inputs and farm productivity, agro-processing, agro-finance, climate resilient and sustainable agriculture, and fisheries and aquaculture.

2. INVESTMENT PLAYS FOR CONCESSIONAL INVESTORS

Investing in climate mitigation and adaptation for agrifood systems presents a unique challenge due to the diversity and specificity of financing needs. Farms, forests, and fisheries—and the natural capital assets and ecosystems that underpin these systems—are deeply tied to local contexts, making a one-size-fits-all investment approach untenable. While climate adaptation solutions are well documented (see Figure 2), the investment pathways to scale these solutions remain insufficiently characterized. Many solutions require blended finance structures to address risk-return imbalances; however, practical tools and clear guidance on structuring financing strategies to unlock private capital are lacking.

This playbook outlines investment plays that can address persistent market failures and inherent challenges that limit capital flows to climate-smart agrifood systems. These include high perceived and actual risks, weak investable pipelines, fragmented concessional efforts, and the misalignment between long-term climate outcomes and traditional investor return expectations. This analysis also considers the specific role of concessional investors given their capital mandates and risk appetites. A review of the climate finance landscape helped identify how capital is currently deployed across agrifood sectors, geographies, and climate objectives.

Five strategic plays emerged from this combined analysis. Each play reflects a practical investment strategy that concessional investors can apply to overcome financing barriers, support climate goals, and ensure the catalytic role of capital. Every play includes illustrative case studies demonstrating how these strategies are being applied in practice across the globe. While each case study has been deliberately mapped against a specific play, a single case study may simultaneously support multiple plays, reflecting the interconnected nature of blended finance strategies.

The case studies highlight various blended finance vehicles, including impact investment funds, funds of funds, technical assistance facilities, and direct project financing. However, a broader set of financing tools and structures exists, including instruments such as offtake agreements and seasonal, flexible debt tailored to the cash flow realities of investees. In addition to the selected case studies, this playbook references other initiatives aligned with each play's objectives to allow readers to explore innovative approaches to climate finance further.

Table 1: The five investment plays and nine illustrative case studies

Investment Play	Description of Play	Selected Case Studies
Deploy a system-level investment approach	Agrifood climate financing often remains fragmented, addressing individual projects rather than systemic issues. Concessional investors can foster system-level impact by aligning their investments with national climate goals and strategies (e.g., NDCs, NAPs), supporting science-based diagnostics to identify the most urgent climate hazards, and coordinating with public and private actors to ensure that policy and investment are mutually reinforcing. Investors should build geographically tailored pipelines based on local needs and prioritize funds that proactively assess climate risks at the outset. Policy alignment led by concessional investors with strong government linkages, such as multilateral DFIs, can help create regulatory certainty that private investors find attractive to commit to new geographies and sectors. Aligning with national priorities can also help foreign investors unlock money from national and subnational public banks incentivized to finance public priorities, particularly populist sectors like agriculture.	**Ireme Invest** (Development Bank of Rwanda, Rwanda Green Fund) demonstrates how early engagement with national institutions and policy frameworks can shape investment strategies aligned with national climate priorities. It blends concessional capital, including grants, loans, and guarantees, to catalyze additional private funding. The **&Green Fund** (SAIL Investments) uses climate risk diagnostics to build a pipeline of context-specific adaptation investments. Anchored by permanent concessional capital, the fund blends junior equity with concessional and senior debt in a layered capital structure to mobilize private investment in deforestation-free commodity production.
Support the large-scale restoration of natural capital assets	Natural ecosystems provide essential services for agrifood systems but remain significantly underfunded due to their public good nature and complex governance. Concessional investors can help bridge this gap by supporting initiatives that: i. Identify productive activities that generate cash flows from the conservation, restoration, or sustainable use of ecosystems, and build partnerships with the right mix of public and private offtakers for these services, ii. Institute equitable governance structures that give representation to local communities, and ensure compliance with local laws, and/or; iii. Aggregate smaller projects into larger vehicles to reduce transaction costs, spread risk, and address ticket-size mismatches. This play is geared towards mobilizing capital from impact-oriented private investors who are often dissuaded by the complex structuring and governance needs of conservation and nature-based projects. These projects require the support of concessional investors to finance extensive pre-investment technical assistance and de-risk the offtake of environmental goods and services generated from these projects.	**Blue Alliance Blended Finance Facility** (Blue Alliance Marine Protected Areas) illustrates how ecosystem restoration can become investable by creating revenue-generating enterprises that conserve and restore marine and coastal ecosystems. It uses grants for project preparation, concessional debt to finance capital expenditure, and parametric insurance to mitigate risk, reducing the cost of capital The **Livelihoods Funds** (Livelihoods Venture) offers a replicable aggregation model for land restoration and nature-based solutions. It uses long-term results-based grants and carbon revenues to bundle smaller restoration projects into investable portfolios with inclusive governance and shared value creation.

Investment Play	Description of Play	Selected Case Studies
Strengthen climate-smart infrastructure shared across value chains	Small- to mid-scale climate-resilient infrastructure is essential to reach last-mile producers often underserved by large-scale utilities. However, most of these assets are too small for private infrastructure funds, and too large for donor funding alone. Concessional capital can de-risk investments and lower the cost of capital for critical infrastructure with long payback periods, such as decentralized renewable energy systems, warehousing and storage facilities, and regional digital monitoring and decision-making platforms (e.g., soil and weather data monitoring), by matching the right private partners with relevant infrastructure needs.	The **Climate Investment Funds** (CIF) (World Bank) demonstrates how large-scale concessional flows from bilateral donors can de-risk major investments in climate-smart agricultural infrastructure. It pools grants and concessional loans with public co-financing to align with national climate plans and crowd in private sector participation at scale. The **Catalyst Fund Resilience I** (Catalyst Impact Partners) shows how donors and concessional investors can scale adaptation-focused, tech-enabled services across agrifood value chains. Donors provide early-stage design grants to structure innovative investment vehicles, while concessional investors supply junior equity to absorb risk and enable prioritized returns for commercial investors.
Expand technical assistance for climate innovation	Producers face several barriers including high costs, limited market access, and low financial incentives in the adoption of climate-smart practices and technologies. Many farmers and other actors across the value chain are unfamiliar with sustainable solutions, while private investors often lack clarity on credible business models for climate adaptation. At the fund level, concessional investors can support TA for climate risk assessment and develop robust adaptation theses, helping fund managers translate climate goals into investment strategies. At the business level, TA can support climate impact assessments for agri-SMEs and certify their credibility with climate-focused investors. Additionally, market development support (e.g., climate-label certifications and buyer engagement) can help secure demand for climate-aligned products.	**Commercial Agriculture for Smallholders and Agribusinesses** (CASA) (UK Foreign, Commonwealth, and Development Office) combines market linkage support with TA to make agri-SMEs more investable, especially in underserved markets. The **Acumen Resilient Agriculture Fund** (ARAF) (Acumen) illustrates how anchor investors can provide early-stage support to fund design by pairing TA with affordable capital to help scale climate-smart solutions.
Incubate and scale local financial intermediaries	Agrifood climate finance flows remain concentrated in a few geographies and value chain segments, failing to reach areas where it is most needed, while producers' limited access to finance restricts their potential for climate adaptation. Concessional investors can address these imbalances in capital flows by incubating and scaling financial intermediaries (e.g., rural banks, MFIs, or investment funds) embedded in local markets. These actors are better equipped to assess risks, serve last-mile clients, and deliver climate-aligned products. Risk-sharing instruments (e.g., guarantees, first-loss capital), capacity support, and patient concessional capital can help intermediaries expand climate-smart lending in underserved geographies.	The **Financing for Agri-SMEs in Africa** (FASA) (Investisseurs & Partenaires) fund of funds demonstrates how concessional investors can anchor catalytic fund of fund models that unlock agri-SME financing by supporting investment funds with subordinated capital and targeted technical assistance.

Table 2: Summary table of selected case studies

Name	Type	Fund Manager or Advisor	Size	Geography	Blended Finance Structure	Capital Structure	Financial Instruments	Agrifood Sector	Climate Use
Acumen Resilient Agriculture Fund (ARAF)	Fund	Acumen	USD 58M	Africa	Design grant, technical assistance, conccessional equity	Junior equity: 43% Senior equity: 57%	Equity, quasi-equity (hard currencies)	Sustainable agriculture	Adaptation
Blue Alliance Blended Finance Facility	Facility	Blue Alliance	USD 65M (target)	Africa, Asia, Latin America	Grant, concessional debt	Grant: 40% Refundable grant: 20% Senior capital: 40%	Grants, concessional debt, technical assistance	Marine and coastal ecosystems, fisheries	Dual benefit
Commercial Agriculture for Smallholders and Agribusinesses (CASA)	Technical assistance program	FCDO (sponsor), Niras, Swisscontact, Technoserve (implementing partners)	GBP 46M (budget)	Africa, Asia	Grant	N/A, grant-funded program	TA	Crop and livestock systems	Adaptation
Catalyst Fund Resilience I	Fund	Catalyst Impact Partners	USD 40M (target)	Africa	Design grant, concessional equity	Junior equity, senior equity (fundraising)	Equity (junior and senior), grants, technical assistance	Fisheries, land restoration	Adaptation
Climate Investment Funds (CIF)	Donor incentive program	World Bank (administrator)	USD 12.5B	Africa, Asia, Latin America	Grant	N/A, grant-funded program	Long-term concessional loans, guarantees, grants	Sustainable agriculture	Dual benefit
Financing for Agri-SMEs in Africa (FASA)	Fund of funds	Investisseurs & Partenaires	USD 80M (current) USD 200M (target)	Africa	Grant	Unique, grant-funded tranche	Patient, catalytic capital, technical assistance	Crop and livestock systems, forestry, fisheries, marine ecosystems	Adaptation
Ireme Invest	Facility	Rwanda Green Fund, Development Bank of Rwanda	USD 260M	Africa (Rwanda)	Grant, concessional debt, guarantees	Information not available	Grants, concessional capital, guarantees	Crop and livestock systems, land use, forestry, biodiversity	Dual benefit
Livelihoods Funds	Funds	Livelihoods Ventures	EUR 150M (LCF3) EUR 30M (L3F)	Africa, Asia, Latin America	Grant, concessional capital	Information not available	Result-based grants, carbon credits	Forestry and agroforestry, mangroves and coastal habitats	Dual benefit
&Green	Fund	SAIL Investments	USD 400M	Africa, Asia, Latin America	Grant, technical assistance, concessional debt	Junior equity, concessional and senior debt	Long-term debt, guarantees	Forestry, crop and livestock systems	Mitigation

3. INVESTMENT PLAY 1: DEPLOY A SYSTEM-LEVEL INVESTMENT APPROACH

Providing concessional capital to the agrifood systems transition tends to be fragmented, addressing project-level pain points rather than driving systemic change. The context-specific nature of climate adaptation in agrifood systems makes it difficult to determine which solutions address the most pressing climate hazards and risks. Selecting the right solutions implies a detailed understanding of value chains, climate risks, local market conditions, and financing landscapes. Additionally, agrifood systems are deeply interconnected—natural resources, labor conditions, climate risks, and market demand all influence one another. Without a coordinated investment strategy, operating in silos and funding individual projects may fail to create a lasting systemic impact.

Many countries have begun embedding agriculture into their national climate strategies, creating the foundations for system-level investment. As of 2023, 78% of Nationally Determined Contributions (NDCs) include agriculture in their mitigation targets, and most National Adaptation Plans (NAPs) address the sector. However, only 36% of NDCs present detailed, costed plans with specific targets or policies for agriculture (GIZ, 2017). This underscores a key opportunity for concessional investors to align with national climate priorities and help shape investment strategies that support and reinforce local policy frameworks while actively contributing to developing more granular, sector-specific strategies for agriculture at the country level.

Early engagement with national authorities to implement system-level strategies is best driven by multilateral and bilateral agencies with deep national-level ties with governments. Country offices of these institutions provide technical expertise and grants for design-stage research, such as climate-risk assessments and sectoral strategy development in line with NDCs and NAPs. Commercial investors find it easier to co-invest once they know their investments are in line with international agreements and national policies, providing them with regulatory certainty.

Few investment funds proactively build pipelines based on a region's specific climate hazards at the fund manager level. Instead, they assess risks at the due diligence stage, focusing on investable opportunities that align with their general climate adaptation thesis. A notable exception is Sail Ventures' &Green Fund, which begins with climate risk assessments and structures its investment pipeline around each landscape's most pressing adaptation needs.

Concessional capital should be strategically allocated based on the most pressing adaptation and resilience needs at the concessional investor level. Investors can be critical in orchestrating financing strategies, integrating policy support, grants, blended finance, and research under a unified approach. Concessional capital providers can implement the following best practices when considering investing in adaptation-focused funds and climate-aligned programs:

- **Align investment strategies with national climate priorities and institutional planning frameworks.** Ensure that concessional capital reinforces the efforts of key national actors, including nodal ministries (e.g., environment, agriculture, finance), development banks, and private investors (e.g., local banks and large corporates). Development partners should support initiatives integrating public policy, private capital, and donor funding into a coherent, context-based strategy. They can also consider incentivizing public authorities to lead comprehensive

climate investment planning processes—defining transformation pathways, estimating investment needs, and fostering an enabling environment for coordinated action.

- **Invest in funds that conduct system-level diagnostics to tailor their investment approach to local adaptation needs.** Prioritize funds that conduct science-based climate risk assessments at national and regional levels and utilize these assessments to influence their investment strategy. These assessments should be performed at the beginning of the investment lifecycle to determine the most vulnerable geographies and identify the most pressing climate hazards and risks. Consequently, funds should develop their pipeline and investment strategy around the adaptation solutions best placed to address context-dependent risks and hazards.

