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# CATALYZING PRIVATE FINANCE FOR CLIMATE ACTION:
## CASE STUDY ANALYSIS

SEPTEMBER 2021

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# Contents & Resources



## RELATED RESOURCES

This series of case studies is one of three complementary resources that include:

*Catalyzing Private Finance for Climate Action - Learning Brief*

***Additionality and Human Impact in Blended Finance - Guidance Note***

# EXECUTIVE SUMMARY

Catalyzing private finance for climate action is essential to achieving goals for limiting global warming. Global climate financing currently available is insufficient to meet the minimum USD 1.6 trillion annual target needed to keep warming within the 1.5-2°C range.

USAID seeks to play a pivotal role in climate action, increasing funding to partner countries and reducing global emissions by half by 2030.

Blended finance can catalyze private sector investment for climate action with financial structuring that enables impact-oriented donors and commercial capital providers to invest alongside each other to increase the speed and scale of climate solutions.

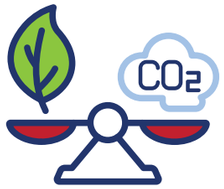
# Definition of Key Terms

## 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 processes, 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 these risks.




## MITIGATION

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

# Donor Support Activities Highlighted in Case Studies

## INVESTMENT OPPORTUNITY ASSESSMENT

**Contributes to understanding of market conditions and identifying investment opportunities**

Occurs early in the design phase and assesses a targeted range of priorities, such as gathering information on investors operating or interested in the market and pipeline development

## STRUCTURING FUNDS & FINANCIAL INSTRUMENTS

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

- Offers activities that help structure blended finance funds, investment platforms, and other financial products
- May provide financial support to cover legal fees

## CATALYTIC CAPITAL

**Improves the risk/return profile for commercial investors by absorbing risk and accepting concessionary returns with projected development outcomes**

Supports fund managers and projects with catalytic capital through sub-contracts or grants, such as by providing catalytic capital to fund managers to build first-loss capital into a vehicle structure

# Donor Support Activities Highlighted in Case Studies

## GUARANTEES AND RISK INSURANCE

**Provides credit enhancements and covers part of or all risk in the event of losses/defaults**

- Enhances issuer's credit rating, enabling access to resources on better terms
- Provides guarantees/insurance on below-market terms
- Launches risk-mitigation vehicle adapted to a particular market risk

## TRANSACTION ADVISORY SERVICES

**Helps link capital suppliers to businesses that need investment**

Offers activities, such as investor matchmaking, pitch preparation, financial modeling, and deal structuring, to help businesses become 'investment ready' and raise funding

## TECHNICAL ASSISTANCE (TA)

**Strengthens the commercial viability of a project at pre- or post- investment stages by developing the capabilities of fund managers and/or building the strategic and operational capacity of businesses**

- Supports technical assistance for investees of one or more investment funds related to a priority geography, sector, or market segment
- Provides financial support to offset operational costs (e.g. for launching new vehicles, conducting outreach to investors to raise capital, or covering management fees)
- Provides technical assistance, such as legal and engineering services, to support government entities with private-public partnerships

# Case Studies Presenting Donor Support in Catalyzing Private Finance

| CASE STUDY | LOCATION | SECTOR \| CLIMATE FOCUS | DONOR SUPPORT |
|---|---|---|---|
| **A** **Seychelles Debt for Nature Swap (2015)**<br>**GOAL:** A debt restructuring mechanism to increase funding for marine conservation and climate adaptation | **AFRICA**<br>*Seychelles* | **WATER**<br>*Adaptation, Resilience, Mitigation* | *Catalytic Capital, Transaction Advisory* |
| **B** **INOCAS Sustainable Palm Oil (2017)**<br>**GOAL:** Provides financing for a new Macauba value chain, to be grown sustainably with smallholder farmers | **LATIN AMERICA**<br>*Brazil* | **AGRICULTURE**<br>*Mitigation* | *Catalytic Capital, Technical Assistance* |
| **C** **The Sustainable Ocean Fund (SOF)* (2018)**<br>**GOAL:** Provides financing to scale businesses that build resilience in coastal ecosystems | **GLOBAL**<br>*Indonesia & Mexico* | **WATER**<br>*Mitigation* | *Technical Assistance, Guarantees & Risk Insurance* |
| **D** **Natural Infrastructure for Water Security (NIWS)* (2017)**<br>**GOAL:** Provides TA to improve natural resources management to increase water security | **LATIN AMERICA** | **WATER**<br>*Adaptation, Resilience, Mitigation* | *Technical Assistance* |
| **E** **Climate Resilience and Adaptation Finance & Technology Transfer Facility (CRAFT) (2017)**<br>**GOAL:** An equity investment vehicle focused on expanding the availability of technologies for adaptation and resilience | **GLOBAL**<br>*Mexico & South Africa* | **AGRICULTURE, FINANCIAL SERVICES, FORESTRY, WATER**<br>*Adaptation, Resilience* | *Catalytic Capital, Transaction Advisory, Technical Assistance* |
| **F** **Climate Smart Agriculture Risk Sharing Facility for MSMEs (2017)**<br>**GOAL:** Long-term loans and equity investments to agricultural/ agro-forestry enterprises for sustainable land use | **LATIN AMERICA**<br>*Mexico* | **AGRICULTURE**<br>*Adaptation, Resilience, Mitigation* | *Catalytic Capital, Guarantees & Risk Insurance* |
| **G** **BioCarbon Fund (2004)**<br>**GOAL:** Provides results-based payments and capacity building for beneficiaries involved in sustainable land use | **GLOBAL**<br>*Indonesia & Mexico* | **FORESTRY**<br>*Mitigation* | *Catalytic Capital, Technical Assistance* |
| **H** **Africa Clean Energy Finance (ACEF)* (2012)**<br>**GOAL:** Provides preparation grants to improve viability of clean energy projects | **AFRICA**<br>*Nigeria & South Africa* | **ENERGY**<br>*Mitigation* | *Catalytic Capital, Technical Assistance, Guarantees & Risk Insurance* |

**Project supported by USAID*

*Note: Countries in italics align with USAID priorities*

# Case Study Framework: Key Questions

## 1 Overview of the Problem Statement and Solution

- What is the problem and overall solution?

## 2 Overview of the Model

- How does the model work?

## 3 Donor Role and Additionality

- What is the donor role?
- How did donor support create additionality?

## 4 Climate and Human Impact

- What are climate impacts?
- What is the realized or expected human impact?

## 5 Lessons Learned

- What are lessons learned that support increased speed and scale of climate action?

# CASE STUDY A

## SEYCHELLES DEBT FOR NATURE SWAP

A debt restructuring mechanism to increase funding for marine conservation and climate adaptation

DONOR SUPPORT

CATALYTIC CAPITAL

TRANSACTION ADVISORY

# A

# The Debt for Nature Swap increases government financial resources to fund marine conservation through debt conversion.

## CLIMATE PROBLEM

Lack of coastal ecosystem protection resulting in overfishing, coral bleaching, and shoreline erosion

## FINANCING GAP

Seychelles government did not have additional financial resources to finance marine conservation

## BENEFICIARIES

**Project Location:** Seychelles
**Beneficiaries:** Communities supported thus far include Mont Fleuri, Mahé, and Pasquière

## SOLUTION

**An innovative model that can support marine conservation by:**

- Using grant funding from donors for structuring funds and financial instruments and transaction advisory services for the debt conversion
- Providing catalytic capital from donors to buy back the debt and finance marine conservation

A

# Seychelles Debt for Nature Swap finances marine conservation via debt restructuring.

## OVERVIEW

**The debt for nature swap program in the Seychelles is a first of its kind and focuses on marine conservation financed through the conversion of USD 21.6 million in national debt via the world's first debt for nature swap for ocean conservation.**

- Debt conversion enabled the Government of Seychelles to make a policy commitment to safeguard 30 percent of its Exclusive Economic Zone through marine protected areas.
- The model is uses USD 15.2 million in concessional loans and a donor grant to capitalize SeyCCAT. In turn, SeyCCAT provides a loan to the Government of Seychelles to purchase its sovereign debt at a discount. The government then repays SeyCCAT at a favorable rate to finance conservation.
- SeyCCAT uses the proceeds and a USD 5 million grant to finance marine conservation and adaptation activities, while capitalizing the endowment fund from government repayments, and repays the loan to The Nature Conservancy (TNC).

