



USAID
FROM THE AMERICAN PEOPLE



CATALYZING PRIVATE FINANCE FOR CLIMATE ACTION: LEARNING BRIEF

Disclaimer: This learning brief is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this learning brief are the sole responsibility of DAI and Dalberg and do not necessarily reflect the views of USAID or the United States government.

This publication was produced for review by USAID, through the USAID INVEST project, USAID contract no. I003240-IQC-20S-14919-0. It was prepared in collaboration with Dalberg, September 2021

TABLE OF CONTENTS

03	Acronyms and Abbreviations
04	Executive Summary
06	Figure 1: Summary of Key Lessons Learned
07	Section 1: How does finance support climate action?
07	Figure 2: Climate Financial Flows 2013–2019 and Estimated Finance Required
08	Figure 3: Key Descriptions of Climate Results
09	Section 2: How can donors catalyze private finance for climate action?
09	Figure 4: Conceptual Framework for Blended Finance
12	Figure 5: Human Impact of Blended Finance
13	Figure 6: Summary of Climate Finance Case Studies
15	Figure 7: The BioCarbon Fund ISFL Model
16	Figure 8: Climate and Human Impact for the BioCarbon Fund ISFL
18	Figure 9: INOCAS Sustainable Palm Oil Model
18	Figure 10: Climate and Human Impact for INOCAS Sustainable Palm Oil
19	Section 3: What are the lessons learned for donor support for climate action?
20	Figure 11: Types of Donor Support Across Project Lifecycle
21	Box 1: Donor Support for Enhancing Credit Ratings and Risk/Return Profiles
22	Citations

ACRONYMS AND ABBREVIATIONS

ACEF	Africa Clean Energy Finance	IDB	Inter-American Development Bank Group
CIF	Climate Investment Funds	INOCAS	Innovative Oil and Carbon Solutions
CO₂	Carbon Dioxide	MRV	Measurement Reporting and Verification
CRAFT	Climate Resilience and Adaptation Finance and Technology Transfer Facility	MSME	Micro, Small, and Medium Enterprises
CSA	Climate-Smart Agriculture	NIWS	Natural Infrastructure for Water Security
DFC	International Development Finance Corporation	SDGs	Sustainable Development Goals
DFI	Development Finance Institutions	SeyCCAT	Seychelles Conservation and Climate Adaptation Trust
ERPA	Emissions Reduction Purchase Agreement	SOF	The Sustainable Ocean Fund
GCF	Green Climate Fund	TA	Technical Assistance
GEF	Global Environment Facility	USAID	United States Agency for International Development
GHG	Greenhouse Gases	USD	United States Dollars
		USG	United States Government



EXECUTIVE SUMMARY

Catalyzing private finance for climate action is essential to achieving goals for limiting global warming. USAID can play a pivotal role in climate action across partner countries by increasing funding for activities that catalyze and crowd in private capital to climate-focused investments. The Intergovernmental Panel on Climate Change (IPCC) estimates USD 1.6 trillion is needed annually to keep global warming to the 1.5-2°C target range; only 38 percent of this was funded in 2019. Blended finance, the strategic use of public resources to attract private capital, represents an opportunity for USAID to help close this gap and dramatically increase the scale and scope of climate finance in the coming years.¹

Several barriers limit the flow of finance toward climate action, including a lack of understanding of the urgency of the climate crisis and limited public sector finance. In response to this challenge, the United States government has committed to doubling public climate finance for developing countries by 2024, including an effort to triple public finance designed to help communities adapt to the negative impacts of climate change.² As part of this effort, USAID seeks to increase funding to partner countries and reduce global emissions by half by 2030.³ Given the limits of public sector finance, raising adequate funds for climate action requires increasing the private sector's investment in adaptation and mitigation.

The private sector contributed an estimated USD 280 billion to climate action in 2018, a level of investment far below current needs.⁴ To date, private investment has focused primarily on **mitigation** activities that aim to limit or prevent greenhouse gas emissions. However, further neglecting investments that can support **adaptation**—the ability to moderate the negative impacts of climate change—may jeopardize mitigation activities by rendering them less effective.

USAID can play a complementary role to that of the U.S. International Development Finance Corporation (DFC), providing support to counter lower expected financial returns and higher risk profiles.⁵ In particular, USAID can add value during the earlier stages of the investment lifecycle, when proof-of-concept must be demonstrated to attract commercial or even development finance institution (DFI) funding. This is particularly important for conservation or adaptation projects with insufficient revenue generation potential to attract commercial capital. Given their long-term country presence, USAID Missions can support the DFC in identifying climate action related projects that direct investment to community-level programs with substantial development benefits for underserved populations, such as Indigenous Peoples or women entrepreneurs.⁶

Lessons for development assistance organizations catalyzing private finance for climate action are categorized in three principal areas: early-stage design, investment facilitation, and enabling conditions. Donors have an essential role to play during the early stage to identify and assess investment opportunities and financing gaps, support investment readiness of firms and projects, and to ensure the equitable distribution of climate benefits. Throughout the lifecycle of an investment, USAID can support activities such as transaction advisory, fund structuring, provision of guarantees, and catalytic capital to increase the speed and scale of climate action and crowd in additional sources of capital. USAID can also improve the enabling environment to encourage investment or reduce costs enhancing ecosystem additionality. A summary of these lessons is provided in Figure 1 and detailed further in the Learning Brief.

This Learning Brief offers a clear justification for the role of development assistance organizations like USAID in catalyzing private finance for climate action. It synthesizes lessons learned from a broad set of donor experiences and offers practical 'how to' descriptions of donor-supported activities that lead to additionality and positive climate and human impacts. This is one of three complementary resources that includes a set of [case studies](#) that examine various models of blended finance for climate action and a guidance note that provides a framework for understanding the potential for additionality and human impacts for blended finance from USAID's perspective.

KEY LESSONS LEARNED FOR DONORS

EARLY-STAGE DESIGN



Identify and assess investment opportunities, sources of capital, and financing gaps

Maximize climate benefit by considering the tradeoffs and synergies of adaptation and mitigation

Support investment readiness of firms and projects

Include Indigenous Peoples and local community engagement

Support proof of concept in new sectors and technologies



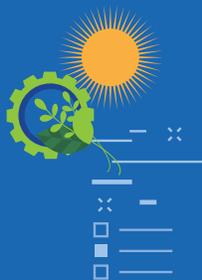
ENABLING CONDITIONS



Build awareness of government on the business cases and opportunities of climate action

Support regulatory and policy reform and systems to enhance credit risk ratings

Facilitate public-private dialogue to improve alignment and accelerate negotiations



Assist local financial sectors to embed climate considerations into policy and practice

Improve climate measurement and data analytics for better risk incorporation and cost reductions



INVESTMENT FACILITATION

Sequence interventions and identify the right tools for innovation

Couple technical assistance with catalytic capital, guarantees, or risk insurance to improve project viability



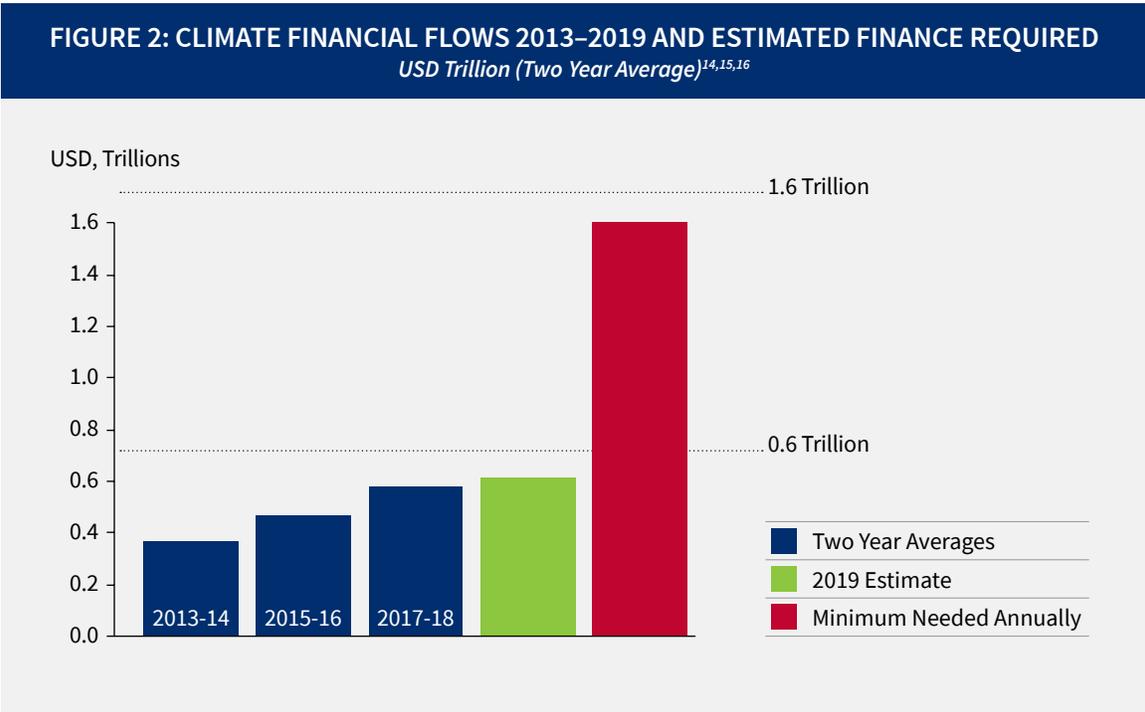
Assist in capital raise and proving business case with fund structuring, catalytic capital, and transaction advisory services

SECTION I: HOW DOES FINANCE SUPPORT CLIMATE ACTION?