The following case studies illustrate how blended finance can align with national strategies and climate priorities to drive systemic change. Ireme Invest demonstrates how early engagement with national institutions and policy frameworks can strengthen systemic alignment, while the &Green Fund builds its pipeline through climate risk assessments that drive context-specific adaptation investments in tropical landscapes. Additional examples demonstrating the deployment of a system-level investment approach include:

- **Green Climate Fund (GCF):** GCF operates through a country-driven model, requiring all financed projects to align with nationally defined climate strategies such as NDCs and NAPs. Through early engagement with National Designated Authorities (NDAs), the fund engages nodal ministries alongside private sector stakeholders throughout its project cycle. This helps governments identify key climate risks, define transformation pathways, and estimate implementation costs. GCF co-finances public sector programs (e.g., resilient infrastructure, national planning) and private sector initiatives (e.g., climate-smart agriculture, renewable energy), driving economies ' systemic change across priority sectors such as agriculture, water, and land use.
- **Gatsby Africa:** Gatbsy takes a long-term, systems-level approach to transforming East Africa's agrifood systems for climate resilience by financing inclusive business models, supporting policy reforms, and building public and private capacity. Gatsby co-founded the Forestry Development Trust to strengthen Tanzania's forestry sector, benefiting both large and small growers. It also helped establish the Kenya Markets Trust, which supports market transformation in Kenya's dairy, water, and agriculture sectors.

CASE STUDY 1

IREME INVEST

RWANDA GREEN FUND, DEVELOPMENT BANK OF RWANDA

Coordinating public policy and climate finance to support climate-smart businesses in Rwanda

Type: Blended finance facility

AUM: USD 260M

Year Established: 2022

Status: Active

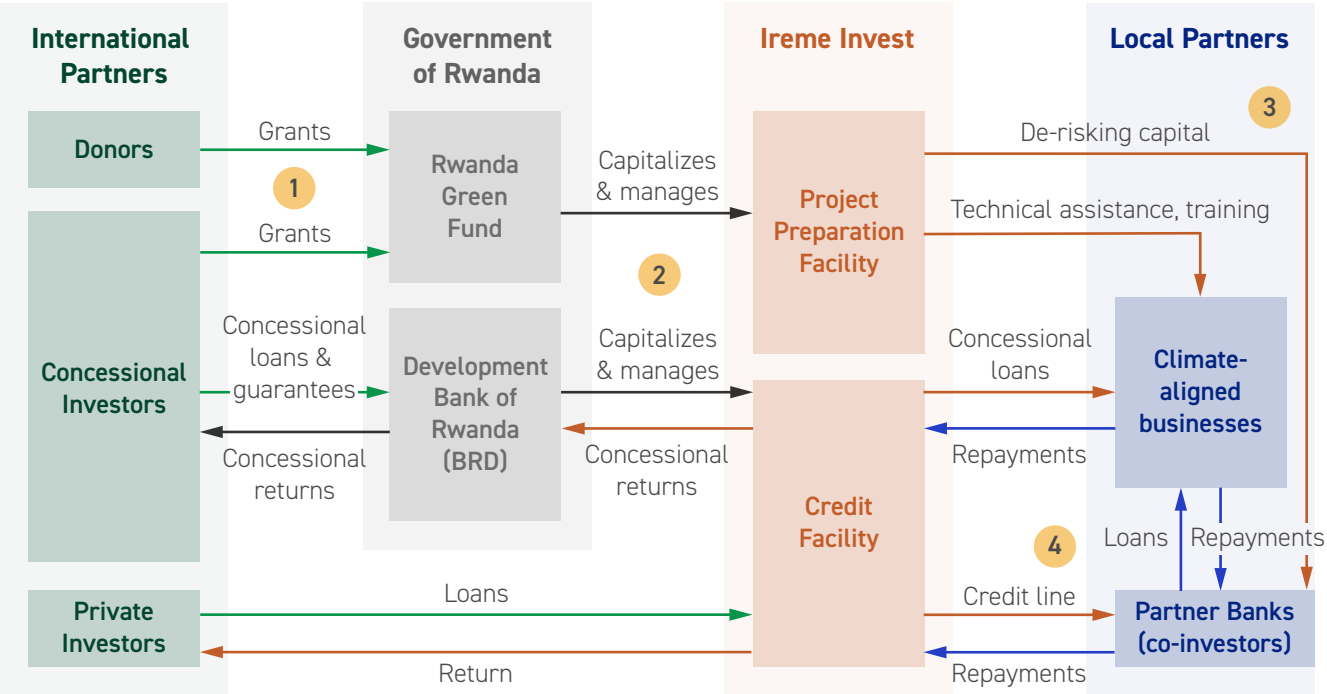
Geography: Rwanda

Main Investors: European Investment Bank (EIB), French Development Agency (AFD), UK Foreign, Commonwealth and Developement Office (FCDO), Swedish International Development Cooperation Agency (SIDA), Danish International Development Agency (DANIDA), Green Climate Fund (GCF)

Agrifood Sectors: Crops and livestock, sustainable land use, forestry, biodiversity

Climate Use: Dual benefit

Description: Ireme Invest is Rwwanda's flagship green finance initiative designed to mobilize capital for climate-smart businesses. Anchored by the Rwanda Green Fund and managed in partnership with the Development Bank of Rwanda (BRD), the facility blends public, donor, and private finance. Serving as a one-stop platform for green investment, it is a central piece of Rwanda's broader strategy to integrate climate goals across public finance, institutional capacity, and private-sector investment.



Investment Strategy

- **Fund Instruments and Ticket Size:**
  1. **Project Preparation Facility (PPF):** Grants (<USD 100K), equity (<USD 1M), technical assistance
  2. **Credit Facility:** Loans (<USD 10M), guarantees (50% of loan amount; 70% for women-owned businesses, <USD 1M)
  3. **Capacity building** for financial intermediaries
- **Assets**: Green businesses, agri-SMEs, cooperatives

Financial and Climate Impact

- **Financial Return:** Positive net return
- **Main Impact Themes:** Climate resilience and job creation
- **Main Impact KPIs**[7]**:**
  1. Environmental: erosion control, flood mitigation, drought resilience, climate-smart crops and livestock
  2. Social: community-based adaptation, education and awareness, inclusivity
  3. Economic: insurance uptake, supply chain resilience, resilient infrastructure investment, resilient livelihoods

Transaction Sample

- **Rwanda:** Under the Rwanda Adaptation Accelerator program's first cohort, nine adaptation agribusinesses shared USD 700K in de-risking investment capital. This was awarded as grants primarily for capital expenditure to support their operations to scale. The second cohort, currently underway, targets agri-tech solutions. The top five businesses are expected to receive USD 700K in recoverable grants.

Illustration of Investment Play

Ireme Invest exemplifies a system-level investment approach by aligning public policy, private capital, and donor funding within a cohesive, place-based strategy. It is embedded in Rwanda's broader ambition to become a carbon-neutral, climate-smart economy by 2050, and integrated with a range of national, sub-national, and local policy frameworks that translate this ambition into sectoral strategies, such as the Vision 2050, National Strategy for Transformation, and Strategic Plan for Agriculture Transformation (PTSA). As part of this national effort, Ireme Invest sits alongside complementary initiatives supported by international partners, including policy and fiscal reforms, long-term investment planning, and expanded access to green finance. Within this framework, Ireme Invest was established to increase the availability of affordable green finance for local businesses. The program consists of two separate facilities:

1. **Project Preparation Facility (PPF)**: Managed by the Rwanda Green Fund, the PPF supports private sector projects from ideation to bankability through incubation and acceleration, creating a sustainable project pipeline for the Credit Facility, local financial institutions, and investors.
2. **Credit Facility:** Implemented by BRD, this facility offers loans with favorable terms to SMEs, either directly or through other financial institutions, incentivizing co-investments.

7 Tracking is ongoing for the recently launched project.

The facility focuses on sectors critical to Rwanda's green growth, including clean energy, smart mobility, sustainable cities, climate-smart agriculture, and waste and circular economy. Its integrated structure ensures that public policy, private capital, and donor funding are aligned, leading to more effective and impactful investments.

Sources: ISF analysis based on publicly available sources (Ireme Invest website and Rwanda's National Policies for Climate Action) and interview with Rwanda Green Fund

CASE STUDY 2

&GREEN FUND

SAIL INVESTMENTS

Integrating local climate risks and contexts to efficiently prevent deforestation, enhance carbon sequestration, and strengthen value chain resilience

Type: Investment fund (direct debt)

AUM: USD 400M (USD 500M target)

Year Established: 2017

Status: Investing (evergreen)

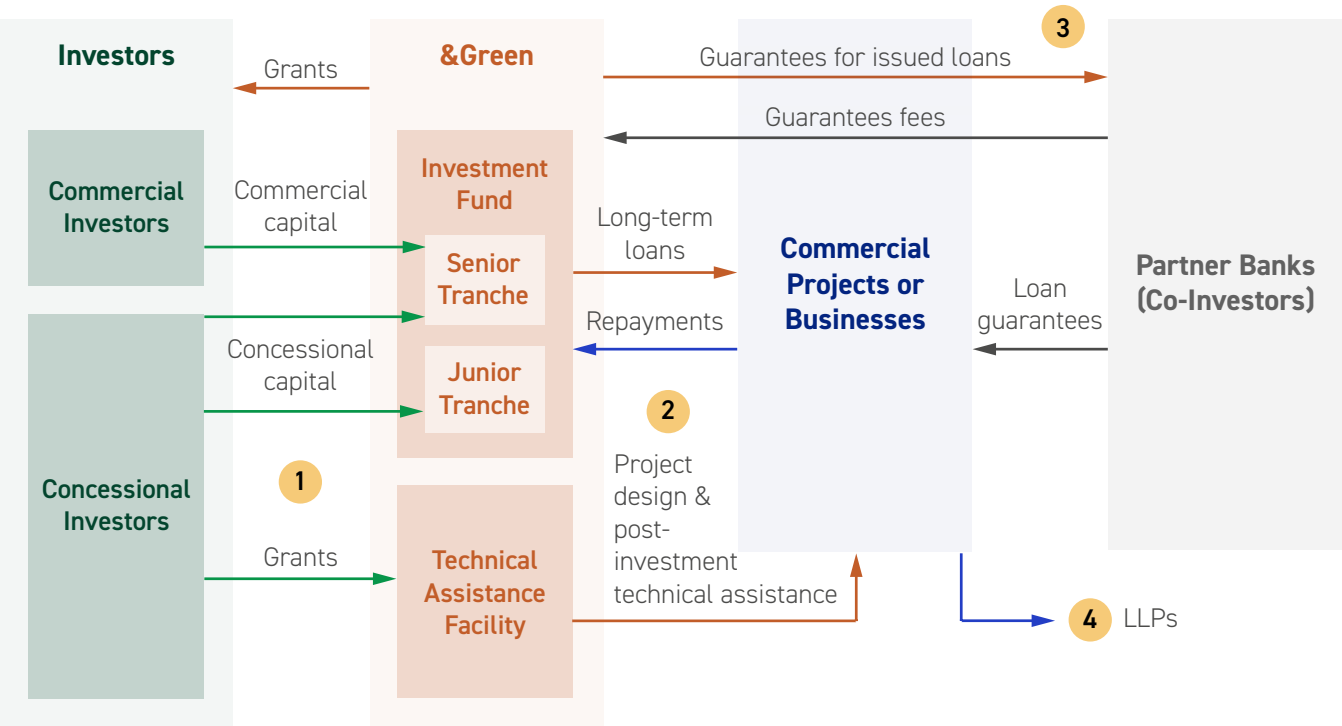
Geography: Latin America, Asia and Africa (tropical countries)

Main Investors: Norway's International Climate and Forest Initiative (NICFI), Dutch Entrepreneurial Development Bank (FMO), Global Environment Facility (GEF), Green Climate Fund (GCF), Unilever

Agrifood Sectors: Forestry, livestock, commodity value chains linked to deforestation

Climate Use: Mitigation

Description: &Green is a target USD 500 million fund investing in large-scale agriculture enterprises and financial intermediaries in tropical regions to strengthen forest and peatland protection. It supports inclusive, sustainable, and deforestation-free production within commodity value chains linked to deforestation. While global in scope, &Green primarily targets countries with significant forest cover and established agribusinesses, such as Indonesia and Brazil, while maintaining a mandate to operate in underserved geographies.



Investment Strategy

- **Fund Instruments and Ticket Size**: Long-term subordinated debt, guarantees (USD 5-30M), and technical assistance
- **Assets:** Supply chain companies sourcing from land-users, large-scale plantation and farmers, and financial Institutions and services providers

Financial and Climate Impact

- **Financial Return:** Positive net returns (~4.7%)[8]
- **Main Impact Themes:** Nature-based carbon sequestration and avoidance, forest conservation
- **Main Impact KPIs[9]:**
  - Forest protection: 3.1M ha
  - Carbon sequestration: 13.2M tCO_2
  - Improved land resilience: 3.3M ha

Transaction Sample

- **Colombia:** Long-term loans to scale deforestation-free beef supply chains, improve productivity, and restore degraded land in the Amazon.
- **Côte d'Ivoire:** Loans to transition cocoa supply chains to traceable, NDPE-compliant sourcing, while protecting biodiversity.

Illustration of Investment Play

&Green targets geographies where globally significant commodity value chains are at risk of driving deforestation. The fund finances commercially attractive businesses when funding helps decouple commodity production from deforestation and promotes sustainable land use. While &Green is primarily backed by concessional investors, its investments aim to de-risk and mobilize private sector participation at the transaction level.

1. Sail Investments conducts national and regional climate risk assessments to identify each geography's most pressing climate hazards. This guides pipeline development and informs the selection of priority regions, value chains, and adaptation solutions. Jurisdictional assessments are updated annually to ensure alignment with local regulatory frameworks and climate priorities.
2. &Green builds a pipeline of medium and large agribusinesses committed to sustainable land use. All investees must publicly commit to halting deforestation and transition to more sustainable practices through a Landscape Protection Plan (LPP), a quantified, time-bound sustainable land management strategy. &Green's flexible, long-term loans partially compensate its clients for the upfront costs of meeting high environmental and social performance standards.
3. To support these prospects, &Green also deploys pre-investment technical assistance, helping potential investees improve their practices ahead of investment.

Sources: ISF analysis based on publicly available sources (website) and &Green Annual Financial Report 2023

8 In 2023. Doesn't include 'movement in provisions for impairment' which equaled -USD 24 M in 2023.
9 As per &Green website, last updated in 2023.