## MECHANISM TIMELINE

# A

# The inclusion of the endowment fund helps the conservation activities to be sustainable beyond the project timeline.

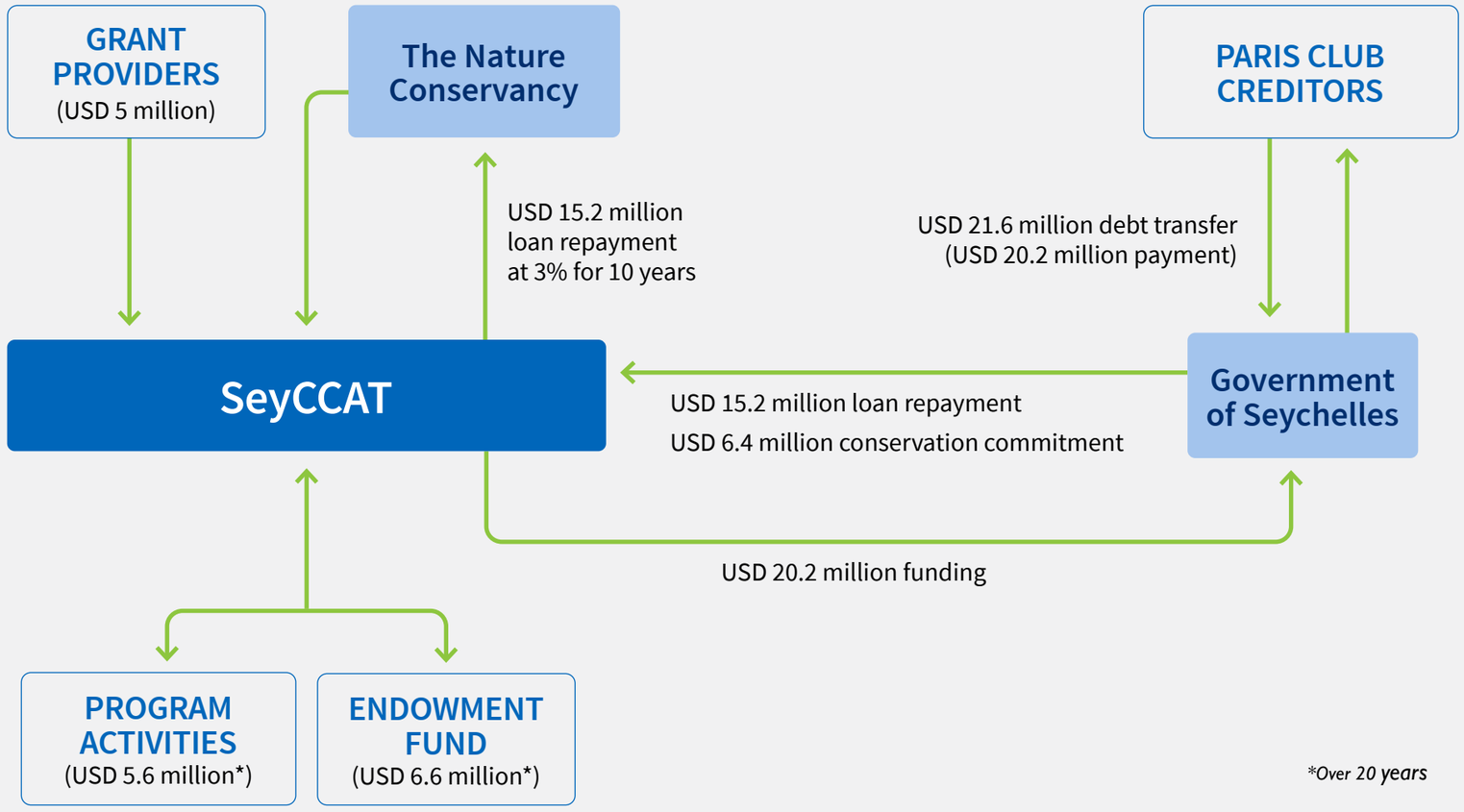
## MODEL

### DONOR ROLE:

Donor engagement included provision of catalytic capital

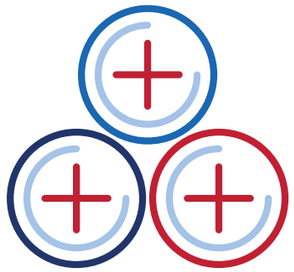
### ENABLING FACTORS:

Partnering with Development finance institutions (DFIs) and donors enables the fund to lower the amount of the original debt, creating more fiscal space to fund more conservation projects



# A

# Catalytic capital from donors enabled the Seychelles to accelerate its coastal conservation efforts.



## ADDITIONALITY

**Donor support mobilized public and private funds and saved time on pipeline development.**

## FINANCIAL ADDITIONALITY

Catalytic funding from the donor was important in mobilizing public and private capital, including funding from Grantham Environmental Trust, the Leonardo DiCaprio Foundation, and others, creating more financial space for conservation activities.

## ECOSYSTEM ADDITIONALITY

The catalytic funding from the donor allowed the Seychelles to channel its old debt to a new priority, protecting marine areas and accelerating climate action activities. This support also allowed the Seychelles to create a legal framework to safeguard marine protected areas and develop a pipeline of climate activities within coastal conservation.

The innovative blue bond and marine conservation trust model is being replicated for other coastal countries. TNC is raising a U.S. International Development Finance Corporation-insured (DFC) loan for the Government of Belize to fund a cash purchase of the Eurobond. In September 2021, Belize announced that it reached an agreement in principle with institutional investors to purchase, redeem, and cancel outstanding bonds and to use the money provided by the blue bond financing program for marine conservation and sustainable economic activity. It commits to prefund, in full, a USD 23.4 million Marine Conservation Endowment Account to support future marine conservation projects.

# A

# Funds increased protection of Seychelles' waters from less than 1 percent to 30 percent.

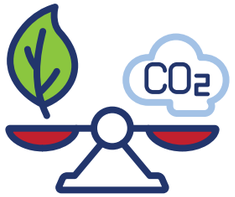


## ADAPTATION & RESILIENCE

**Ensures management of coasts, coral reefs, and mangroves, and development and implementation of risk reduction and social resilience planning to adapt to the effects of climate change**

**Achieved impact:**
High-resolution 2D/3D coastal mapping and monitoring to assess changes in shoreline, topography, volumes, and understanding the extent of beach morphology using photogrammetry is under implementation

**Expected impact:**
A project mapping coral population connectivity and ocean currents to inform management and policy of the coral reef system in Seychelles is also under implementation




## MITIGATION IMPACT

**Rehabilitates marine and coastal ecosystems, which are effective at sequestering carbon dioxide**

**Achieved impact:**
Increase protection for Seychelles waters from less than 1 percent to more than 30 percent of the country's Exclusive Economic Zone, which will improve marine biodiversity, an important factor for $CO_2$ sequestration

## HUMAN IMPACT

**Based on increased income and livelihoods through financing of conservation projects**

**Achieved impacts:**
**Equity and Empowerment.** More than 50% of projects have been led by or have benefited women

**Income and Livelihoods.** 23 projects have benefited small-scale artisanal fisheries

# A

## DFIs and donors are important in creating more fiscal space for conservation efforts.

**1** **Coupling capacity-building with an endowment fund that supports marine conservation projects can have broader economic impacts in regions reliant on coastal conservation.**

An endowment fund for the Seychelles ensures financial sustainability of future climate-related projects beyond the life-cycle of the project. The SeyCCAT endowment fund will be capitalized with USD 151,000 per year to fund future projects.