USAID seeks to play a pivotal role in climate action, increasing funding to partner countries and reducing global emissions by half by 2030.⁷ The United States government has committed to doubling public climate finance for developing countries, including an effort to triple public finance for adaptation by 2024.⁸ These goals align with sentiments from [The Leaders' Summit on Climate](#) acknowledging the urgent need to scale climate financing from the public and private sectors.⁹

Several barriers limit the flow of finance toward climate action, including a lack of understanding of the urgency of the climate crisis and limited public sector finance. Although the IPCC estimated in 2018 that USD 1.6 trillion would be needed annually to achieve the 1.5-2°C target range, only 38 percent of this amount was deployed in 2019.¹⁰ Public institutions contributed about 48 percent of total climate financing (±USD 261 billion) in 2018¹¹ and are the main contributors of funding toward achieving Sustainable Development Goals (SDG).¹² Seventeen SDGs were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure peace and prosperity. SDG 13 focuses on climate.

As public sector finance is limited, raising adequate funds for climate action requires enhancing the private sector's role across adaptation and mitigation investments. The private sector only contributed about USD 280 billion to climate action in 2018, a level far below estimated needs.¹³ Current private investment for climate action focuses primarily on mitigation activities, given the comparatively higher returns and relative ease of monetizing and measuring outcomes for these projects. Private sector investments within mitigation mostly fall into the energy and transport sectors. These two sectors tend to have the clearest business models and direct policy support to scale outcomes. In the long run, however, further neglecting adaptation may jeopardize mitigation activities, rendering them less effective. For example, a renewable energy project may have its entire transmission system destroyed by hurricanes because of climate variability, damage that might have been avoided with timely adaptation measures. To increase action for adaptation, investments need to focus on finding projects with positive net returns, adjusted for real risks, and continue to direct private capital into less commonly known opportunities with good potential for the private sector.



There is a growing need to increase adaptation financing while continuing mitigation financing efforts.¹⁷

Sources vary on the percentage of financing that goes toward adaptation, as the amounts are difficult to track: information is often unreported, and definitions are inconsistent. For example, the Climate Policy Initiative estimates that an average of only five percent (USD 30 billion) of tracked climate financing was spent on adaptation and resilience activities globally in 2017 and 2018. During the same period, mitigation finance averaged about USD 532 billion.¹⁸ Similarly, the World Resource Institute estimated in 2013 that 18 percent of financing was directed toward adaptation and the rest for mitigation.¹⁹ The more limited focus on adaptation, and public good nature of some adaptation measures, has led to a lack of proven business models. Regardless of differences in estimates, there is insufficient finance to meet the expected adaptation financing gap—especially with increased frequency and severity of climate change impacts. Developing countries will be hardest hit by climate disasters for various reasons, including their heavy reliance on climate-sensitive sectors like agriculture and water;²⁰ their naturally warmer climates due to many of these countries' locations in tropical and subtropical regions; and their limited financial ability to respond to natural disasters. At the same time, increased mitigation action is essential to keep the adaptation challenge manageable.²¹ Increased mitigation financing provides an opportunity for developing countries to contribute to reducing emissions while creating sources of income and jobs. According to the World Resource Institute, energy consumption is responsible for 73 percent

of anthropogenic greenhouse gas emissions requiring more resources to reduce emissions.²² Other sources estimate the contribution of energy consumption to greenhouse gas emissions as falling into an average range of around 72 to 78 percent.²³ Climate mitigation projects, particularly those in the energy and transport sector, can build income sources and create jobs in developing countries, contributing to the mobilization of public and private revenues.

Blended finance has been used to catalyze private sector investment for climate action.

Blended finance combines donor or philanthropic funding and private capital to reduce risks and increase opportunities for private investors while generating positive development outcomes. An estimated USD 31 billion for climate-focused investments has been channeled through blended finance models to date.²⁴ Blended finance models have been used to pioneer and scale-up financing of new technologies in renewable energy, energy efficiency, urban transport, and other related fields. Most blended finance transactions have gone towards mitigation activities within the energy sector;²⁵ however, as a result of the involvement of development assistance organizations, there is emerging experience in blended finance for adaptation.²⁶ For example, forty-eight percent of the Global Environment Facility's (GEF) blended finance projects between 2014–2018 were directed toward land use and biodiversity and eleven percent to fisheries—sectors that contribute significantly to adaptation.

FIGURE 3: KEY DESCRIPTIONS OF CLIMATE RESULTS^{27,28,29}



ADAPTATION

Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in process, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.



RESILIENCE

Climate resilience refers to the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate change. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks and taking steps to better cope with them.



MITIGATION

Climate change mitigation is achieved by limiting or preventing greenhouse gas emissions and by enhancing activities that remove these gases from the atmosphere.

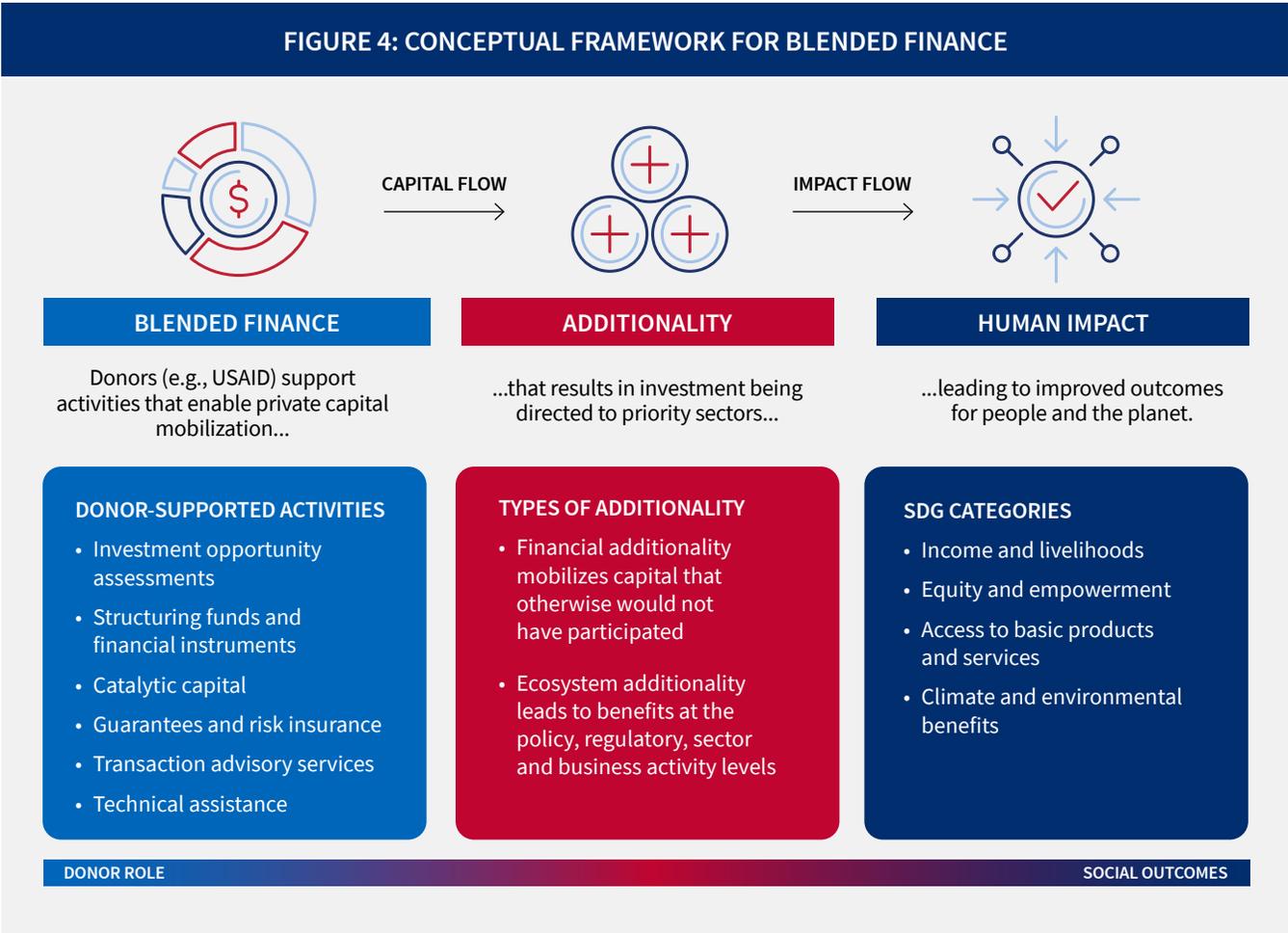
Note: Adaptation, resilience, and mitigation can be cross-cutting. For example, resilience intelligence solutions can be used to design adaptation strategies, while adaptation and resilience solutions can have mitigation co-benefits.