4. INVESTMENT PLAY 2: SUPPORT LARGE-SCALE RESTORATION OF NATURAL CAPITAL ASSETS

Ecosystem restoration is foundational to long-term climate resilience in agrifood systems. Preserving and restoring natural capital assets—such as forests, wetlands, and marine ecosystems—is essential to sustain the ecosystem services on which agrifood systems depend, including pollination, water regulation, carbon sequestration, and soil fertility. However, a short-term, narrow view of their value can make commercial exploitation of these assets seem more lucrative than conserving them, especially for resource-constrained governments in low-income countries, leading to a gradual decline in natural capital stocks and the restorative capacity of ecosystems.

The economic cost of ecosystem degradation is staggering. Global losses of USD 2.7 trillion annually are projected by 2030 if key ecosystem services collapse (World Bank, 2021). In low-income countries, GDP could fall by 10%, with higher impacts expected in nature-dependent economies. The environmental cost of food production already exceeds its value, amounting to 170% of crop production value and 134% of livestock value (FAO, 2023). Land degradation alone costs emerging markets USD 6.3 trillion annually, with Africa losing USD 68 billion annually due to soil erosion and nutrient depletion (UNCCD, 2022). Meanwhile, agriculture consumes 70% of global freshwater, with the economic value of water for agriculture in emerging markets estimated at USD 500 billion annually (WWF, 2023).

Yet, restoration efforts remain underfinanced. Governments often lack the resources to conserve these public assets, and require larger pools of capital and technical expertise from the private sector. However, long payback periods of restoration activities, unclear land tenure, and limited capacity to aggregate smaller efforts into investable pipelines make natural capital assets unattractive to private investors. Farmers, fishers, and foresters, while often in support of conservation, do not have the capital to drive restoration efforts alone, especially when competing with their time allocation and livelihoods.

Concessional capital providers can play a pivotal role in creating investable pathways for ecosystem restoration and aligning stakeholder incentives towards a common conservation goal. They can help develop and scale financially viable conservation models, both at the project and fund level by:

- **Identifying and supporting a diverse portfolio of productive activities that generate cash flows through mechanisms like carbon credits, sustainable forest and marine commodities, and eco-tourism fees.** These services can be matched with relevant public and private buyers in long-term offtake contracts to make projects more attractive for commercial investment. Revenues from these activities can be used to cross-subsidize non-revenue generating restoration and conservation efforts that improve the overall health of ecosystems.
- **Supporting investment strategies that aggregate and structure restoration initiatives into larger, de-risked vehicles that meet the scale requirements of private investors and help diversify risk across geographies and business models**. They can prioritize strategies and vehicles that secure long-term access to natural assets (e.g., marine or forest conservation licenses) and bundle smaller restoration efforts under scalable, investable structures. This

includes supporting governance models that embed local communities and ensure equitable benefit-sharing, addressing a common shortfall in private sector–driven conservation efforts.

- **Integrating instruments such as parametric insurance to de-risk ecosystem restoration projects by providing rapid payouts in the event of climate-related shocks.** These tools reduce climate risk exposure for small producers in managing and operating conservation activities and enhance investor confidence.

The following case studies illustrate complementary approaches to scaling ecosystem restoration through blended finance. Blue Alliance illustrates how ecosystem restoration can become investable by developing revenue-generating models. It builds productive activities that create cash flows from conserving and restoring marine protected areas. The Livelihoods Funds emphasize how concessional investors can support aggregation strategies that bundle smaller restoration initiatives into scalable investment vehicles with inclusive governance structures. Additional examples supporting the large-scale restoration of natural capital assests include:

- **Mirova Natural Capital:** Mirova has developed a suite of nature-based investment strategies to enable public, institutional, and corporate investors to combine the potential for attractive returns and positive impacts by investing in projects that preserve, restore, and regenerate natural ecosystems. By positioning natural capital as an asset class, Mirova mobilizes private capital at scale to finance nature-based solutions (NbS).
- **Root Capital:** Root Capital deploys below-market, affordable loans to agricultural enterprises and farmers engaged in adaptation practices. These loans support investments in agroforestry, soil regeneration, and climate-resilient infrastructure at affordable rates for smallholder farmers. Most enterprises used Root Capital financing to extend loans for agricultural inputs and labor associated with organic farm management practices. In 2024, these loans helped over 1,000 producers apply more climate-resilient practices on over 2,500 hectares in Mexico and Central America.
- **Blue Alliance:** Blue Alliance's collaboration with Humanity Insured and AXA Climate has significantly bolstered marine conservation efforts through the implementation of parametric insurance. The predictability and speed of payouts reduce long-term financial risks and provide a stable foundation for budgeting and planning. For investors, this mechanism offer assurance that funds are in place to address unforeseen climate-related challenges, thereby enhancing the project's resilience and attractiveness.

CASE STUDY 3

BLUE ALLIANCE BLENDED FINANCE FACILITY

BLUE ALLIANCE MPAs

A replicable blended finance model for funding public good natural capital assets with high adaptation and mitigation value

Type: Blended finance facility

AUM: USD 65M (target)

Year Established: 2021

Status: Active

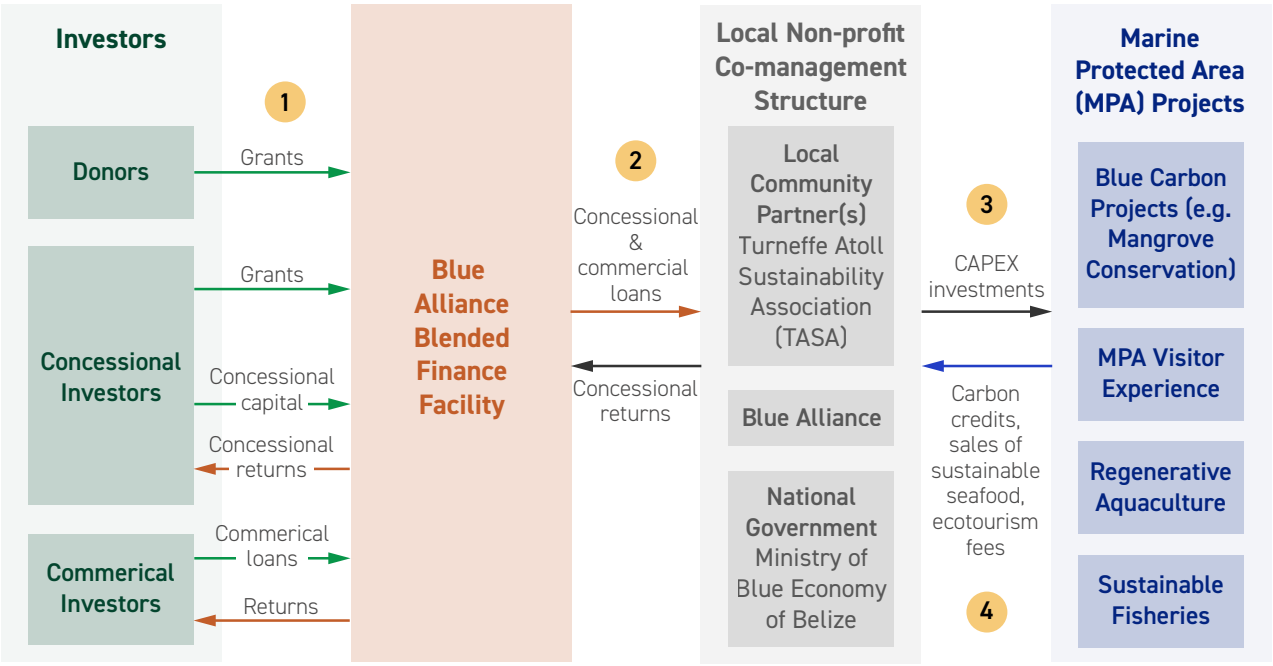
Geography: Belize, Indonesia, Philippines, and Tanzania

Main Investors: BNP Paribas, UBS Optimus Foundation, Global Fund for Coral Reefs, Global Environment Facility (GEF), United Nations Development Programme (UNDP)

Agrifood Sectors: Marine ecosystems, fisheries

Climate Use: Adaptation and mitigation

Description: Blue Alliance is pioneering a blended finance approach to marine ecosystem regeneration, aiming to make large Marine Protected Areas (MPAs) financially sustainable by developing a portfolio of reef-positive social enterprises. In partnership with national governments, Blue Alliance structures, aggregates, and co-manages bankable MPA projects that deliver climate, nature and socioeconomic benefits. By tackling the chronic underfunding of MPAs, the initiative enhances their operational capacity while supporting the growth of reef-positive businesses within the blue economy. This approach helps alleviate poverty and generate sustainable, long-term revenue streams to secure the future of marine conservation.



Note: This is an illustrative example based on the Turneffe Atoll MPA in Belize.

Investment Strategy

- **Fund Instruments and Ticket Size:** Grants (for early-stage social enterprises and MPAs' operational expenses), concessional and commercial debt (for social enteprises)
- **Assets:** MPA co-management organizations, social enterprises operating in community-based aquaculture, ecotourism, sustainable fisheries, and blue carbon projects

Financial and Climate Impact

- **Financial Return:** Concessional returns based on environmental, climate, and social outcomes
- **Main Impact Themes:** Biodiversity preservation, poverty alleviation, and climate resilience
- **Main impact KPIs[10]:**
  1. Coral reef ecosystems sustainably managed: 1.28M ha
  2. Carbon sequestration: estimated potential of <300K tCO_2e per year

Transaction Sample

- **Belize, Turneffe Atoll MPA:** A partnership with the Turneffe Atoll Sustainability Association to implement conservation efforts and develop revenue-generating activities across the reef ecosystem. The project supports endangered species, coastal resilience, carbon sequestration, and improved livelihoods for fishers. In 2024, ~40% of the MPA's annual operational budget was covered by revenues primarily from the eco-tourism social enterprises.

Illustration of Investment Play

Operating across 2 million hectares of large MPAs in four countries, Blue Alliance tackles systemic barriers hindering investment in large-scale marine restoration, including fragmented funding and the lack of clear revenue generation. Blue Alliance model achieves long-term ecosystem regeneration through:

1. Linking ecosystem regeneration to sustainable revenue generation: Blue Alliance develops, owns, and runs a portfolio of reef-positive social enterprises that generate long-term revenue linked to climate and ecosystem outcomes. Early capital is deployed for project capital expenditure, mitigating investor risk. Over time, revenue from blue carbon credits, sustainable seafood, and tourism fees repays investors and provides dividends to fund MPA operations, ensuring both ecosystem impact and financial sustainability.
2. Innovative public-private partnerships for MPA sustainability: Blue Alliance co-develops blended finance solutions and co-management agreements with MPAs' public and private stakeholders, NGOs, and local communities. These partnerships aim to secure the long-term financial sustainability of MPAs by funding essential conservation efforts.
3. Blended financial structure to bridge MPA financing gaps: Blue Alliance's model combines grants, impact-linked loans, and parametric climate insurance to support MPA management and affiliated enterprises. Concessional debt enables community-centered businesses to scale, while grants help

10 From inception till December 2023 (Blue Alliance Impact Report, 2023).

enterprises and MPAs become financially self-sufficient. Structured as a syndicated loan, the impact-linked facility allows pari passu investments with partners like BNP PARIBAS, with repayments tied to impact performance. Parametric insurance, provided by AXA Climate with the support of Humanity Insured, provides a safety net against climate-induced disasters and enhances the overall sustainability and attractiveness of the projects to investors.

Sources: ISF analysis based on publicly available sources (website, press release) and interview with Blue Alliance management

CASE STUDY 4

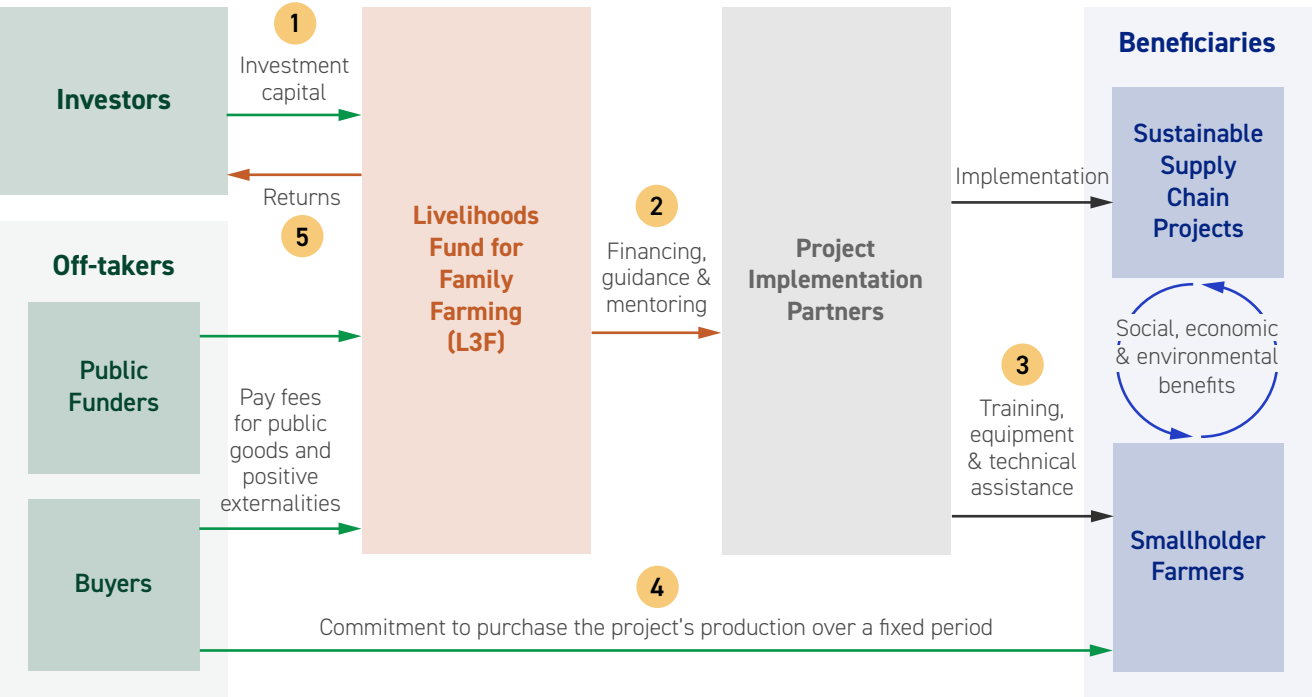
LIVELIHOODS FUNDS

LIVELIHOODS VENTURE

An impact investing model aligning corporate investors, local communities and nature

Type: Investment fund (direct)
AUM: EUR 150M (LCF3), EUR 30M (L3F)
Year Established: 2020 (LCF3), 2015 (L3F)
Status: Investing
Geography: Latin America, Asia, and sub-Saharan Africa
Main Investors: Danone, Schneider Electric, Crédit Agricole, Michelin, SAP, CDC, La Poste
Agrifood Sectors: Agroforestry, mangroves and coastal habitats
Climate Use: Mitigation and adaptation

Description: The Livelihoods Funds are a family of blended finance vehicles supported by a coalition of private companies. They aim to deliver climate and livelihood outcomes by financing large-scale ecosystem restoration and sustainable agriculture projects across developing countries. Livelihoods' investment model removes major barriers to agrifood finance, such as project complexity, aggregating smaller players, long timelines between investment and financial returns, and siloed approaches to agrifood challenges.