**2** **Using transaction advisory services can help raise capital and prove the business case for new sectors or innovations.**

Donor funding of USD 1 million helped to finance structuring the financial instruments and transaction advisory services for the debt conversion, which increased funding for marine conservation and climate adaptation.

# Sources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SeyCCAT, Projects, accessed July 2021

Dalberg, Stakeholder interviews, 2021

Panorama, Seychelles' first debt-for-nature swap for ocean conservation, 2021

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World Resource Institute, Ocean Conservation Is an Untapped Strategy for Fighting Climate Change, 2018

*Press Release: Belize Reaches an Agreement in Principle with a Committee of Holders of a Substantial Portion of Its International Bonds*

# CASE STUDY B

## INOCAS SUSTAINABLE PALM OIL

Catalytic capital to leverage private investment to reforest degraded pastureland using a business model that enhances producer income and creates a sustainable landscape in Brazil

### DONOR SUPPORT

**CATALYTIC CAPITAL**

**TECHNICAL ASSISTANCE (TA)**

# B INOCAS Sustainable Palm Oil improves sustainable farming of indigenous palm trees across deforested cattle pastureland in Brazil.

## CLIMATE PROBLEM

- Cattle ranching on degraded land
- Farmers lack access to finance, knowledge of more sustainable farming practices, and market for sustainable produce

## FINANCING GAP

Local banks and investors would not finance undeveloped value chain and a nascent business model

## BENEFICIARIES

**Project Location:** State of Minas Gerais, Brazil
**Beneficiaries:** A community with low socio-economic indicators due to the availability of few income-generating opportunities

## SOLUTION

**An innovative model using blended finance to improve sustainability of agriculture, decrease greenhouse gas emissions, increase incomes, and improve standard of living by:**

- Promoting a native species of palm (Macauba)
- Engaging farmers to increase uptake of a financing mechanism to plant Macauba on degraded land
- Supporting farmers with input financing and TA
- Creating a 20-year sharing agreement via Macauba yields to pay back support

# B INOCAS provides financing to farmers and shares yields of Macauba trees as repayments for a period of 20 years.

## OVERVIEW

**The project provides USD 3 million in equity financing (non-concessional) to INOCAS, a private start-up firm that finances farmers' Macauba investments.**

- The project attracted additional financing in the form of bridge loans (USD 300,000) and USD 1 million from local private investors to finance INOCAS and farmers.
- The de-risking mechanism includes a USD 1 million contingent recovery grant to develop a new business model, structure farmers' involvement, and train farmers and agricultural laborers. It is repaid only if the company is profitable.
- Farmers partner with INOCAS, which prepares land, supplies seeds, and provides TA. Farmers share their yield equally with INOCAS for 20 years to repay the loan.
- INOCAS collects Macauba fruits for further processing. Over 200,000 tons of Macauba fruits have been collected as of March 2020 from existing trees until the new plantation begins to produce yields.
- Investors expect to exit INOCAS by year 10, selling shares to new investors or executing the exit option negotiated with INOCAS.

## MECHANISM TIMELINE

# B

# Catalytic funding from donors enabled INOCAS to finance Macauba farmers.

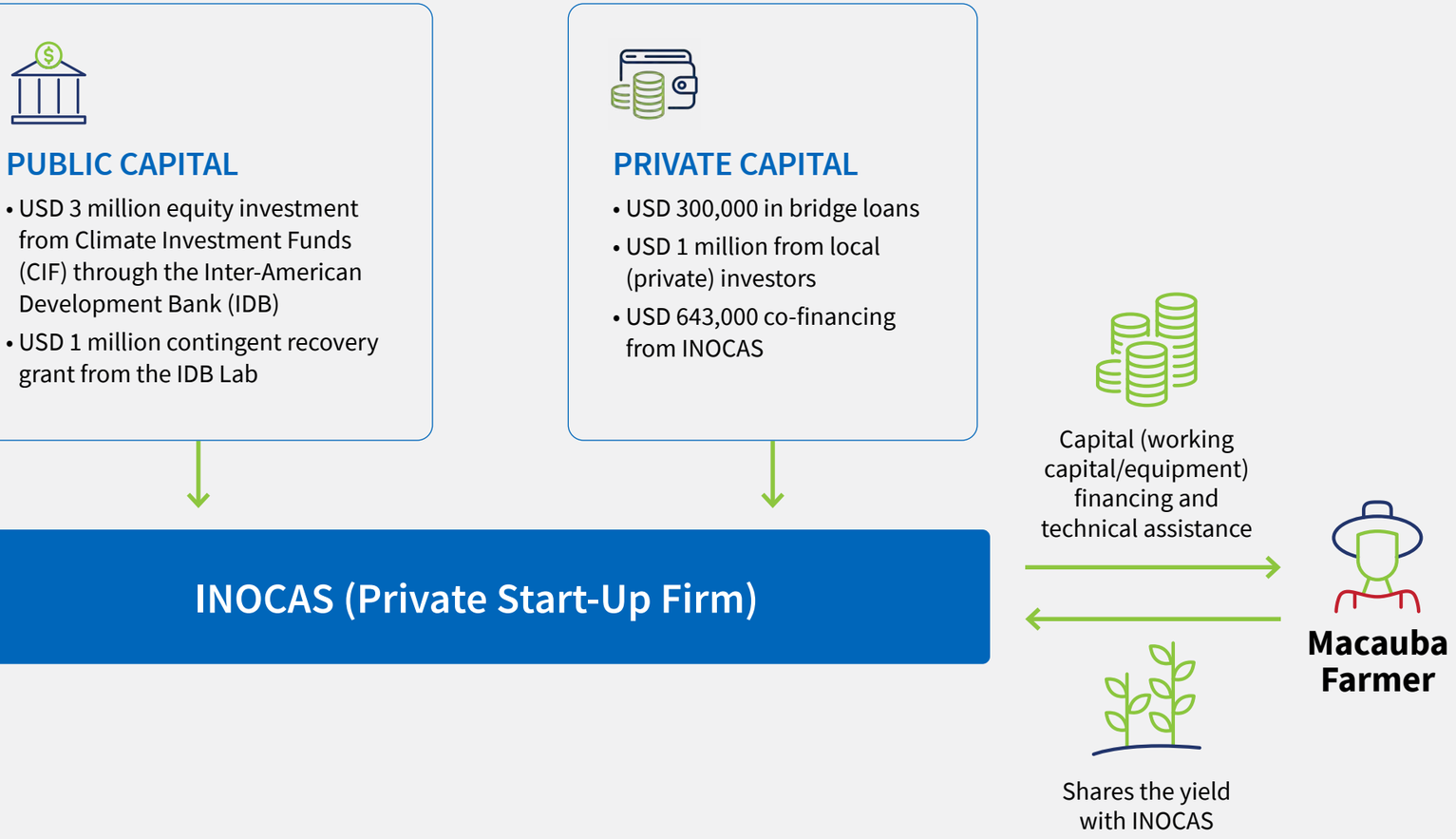
## MODEL

### DONOR ROLE:

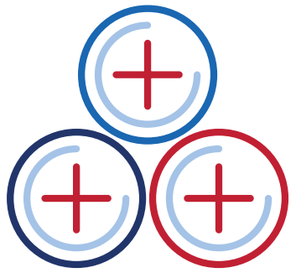
Catalytic funding into the mechanism to finance the business start-up, initial loans to producers, and the training program on sustainable farming practices

### ENABLING FACTORS:

The project and the forest code requirement to plant native species with demand for sustainable palm oil to build a viable sustainable business model with farmers



# B The Contingent Recovery Grant allowed INOCAS to demonstrate proof of concept for the sector, attracting additional funding.