SECTION 2: HOW CAN DONORS CATALYZE PRIVATE FINANCE FOR CLIMATE ACTION?

Public sector actors, including USAID and other development assistance organizations, can play a key role in catalyzing investment to increase the speed and scale of climate action.³⁰ Their participation is essential to exponentially increasing the amount of funding directed to climate-focused investments and meeting the goals for limiting global warming. The level of donor engagement will be based on the amount of risk and/or investment return expectations that private-sector investors and/or development finance institutions (DFI) will accept. The participation of donors allows the private sector to invest in climate projects in which they might not otherwise have participated.

USAID can play a complementary role to that of the U.S. International Development Finance Corporation (DFC), providing support where there are lower expected financial returns and higher risk profiles—particularly during the earlier stages of the investment lifecycle, when proof-of-concept must be demonstrated to attract commercial or even DFI funding. This is particularly important for conservation or adaptation projects with insufficient revenue generation potential to attract commercial capital. This early-stage focus complements the work of the DFC, which tends to provide financing support to the scale-up phase of investments, companies, or financial intermediaries,

FIGURE 4: CONCEPTUAL FRAMEWORK FOR BLENDED FINANCE



where larger potential investments and relationships with commercial investors drive impact. Given their long-term country presence, USAID Missions can support the DFC in identifying projects related to climate action that direct investment to community-level programs with substantial development benefits for underserved populations, such as Indigenous Peoples or women entrepreneurs.

Development assistance organizations can contribute to blended finance in several ways, supporting activities that create additionality that ultimately leads to positive human and climate impact. These activities facilitate the participation of the private sector, as well as more effective engagement of development finance institutions. The framework in Figure 4 summarizes this process. Deploying blended finance creates a pathway to additionality that ultimately leads to human impact, improving outcomes for both people and the planet.

USAID can play an essential, value-added role by offering a distinct blend of support services. The type of activity will depend on the lifecycle of a project, the associated risks, and the overall goals of engagement.

DONOR-SUPPORTED ACTIVITIES

INVESTMENT OPPORTUNITY ASSESSMENTS



Help investors, banks, and other sources of financing understand market conditions and identify investment opportunities for climate action, to maximize climate impacts. Investment opportunity assessments commonly occur early in the design phase

and assess a targeted range of priorities, such as gathering information on investors operating or interested in the market and pipeline of climate action investment deals, supporting and sharing research on successful models that can be replicated i.e., carbon credits cross-subsidizing product sales used for different products, (e.g., [INOCAS Sustainable Palm Oil](#)).

STRUCTURING FUNDS AND FINANCIAL INSTRUMENTS



Offsets project preparation cost so that its execution appeals to private-sector actors and simultaneously offers climate and social/economic development

benefits. Activities include helping to structure blended finance funds, investment platforms, and other financial products for climate action. Financial support also can be provided to cover legal fees (e.g., [CRAFT](#)).



CATALYTIC CAPITAL

Improves the risk/return profile for commercial investors by absorbing risk and/or accepting concessionary returns for transactions with projected climate adaptation, resilience, and/or mitigation outcomes. Catalytic capital makes concessions that can nurture nascent markets with unproven models, particularly those that serve low-income customers. USAID can support fund managers and projects with catalytic capital through subcontracts or grants, providing catalytic capital to fund managers to build first-loss capital into a climate focused investment fund (e.g., [BioCarbon Fund Initiative for Sustainable Forest Landscapes \(ISFL\)](#)).



GUARANTEES AND RISK INSURANCE

Provide credit enhancement and cover part of the risk in the event of losses or default in order to crowd in private capital that would not invest in the sector or take on the level of project risk on its own. Projects include adaptation and resilience innovations lacking a proven business model. Guarantees and risk insurance may also enhance an issuer's credit rating, enabling access to resources on better terms. Donors can provide guarantees or insurance on below-market terms. The approach is also used to launch risk-mitigation vehicles adapted to particular market risks (currency risk, etc.; e.g., [ACEF](#)).



TRANSACTION ADVISORY SERVICES

Help link capital suppliers to businesses or projects that need investment to address climate adaptation, resilience, and/or mitigation. Activities such as investor matchmaking, pitch preparation, financial modelling, and deal structuring are used to help businesses become "investment ready" and raise funding (e.g., [Debt for Nature Swap](#)).



TECHNICAL ASSISTANCE (TA)

Strengthens the commercial viability of a climate project in the pre- or post-investment stages by developing fund managers' capabilities and/or by building businesses strategic and operational capacity. Donors may leverage TA to support a priority geography, type of climate action, or market segment. In addition, USAID may provide financial support to offset operational costs (e.g., for launching new vehicles, conducting outreach to investors to raise capital, management fees), which can help new fund managers get established and control management fees to help attract commercial investors

into innovative vehicles. USAID may also provide TA, such as legal and engineering services, to support government entities with private-public partnerships that address climate change, such as clean energy or sustainable infrastructure (e.g., [NIWS](#)).

Blended finance transactions can create additionality where there are opportunities to crowd in financing from commercial sources that would not otherwise participate in transactions that deliver development impact. Additionality provides the rationale for donor engagement and curtails resource depletion on activities that would have happened independent of donor involvement. Given the enormity of resources

required to support the climate crisis, donors have the responsibility to ensure resources are used effectively by targeting support where it is most needed.

The “effects” created by additionality can be either financial and/or at the ecosystem level. **Financial additionality** refers to situations in which private capital is obtained by an entity that, without a development assistance organization’s support, cannot obtain financing from other sources on similar terms, in similar quantities, or for similar development purposes. **Ecosystem additionality** refers to system-level impact that would not have occurred without a partnership between development assistance organizations and private investors.



TYPES OF FINANCIAL ADDITIONALITY

- **Innovative financial structures:** provide financing, in the form of innovative instruments with nontraditional terms and conditions (e.g., revenue based, movable-asset-based collateral, etc.) that lowers the cost of capital for private investors and addresses risks associated with investing in unproven geographies or sectors.
- **Risk mitigation:** provides financing, unavailable in the market, that strengthens the investee's creditworthiness, financial soundness, and/or governance.
- **Resource mobilization:** mobilizes financing from private investors, development finance institutions, and/or additional public sources that would otherwise not have invested.

TYPES OF ECOSYSTEM ADDITIONALITY

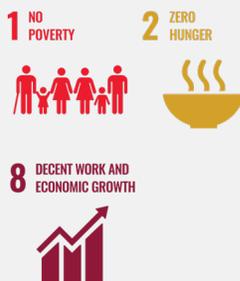
- **Demonstration effects:** prove the concept/ validation created by innovative blended finance projects that incentivize replication at the fund or project level within or across sectors/regions.
- **Sector-wide growth:** strengthens a previously overlooked sector or market by building the capabilities of businesses, funds, and intermediaries.
- **Policy or institutional change:** enhances policy, institutional, or regulatory practices at the sector or country level.
- **Standard setting:** creates improved policies that advance development finance, including procurement best practices and expertise in environmental, social, and governance standards.