Investment Strategy

- **Fund Instruments and Ticket Size**: Result-based grants, carbon credits
- **Assets:** Project developers (e.g., NGOs, social enterprises) (LCF3), Smallholder farmers, cooperatives, and farmer organizations (L3F)

Financial and Climate Impact

- **Financial Return:** Positive
- **Main Impact Themes:** CO_2 sequestration, carbon offsets with high social value, sustainable supply chains, natural ecosystem restoration, improved rural livelihoods
- **Main impact KPIs[11]:**
  1. Carbon sequestration: 10M tCO_2
  2. Farms under sustainable land practices: 60K
  3. Indirect beneficiaries: >2M

Transaction Sample

- **Senegal:** A mangrove restoration project of over 10,000 ha supporting climate adaptation and mitigation by protecting coastal villages, restoring fish stocks, and reclaiming arable land for food production.
- **Kenya:** Implementation of climate-smart practices and agroforestry across 35,000 ha of farmland, enhancing yields, water retention, and carbon sequestration.

Illustration of Investment Play

Livelihoods Funds demonstrates how natural capital restoration—from mangroves to degraded farmland—can be embedded into investment models. The funds tackle key agrifood challenges at the farmer (low yields, poor market access, unsustainable practices) and ecosystem level (climate change, biodiversity loss), while engaging corporates through sourcing and decarbonization goals.

1. **LCFs (Livelihoods Carbon Funds 1–3)**: Outcome-based vehicles that pre-finance ecosystem restoration through future carbon credit revenues, delivering high social and environmental value to corporate buyers

2. **L3F (Livelihoods Fund for Family Farming)**: Supports sustainable sourcing through partnerships between corporates, local NGOs, and smallholders. Provides upfront financing to project implementers that deploy large-scale sustainable supply chain projects with rural producers (farmers, fishers, and landowners), with returns coming from corporate and public off-takers paying for improved traceable production and the positive externalities.

Livelihoods' model shows how corporate and concessional capital can fund public good outcomes jointly. It offers a replicable approach for large-scale restoration projects by:

1. Aligning ecosystem restoration with corporate needs to incentivize restoration projects, whether

11 2025 impact metrics for the Livelihoods Carbon Fund 1 (launched in 2011) and the Livelihoods Fund for Family Farming (launched in 2015).

through supply chain resilience or high-quality carbon offsetting.

2. Using carbon credit pre-purchase agreements (LCF funds) and long-term sourcing commitments (L3F fund) to secure upfront funding, reduce project risks, and ensure predictable cash flows tied to environmental outcomes (e.g., CO_2 sequestration, hectares of land restored).
3. Aggregating smallholders around investable projects to make large-scale restoration investable and ensure long-term adoption of agroecological practices by smallholder farmers.

Sources: Livelihoods website

5. INVESTMENT PLAY 3: STRENGTHEN CLIMATE-SMART INFRASTRUCTURE SHARED ACROSS VALUE CHAINS

Agrifood systems rely on critical market infrastructure and utilities that enhance the resilience of small producers while reducing emissions across the value chain. A lack of rural infrastructure—access to roads, energy, and cold chain storage—has significantly impacted agricultural productivity and food losses. For example, in sub-Saharan Africa, post-harvest losses account for up to 50% of fruits and vegetables and 10–20% of grains and pulses, with 14% of global food production lost before retail (FAO, 2019).

Given the highly dispersed nature and razor-thin margins of smallholder production, small- and mid-scale infrastructure that services last-mile producers is critical to building value chain resilience. This includes mini- and micro-grids on farms that power on-farm infrastructure, post-production facilities, climate-smart storage, waste processing, and regional weather forecasting and advisory infrastructure. In agroforestry, decentralized biomass processing units and landscape-level carbon and biodiversity monitoring infrastructure can help access payment-for-ecosystem (PES) services markets. These solutions help agrifood communities improve productivity at scale and adapt to climate shocks and mitigate emissions by reducing food waste, optimizing resource use, and replacing fossil fuel-dependent processes.

However, decentralized rural infrastructure is often too large for grant funding alone, and too small and risky for large-scale infrastructure funds. Private investors struggle to justify investments in systemic infrastructure due to the fragmentation in agrifood systems, a lack of scalable revenue models, and a mismatch between short-term return expectations and long-term benefits. Public investors may lack the flexibility to experiment with innovative financing structures or partner effectively with private actors.

Concessional investors can address these challenges by providing first-loss capital, technical assistance, and proof-of-concept funding to demonstrate viability. Building climate-smart shared infrastructure often requires concessional debt or guarantees to initiate projects and de-risk senior investors. These investments can be supported by multi-donor climate financing facilities with large average ticket sizes, such as the World Bank's Climate Investment Funds (CIF). Private investment funds like AgDevCo and the Catalyst Climate Resilience Fund (Catalyst Fund), which raise concessional capital bilaterally through concessional equity tranches, are well-positioned to directly invest in localized commercial solutions. Local commercial banks with project finance expertise can be engaged at later stages, once projects demonstrate revenue certainty and stable cash flows. Best practices to strengthen climate-smart infrastructure shared across value chains include:

- **Target infrastructure gaps where shared climate-smart utilities can unlock systemic value, justifying sub-commercial returns.** Identify high-impact infrastructure needs, such as mini-grids that can power processing units shared by a cluster of villages, or passively cooled storage solutions at marketplaces where perishables are traded, which enable climate adaptation across value chains but are underinvested. Concessional investors are also well-positioned to match solutions with recipients and partners. Depending on the context, this could include funds or project finance specialists with experience in shared infrastructure solutions, organizations that

scale deployment across regions in collaboration with local authorities, or direct infrastructure projects that absorb large-ticket investments but require concessional capital to lower their cost of capital and reduce risk to deliver affordable services.

- **Foster blended delivery models through multi-stakeholder partnerships to ensure scalability and adoption**. Support partnerships between governments, NGOs, private investors, and technology providers to embed infrastructure into local systems, align incentives, and ensure that services reach last-mile users. For instance, a concessional fund could partner with a technology startup to develop an open-access soil carbon monitoring platform, then work with governments to integrate it into national agricultural extension programs.

The case studies below highlight how concessional capital can de-risk and accelerate investment in shared infrastructure solutions that enhance resilience across agrifood systems. CIF demonstrates how bilateral donors can pool concessional capital to finance climate-smart agricultural infrastructure by working through multilateral development banks, deploying catalytic, de-risking capital that aligns with country priorities and crowds in private sector participation at scale. The Catalyst Fund illustrates how donors and concessional investors' support can be instrumental in launching innovative investment vehicles for climate resilience, providing both early-stage design grants, and junior equity that absorbs greater risk and enables prioritized returns for commercial investors. Additional examples demonstrating how climate-smart infrastructure can be strengthened shared across value chains include:

- **AgDevCo:** AgDevCo invests equity and long-term debt (USD 2-10m) in climate-resilient infrastructure and logistics to support inclusive agrifood systems in sub-Saharan Africa. Its investments have supported the development of large-scale solutions such as shared cold storage, packhouses, and irrigation systems that improve market access and reduce climate vulnerability for smallholder farmers. AgDevCo's blended finance approach strengthens commercially viable solutions that deliver systemic adaptation outcomes.

CASE STUDY 5

CLIMATE INVESTMENT FUNDS (CIF)

ADMINISTERED BY THE WORLD BANK

Unlocking climate-smart infrastructure through large-scale, country-led programs

Type: Multilateral concessional fund or incentive program
AUM: >USD 12B
Year Established: 2008
Status: Active
Geography: Latin America, Asia, and Africa
Main Investors: AfDB, ADB, EBRD, IDB, World Bank (IBRD/IDA), IFC
Agrifood Sectors: Agriculture, water, and productive energy
Climate Use: Adaptation and mitigation

Description: Climate Investment Funds (CIF) is a pioneering multilateral climate fund, supporting low- and middle-income countries adapt to and mitigate climate change through climate-smart infrastructure. Established in 2008 and hosted by the World Bank, CIF works through six major multilateral development banks (MDBs) to channel donor-backed concessional capital into large-scale climate solutions. By de-risking investments, CIF enables the development of innovative climate infrastructures and the scaling of proven approaches. It has supported over 360 projects across over 80 countries, catalyzing private sector participation and mobilizing capital from partners who might not otherwise invest independently.

Investment Strategy

- **Fund Instruments and Ticket Size:** Long-term concessional loans, guarantees, and grants channeled through MDBs
- **Assets:** Funds flow through country-owned investment plans, enabling targeted investments in climate-smart infrastructures. Investment priorities include:
    1. Irrigation and water storage infrastructure
    2. Climate-smart rural roads
    3. Decentralized solar energy systems
    4. Early warning and risk management systems

Financial and Climate Impact

- **Financial Return:** Concessional; grant-based program focused on leveraging private capital and public co-financing
- **Main Impact Themes:** Reducing climate vulnerability and increasing the adaptive capacity of agriculture, water and energy

- **Main Impact KPIs[12]:**
  1. Co-financing ratio: 1:8.7 (expected co-financing for CIF-approved funding)
  2. GHG emissions: 40m tCO_2e reduced or avoided annually
  3. Land under sustainable management practices: 37m ha

Transaction Sample

- **Mozambique:** A project to strengthen resilience in the flood-prone Gaza province by introducing climate-smart seeds, improving rural roads, building local storage facilities, and expanding market access.

Illustration of Investment Play

CIF offers a compelling example of how large-scale concessional capital can enable transformative infrastructure investments in climate-vulnerable agricultural regions by pooling bilateral resources to invest in shared climate-smart infrastructure and services across agrifood value chains. Through its Pilot Program for Climate Resilience (PPCR) and Clean Technology Fund (CTF), CIF provides long-term, flexible concessional finance to design, fund, and implement critical infrastructure that supports climate-smart agriculture, including irrigation schemes, flood and water management systems, early warning mechanisms, and decentralized renewable energy solutions. These investments are often integrated within broader agricultural and rural development programs.

1. **Country-led planning to identify priority infrastructure needs:** CIF's programming starts with national governments, supporting them to define climate resilience priorities and build investable infrastructure pipelines grounded in country-owned strategies.
2. **Partnering with MDBs to unlock co-financing and technical expertise:** CIF channels concessional finance through MDBs to crowd in co-investment from public and private actors. Concessionality reduces risk and supports implementing infrastructure solutions with long payback periods or public good characteristics. MDBs bring in technical expertise and help scale solutions through broader development programs. CIF's flexible instruments also enable innovative financing and delivery models to be tested.
3. **Technical assistance (TA) at system level:** CIF provides tailored TA throughout the investment cycle, including capacity building for ministries and implementing agencies, community engagement, stakeholder coordination, and support for regulatory or institutional reforms. It ensures the integration of climate-smart infrastructure into broader food systems and climate adaptation goals.

Sources: ISF analysis based on CIF's publicly available sources (website, theory of change and 2023 impact report)

12 GHG emissions based on 85 of 171 clean technology and energy access projects; land management based on 38 of 47 sustainable forest and climate resilience projects.

CASE STUDY 6

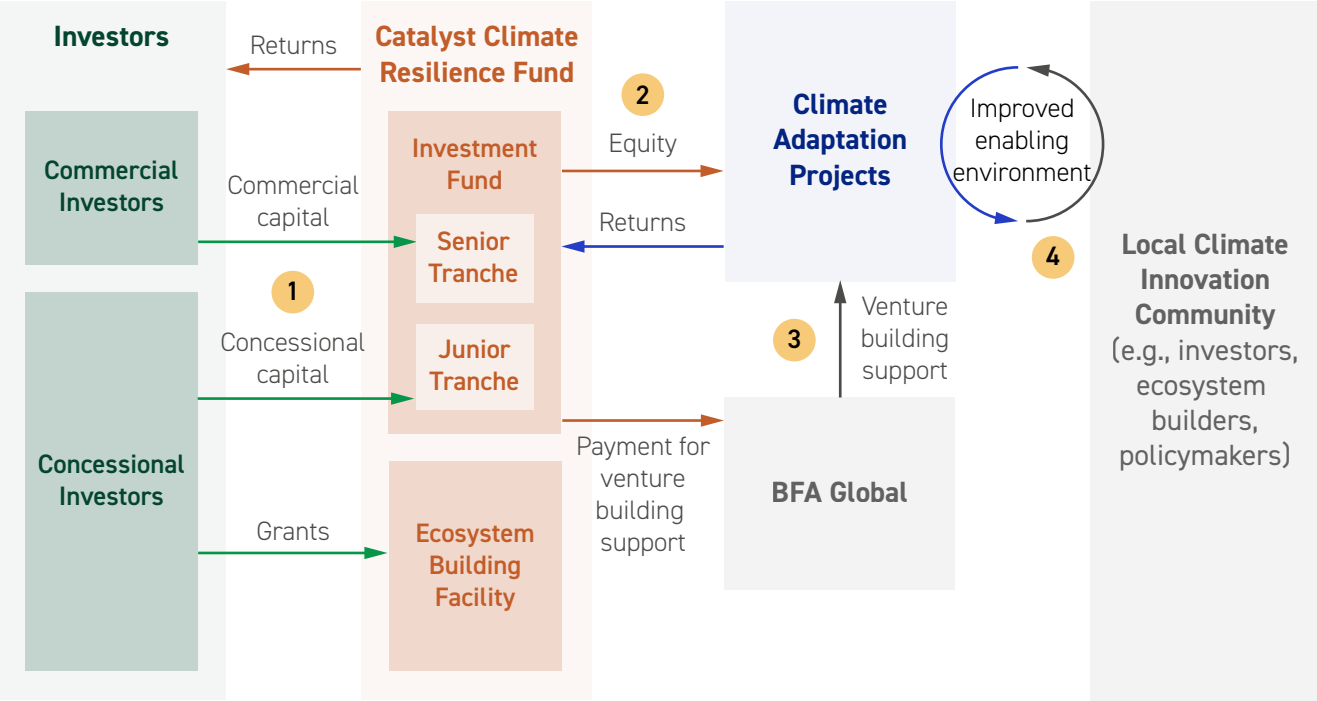
CATALYST FUND RESILIENCE I

CATALYST IMPACT PARTNERS

Backing early-stage climate-smart services to drive resilience in agrifood systems

Type: Investment fund (direct equity)
AUM: USD 40M (target)
Year Established: 2022
Status: Investing and fundraising (fund lifespan: 10 years, with flexibility to extend to 21 years)
Geography: Africa
Main Investors: DFIs, private Foundations, HNWIs, family offices
Agrifood Sectors: Agrifood systems, fisheries, land restoration
Climate Use: Adaptation

Description: Catalyst Fund is an impact fund and venture builder focused on supporting early-stage climate tech startups that build climate resilience in Africa. Incubated initially by CPI's Global Innovation Lab for Climate Finance (the Lab), the fund provides pre-seed capital and tailored venture-building support to startups offering tech-enabled solutions to help vulnerable communities adapt to climate change. The fund aims to build a robust pool of scalable adaptation solutions that are accessible, appropriate, and affordable for vulnerable populations.