## ADDITIONALITY

**Attracted additional private investment and demonstrated the success of the value chain.**

## FINANCIAL ADDITIONALITY

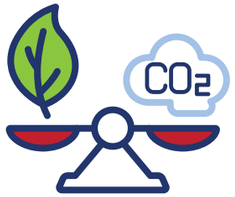
The catalytic funding from donors allowed INOCAS to successfully build the Macauba value chain, enabling INOCAS to attract an additional USD 300,000 in bridge loans and USD 1 million from local investors and expressions of interest to expand the model with additional investment to other regions from Mirova and Fundo Vale.

## ECOSYSTEM ADDITIONALITY

Technical assistance support, funded by donors, is helping to establish the first successful cultivation of the Macauba plant in Brazil, illustrating the potential impact for the new sector. Farmers received training to sustainably grow the Macauba tree and were guided on forest code regulation around planting native species.

# B

# The project is expected to sequester 300,000 tons of $CO_2$ and improve farmer incomes.




## MITIGATION IMPACT

**Helps sequester carbon through reforestation and conservation of native species.**

- The Brazilian forest code requires farmers to dedicate 35 percent of their crops to native species, including Macauba trees
- The Macauba tree helps with soil restoration, which stores carbon

**Achieved impact:**

By 2020, over 500 hectares of Macauba trees were planted on 26 farms

**Expected impact:**

The project is expected to sequester 300,000 tons of $CO_2$ equivalent

## HUMAN IMPACT

**Improves income and livelihoods from the sale of Macauba fruit and provides access to basic services in the form of training and education on sustainable farming practices.**

**Expected Impacts:**

- The project is expected to increase farmer income by USD 35 per day, double the average received by rural farmers. Farmers will also receive subsidies due to price floors imposed by the government
- 26 farmers have been trained on agroforestry and silvopastoral systems. Trainings are expected to reach 120 farmers as the project grows

# B

# The blending structure is leading to the first successful Macauba plantation project, helping farmers meet the Brazilian forest code.

**1** **Ensuring a sustainable business model can fast-track forest code compliance.**

This model requires farmers to conserve and reforest native species, such as the Macauba tree, and provides the capital and market to do so profitably, thus increasing the speed and scale of mitigation efforts.

**2** **Providing catalytic capital can enable entrepreneurs to build a sustainable business.**

Using a contingent recovery grant together with public and private capital, INOCAS is building the business case for the first Macauba plantation before additional private capital would invest to expand the model. As the model developed, more private capital committed to finance the value chain.

**3** **Developing a financing model attractive to farmers can amplify and equitably share climate action benefits.**

INOCAS provides loans to farmers, repaid through sharing yields from the sales of the Macauba tree products. This increased producer participation, with over 500 hectares planted with Macauba trees by 2020.

# Sources


INOCAS, Developing a value chain for sustainable palm oil in Brazil, 2020

CIF, Building a Sustainable Macauba Based Silvopastoral System and Value Chain in Brazil, 2020

IDB, Development of a macaub based silvopastoral system and value chain, accessed July 2021

# CASE STUDY C

## THE SUSTAINABLE OCEAN FUND

Donor guarantee leveraged to catalyze private and public capital into a model that scales up businesses that build resilience in coastal ecosystems

### DONOR SUPPORT

**TECHNICAL ASSISTANCE (TA)**

**GUARANTEES AND RISK INSURANCE**

# C

# The Sustainable Ocean Fund provides growth capital to companies building resilience in coastal ecosystems.

## CLIMATE PROBLEM

Human activity, such as pollution and overfishing, threaten coastal and marine biodiversity. This negatively impacts the capacity of the oceans to regulate climate change

## FINANCING GAP

There is limited funding for scaling existing solutions for coastal and marine biodiversity

## BENEFICIARIES

**Project Location:** Global
**Beneficiaries:** Communities in Mexico (Baja California Sur), Indonesia, Europe, South Asia, Middle East and North Africa(MENA), and the Caribbean

## SOLUTION

**A blended finance model that supports marine conservation and sustainable seafood by providing loans and equity to scale projects that build resilience in coastal ecosystems, investing in:**

- **Sustainable seafood** - Solutions that improve sustainable fisheries and best practices
- **Circular economy (CE)** - Solutions that reduce ocean waste and create new products from the waste
- **Marine conservation** - Coastal protection and management solutions that create business opportunities, such as blue carbon

# C

# Sustainable Ocean Fund has raised USD 132 million and invested in six companies, mostly in circular economy initiatives.

## OVERVIEW

**The Mirova-managed Althelia Sustainable Ocean Fund (SOF) provides financing to help scale businesses that build resilience in coastal ecosystems and create sustainable economic growth.**

**Resilience-building:**

- Created a platform for countries transitioning from the linear model of 'take-make-waste'

  *Take-make-waste: The process of extracting new resources to create new products with increased emissions from extraction. Does not utilize recycling.*

- Channeled majority of the funds toward circular economy (CE) models, the process of reducing waste while improving ecosystem services by re-using and repairing products already produced
- Reduced emissions from producing new products and gained conservation benefits

**Sustainable growth:**

- Provided growth capital through loans, equity, performance-based payments, and advance market commitments--a guarantee that once a product or service is successfully developed, a sponsor will pay for it, thus creating markets
- Utilized a blended structure with USD 50 million for guarantees provided directly to portfolio investments
- Upon final close in 2020, the fund had produced commitments exceeding USD 132 million