FIGURE 5: HUMAN IMPACT OF BLENDED FINANCE

HUMAN IMPACT - SDG CATEGORIES

INCOME AND LIVELIHOODS

Reduce poverty, create inclusive and sustainable economic growth, increase decent work, and promote full and productive employment for all.



ACCESS TO BASIC PRODUCTS AND SERVICES

Contribute to healthy lives, inclusive and equitable education, sustainable management of water and sanitation, and affordable and reliable energy.



EQUITY AND EMPOWERMENT

Contribute to full gender equality, empowerment of women and girls, and reduce inequalities for other marginalized or vulnerable populations.



CLIMATE AND ENVIRONMENTAL BENEFITS

Reduce greenhouse gas emissions, increase climate change adaptation and resilience, protect or improve ecosystem services and biodiversity on water and land.



Human impact is the long-term social effect of blended finance. The conceptual framework aligns these impacts to the SDGs across four categories: income and livelihoods, access to basic products and services, equity and empowerment, and climate and environmental benefits as presented in Figure 5.

Case studies of development assistance organizations supporting private capital mobilization provide examples of additionality and positive human and climate impact. They represent the experience of a wide variety of donors. The countries in parenthesis in Figure 6 highlight the locations that align to USAID priorities.

FIGURE 6: SUMMARY OF CLIMATE FINANCE CASE STUDIES

CASE STUDY	LOCATION SECTOR CLIMATE FOCUS
<p>Debt for Nature Swap (2018) </p> <p>Goal: A debt restructuring mechanism to increase funding for marine conservation and climate adaptation</p> <p>Donor role: Catalytic capital and transaction advisory</p>	<p>Africa (Seychelles) Water Adaptation, Resilience, Mitigation</p>
<p>INOCAS Sustainable Palm Oil (2017)</p> <p>Goal: Provides financing for a new Macauba value chain, to be grown sustainably with smallholder farmers</p> <p>Donor role: Catalytic capital and technical assistance to prove business case for the sector</p>	<p>Latin America (Brazil) Agriculture Mitigation</p>
<p>The Sustainable Ocean Fund (SOF) (2018)*</p> <p>Goal: Provides financing to scale businesses that build resilience in coastal ecosystems</p> <p>Donor role: Provision of a guarantee directly to portfolio investments made by SOF</p>	<p>Global (Indonesia and Mexico) Water Mitigation</p>
<p>Natural Infrastructure for Water Security (NIWS) (2017)*</p> <p>Goal: Provides TA to improve natural resources management to increase water security</p> <p>Donor role: Financing of the TA facility to help develop a project pipeline of nature-based solutions</p>	<p>Latin America Water Adaptation, Resilience, Mitigation</p>
<p>Climate Resilience and Adaptation Finance & Technology Transfer Facility (CRAFT) (2017)</p> <p>Goal: A equity investment vehicle focused on expanding the availability of technologies for adaptation and resilience</p> <p>Donor role: Transaction advisory services support, TA, and catalytic capital to fund projects</p>	<p>Global (Mexico, South Africa) Agriculture, Financial Services, Forestry, Water Adaptation, Resilience</p>
<p>Climate Smart Agriculture Risk Sharing Facility for MSMEs (2017)</p> <p>Goal: Long-term loans and equity investments to agricultural/ agro-forestry enterprises for sustainable land use</p> <p>Donor role: Guarantees to unlock USD 128 million of private capital</p>	<p>Latin America (Mexico) Agriculture Adaptation, Resilience, Mitigation</p>
<p>BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) (2004)</p> <p>Goal: Provides results-based payments and capacity building for beneficiaries involved in sustainable land use.</p> <p>Donor role: Catalytic capital to finance projects and funding the TA facility for capacity building and training</p>	<p>Global (Indonesia and Mexico) Forestry Mitigation</p>
<p>Africa Clean Energy Finance (ACEF) (2012)*</p> <p>Goal: Provides preparation grants to improve viability of clean energy projects</p> <p>Donor role: Catalytic capital into the mechanism to finance projects, TA, and guarantees for projects that demonstrate commercial viability</p>	<p>Africa (Nigeria, South Africa) Energy Mitigation</p>

* USAID SUPPORTED



CASE STUDY HIGHLIGHTS

EXAMPLE 1: [BioCarbon Fund ISFL](#)

BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) aimed to reduce greenhouse gas emissions and increase carbon sequestration by promoting better land management practices.³¹

Unsustainable land-use practices play a significant role in deforestation and forest degradation. Safeguarding forests is an important carbon sequestration tool and protects the income and livelihoods of forest-dependent communities. Agriculture, including livestock, is estimated to be one of the largest contributors to greenhouse gas emissions and is a

significant driver of deforestation in many countries. In Latin America, for example, agriculture accounts for around two-thirds of deforestation, but it is also an important source of income for rural communities. Damage due to agriculture and other land use can be minimized through climate-smart agriculture and low-carbon land-use practices, providing sustainable agriculture and income-generating opportunities for communities.³²

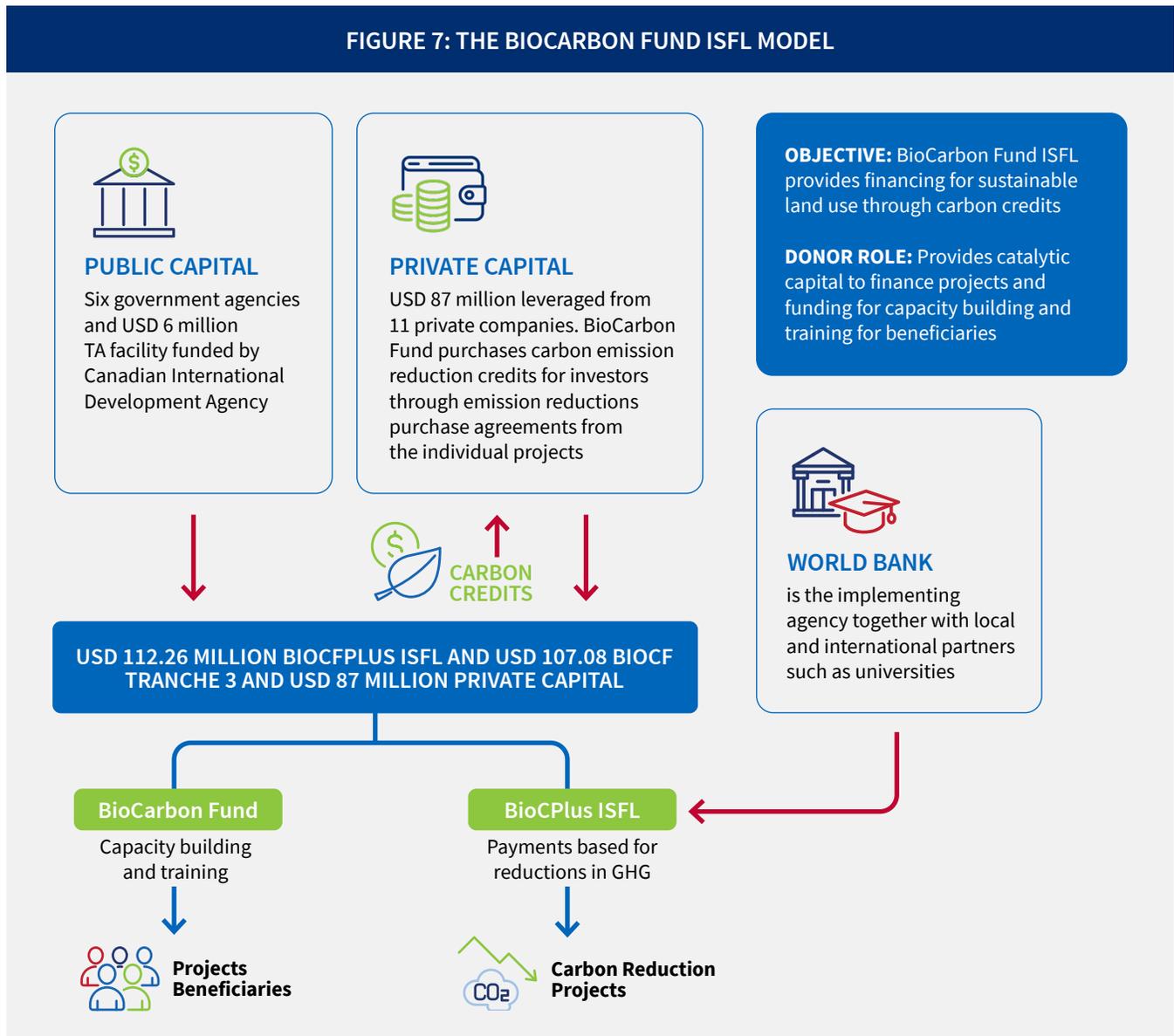
Catalytic capital and financing a technical assistance facility helped communities develop sustainable land management projects.³³ ISFL aimed to pilot large-scale, integrated land-use programs as a means for generating emissions reductions, working collaboratively with all actors

across the land-use spectrum—government, private sector, and local communities—to effect change and ensure mutual benefits. The integrated approach for ISFL was built off experience in earlier programs whereby focusing on forestry alone, excluding other land uses, failed to adequately achieve lower emission targets.