Investment Strategy

- **Fund Instruments and Ticket Size:** Post-money SAFE agreements starting at USD 200K with reserves for follow-on funding up to USD 2M. All initial investments receive dedicated venture-building support through operational partner BFA Global.

- **Assets:** Early-stage agri-tech companies and tech-enabled SMEs

Financial and Climate Impact

- **Financial Return:** Target 20% net IRR
- **Main Impact Themes:** Building the climate resilience of vulnerable communities by scaling pre-seed tech startups
- **Main Impact KPIs[13]:**
  1. Individuals with improved climate resilience: 450K
  2. Land sustainably managed quarterly: 300K ha
  3. Carbon emissions mitigated quarterly: 46K CO_2e
  4. Water saved quarterly: 4.6M liters

Transaction Sample

- **Kenya:** Keep It Cool provides solar-powered cold chain solutions, reducing food waste and enhancing market access and resilience for farmers and fishers vulnerable to food insecurity.
- **Tanzania:** Mazaohub[14], a data-driven climate-tech farming software, offers hyperlocal soil analytics, daily agronomy guides, and farm insight solutions for farmers to adapt to climate change.

Illustration of Investment Play

The Catalyst Fund is an investment vehicle that enables early-stage, innovative solutions that improve the climate resilience of producers, value chain actors, and local communities to scale. The fund invests across a list of eligible climate adaptation solutions in three core verticals

1. **Fintech for climate resilience:** Startups developing fintech or data innovations that can help climate-vulnerable groups manage and recover more effectively from climate risks. The three key product verticals are insurance, carbon finance, and climate data.
2. **Sustainable livelihoods:** Startups developing solutions to decrease climate-related hazards to individual and community sources of income or subsistence. The four key product verticals are agri-tech, food systems, fishery management, and land restoration.
3. **Climate-smart essential services:** Startups responding to climate-related stressors on essential services like energy, water, healthcare, and cooling. Increasing the climate resilience of essential services is critical to supporting households and businesses adapt to and manage the effects of climate

13 Catalyst Fund 2023 Impact Report
14 Mazao Hub has been supported by CLIC's Agrifood Investment Connector

change. The four key product verticals are water management, cooling and cold storage, healthcare, and waste management.

The fund uses a blended structure with senior equity for commercial investors and junior equity for concessional investors. The junior layer absorbs more risk, enabling prioritized returns for commercial investors. This aims to attract private capital and demonstrate that adaptation and resilience investments can deliver viable returns.

Sources: ISF analysis based on publicly available sources (Catalyst website, CPI's Global Innovation Lab website)

6. INVESTMENT PLAY 4: EXPAND TECHNICAL ASSISTANCE FOR CLIMATE INNOVATION

Promoting climate adaptation solutions and implementing sustainable practices across agriculture, agroforestry, and marine ecosystems is a long-term process that cannot be addressed through funding alone. Producers often face significant barriers to adopting climate-smart practices, including high upfront costs, limited financial incentives, lack of awareness, and behavioral resistance. The benefits of these practices are often long-term and uncertain, making their implementation challenging without additional support. Even when producers adapt sustainable practices, they may struggle to secure reliable buyers or access premium markets, undermining the long-term viability of their efforts.

Agribusinesses and agri-SMEs are key to scaling climate adaptation solutions, but require substantial support to prototype, test, and refine their solutions. They also need assistance to measure impact and drive adoption. Scaling these innovations demands patient capital, targeted technical assistance, and iterative learning. Investors consistently view technical assistance (TA) as a key lever to de-risk investments, strengthen business models, and improve the resilience of agri-businesses (ISF, 2025). Our study found that enhancing investees through TA was preferred over deploying capital with higher risk tolerance. Funds providing TA achieve 44% higher SME revenue growth and higher average IRRs, underscoring the financial value of pairing capital with capacity building (Shell Foundation, 2019). Agriculture is the second most frequent sector for TA use, with 27% of transactions including a TA component (Convergence, 2023).

Many fund managers lack the expertise to develop climate risk assessment frameworks, impact KPIs, or guide their portfolio companies on adopting climate-smart practices. TA budgets are limited and are often prioritized for interventions with immediate impact on business operations and metrics. Concessional capital providers are well-positioned to expand TA provision at both the business and fund levels to support the transition of agrifood systems.

Pure grant funding is required to deploy TA at the fund and business level. Philanthropies and donors generally fund capacity building, the development of climate-aligned monitoring, evaluation, and learning (MEL) frameworks, and the design of adaptation strategies, enhancing the investability and resilience of climate-aligned agribusinesses. Given their ties with domestic innovation ecosystems and understanding of the unique capacity challenges of both domestic entrepreneurs and producers, national and local philanthropies are particularly well placed to provide grant funding for TA. Donors can consider the following strategies:

- **Expand TA to fund managers.** Incentivize the implementation of climate risk assessments, well-documented impact theses and metrics, and adaptation-focused investment strategies. Donors can support the development of science-based adaptation theses that align financing with measurable climate resilience outcomes.
- **Expand TA at the business level to help climate solution providers refine and scale their innovations.** This includes supporting pilots, testing business models, and validating adaptation technologies to bridge the gap between R&D and commercial deployment. Additionally, TA at

the business level remains key to strengthening agribusinesses' metrics and ensuring sufficient revenue and resilience to implement climate adaptation practices.

- **Support end-to-end market development for climate-aligned commodities, from input to offtake.** This can facilitate buyer engagement and support climate-labeled certification programs. These efforts can help secure demand for sustainable production and create economic incentives for adaptation across the value chain.

The following case studies illustrate how concessional investors can play a catalytic role by providing early-stage support to fund design, pairing TA with affordable capital to help scale climate-smart solutions, and building robust TA and market development mechanisms to strengthen agribusinesses' investability. Additional examples demonstrating the expansion of technical assistance for climate innovation include:

- **The Global Innovation Lab for Climate Finance (Lab):** The Lab's technical assistance program supports the design and pilot phases of early-stage, high-impact financial instruments. Several Lab instruments target climate adaptation in agriculture and land use, helping innovators move to proof of concept.
- **Catalytic Climate Finance Facility (CCFF):** Building on a partnership between CPI and Convergence, CCFF is an accelerator for market-ready innovative climate vehicles in developing economies. It provides startup capital through milestone-based grants, investor matchmaking to help initiatives scale, and tailored technical assistance support on strategy, fundraising, and operations.

CASE STUDY 7

COMMERCIAL AGRICULTURE FOR SMALLHOLDERS AND AGRIBUSINESSES (CASA)

FCDO, TECHNOSERVE, NIRAS

Scaling investment in smallholder agriculture through a systemic, multi-component approach

Type: Technical assistance program
Budget: GBP 46M
Year Established: 2019
Status: Active
Geography: Africa and Asia
Main Investors: UK Foriegn, Commonwealth, and Development Office (FCDO)
Agrifood Sectors: Crop and livestock systems
Climate Use: Adaptation

Description: Commercial Agriculture for Smallholders and Agribusiness (CASA) is an initiative funded by UK International Development (FCDO) to unlock inclusive, climate-smart investment in agrifood systems across sub-Saharan Africa and South Asia. The program combines five complementary components to improve the commercial viability and climate resilience of agricultural SMEs and smallholder value chains.

Investment Strategy

- **Instruments:** Grants, technical Assistance (TA)
- **Beneficiaries:** Agribusinesses with inclusive sourcing models, farmer services and tech-enabled agricultural platforms

Financial and Climate Impact

- **Main Impact Themes:** Smallholder farmer livelihoods, agrifood systems climate resilience
- **Main Impact KPIs:**
  1. Number of farmers supported by CASA's MSD and TAF components from inception: >500K
  2. Cumulative total investment leveraged by MSD and TAF components from inception: ~GBP 23M

Transaction Sample

- **India:** CASA's TA supported the co-design of a pilot finance scheme that enabled farmers to access bundled inputs on credit through DeHaat's digital platform and local agent network.

- **Nepal:** CASA's MSD support helped strengthen market linkages that enabled a farmer-led multipurpose cooperative to scale its aggregation role and transition from a producer group to an SME.

Illustration of Investment Play

The five complementary components of the CASA program are:

1. **Market systems development (MSD):** CASA supports small, pre-investment agribusinesses in Ethiopia, Malawi, Nepal, and Rwanda across value chains like poultry, aquaculture, dairy, soy, and vegetables, focusing on domestic food security. Its work addresses systemic bottlenecks, improves supply chain efficiency, and promotes commercially viable models integrating smallholders. Its support aims to improve business models and bankability for local financial institutions.
2. **Technical Assistance Facility (TAF):** CASA works with established, export-oriented agribusinesses in the portfolios of major impact investors and DFIs (e.g., BII, Norfund, FMO), providing targeted TA to improve businesses' commercial performance, strengthen climate-smart supply chains, and enhance ESG and impact frameworks. From a climate lens, the TAF supports the integration of adaptation into business strategies and enables these firms to serve as scalable models.
3. **Learning and Knowledge Sharing:** CASA synthesizes the program's evidence and insights to facilitate the scaling and replication its approach to climate-smart agri-finance.
4. **Partnerhsip with Aceli Africa:** A GBP 2.3M project (January 2025 to March 2026) supporting Aceli's activities in Kenya and Rwanda. Aceli incentivizes financial institutions to lend to agribusinesses through risk-sharing mechanisms and TA.
5. **Development Capital (DevCap):** A new GBP 10M capital investment component launching in 2025, which aims to test mechanisms to catalyze private investment in agri-SMEs and SHFs.

CASA demonstrates how TA can de-risk investments, strengthen inclusive business models, and contribute to market-building for agrifood systems transformation. Key enabling factors include:

- Dual focus on enterprise- and system-level transformation: CASA delivers tailored business development services to agri-SMEs while supporting pre-investment and market system interventions at the value chain level.
- Localization through country-level engagement: By working directly with FCDO's posts, CASA facilitates context-specific TA, builds investor trust, and strengthens relationships with local stakeholders. In addition, investor engagement ensures TA is relevant, targeted, and demand driven.
- Alignment with national plans through local climate expertise: CASA has enhanced its climate-smart focus through project-level climate assessments led by in-country experts. Climate outcomes are embedded across TA and MSD interventions using tailored tools. Activities are aligned with national climate frameworks such as NDCs, NAPs, and agri-climate policies to ensure systemwide coherence.
- Donor commitment to demonstration and replication: CASA invests in documenting learnings and impact pathways to promote replication by donors, governments, and investors, enabling scaling of proven practices. Its adaptive learning agenda is designed to support replication at scale.