## MECHANISM TIMELINE

C

# The fund is a blended structure, whereby donor support provides a guarantee and TA facility.

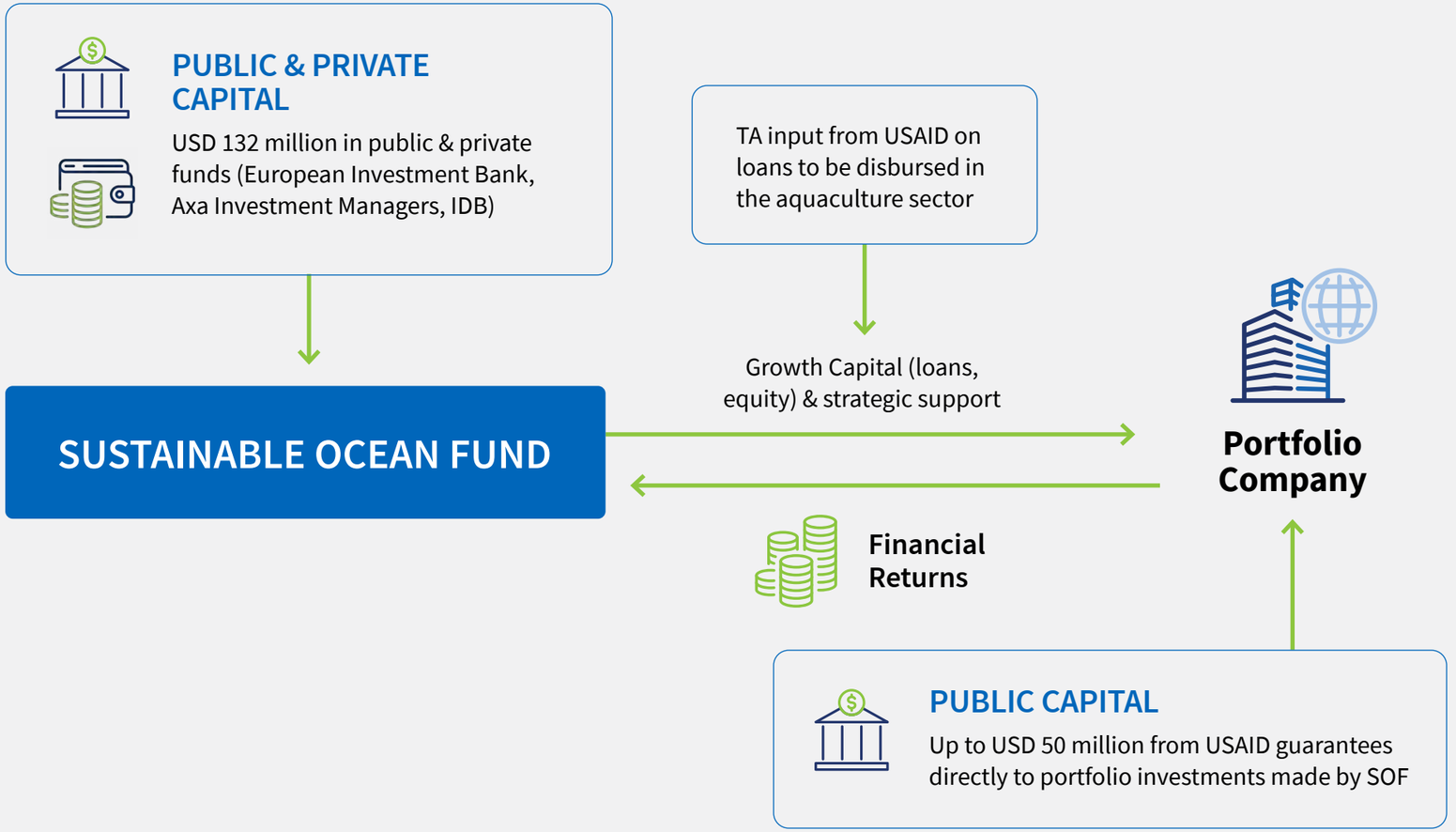
## MODEL

### DONOR ROLE:

Guarantees to de-risk investments and technical assistance to strengthen business models for no-waste solutions

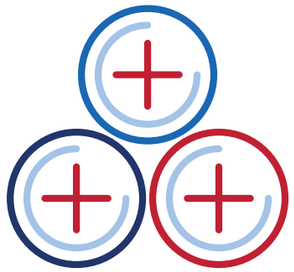
### ENABLING FACTORS:

There is growing interest in coastal conservation from investors, which has made it easier for the Fund to raise capital



# C

# Donor guarantees have been instrumental in mobilizing capital, and donor support helped set standards for suitable seafood practices.



## ADDITIONALITY

**Donor support mobilized financing and set standards for sustainable seafood practices.**

## FINANCIAL ADDITIONALITY

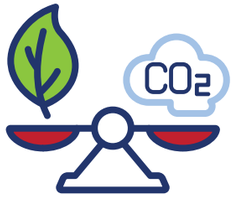
Donor guarantee was instrumental in mobilizing capital, assisting SOF to exceed its target and raise USD 132 million of both public and private capital. The fund was initially designed to raise USD 50 million.

## ECOSYSTEM ADDITIONALITY

The SOF has standard-setting effects, as it imposes sustainable seafood practices, such as helping companies obtain Aquaculture Stewardship Council (ASC) certification.

C

# Mitigation efforts are based on improving carbon storage and recycling within coastal and marine ecosystems.




## MITIGATION IMPACT

- SOF invests in marine conservation whereby mitigation is by-product of investments (e.g. coastal protection and management) to improve biodiversity and resilience in coastal communities
- Blue carbon ecosystems such as mangroves, have been found to be 10x more effective at $CO_2$ sequestration compared to tropical forests

**Achieved Impact:** +80 SafetyNet Technologies products were deployed in order to reduce non-target species capture

**Expected Impacts:**

- Recycling technologies have mitigation co-benefits, saving up to 117,000 tons of $CO_2$ per year through the diversion of plastic from incineration
- Financing a nature-based project that represents 11,000 hectares in blue carbon credit potential, thus increasing mitigation efforts

## HUMAN IMPACT

**Based on increased income and livelihoods through job creation, the financial support from SOF enables companies to expand, employing more people. SOF also helps launch start-ups, creating new job opportunities from new ventures.**

**Achieved Impacts:**

- Created 303 jobs and is expected to support an additional 30,000 waste pickers through recyclables
- 34 percent of the 303 jobs created are held by women

**Expected Impact:** Over1,000 jobs will be created from the 61 enterprises supported under SOF

# C

# Donor-supported technical assistance, along with risk insurance, can be instrumental in decision-making and crowding in private capital.

1

**Providing technical inputs can support decision-making that can maximize climate impact.**

USAID provided technical guidance in the approval process for aquaculture projects, ensuring high-quality selections.

2

**Coupling guarantees/risk insurance with TA can crowd in private capital to support marine conservation and biodiversity.**

Using both mechanisms together allowed for identification and scale of conservation projects, such as SafetyNet technology, to protect endangered species.

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Ellen MacArthur Foundation, What is a circular economy? A framework for an economy that is restorative and regenerative by design, accessed August 2021

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World Resources Institute, Ocean Conservation Is an Untapped Strategy for Fighting Climate Change, 2018

The Blue Carbon Initiative, Mitigating climate change through coastal ecosystem management, accessed July 2021

# CASE STUDY D

## NATURAL INFRASTRUCTURE FOR WATER SECURITY (NIWS)

Donor financing of TA facility supports capacity of sub-national government agencies to improve water security by investing in nature-based solutions

DONOR SUPPORT

TECHNICAL ASSISTANCE (TA)

# D Natural Infrastructure for Water Security (NIWS) improves capacity of government to increase investments in nature-based solutions.

## CLIMATE PROBLEM

Water crisis due to natural events, such as drought, forest fires, floods and landslides

## FINANCING GAP

- Lack of pipeline development for water security projects
- Lack of capacity to design, implement, and coordinate natural infrastructure projects

## BENEFICIARIES

**Project Location:** Peru
**Beneficiaries:** Communities in priority basins of Chira, Chilon, Mayo, Quica, Tambo and Vilcanota

## SOLUTION

**A technical assistance model aimed at improving investments in natural infrastructure by:**

Providing capacity building to sub-national government agencies to improve investments in natural infrastructure.