Catalytic capital made available by donors allowed the ISFL to finance carbon reduction projects that took a sustainable land management approach. Additionally, the Canadian International Development Agency financed technical assistance to support beneficiaries in employing carbon reduction projects. The World Bank, together with universities and Measurement, Reporting and Verification (MRV) experts, provided capacity building to beneficiaries through

the TA facility.³⁴ Donor assistance leveraged over USD 80 million from the private sector and increased knowledge of better land use and productivity.³⁵ The private sector funding is matched to activities supported with grants and to other investments that flow from regulatory changes and capacity building. Additional financing includes government funding (from national and regional governments that utilize their resources to support the land-use planning agenda); contributions from individual in-country development assistance programs, GEF funding, and financing from the International Development Association and International Bank for Reconstruction and Development. ISFL benefits supported local communities in Indonesia (Sumatra) and Mexico (Nuevo León, Coahuila, Chihuahua, Durango) in improving land-use practices.

FIGURE 7: THE BIOCARBON FUND ISFL MODEL



The increased uptake of sustainable land practices resulted in positive climate and human impacts. To date, most of the ISFL activities have focused on implementing on-the-ground preparations, working with governments, private sector, and local communities. Although there has already been some evidence of impact, the major results will be generated going forward. From 2013 to 2020, USD 37.75 million was spent on TA through the BioCarbon Fund ISFL across Colombia, Ethiopia, Indonesia, Mexico and Zambia. Through the BioCarbon Fund ISFL, over 27,000 people, 25 percent of whom were women, adopted sustainable land management practices. Further, 31,427 people have been trained on sustainable agriculture. This support also brought over 4,600,000 hectares of land under sustainable management and helped restore 3,590 hectares of land.

Lastly, evidence shows positive impact on income and livelihoods—about 62,000 people received access to benefits related to emission reduction payments (results-based payments for reducing greenhouse gases). Over 49,000 farmers received training to support productivity, potentially increasing farmers' revenues. ISFL used a benefit-sharing approach. It engaged communities in developing rules for resource use, including penalties for violations, and ensured benefits were shared equitably based on the Emissions Reduction Purchase Agreement (ERPA). Fair shares went to the communities where the carbon credit activities took place. Although activities are still at an early stage, with just five emissions reduction purchase agreements signed, this project has significant potential with expected payment for up to 36 million tons of emissions reductions.

FIGURE 8: CLIMATE AND HUMAN IMPACT FOR THE BIOCARBON FUND ISFL



MITIGATION IMPACT

Includes forest restoration and conservation as mitigation efforts

- **Achieved Impact:** Over 4,600,000 hectares of land have been brought under sustainable management, and 3,590 hectares have been reforested.
- **Achieved Impact:** Over 27,000 people have adopted sustainable land management practices (25 percent are women) and over 49,000 received training on productivity.
- **Achieved Impact:** Five emissions reduction purchase agreements signed.
- **Expected Impact:** Almost 38,000 hectares reforested of afforested in by 2031; 88,342 land users who have adopted sustainable land management practices.
- **Expected Impact:** Potential payments for up to 36 million tons of emissions reductions for five country programs in Colombia, Ethiopia, Mexico and Zambia.



HUMAN IMPACT

Improves incomes and livelihoods for farmers through emission reduction payments

- **Achieved Impact:** Income & livelihoods. +62,000 people now have access to benefits such as assets/services relating to ER payments.
- **Achieved Impact:** Access to basic services and equity and empowerment. The project works towards closing gender barriers.
- **Achieved Impact:** +49,000 land users have been trained on agricultural productivity (34 percent are women) and over 26,000 people trained in sustainable land use practices (18 percent are women).

EXAMPLE 2: [INOCAS Sustainable Palm Oil](#)

The INOCAS Sustainable Palm Oil activity aimed to limit degradation and deforestation by planting native Macauba oil palm trees (*Acrocomia aculeata*) through silvopasture systems on existing degraded cattle pastures, simultaneously diversifying the income of cattle farmers.³⁶ With demand increasing for palm oil, import costs have risen, encouraging domestic production and leading to the use of previously forested lands for monoculture oil palm plantations. Further, smallholder farmers in the Patos de Minas region in Minas Gerais, Brazil, largely depend on cattle farming due to the limits placed on the use of farming machinery by local topography.³⁷ Cattle farming causes land degradation and deforestation, reducing CO₂ capture by forests and soil, and increases runoff, adding to erosion.

Funding from donors supported TA and land preparation to pilot the INOCAS Sustainable Palm Oil project and enabled financing to farm a native species of oil-producing Macauba trees on deforested cattle pastureland.³⁸ Donor funding allowed INOCAS, a private start-up firm, to partner with farmers and finance land preparation to plant Macauba trees, providing seeds and other inputs. Donors also provided TA support for farmers to become eligible for financing schemes, guidance on pest control, and techniques for improving soil quality. Smallholder farmers harvested Macauba trees on their pastureland, allowing them to diversify their revenue stream and meet forest code requirement to dedicate 35 percent of their crop to native species, while the trees produce positive environmental benefits. Rather than cash loan repayments, farmers will share crop yields from the Macauba trees equally with INOCAS for 20 years. Donor support resulted in both financial and ecosystem additionality. Catalytic capital in the form of a contingent recovery grant of USD 1 million

only needs to be repaid if the project is successful, allowing INOCAS to demonstrate proof of concept that the sector, perceived as high risk, can be profitable. This grant, and USD 3 million in non-concessional equity financing from Climate Investment Funds, unlocked additional financing in the form of bridge loans (USD 300,000) from Mirova, USD 1 million from local private investors, and USD 643,000 in co-financing from INOCAS, and expressions of interest to expand the model to other regions with additional investment from Mirova and Fundo Vale.³⁹ Despite INOCAS's success in developing the Macauba value chain, the contingent recovery grant has yet to be repaid. As of 2020, the activity has invested in 26 farmers who have planted about 502 hectares of Macauba trees. Donor funding also covered upfront costs for INOCAS's community engagement process to ensure uptake of the project at the community level, supporting the State of Minas Gerais, and other communities that had few income-generating opportunities. Operations are behind schedule, but the goal is to expand to over 2,000 hectares in year six and 1,000 hectares per annum in the following years. Successfully scaling and commercializing the value chain could dramatically disrupt the global palm oil market, providing an environmentally friendly substitute to palm oil for the Brazilian market and reducing reliance on imports.⁴⁰ The project is expected to sequester over 300,000 tons of CO₂ equivalent.

This innovative model has already shown high participation rates among farmers and provides promising evidence of human impact.⁴¹ The added revenue streams from Macauba tree farming are expected to have high income and livelihood impact, with farmers' incomes expected to increase by USD 35 per day, doubling the average income.⁴² With additional funding commitments, the project is expected to reach more farmers and increase their income levels.