Sources: CASA website, TAF's report, and interview with FCDO

CASE STUDY 8

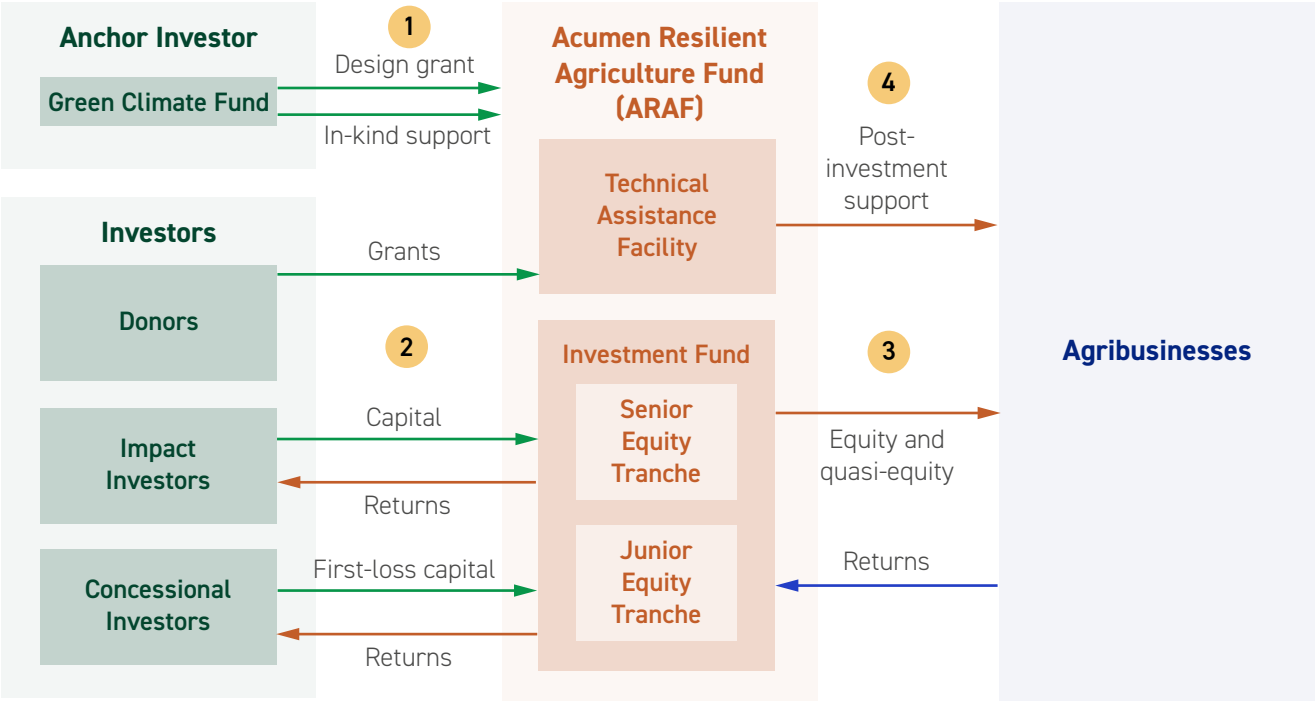
ACUMEN RESILIENT AGRICULTURE FUND

ACUMEN

How an anchor investor can be instrumental in combining capital with climate expertise and technical assistance to reach outsized impact

Type: Investment fund (direct equity)
AUM: USD 58M
Year Established: 2019
Status: Investing (closed-ended, 12 years)
Geography: Ghana, Kenya, Nigeria, Tanzania and Uganda
Main Investors: GCF, FMO, the Soros Economic Development Fund, PROPARCO, CIFF, IKEA Foundation
Agrifood Sectors: Crop and livestock systems
Climate Use: Adaptation

Description: ARAF invests in early-stage businesses that are pivotal to overcoming the barriers smallholder farmers face. The fund works with companies that empower farmers to access critical information, affordable financing, modern inputs, and formal markets. ARAF's comprehensive approach involves capital investment, strategic guidance, governance, and technical assistance (TA) to ensure sustainable and impactful investments.



Investment Strategy

- **Fund Instruments and Ticket Size:** Equity and quasi-equity (USD 2.5M average ticket size)
- **Assets:** Agribusinesses operating in smallholder (SHF) value chains

Financial and Climate Impact

- **Financial Return:** Single-digit positive returns
- **Main Impact Themes:** Improving SHFs' resilience to climate change to ensure long-term sustainable increases in agriculture productivity and incomes
- **Main Impact KPIs[15]:**
  1. Farmers impacted: 1.1M
  2. Increase in farmers' yields: 72%
  3. Climate resilient farmers: 42%

Transaction Sample

- **Kenya:** Projects to install solar-powered irrigation pumps to boost yields, reduce drought vulnerability, and enable year-round cultivation for farmers, and promote vertically integrated tilapia farming, which improves food security and reduces pressure on wild stocks.

Illustration of Investment Play

The Green Climate Fund (GCF), ARAF's anchor investor, was instrumental in co-designing the fund's impact approach, TA strategy, and monitoring, evaluation, and learning (MEL) framework, among other experts. In addition to providing a USD 25M first-loss equity tranche, GCF's climate expertise helped ARAF's management team better integrate climate adaptation into the fund's investment thesis. This collaboration also led to the development of innovative impact metrics, including a comprehensive MEL framework to assess climate adaptation outcomes, adopted by other stakeholders in the market. Furthermore, GCF supported ARAF building in-house climate expertise by funding the appointment of a dedicated internal climate expert.

ARAF's investment capital is complemented by a USD 6M Technical Assistance Facility (TAF) that de-risks investments and enhances impact. The TAF's four main support categories include climate adaptation and gender initiatives, business development services, ESG and audit initiatives, and impact measurement support. These categories cater to the diverse needs of investee companies, smallholder farmers, and the broader ecosystem. To further enhance the fund's impact, GCF also provided USD 2.5M to support part of the TAF's climate adaptation and gender initiatives category. This category equips agribusinesses with the tools and knowledge to manage climate risks, including selecting climate-appropriate crops, adopting adaptation techniques, and diversifying income sources.

ARAF's partnership with GCF went beyond the typical concessional capital arrangement. GCF provided valuable expertise that created a broader and longer-lasting impact than capital alone could achieve. This

15 From fund inception to 2023.

collaboration not only contributed to ARAF's success but also developed sector-wide tools and frameworks that paved the way for future climate adaptation funds.

Sources: ISF analysis based on publicly available sources (Acumen 2023 Impact report, ARAF Annual Performance Report CY2023, ARAF 2018 funding proposal for the Green Climate Fund)

7. INVESTMENT PLAY 5: INCUBATE AND SCALE LOCAL FINANCIAL INTERMEDIARIES

Agrifood finance flows are concentrated in a few geographies and value chains, failing to reach the most climate vulnerable segments. Many critical regions, sectors, and types of actors remain underfunded, limiting the impact of climate adaptation and mitigation efforts. A significant portion of agrifood systems' value is captured by downstream actors, which are often large corporations, while the highest risks are borne upstream by underfinanced farmers and agri-SMEs.

Smallholder farmers and agri-SMEs fall into the missing middle: too large for microfinance, too small or risky for commercial lending. They face persistent barriers that restrict their access to capital, such as a lack of financial records, limited collateral, high transaction costs, and perceived risks. For instance, there is an approximately USD 106 billion supply-and-demand gap in agri-SME finance in sub-Saharan Africa and Southeast Asia (ISF Advisors, 2022). These agribusinesses are pivotal in delivering resilience-enhancing products and services to farmers and retaining economic value in rural economies. Unlocking capital for this segment is critical to enabling the actual climate transition in agrifood systems.

Investments in emerging market agrifood systems often present a risk-return imbalance, deterring private sector participation. High perceived and actual risks, coupled with modest returns, lead investors to favor more economically developed sectors and regions. Additionally, high transaction costs and small investment sizes associated with asset classes, such as agri-SMEs, further discourage private capital. Implementing intermediation strategies can expand capital access for underserved segments, particularly in climate-vulnerable geographies. Key actions for concessional capital providers can include:

- **Incubate, support, and scale financial intermediaries operating in overlooked geographies and agrifood segments, to maximize leverage and build systemic capacity.** By anchoring a range of financial intermediaries—locally embedded funds, funds-of-funds, digital lenders, MFIs—concessional investors can build a stronger, demand-driven financing ecosystem that understands local needs and is better equipped to reach underserved clients. This approach also helps financial actors develop their risk appetite and knowledge about new asset classes and enables operational models to reach previously overlooked clients.
- **Prioritize capital deployment in regions with the highest need, particularly those identified as climate vulnerable and underfinanced.** Tools such as the ND-GAIN Index can help identify geographies where concessional capital can fill the largest adaptation finance gaps.
- **Support and strengthen risk-sharing instruments to reduce perceived risk and attract private investment**. This includes first-loss tranches, fund-level guarantees, and co-funding facilities that provide credit enhancements to local lenders. It also involves promoting the integration of insurance mechanisms, such as crop or weather index insurance, into lending models to shield borrowers from climate-related shocks and improve their creditworthiness.
- **Ensure strong local presence and contextual expertise**. Prioritize intermediaries with local teams, proven track records in target regions, and a thorough understanding of climate hazards and investment risks. Local knowledge enhances risk assessment, pipeline development,

and alignment with climate adaptation needs, increasing the likelihood of successful investment outcomes.

The following case study demonstrates how concessional investors can anchor catalytic fund of fund models, which unlock agri-SME financing by supporting investment funds with subordinated capital and targeted technical assistance. Additioanl examples demonstrating the incubation and scaling of local financial intermediaries include:

- **Aceli Africa:** Aceli is a market-building initiative that strengthens agri-SME lending ecosystems in East Africa by offering incentives such as first-loss guarantees to local financial institutions. The program is tailored to promote inclusive and climate-aligned lending by integrating climate and gender metrics into its incentive framework. Aceli also provides technical assistance to improve lenders' capacity to underwrite and manage loans.
- **IDH Farmfit Fund:** Farmfit is a blended finance investment fund that de-risks investments in rural agriculture by supporting microfinance institutions (MFIs) that lend to smallholders and agri-SMEs. The fund enables capital to reach underserved markets through intermediation strategies that leverage local financial institutions. Farmfit also draws on IDH's technical assistance expertise to improve the design and viability of inclusive business models aligned with climate adaptation and income improvement for smallholders.
- **Agri3 Fund:** Agri3 is a blended finance vehicle that mobilizes capital for high-impact, underfunded projects that protect forests, promote sustainable agriculture, and support rural livelihoods in emerging economies. Backed by public concessional capital, including a first-loss tranche from Netherlands' Ministry of Foreign Affairs, and supported by partners like Rabobank, UNEP and FMO, Agri3 provides credit guarantees to de-risk long-term loans issued by commercial banks and other financial institutions. A technical assistance facility managed by IDH further de-risk projects and ensure alignment with environmental and social goals.

CASE STUDY 9

FINANCING FOR AGRI-SMES IN AFRICA (FASA) FUND

INVESTISSEURS & PARTENAIRES

Providing catalytic capital and technical assistance to investment funds which support agribusinesses across the value chain in Africa

Type: Investment fund (multi-donor fund of funds)

AUM: USD 80M current (USD 200M target)

Year Established: 2025

Status: Investing

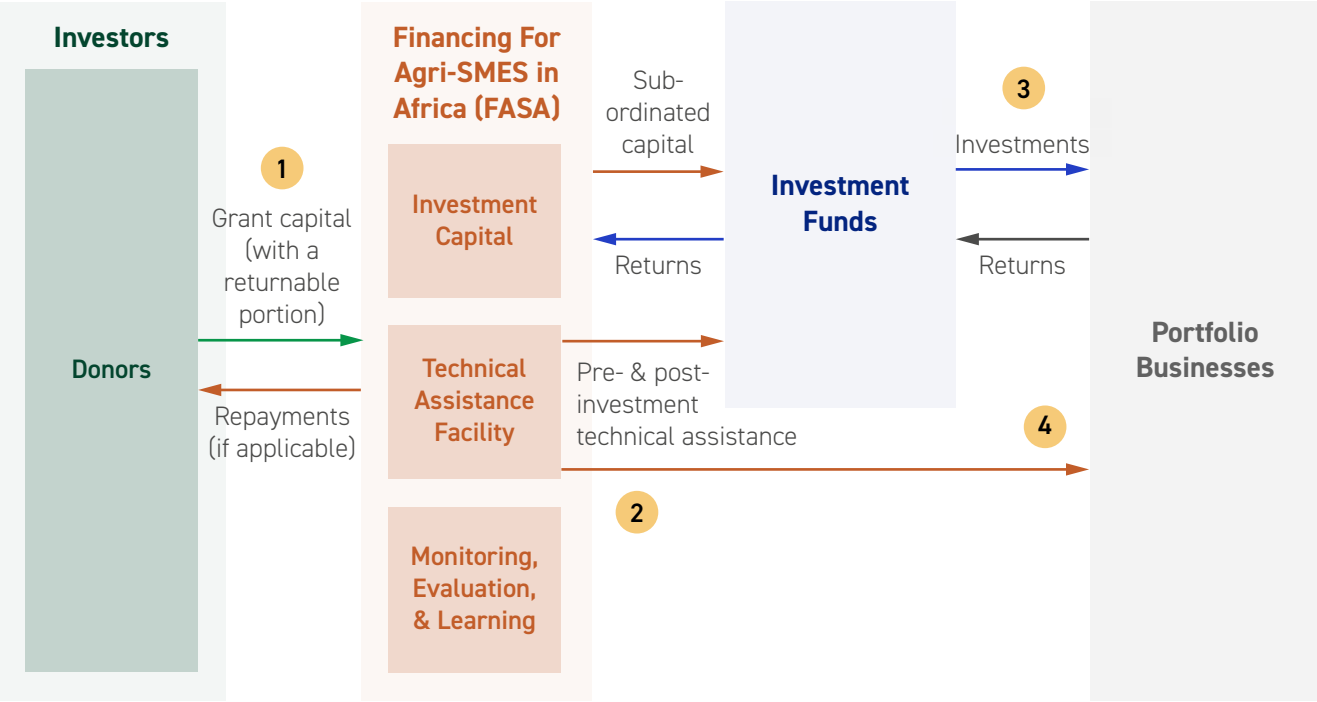
Geography: Africa

Main Investors: Norway Agency for Development Cooperation (NORAD), USAID, FCDO

Agrifood Sectors: Crop and livestock systems, forestry, fisheries, and marine products

Climate Use: Primarily adaptation

Description: The FASA fund is a multi-donor, catalytic fund of fund designed to unlock capital for African agri-SMEs and strengthen the broader investment ecosystem. Managed by Investisseurs & Partenaires (I&P), with CGIAR as its agriculture and climate partner, FASA invests in both emerging and established SME fund teams, including those using smaller ticket sizes, local currency exposure, or first-time teams, and provides technical assistance (TA) to fund managers and their agri-SME portfolios. It operates along three interconnected pathways to bridge the financing gap for agri-SMEs: mobilizing catalytic capital, enhancing investment fund managers' capacity, and fostering a supportive ecosystem.



Investment Strategy:

- **Fund Instruments and Ticket Size:** Patient, catalytic capital (USD 2–10M)—primarily through junior equity, with flexibility for preferred shares, mezzanine, or junior debt—and technical assistance
- **Asset classes:** Primarily agri-SME-focused funds in Africa, deploying initial investments of USD 15K-5M (excluding follow-ons), including early-stage, growth-stage, VC and debt funds, with flexibility to invest in holdings or solutions mobilizing capital for agri-SMEs

Financial and Climate Impact

- **Financial Returns:** Positive
- **Main Impact Themes:** Food security, nutrition, livelihoods, and climate-smart agricultural value chains. Gender and climate are cross-cutting themes with support provided to both fund managers and portfolio agri-SMEs.
- **Main impact targets[16]:**
    1. Capital mobilization ratio: 3:1
    2. Share of investment funds receiving climate TA: 100%
    3. Farmers reached: 230K

Transaction Sample: Ongoing screening and due diligence, with transactions expected to close in the second half of 2025.