# D

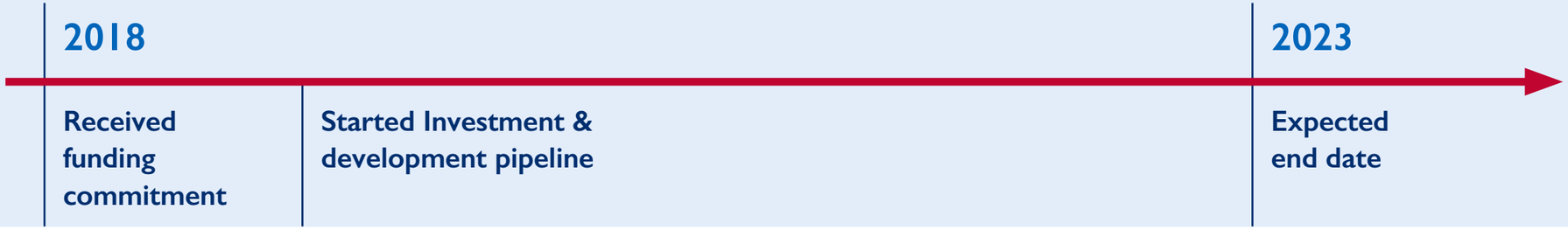
# NIWS is a TA facility that helps communicate a business case for nature-based solutions in Peru.

## OVERVIEW

**NIWS aims to improve natural resource management to increase water security, developing a project pipeline through technical capacity-building that scales investments within natural infrastructure. Over USD 300 million has been mobilized to date.**

- NIWS targets the Government of Peru's capacity to regulate water supply, reducing risk of floods, drought, and water contamination.
- NIWS is a USD 27.5 million TA grant, from the government of Canada and USAID, used to effectively communicate the business case for natural infrastructure and innovative financial mechanisms.
- TA includes supporting government agencies to coordinate on natural infrastructure projects, sharing information on possible interventions and recommendations from the OECD, unlocking funding earmarked for natural infrastructure, and helping agencies use these frameworks to support nature-based solutions.

## MECHANISM TIMELINE



# D

# Government agencies have received TA support, and the private sector has also requested assistance from NIWS.

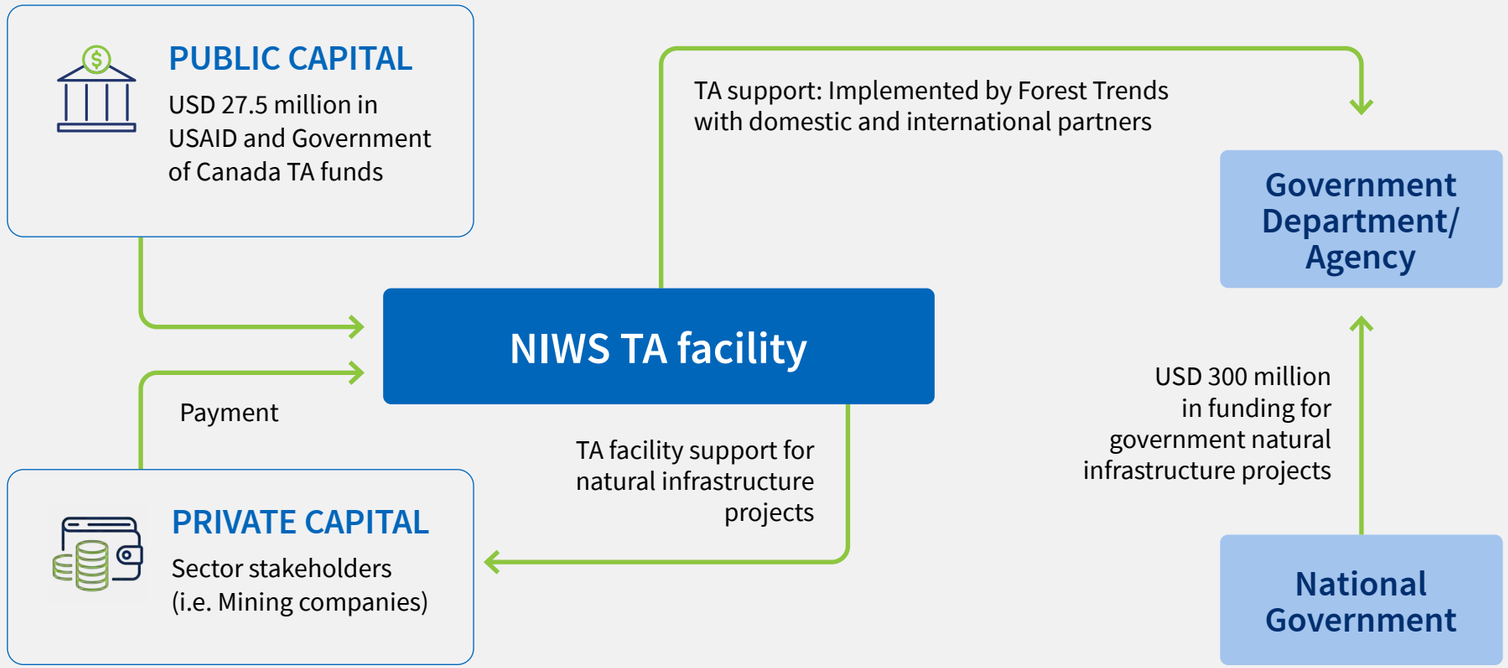
## MODEL

### DONOR ROLE:

TA to the Government of Peru on their national adaptation planning process, and the development of a climate finance strategy

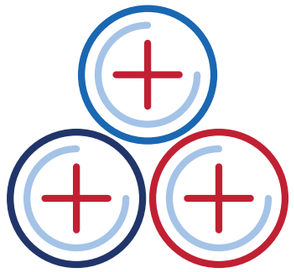
### ENABLING FACTORS:

Scientific tools, such as Herramienta para Identificación Rápida de Oportunidades (HIRO)/Rapid-Focus GIS Tool, have been important in identifying natural infrastructure projects, fast tracking climate action



D

# Donor support has been additional, mobilizing over USD 300 million from the government of Peru.



## ADDITIONALITY

**Support has helped develop the pipeline, accelerate the project development timeline, and assist with garnering private investment.**

## FINANCIAL ADDITIONALITY

The project has mobilized over USD 300 million for natural infrastructure projects from the public sector. NIWS provided capacity building to sub-national government agencies that helped to unlock financing from the government. NIWS has also started to assist private mining companies with managing their water resources, which is expected to result in payments for the services provided.

## ECOSYSTEM ADDITIONALITY

The project has time-saving and pipeline effects coupled with capacity-building as the TA facility enabled the government and private sector to use scientific tools (HIRO) to identify, design, and implement projects. This was difficult to implement before NIWS' intervention. Over USD 68 million of projects have been identified using HIRO by the Ministry of Agriculture, Ministry of Environment, Ministry of Housing, Construction and Sanitation, and the national Reconstruction with Changes Authority (RCC).