FIGURE 9: INOCAS SUSTAINABLE PALM OIL MODEL

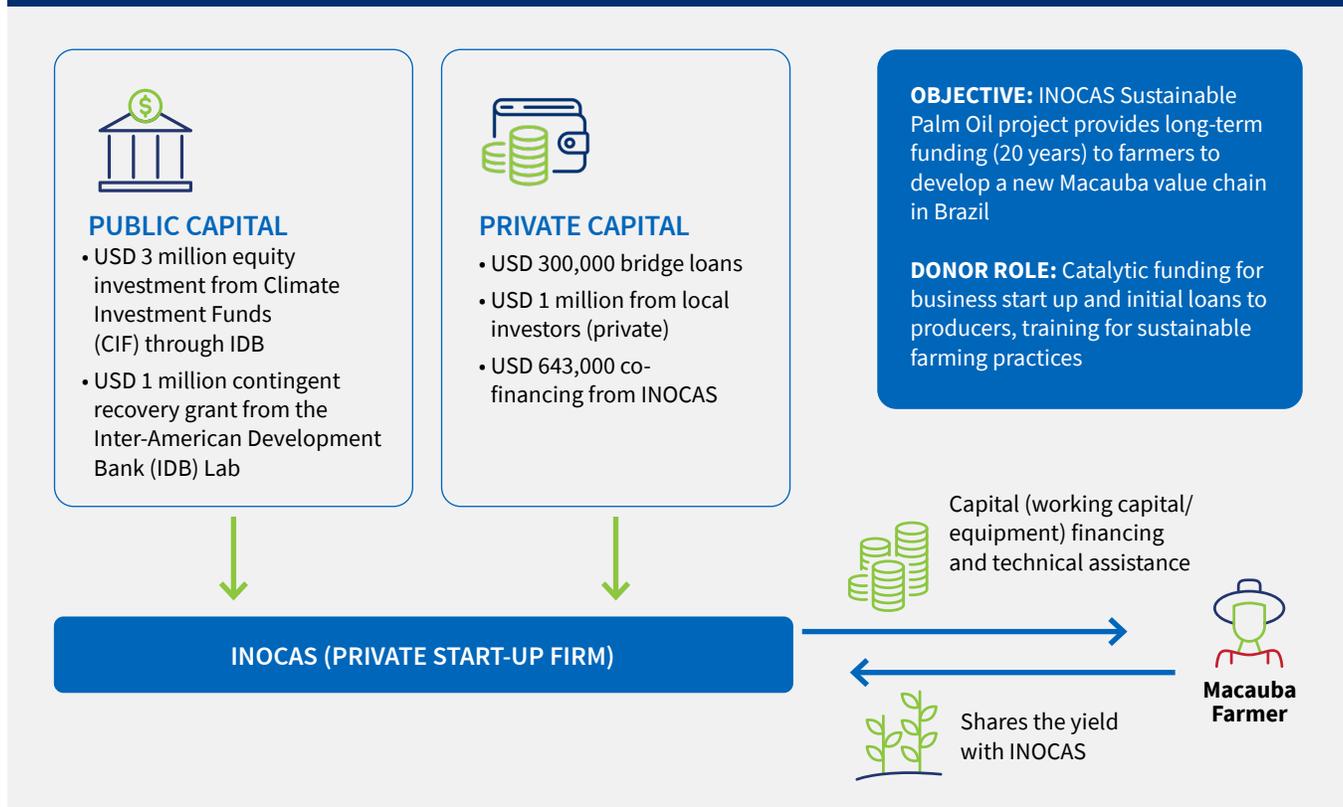
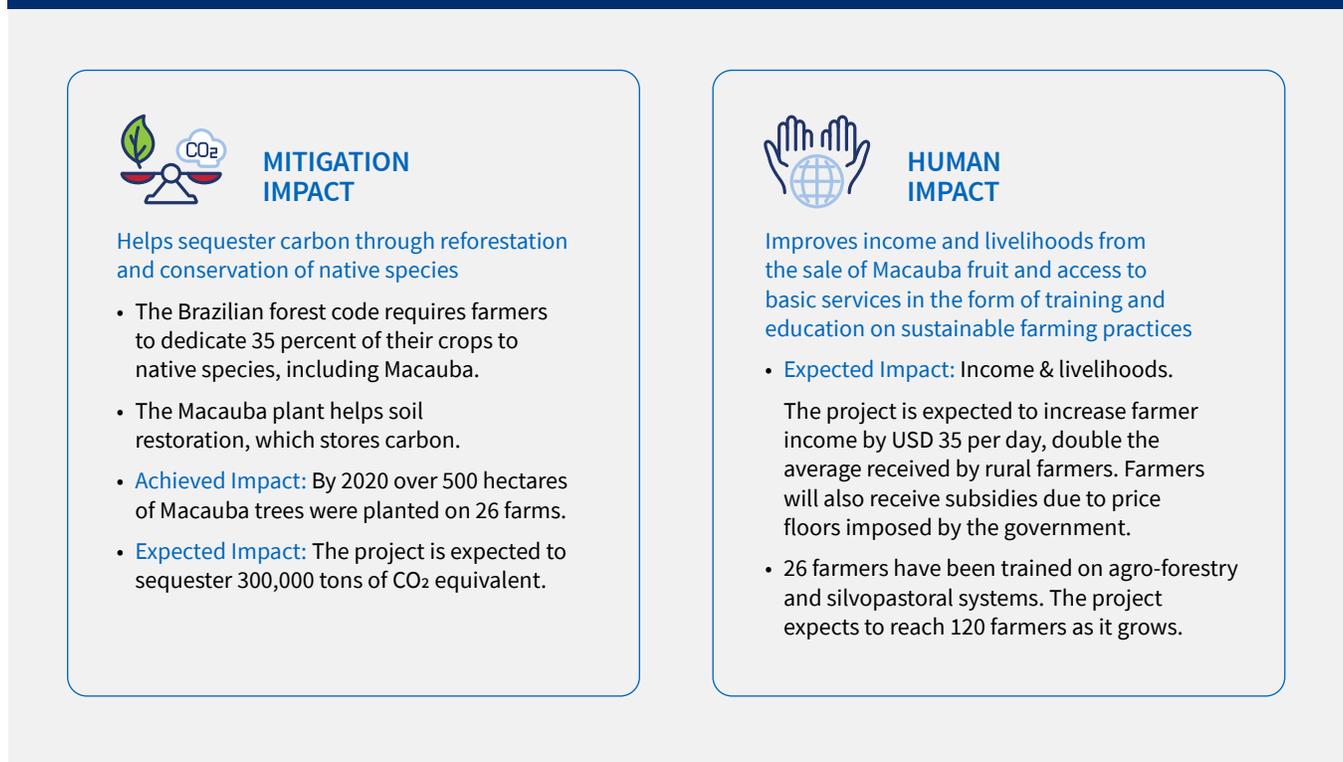


FIGURE 10: CLIMATE AND HUMAN IMPACT FOR INOCAS SUSTAINABLE PALM OIL



SECTION 3: WHAT ARE THE LESSONS LEARNED FOR DONOR SUPPORT FOR CLIMATE ACTION?

Lessons drawn from a broad set of donor experiences are categorized in three principal areas: early-stage design, investment facilitation, and enabling conditions.

Donors have an essential role to play during the early stage to identify and assess investment opportunities and financing gaps, support investment readiness of firms and projects, and ensure that community engagement and the equitable distribution of climate benefits are considered. Throughout the lifecycle of an investment, USAID can support activities such as transaction advisory, fund structuring, provision of guarantees, and catalytic capital to increase the speed and scale of climate action and crowd in other sources of capital. USAID can also improve the enabling environment to encourage investment or reduce costs enhancing ecosystem additionality.

KEY LESSONS: EARLY-STAGE DESIGN

Donors have an essential role to play during early-stage design to identify and assess investment opportunities and financing gaps, support investment readiness of firms and projects, and include Indigenous Peoples and community engagement.

An intentional focus on climate justice during early-stage design can prevent further exacerbation of racial, economic, and gender disparities. Such support results in more equitable distribution of climate benefits and wider scale uptake of climate solutions that deliver both environmental and human impact. For example, early funding for technical assistance from donors in the [INOCAS Sustainable Palm Oil](#) project in Brazil assisted INOCAS in covering upfront community engagement costs, resulting in increased areas planted with Macauba trees and growing incomes for participating farmers.

Considering the tradeoffs and synergies of both adaptation and mitigation can help identify and design projects that maximize climate benefits. Mitigation approaches, on their own, can exclude other sectors, like agriculture and water; increasing vulnerabilities as climate risk increases.⁴³ On the other hand, mitigation projects that have few adaptation and resilience effects can have large mitigation potential. Assessing these factors at the project's design-stage can support decision-making that maximizes climate benefits. For example, [CRAFT](#) developed an investment criterion

to assess where climate projects reduce vulnerabilities through adaptation or resilience. Key vulnerabilities include water scarcity and damage to agriculture from storms and floods. These projects also have mitigation benefits.

Early-stage support from donors can also support proof of concept in new sectors and technologies.