Illustration of Investment Play

Intermediation strategies such as fund of funds are highly effective for concessional investors aiming to reach large-scale impact and capital mobilization. Through intermediation strategies, concessional investors can catalyze multiple layers of impact, as illustrated by the FASA Fund:

1. De-risking investment funds to unlock agri-SME finance: FASA acts as a catalytic LP in partner funds, deploying subordinated capital into investment funds financing African agri-SMEs, ultimately enhancing their ability to mobilize funding into an overlooked segment.
2. Delivering capacity building across the ecosystem: TA is delivered by I&P, CGIAR, and third-party providers, supporting fund managers with operational expenditure, training, tools and systems improvement, and their portfolio agri-SMEs with business development, climate-smart agriculture, and gender and social inclusion. TA is tailored on a case-by-case basis and deployed both pre- and post-investment. FASA ensures all investee fund managers integrate climate risk strategies and gender-sensitive practices into their models.
3. Creating a community of practice for agri-SME investment: FASA fosters a community of practice for agri-SME investment, enabling donors and fund managers to share knowledge, collaborate, and adopt best practices, accelerating climate adaptation and resilience for African agri-SMEs.

By combining a catalytic and diversified investment approach with technical assistance, FASA aims to support various profiles of funds deploying capital into African agri-SMEs. Its portfolio balances different risk-return profiles and asset classes, including equity, debt, and quasi-equity funds, ensuring financial

16 Main impact targets by year 5 at FASA level. Full list includes # of investment funds for which data related to the learning agenda is collected; % of agri-SMEs contributing to food security and nutrition; # of jobs created or maintained; and % of agri-SMEs contributing to climate-smart value chains.

sustainability. The fund actively supports both first-time and established investment teams, enabling the emergence of innovative investment strategies and local funding solutions. Ultimately, FASA enables the funding of a wide range of agri-SMEs across Africa's value chains.

Sources: FASA's website and an interview with I&P

8. A FRAMEWORK FOR INVESTOR ACTION

Effectively deploying concessional capital to support the climate resilience of agrifood systems requires a structured approach to ensure interventions are additional, catalytic, and responsive to stakeholder needs. Agrifood systems are highly diverse and complex, with highly context-specific adaptation and mitigation needs. Concessional investors face multiple entry points, from supporting early-stage pipeline development and innovation to scaling financial intermediaries or financing ecosystem-level assets, making adopting a clear and deliberate strategy essential.

We propose a four-step framework for investor action based on the insights and case studies presented in this playbook (see Table 3). This step-by-step guide can help concessional investors address key questions to structure climate-smart investment strategies. This framework is not intended to be prescriptive, as concessional investors operate with a wide range of mandates and tools, but it outlines the typical decision-making process observed in effective climate-smart agrifood investment initiatives.

The investment plays presented in this playbook sit within step 3 of this framework. They offer concrete investment strategies that investors can deploy once they have diagnosed the climate landscape and identified key financing gaps. In this way, the framework provides the design process, while the plays offer strategic pathways that investors can apply based on their objectives, risk appetite, and local conditions.

Table 3: A four-step framework for investor action

Step 1	**Diagnose the agrifood climate landscape** • Find out where and how climate risks affect productivity, incomes, and nutritional outcomes to target value chains and regions with the most significant opportunity for impact. • Understand how national governments deal with these risks and respond with their regulatory and policy toolkits. This will surface priority areas of intervention that also have political support, which can make it easier to mobilize capital from a diverse set of investors.
Step 2	**Identify financing gaps and additionality opportunities** • Study existing financing flows (public, private, and blended) to identified regions and value-chains, and find areas with the highest demand-supply mismatch. • Segment opportunities with high impact but slow or low paths to payback for investors, from those that are easily commercializable and profit-making. • Prioritize areas where subsidies can be most catalytic for risk-averse private investors and promise significant impacts on producers and rural communities at large.
Step 3	**Design appropriate instruments and financing structures** • Speak to asset operators to understand their underlying business models, revenue streams, payback periods, and commercial risks. Learn about their unique finance needs and the terms and conditions that can make investments work for their commercial and impact strategy. • Engage with financiers across the capital stack to understand respective risk-return expectations and time horizons to design blended structures and instruments that best meet the needs of intermediary funds and businesses.
Step 4	**Integrate partnerships and knowledge sharing in implementation** • Build governance structures that help represent the views of each party in the blended structure. • Embed coordination systems that ensure goals remain aligned and information and feedback are transmitted between investees and investors in the right cadence. • Create a robust monitoring, evaluation, and learning (MEL) strategy to collect pre- and post-investment data from the outset. Use this intelligence to revisit program strategy, make occasional revisions, and share learnings with the broader investment community to guide their efforts, help them scale successes, and avoid mistakes.

STEP 1: DIAGNOSE THE AGRIFOOD CLIMATE LANDSCAPE	
Recommended method and questions to ask	**Related resources**
Identify priority climate risks affecting agrifood systems ▪ What are the priority climate risks affecting agrifood systems (drought, floods, degraded soils, fisheries collapse, etc.)? ▪ What sectors and value chains are most exposed?	**Climate-risk assessment (global/regional levels)** IPCC Assessment Reports. **Agricultural risk assessment methodology** ▪ World Bank. Agricultural sector risk assessment: methodological guidance for practitioners. 2016. ▪ CGIAR. Climate change, Agriculture and Food security (CCAFS) Toolbox. **Current state of climate risk assessment practice and guidelines (agri-specific)** ▪ CASA, CABI. State of Play Review of Climate Risk Assessment Guidance. 2021. ▪ List of mitigation/adaptation solutions across sectors and value chain segments ▪ FAO. Climate resilient practices: Typology and guiding material for climate risk screening. 2021.
Assess integrated national/regional agrifood climate policies ▪ At country/region level, what sectors and value chains are most critical for food security, livelihoods and employment? ▪ How are agrifood climate risks already integrated into national climate policies (e.g., NDCs, NAPs) and agrifood strategies? ▪ What adaptation and mitigation solutions exist and are technically relevant and feasible?	**National agrifood climate policy guidance** ▪ FAO. COP28 Agriculture, Food and Climate National Action Toolkit ▪ FAO, Integrating Agriculture in National Adaptation Plans ▪ UNDP, National Adaptation Plans Agriculture ▪ WWF, UNEP, EAT, Climate Focus. Enhancing NDCs for Food Systems. Recommendations for Decision-makers ▪ Global Alliance for Future of Food. Untapped Opportunities: Assessment Food Systems in Nationally Determined Contributions

STEP 2: IDENTIFY FINANCING GAPS AND ADDITIONALITY OPPORTUNITIES	
Recommended method	**Related resources, reports and tools**
Identify financing gaps • What is the current landscape of financing supply across the agrifood system (e.g., public programs, private investments, donors, DFIs, domestic banks)? • What are the main gaps for climate-aligned investments across market segments? Are there already climate-aligned funders, TA platforms, or programs addressing part of these gaps? • Which actors/segments are currently underfinanced or excluded (smallholders, SMEs, underserved geographies, etc.)?	**Financing gaps in agrifood systems (global/regional levels)** • CLIC. Landscape of Climate Finance for Agrifood Systems. 2025 (upcoming publication) • CPI, FAO. The Triple Gap in Finance for Agrifood Systems. 2025. • ISF Advisors. State of the Sector: Agri-SME Finance. 2022. **Blended finance market data** • Convergence. State of Blended Finance. 2024. • Convergence. Historical Deal Database. **Financing landscape (investment funds)** • ISF Advisors. Fund Database.
Define where concessional capital can add most value • What are the most pressing objectives aligned with the donor's mandate (e.g., resilient infrastructures, inclusive supply chains, nature restoration)? • Where could concessional capital deliver the highest catalytic effect (e.g., reaching hard-to-serve segments, de-risking investments in adaptation solutions, crowding in private capital)? • Which investment plays should concessional capital prioritize?	**Investment guidance and best practices for agrifood system transformation** • CGIAR, CCAFS KOIS. Financing the Transformation of Food Systems Under a Changing Climate. 2019. • ISF Advisors. Climate adaptation finance for agriculture: Donor and investor guidance. 2024. **Investment guidance for specific sub-sectors** • CPI, iCS. Toolbox on financing Nature-based solutions. 2024. • UNEPFI. How to finance a sustainable ocean recovery: A practical guide for financial institutions. 2021. • CASA, Technoserve. Briefing on agroforestry solutions. 2022

STEP 3: DESIGN APPROPRIATE INSTRUMENTS AND FINANCING STRUCTURES	
Recommended method	**Related resources, reports and tools**
Structure instruments to address identified risks • Which blended finance structures (e.g., concessional debt or equity, guarantees, technical assistance facilities, or design grants) are best suited to address the identified financing bottlenecks and generate climate impact? • What level of concessionality is optimal to maximize impact while ensuring efficient use of subsidies?	**Blended finance structuring for agricultural value chains and guidance on concessional capital deployment** • ISF Advisors. Concessional Capital for Agri-SME Funds: Donor & Investor Guidance. 2025. • Dalberg. Blended Finance Tools to Catalyze Investment in Agricultural Value Chains. Commissioned by AfDB, DFID, AGRA and IFAD. 2019.
Define exit strategy and pathway to sustainability • What governance and ownership models (public, private, or hybrid) can best secure long-term impact and financial sustainability? • Can the intervention evolve toward financial self-sufficiency or market-based financing over time? What mechanisms can sustain operations post-intervention (e.g., pathway to commercial sustainability, carbon	**Guidance on blended finance governance and implementation strategies for donors** • OECD. DAC Blended Finance Guidance. 2021. • Guidance on sustainability pathways • Omidyar Network. Across the returns continuum. 2020. • ISF Advisors. Concessional Capital for Agri-SME Funds: Donor & Investor Guidance. 2025.

STEP 4: INTEGRATE PARTNERSHIPS AND LEARNING AGENDA IN THE IMPLEMENTATION ROADMAP	
Recommended method	**Related resources, reports and tools**
Engage key implementation partners • How to structure partnerships across public authorities, concessional and private investors, and communities to ensure uptake and scalability?	**Guidance for partnership-driven financing strategies** • IISD. Guiding Principles for the Preparation of Financing Strategies for Climate Change Adaptation in Developing Countries. 2023.
Set up flexible M&E systems and learning loops • Which balance between standardized and context-specific KPIs should be used to measure adaptation, mitigation, resilience, and related co-benefits (e.g., GHG emissions reductions, enhanced resilience, food security, and livelihoods)? • How can learning loops can be embedded to continuously adapt financial instruments and delivery models to evolving climate risks and market dynamics?	**Guidance on systemic impact measurement (climate-specific)** • OpenEarth Foundation, Metabolic. Place-based Transition Funds: a playbook for systemic portfolio construction. 2024. • Adapatation & Resilience Investors Collaborative. Assessing Adaptation & Resilience Impact in Private Investments: A measurement framework for investors. 2024. **Ag-specific metrics and targets to measure and disclose impact** • WBCSD. Food, Agriculture and Forest Products TCFD Preparer Forum. 2020 • Climate-related financial reporting frameworks • TCFD (Taskforce on climate-related financial disclosure) resources
Share evidence and learnings with the blended finance community (ex-post analysis) • What are the lessons learned on barriers you faced, and how you overcame these? • What are the major risk perceptions and barriers that the investment community faces, that can be answered by our experience? • What are the platforms to disseminate your findings and share useful learnings to the industry?	**Investor-learning communities and action groups (specific to agrifood systems and blended finance)** • CLIC convenings and action groups • Council for Smallholder Agriculture Finance (CSAF) • Global Donor Platform for Rural Development (GDPRD) • Thematic Working Group on Blended Finance for Food Systems • Catalytic Capital Consortium (C3) • Collaborative for Frontier Finance (CFF)

9. CONCLUSION

The global landscape for climate and development faces a pivotal moment. In 2024, official development assistance (ODA) from the OECD's Development Assistance Committee, the world's largest group of sovereign donors by volume of financing, fell by 7.1%, the first such decline in more than five years. At the same time, climate finance needs for agrifood systems are skyrocketing, with FAO estimating USD 12 trillion in hidden annual costs from environmental damage and health impacts, and CPI estimating a financing gap of USD 1.1 trillion annually to align agrifood systems with climate goals. This paradox demands urgent, strategic intervention from concessional investors looking to close the financing gap by catalyzing private investment using their subsidies and market-shaping power.

This playbook offers a starting point for concessional investors to invest in solving market failures that can have the greatest catalytic effects on the system. By implementing the plays in this playbook, we hope concessional investors can identify long-term objectives to anchor their blended finance strategies**,** align with the goals of different partners in national ecosystems within which they seek to operate, work in synchronicity with public policy, and apply subsidies in areas with the greatest catalytic potential for the private sector.

However, expanding the pool of blended finance for agrifood systems needs more than investment in assets alone. A systemic shift will require strong leadership from concessional investors to become proponents for blended financing strategies. This means using positions of influence to lower barriers for new investors and reduce information asymmetries and transaction costs for the ecosystem. This can be achieved by signaling roles and objectives to the market, sharing successes and failures widely, and streamlining data collection and reporting standards, as well as the systems and tools that enable this.

This focus on transparency ensures that all parties have a clear understanding of expectations and outcomes, ultimately driving better alignment and accountability across the sector. The most effective investors actively signal their role in the market, including their risk-return profile, impact objectives, exit strategy timelines, and domain and technical expertise, seeking out partners that complement their strategy. While many investors have a strong internal understanding of their investment mandates, budget cycles, and impact objectives, these are not always clear to fund managers. This results in missed opportunities for collaboration, higher search costs, and mismatched partnerships.

Concessional capital must be paired with long-term collaboration and a shared vision between stakeholders to achieve ecosystem change. Sharing lessons learned on the process of finding the right investment partners, co-designing blended structures, making mistakes, correcting strategies, and achieving success in markets perceived as too risky, can instigate action among those standing on the sidelines, waiting to hear from the first movers in a market. Platforms such as CLIC's Peer Exchanges, Convergence's Blended Finance Forum, the Catalytic Capital Consortium, the Collaborative for Frontier Finance, and Global Donor Platform's Agri-SME Learning Collective are examples of forums where organizations can signal their role in the market and share stories with their peers.