# D

# NIWS has enabled resilient intelligence services in Peru that will support data-driven decision making.

## ADAPTATION

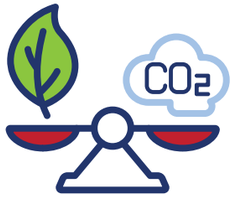
**Includes investments in disaster risk management and conserving wetlands and storing water resources**

**Expected Impact:**
Some of the 57 NIWS projects aim to moderate the hydrological cycle by enhancing ecosystem functions. This helps manage water scarcity while reducing flood risks

## RESILIENCE

**Includes investments in tools that help government and private sector make data-driven decisions, such as satellite imaging**

**Achieved Impact:**
NIWS developed the HIRO tool (Rapid-Focus GIS Tool), a hydrological modeling and plant selection guide for ecosystem restoration. HIRO identifies priority areas and interventions in natural infrastructure




## MITIGATION IMPACT

**Includes conservation and forest restoration efforts that led to mitigation through carbon sequestration. Forest restoration can absorb around 23 percent of global annual $CO_2$ emissions**

**Expected impact:**
NIWS projects are expected to avoid approximately 1.75 million metric tons of $CO_2$ over 20 years

## HUMAN IMPACT

**Improves income and livelihoods and access to basic services through water provisions**

**Achieved impact:**
NIWS created formal employment for around 10,000 people through forest restoration activities

**Expected impact:**
NIWS is expected to increase water availability, allowing up to 24 liters per second in the dry season

# D

# Capacity-building and stakeholder engagement are important factors in scaling natural infrastructure projects in Peru.

1

**Using TA can improve the capacity of local actors and drive climate action to targeted areas like natural infrastructure projects.**

TA interventions can increase the speed and scale of climate action.

2

**Providing support for the coordination and use of scientific tools for climate action can support pipeline development.**

NIWS engages various actors across the economy on identifying areas with the most need through the HIRO tool for natural infrastructure interventions, and assists in designing interventions, thus creating a new pipeline of nature-based solutions.

3

**Collaborating with different donors can bring different expertise to a project, creating stronger outcomes.**

For NIWS, the design team included members from the Canadian government and USAID. Both partners brought important design elements to the project, such as a focus on gender outcomes.

# Sources


Dalberg, Stakeholder interviews, 2021

Forest Trends, NIWS, accessed June 2021

USAID, NIWS: FY2021 Q2 Report, 2021 (Internal)

# CASE STUDY E

## CLIMATE RESILIENCE AND ADAPTATION FINANCE AND TECHNOLOGY TRANSFER FACILITY (CRAFT)

Donor catalytic capital leveraged to expand adaptation and resilience technologies in developing countries

### DONOR SUPPORT

**CATALYTIC CAPITAL**

**TRANSACTION ADVISORY SERVICES**

**TECHNICAL ASSISTANCE (TA)**

# E

# CRAFT addresses climate vulnerabilities by expanding adaptation and resilience solutions.

## CLIMATE PROBLEM

Vulnerabilities caused by chronic or acute impacts of climate change, such as changes in precipitation patterns, temperatures, and natural disasters

## FINANCING GAP

Low-income countries have limited resources to adopt technologies and services that can help them assess and manage climate risks to reduce vulnerabilities

## BENEFICIARIES

**Project Location:** Global
**Beneficiaries:** Individuals, organizations, and governments (e.g. SOURCE solution has been deployed, which provides individuals with drinking water in areas of extreme water stress)

## SOLUTION

**A growth equity investment model coupled with a TA facility to expand adaptation and resilience products and services in existing and new markets, particularly low-income countries by:**

- Leveraging catalytic funding from donors to finance TA facility activities to support adaptation and resilience projects implemented in low-income countries
- Providing equity investments and strategy support to scale adaptation and resilience projects

E

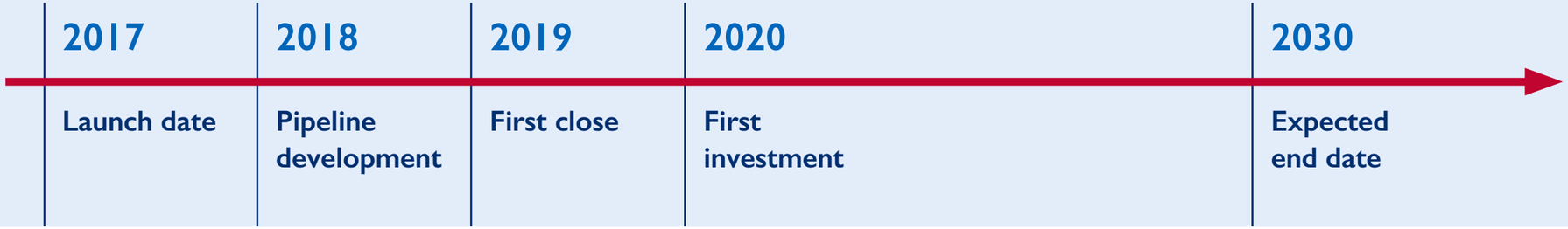
# CRAFT aims to transfer adaptation and resilience technologies through blended capital.

## OVERVIEW

**CRAFT is an investment vehicle focused on expanding the availability of technologies for adaptation and resilience. It provides a platform for innovators to access both existing and new markets through business development services and other strategic support.**

- CRAFT is a USD 250 million target fund, providing equity investments to early-stage adaptation and resilience companies. It also uses a TA facility to finance market studies and preparation support for companies looking to expand to low-income countries.
- The Fund has a global focus, targeting at least 70 percent of companies based in emerging markets, with remaining companies headquartered in developed markets but seeking to expand in emerging markets.

## MECHANISM TIMELINE



# E

## The blended finance structure is based on a 20 percent first-loss guarantee from donors to protect non-concessional capital.