Early-stage support typically provides financing to projects through a combination of a feasibility study, convening power, and collaboration between the private sector and government to guide companies to commercial viability. Early-stage support helps in demonstrating the viability of a new sector or technology and makes projects bankable, attracting additional funding to increase the speed and scale of climate action. Early-stage support can demonstrate that priority areas, such as adaptation and resilience, can generate positive returns to attract more funding for use cases, thus expanding climate action solutions.

KEY LESSONS: INVESTMENT FACILITATION

Sequencing donor interventions and identifying the right tools to crowd in other sources of capital across the investment lifecycle can speed development of innovative climate solutions. Advising on components that have been successful in prior transactions helps save time and effectively deploy resources to scale.

Fund structuring, catalytic capital, and transaction advisory services can help raise capital and prove the business case for new sectors or innovations.

Donor funding through a USD 1 million grant in the [Debt for Nature Swap](#) project in the Seychelles helped finance the structuring of financial instruments and transaction advisory services for debt conversion that increased funding for marine conservation and climate adaptation. Catalytic capital in the form of a concessional loan to the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) enables the government of the Seychelles to repay the trust debt at a discounted rate, thereby freeing funds for marine conservation and adaptation projects.⁴⁴

Coupling technical assistance with catalytic capital, guarantees or risk insurance can improve the viability of projects and crowd in private capital to scale climate action.

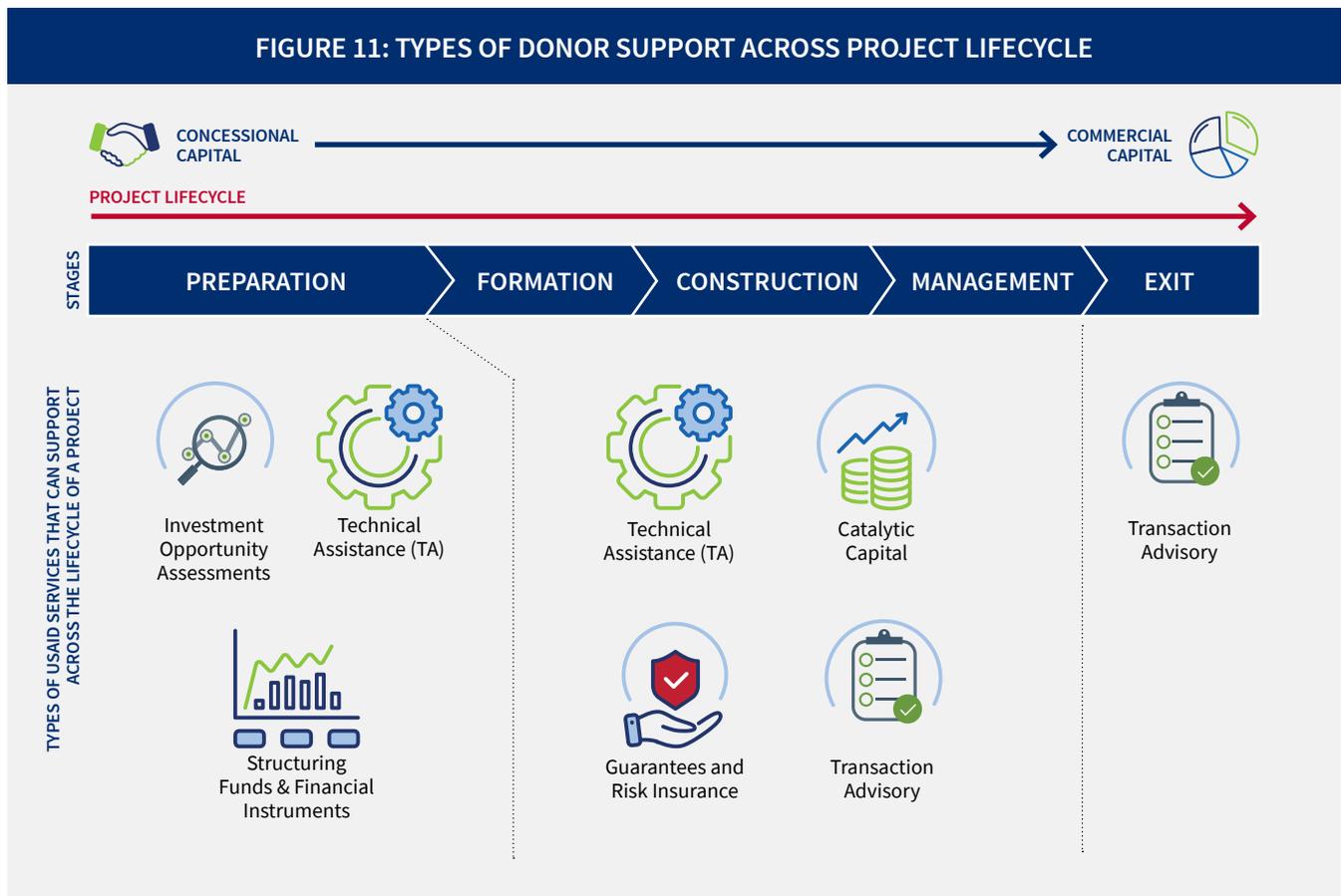
Donor funding can cover the costs of services needed to support business preparation. Coupling this support with risk insurance or guarantees can further enhance the likelihood of private investment, as it protects investors from the risks they perceive in climate projects. This support can improve businesses' viability. Once a project is commercially viable, it can access investment funding to scale. Donor support of [Africa Clean Energy Finance \(ACEF\)](#) provided funding for a TA facility which was coupled with risk insurance from DFC that allowed 17 of the 27 clean energy projects it financed to scale.⁴⁵ Funding for TA activities allowed ACEF to provide preparation support to improve viability of their clean energy projects, allowing projects to meet upfront planning costs prior to seeking investment on commercial terms.

**KEY LESSONS:
ENABLING CONDITIONS**

Support for awareness building for government agencies on the business cases and opportunities of climate action, more conducive policies, legislative reforms, and enhanced credit risk ratings contribute to creating a more conducive environment for investment.

Donor support can increase opportunity awareness by providing technical assistance to mainstream climate investment in national policies and planning. Low carbon footprint growth can be seen as placing "shackles" on economic growth or offloading the Global North's past emission problems onto developing countries.⁴⁶ Donor-supported TA creates ecosystem additionality by improving the policy environment for private-sector investment.

FIGURE 11: TYPES OF DONOR SUPPORT ACROSS PROJECT LIFECYCLE



The [BioCarbon Fund ISFL](#) increased awareness and policy reforms by engaging with public- and private-sector actors in Colombia to generate knowledge products that increase awareness, develop policy reforms, and improve synergies for investment in climate-smart agriculture. These actions helped to mobilize over USD 80 million in funding for forest restoration and conservation, agroforestry, bio-energy plantations, reduced tillage, and timber plantations.⁴⁷

Convening and facilitating dialogue can improve alignment among public- and private-sector actors that can reduce the time needed to negotiate climate deals and maximize sustainable adoption of climate initiatives.⁴⁸ Aligning with government climate priorities limits the time needed to develop national objectives and obtain buy-in from government. As a result, financing country-driven climate solutions can accelerate climate action. For example, donors provided TA funding in the [NIWS](#) project to support dialogue between government agencies. As a result, TA funding unlocked a pipeline of over USD 300 million for natural infrastructure projects in Peru. The positive results led private-sector players to seek NIWS support for both design and implementation of natural infrastructure projects.⁴⁹

Supporting local financial sectors to embed climate consideration into policy and practice can help to mainstream climate in policies and investments.

Local financial providers are key intermediaries given their understanding of local contexts. These investors can provide local currency financing, allowing businesses to take up debt for climate projects while avoiding the risks associated with exchange rate fluctuations. Technical assistance for local investors could unlock local financing and speed of adoption of climate initiatives.

Support for climate measurement and data analytics brings down carbon trading costs and improves project design with better risk incorporation. Donor funding and TA can increase the affordability of measurement services needed to trade carbon credits and the data analytics technology needed to better ascertain risks. Climate measurements can be costly due to the lack of market players, the relatively small size of projects that entail diseconomies of scale (in both investment amounts and beneficiaries involved), and the lack of market transparency.⁵⁰ Bringing in more market players and improving market transparency can drive down the cost of climate measurements. The [Climate-Smart Agriculture \(CSA\) Risk-Sharing Facility for MSMEs](#) will address the poor access to information experienced by farmers adopting CSA techniques.⁵¹ Farmers will be provided with CSA-related resources, such as access to climate data, partnership with farmer cooperatives, extension agents, and local agricultural research centers.