Democratizing access to commercial and impact data and streamlining investment tools and processes can further lower barriers to entry. While concessional capital can mitigate perceived risks, it does not inherently improve private investors' understanding of underlying risks or address information asymmetries. Many investors still lack reliable data on the performance of agrifood system investments, particularly in smallholder-oriented or nature-based segments. It is key to support the development of shared metrics, standardized reporting, and investee-level data collection to improve investor confidence and enable smarter capital allocation. Systematizing this data-driven approach implies aligning at the industry level on data collection and mandating ex-post assessments of the financial and impact performance of vehicles benefiting from concessional capital. It also includes providing technical assistance and financial resources for stakeholders to implement such approaches, and sharing outcomes and insights of ex-post assessments among the industry.

Like the systems they seek to transform, the future of blended financing for agrifood systems must allow for a diversity of approaches, flexibility in form, and demonstrate high responsive to local needs. Even with optimal design, climate-aligned investments in agrifood systems often face slower and more complex paths to maturity compared to other sectors. While some investments may eventually transition out of concessionality, many will continue to require long-term support, especially those involving public goods or delivering systemwide co-benefits. These include interventions that offer indirect financial returns but significant positive externalities, such as ecosystem restoration. Supporting these pathways to sustainability requires tools to better measure and communicate all forms of value created, whether financial or non-financial. Continued experimentation, transparency, and industry-wide collaboration are essential to ensure that blended finance approaches can scale to the extent needed to meaningfully transform agrifood systems for climate resilience.

ANNEXURE 1: BLENDED FINANCE TAXONOMY

This playbook taxonomy builds on Convergence's archetypes of blended finance interventions and investment vehicles, which Climate Policy Initiative (CPI) also uses in related works (see Figure A1). Additionally, it incorporates insights from ISF Advisors, using a simplified version of their recipients' taxonomy. This framework is designed as a flexible toolbox rather than a rigid sequence, allowing donors and investors to strategically combine multiple archetypes based on specific financing needs and market conditions. These archetypes include design grants, concessional debt or equity, guarantees, and technical assistance (TA).

Figure A1: Capital structure of blended finance archetypes

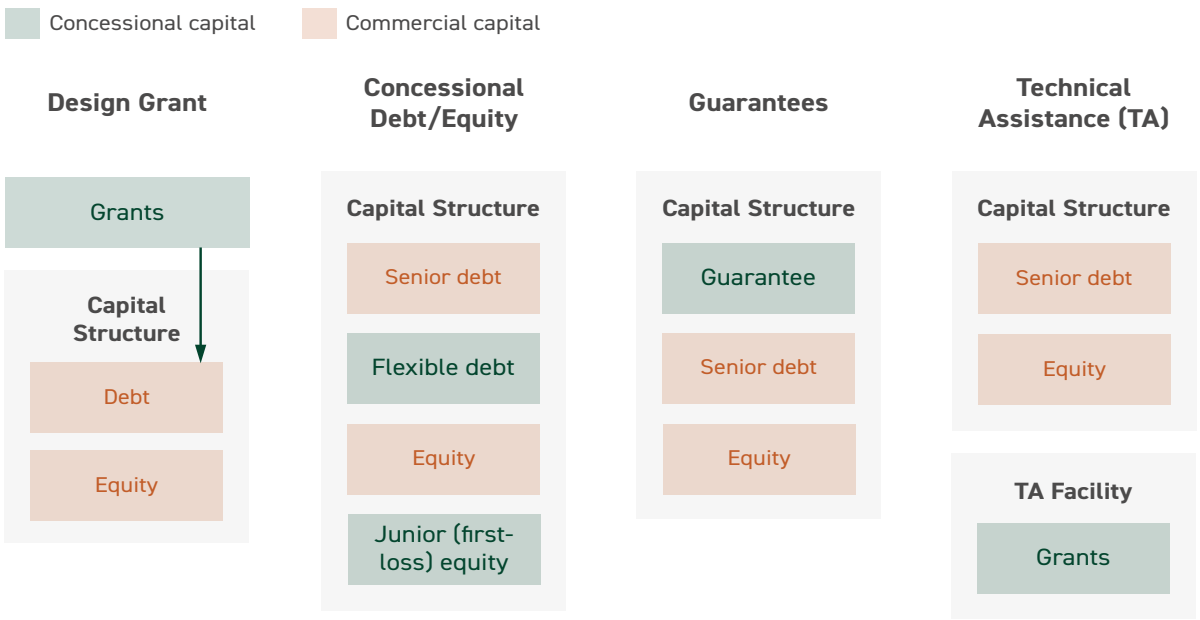
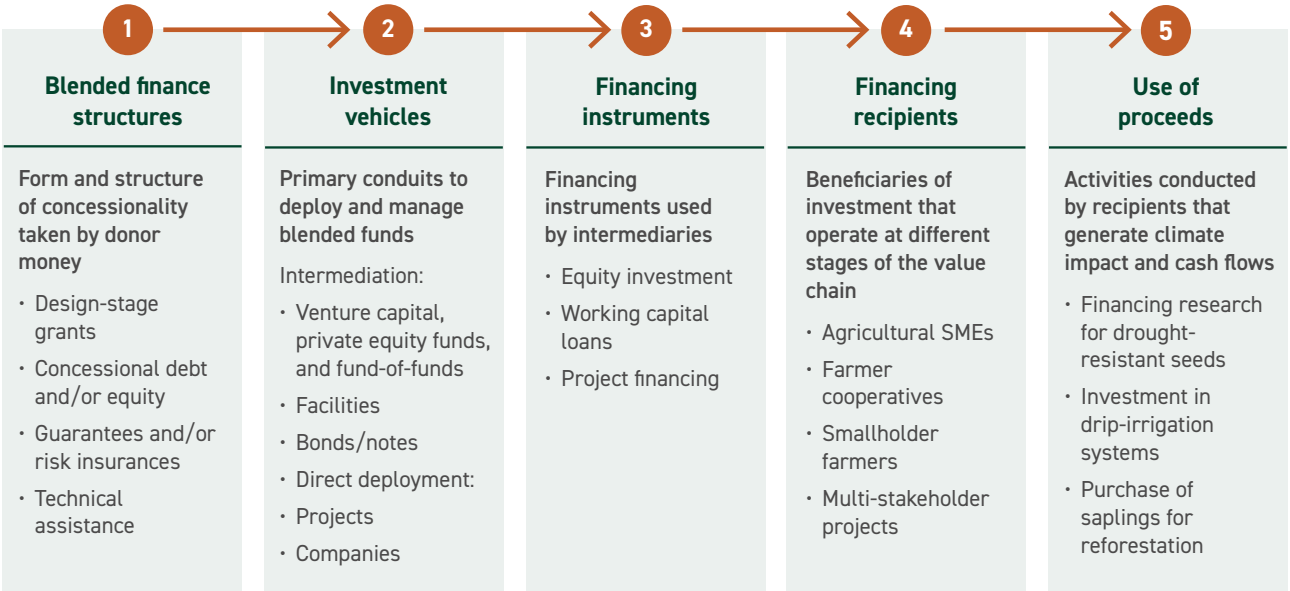


Table 1: Benefits and uses of blended finance archetypes

Archetypes	Description	Benefits and uses
Design Grants	Early-stage funding to support the feasibility, structuring, and development of investment vehicles.	Supports the costs and activities necessary to launch new vehicles or strategies, especially first-time and locally led funds.
Concessional Debt or Equity	Capital provided at below-market rates or with preferential terms.	Improves an investment's risk-return profile, protects senior investors by absorbing first losses, and provides enhanced returns.
Guarantees	Risk-sharing mechanisms that provide credit enhancement and/or loss protection features.	Protects investors against capital losses, improves the bankability of investments, and allows reduced required capital reserves (for banks).
Technical Assistance	Capacity building support, which can be in-kind or through dedicated budgets.	Builds a stronger investable pipeline, lowers transaction costs, mitigates operational risks for recipients and improves business metrics, ultimately de-risking investments.

Concessional capital flows through blended finance archetypes to support climate-smart outcomes in agrifood systems (see Figure A2). Capital moves from the left, where one or more blended finance structures can de-risk investments and attract private sector participation. These interventions are channeled through various investment vehicles, including fund-of-funds, facilities, projects, companies, and bonds, which serve as primary financing instruments. Intermediaries such as fund-of-funds and facilities play a central role in mobilizing and scaling private capital within this sector and are the primary focus of this playbook. Instruments are allocated to different recipients, such as large corporations, agri-SMEs, financial institutions, and funds, to finance climate adaptation and mitigation activities in the agrifood sector.

Figure A2: Concessional capital deployment process

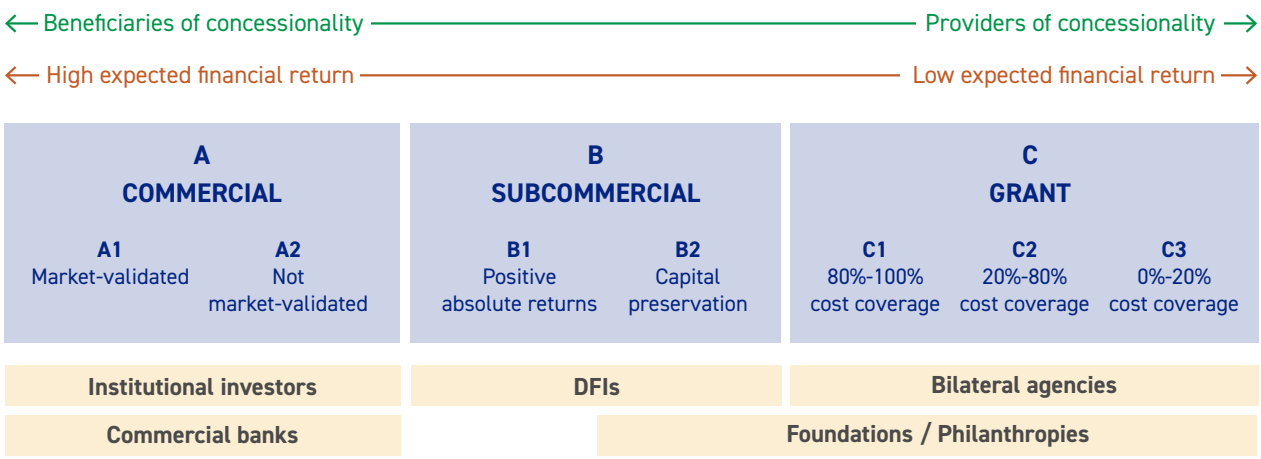


For example, a donor investing in agricultural practices supporting climate adaptation in sub-Saharan Africa could deploy a combination of concessional capital (for instance, junior equity) and technical assistance into a fund-of-funds structure. The fund would raise additional senior debt to provide capital to financial institutions that lend to agri-SMEs adopting sustainable practices. Guarantees could further enhance the attractiveness of these loans by mitigating credit risk for commercial lenders.

ANNEXURE 2: INVESTOR PROFILE MAPPING

Concessional capital exists on a continuum of expected returns and impacts (see Figure A3). On this continuum, capital is categorized by risk-adjusted expectations of financial returns and market impact. Category A and B comprise for-profit, commercial or sub-commercial investments, while Category C comprises philanthropic grants. As we move across the continuum from Category A to C, the expectation of financial returns decreases, while the expectation of market impact increases. For an investor, the greater the financial "concession," the higher the expectation for market impact.

Figure A3: Financial return continuum



Investor risk-return profiles and capital mandates shape investment preferences and determine the relevance and effectiveness of blended finance structures. Concessional investors typically have varying risk tolerances and often co-invest in blended structures, making coordination essential for the efficient use of subsidies. Lower-risk strategies generally attract a broader pool of investors and mobilize more capital, particularly from commercially driven and risk-averse investors. However, they tend to prioritize established businesses and markets, and while financial additionality may be significant, non-financial additionality can be compromised. Higher-risk strategies mobilize lower levels of capital but have the potential to generate greater impact by supporting vulnerable populations, underserved segments, and innovation. They help create a track record of successful investment, potentially reducing perceived risks and paving the way for future investments in undercapitalized areas.

Institutional investors, including pension funds, have limited risk appetite and focus on returns. Most do not have specific agricultural mandates, and those that do tend to deploy capital in developed markets. When considering emerging markets, they generally gravitate toward intermediation strategies in higher-income countries, such as Brazil, Chile, or South Africa. For institutional investors with impact mandates, the perceived opportunity cost of diverting capital from sectors with stronger risk-adjusted returns often precludes their involvement in agrifood systems.

Commercial banks generally exhibit low risk tolerance and are constrained by regulatory requirements around capital reserves. As a result, they prioritize sectors with more favorable risk-adjusted returns. Banks prioritize well-established value chains and long-standing client relationships when lending to agriculture, with few incentives to consider new borrowers or value chains.

With both development and commercial mandates, development finance institutions (DFIs) aim to generate financial returns, although with a lower risk-return expectation than institutional investors. They typically act as senior investors, making sizeable contributions critical to scaling funds. Their limited risk appetite often requires risk-mitigation tools, such as guarantees or protection from junior capital. They prioritize investments in funds with significant potential for additionality if they are low risk and generate a positive spread over the base rate.

Philanthropies and private capital endowments, such as family offices, seek to maximize impact while preserving their capital base. With flexible capital, they seek opportunities to fill critical funding gaps left by other capital types. While they can sometimes forgo upside potential, they have limited risk appetite as losses can diminish their capital base and affect their ability to generate impact in the long run. Their ticket sizes usually are smaller than DFIs' and their orientation across the financial return continuum varies.

Bilateral agencies or donors provide high-risk capital in the form of grants. They play a critical role in fundraising by anchoring or sponsoring investment funds. However, as public actors, they must weigh the opportunity costs of grant capital and typically have limited allocations for private sector investments. Investors in this category typically aim for maximum impact at the investee level, often seeking capital leverage—mobilizing additional capital. They often take junior positions with greater risk and can even forgo upside potential to make senior tranches more attractive to investors. Anchor fund investors usually fall within this category by providing early, high-risk capital to establish fund viability and attract other investors.

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