BOX 1: DONOR SUPPORT FOR ENHANCING CREDIT RATINGS AND RISK/RETURN PROFILES

[USAID can conduct a spectrum of activities to improve the enabling environment of a given country and enhance the credit rating and risk/return profiles of a given location/project.](#) Generally, low credit ratings are a major impediment for many sovereigns and corporations in developing and frontier markets, and they contribute to investors' perceptions of unattractive risk/return profiles. The U.S. government (USG) is well positioned to address this challenging barrier to investment through a series of interventions to enhance credit ratings, improve risk and return profiles, and promote access to international capital. These could be relevant for countries and subnational entities, public-private partnerships, and private issuers looking to raise private capital for mitigation and adaptation projects. Support may include promotion of a private de-risking facility (such as insurance or guarantees), training sessions on rating agency methodologies, and supporting entities with raising SDG-linked financing.

CITATIONS

1. IPCC, "IPCC SPECIAL REPORT", 2018.
2. USG, LEADER'S SUMMIT ON CLIMATE, ACCESSED JULY 2021.
3. USAID, OUR CLIMATE OUR WORLD, ACCESSED JULY 2021.
4. CLIMATE POLICY INITIATIVE, "UPDATE ON THE GLOBAL LANDSCAPE OF CLIMATE FINANCE 2019", 2020.
5. CSIS BRIEF, HOW CAN THE U.S. INTERNATIONAL DEVELOPMENT FINANCE CORPORATION EFFECTIVELY SOURCE DEALS?, 2020.
6. DFC, COORDINATION REPORT, 2019.
7. USAID, OUR CLIMATE OUR WORLD, ACCESSED JULY 2021.
8. USG, LEADER'S SUMMIT ON CLIMATE, ACCESSED JULY 2021.
9. THE LEADERS CLIMATE SUMMIT WAS A VIRTUAL SUMMIT HELD IN APRIL 2021 CONVENED BY THE USG TO RALLY THE WORLD IN TACKLING THE CLIMATE CRISIS.
10. IP CC, "IPCC SPECIAL REPORT", 2018.
11. IBID.
12. THE SUSTAINABLE DEVELOPMENT AGEDNA, UN.ORG.
13. CLIMATE POLICY INITIATIVE, "UPDATE ON THE GLOBAL LANDSCAPE OF CLIMATE FINANCE 2019", 2020.
14. TWO-YEAR AVERAGES FOR CLIMATE FINANCE ARE USED BY THE CLIMATE POLICY INITIATIVE TO SMOOTH OUT ANNUAL FLUCTUATIONS IN DATA.
15. IPCC, "IPCC SPECIAL REPORT", 2018 AND CLIMATE POLICY INITIATIVE, "UPDATE ON THE GLOBAL LANDSCAPE OF CLIMATE FINANCE 2019", 2020.
16. DALBERG ANALYSIS 2021. USAID, "AGENCY FINANCIAL REPORT FY 2019", 2019: ALL PROGRAM AREAS WITH CLIMATE CHANGE AS THE LEAD TITLE WERE SUMMED UP FOR THIS ANALYSIS. AREAS OF POTENTIAL OVERLAP WITH CLIMATE ACTIVITIES LIKE AGRICULTURE ARE NOT INCLUDED DUE TO THE DIFFICULTY IN DISSAGGRIGATING CLIMATE FOCUSED ACTIVITIES.
17. THE UNFCCC DEFINES ADAPTATION AS 'CHANGES IN PROCESSES, PRACTICES, AND STRUCTURES TO MODERATE POTENTIAL DAMAGES OR TO BENEFIT FROM OPPORTUNITIES ASSOCIATED WITH CLIMATE CHANGE' AND THEY DESCRIBE RESILIENCE AS A FORM OF ADAPTATION. THE WORLD BANK ACTION PLAN ON CLIMATE CHANGE ADAPTATION AND RESILIENCE 2019 SPEAKS OF DOUBLING ADAPTATION FINANCE TO EQUAL THAT OF FINANCING GOING TO MITIGATION IMPLYING THAT RESILIENCE IS PART OF ADAPTATION FINANCING.
18. CLIMATE POLICY INITIATIVE, "UPDATE ON THE GLOBAL LANDSCAPE OF CLIMATE FINANCE 2019", 2020.
19. WRI, THE COSTS OF CLIMATE ADAPTATION, EXPLAINED IN 4 INFOGRAPHICS, 2015.
20. UNITED NATIONS ENVIRONMENTAL PROGRAMME, "ADAPTATION GAP REPORT", 2020.
21. OLHOFF, A., NEUFELDT, H., NASWA, P., AND DORKENOO, K. E. J. (EDS.), THE ADAPTATION GAP REPORT. TOWARDS GLOBAL ASSESSMENT, 2017.
22. THE WORLD RESOURCE INSTITUTE, WRI, ACCESSED JULY 2021.
23. CLIMATE POLICY INITIATIVE, "UPDATE ON THE GLOBAL LANDSCAPE OF CLIMATE FINANCE 2019," 2020.
24. CONVERGENCE, CONVERGENCE, ACCESSED JUNE 2021: USD 23 BILLION OF BLENDED FINANCE FOR CLIMATE DEALS ARE IN THE RENEWABLE ENERGY SECTOR.
25. IBID.
26. GREEN CLIMATE FUND, GCF, ACCESSED JULY 2021.
27. IPCC, WORKING GROUP III MITIGATION OF CLIMATE CHANGE, 2021.
28. UNFCCC, WHAT DO ADAPTATION TO CLIMATE CHANGE AND CLIMATE RESILIENCE MEAN?, ACCESSED SEPTEMBER 2021.
29. C2ES, CLIMATE RESILIENCE PORTAL, ACCESSED SEPTEMBER 2021.
30. CONVERGENCE BLENDED FINANCE, "BLENDED FINANCE WORKSHOP FOR USAID PIVOT CHAMPIONS:" POWERPOINT PRESENTATION PRESENTED IN BALTIMORE, MD, SEPT. 4 2019.
31. BIOCARBON FUND, ANNUAL REPORT, 2017.
32. BIOCISFL FLYER, 2013.
33. BIOCARBON FUND, WHAT IS THE BIOCARBON FUND, ACCESSED AUGUST 2021.
34. THE TA FACILITY INCLUDES CAPACITY BUILDING AND TRAINING, DEVELOPMENT OF METHODOLOGIES AND TOOLS FOR CARBON ACCOUNTING, PROMOTION OF POLICY DIALOGUE AND DISSEMINATION OF LESSONS LEARNED, ASSISTING DEVELOPING COUNTRIES IN CARBON ASSET CREATION.
35. BIOCARBON FUND, ANNUAL REPORT, 2020.
36. INITIATIVE 20 X 20, PRODUCING SUSTAINABLE PALM OIL IN INNOVATIVE SILVOPASTURE SYSTEMS, ACCESSED AUGUST 2021.
37. IDB, DEVELOPMENT OF A MACAUBA-BASED SILVOPASTORAL SYSTEM AND VALUE CHAIN.
38. INOCAS, DEVELOPING A VALUE CHAIN FOR SUSTAINABLE PALM OIL IN BRAZIL, 2020.
39. IBID.
40. CIF, BUILDING A SUSTAINABLE MACAUBA BASED SILVOPASTORAL SYSTEM AND VALUE CHAIN IN BRAZIL, 2020.
41. CIF, BUILDING A SUSTAINABLE MACAUBA BASED SILVOPASTORAL SYSTEM AND VALUE CHAIN IN BRAZIL, 2020.
42. INOCAS, DEVELOPING A VALUE CHAIN FOR SUSTAINABLE PALM OIL IN BRAZIL, 2020.
43. SOURCE, THE WORLD'S FIRST RENEWABLE WATER SUPPLY, ACCESSED AUGUST 2021.
44. DALBERG, STAKEHOLDER INTERVIEWS, 2021.
45. OPIC, ACEF FACTSHEET, ACCESSED JULY 2021.
46. DALBERG, STAKEHOLDER INTERVIEWS, 2021.
47. BIOCARBON FUND, ANNUAL REPORT, 2020.
48. DALBERG, STAKEHOLDER INTERVIEWS, 2021.
49. DALBERG, STAKEHOLDER INTERVIEWS, 2021.
50. IBID.
51. GCF, CSA RISK SHARING FACILITY FOR MSMEs, 2017.