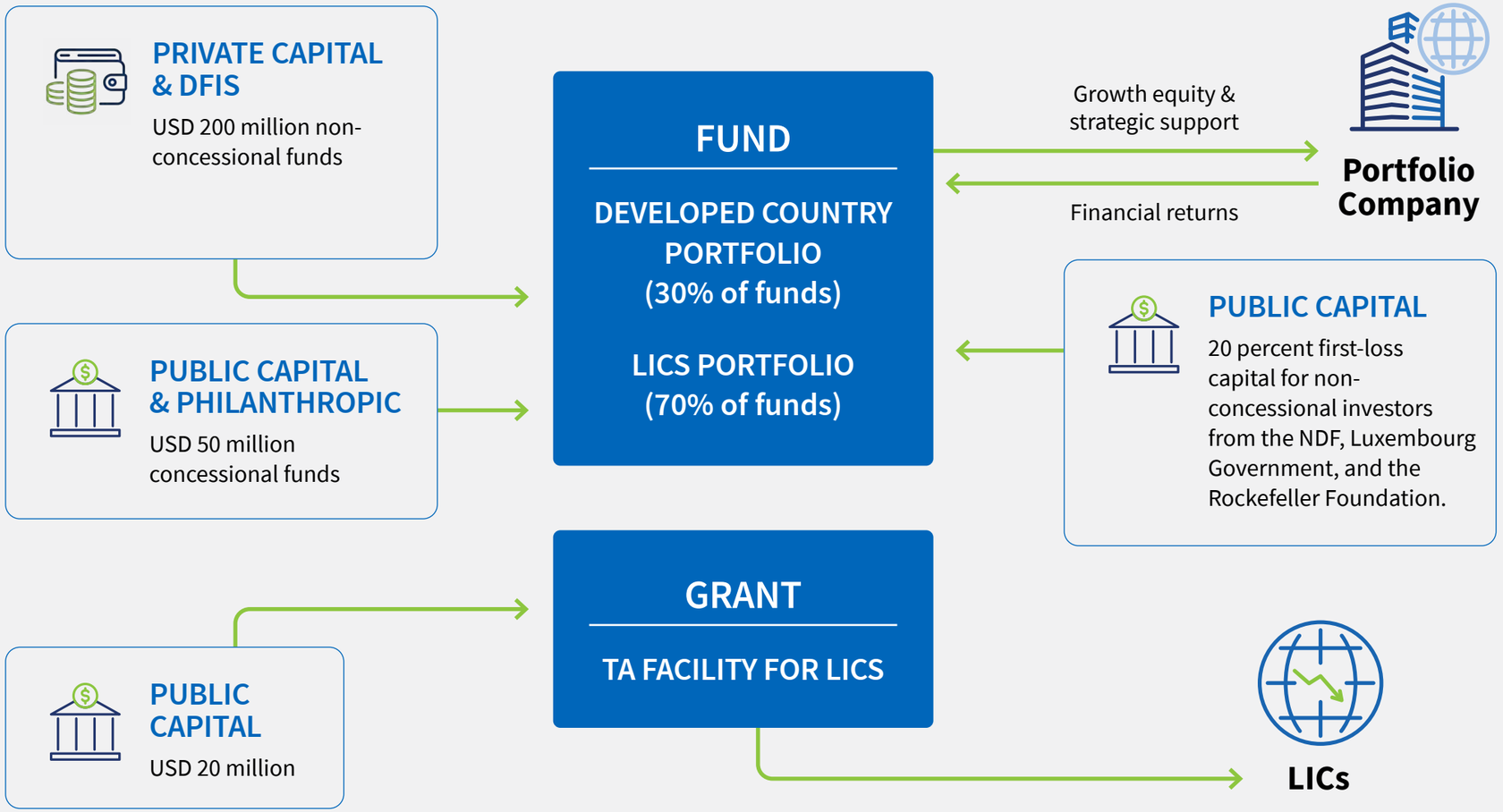
### MODEL

**DONOR ROLE:**

Sequenced funding from concept to execution and catalytic capital for project financing

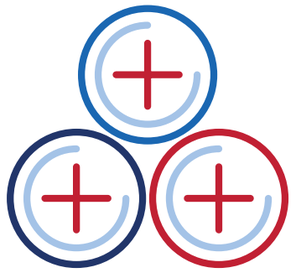
**ENABLING FACTORS:**

CRAFT developed investment criteria for the new sector to help identify projects within adaptation and resilience



E

# First-loss capital was important in mobilizing funding from both public and private actors.



## ADDITIONALITY

**Donor support scaled the project, increased the speed of pipeline development, and mobilized private capital.**

## FINANCIAL ADDITIONALITY

The funding structure, which separates the developed and LIC portfolios, allows investors to choose their risk appetite and channel funding to the portfolio they prefer. The de-risking mechanism that provides 20 percent first-loss capital from donors was important in mobilizing capital, particularly for the LIC portfolio. It also mobilized finance for a new sector—resilience and adaptation.

## ECOSYSTEM ADDITIONALITY

- CRAFT developed a pipeline with funding from donors. For example, the hydro-panels business CRAFT financed has been adopted in over 40 countries
- First private equity vehicle that is attempting to mobilize private capital for adaptation solutions, with potential for demonstration effects
- Knowledge generation through Adaptation SME Acceleration Program
- Development of taxonomy supports standards development

# E CRAFT funds are invested in adaptation and resilience products, and services have mitigation co-benefits and result in human impact.

## ADAPTATION

**CRAFT funds adaptation solutions based on countries' nationally determined contributions, with a focus on agriculture, water, health, disaster risk management, coastal zones, and energy.**

### Expected Impact:

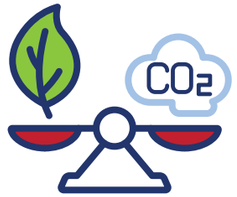
Transfer of adaptation technologies and capabilities, e.g. CRAFT invested in a business which makes fresh water from the moisture in the air using solar powered hydro-panels

## RESILIENCE

**CRAFT funds companies that provide resilience intelligence, products, and services to help customers assess and manage climate risks and impacts.**

### Expected Impact:

Increase availability and adoption of climate risk intelligence. Users can incorporate climate intelligence into decision-making. Resilience companies invested in include weather analytics and modeling services




## MITIGATION IMPACT

**CRAFT invests in adaptation and resilience solutions, which have mitigation co-benefits. CRAFT's thesis combines all three factors to reduce future vulnerabilities.**

### Expected Impact:

Investments are expected to have mitigation co-benefits. CRAFT aims to invest in a cold chain logistics company that can avoid $CO_2$ emission from food waste and save up to 22 percent of water used for crops

## HUMAN IMPACT

**Increases access to basic services and jobs.**

### Expected Impacts:

**Access to basic services.** Increase access to water while incrementally reducing the cost of technologies

**Income and Livelihoods through equity and empowerment.** Reduce vulnerability to climate change and create employment, particularly for women who are most vulnerable

# E

# First-loss capital and sequential blended financing have been important factors in mobilizing capital for CRAFT.

1 **Using first-loss capital can be effective in mobilizing capital from different stakeholders when aiming to fund innovation.**

These types of efforts allow technologies to be transferred quickly to LICs.

2 **Sequencing blended financing can speed up finance action by allowing projects to quickly move from concept phase to execution.**

Funding at different stages enabled CRAFT to mobilize capital and create a pipeline of investable businesses for climate action.

3 **Supporting fund structuring by identifying successful components that can be used in a mechanism to help scale climate action.**

In the case of CRAFT, the African Clean Energy TA facility was replicated and helped scale businesses.

# Sources


NDF, CRAFT, accessed June 2021

The Lab, About, accessed June 2021

The Lab, CRAFT instrument analysis, 2017

Dalberg, Stakeholder interviews, 2021

Source, Meet the Hydropanel, accessed July 2021

# CASE STUDY F

## CLIMATE SMART AGRICULTURE RISK SHARING FACILITY FOR MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES (MSMEs)

Catalytic funding (including guarantees and catalytic capital) to share risk in investments that mobilize private capital to increase climate smart agriculture practices

### DONOR SUPPORT

CATALYTIC CAPITAL

GUARANTEES AND RISK INSURANCE

# F Climate Smart Agriculture Risk Sharing Facility for MSMEs provides long-term loans to farmers practicing sustainable agriculture.

## CLIMATE PROBLEM

Unsustainable agricultural practices that increase emissions, deforestation, and soil degradation

## FINANCING GAP

Farmers have limited access to finance from banks and financial intermediaries due to perceived and real risks of the sector

## BENEFICIARIES

**Project Location:** Mexico and Guatemala
**Beneficiaries:** Agricultural and agroforestry enterprises, financial institutions, and cooperatives that work with smallholder farmers

## SOLUTION

**A blended finance model that supports risk sharing to finance and train smallholder farmers on sustainable agriculture and agroforestry by:**

- Providing long-term loans to farmers practicing sustainable agriculture and agroforestry
- Supporting guarantees to de-risk loans provided by financial intermediaries to farmers
- Investing in anchor companies and investment funds to promote farmer productivity and resilience

# F Agricultural and agroforestry enterprises are expected to benefit from equity, loans, and guarantees via a risk-sharing model.

## OVERVIEW

**The Climate Smart Agriculture Risk Sharing Facility for MSMEs is a concessional capital blended structure that provides long-term loans, equity investments, and guarantees for sustainable land use targeting agricultural and agroforestry enterprises. These enterprises will benefit from the loan duration and grace period (principal does not need to be repaid until end of grace period).**

- The funding is based on Green Climate Fund (GCF) providing USD 20 million in credit guarantees to de-risk investments as well as grants. Co-financing of USD 10 million from IDB comes through loans, equity, credit guarantees, and grants. Another USD 51.7 million has been mobilized from private-sector companies as co-investment.
- To date, companies preferred debt over guarantees and equity, as these instruments are poorly understood in both countries.
- Support from TA facility helps farmers to adopt climate smart agriculture practices.

## MECHANISM TIMELINE

# F

# Donor-stated interest and de-risking efforts attract private-sector investors who would prefer to share risk.

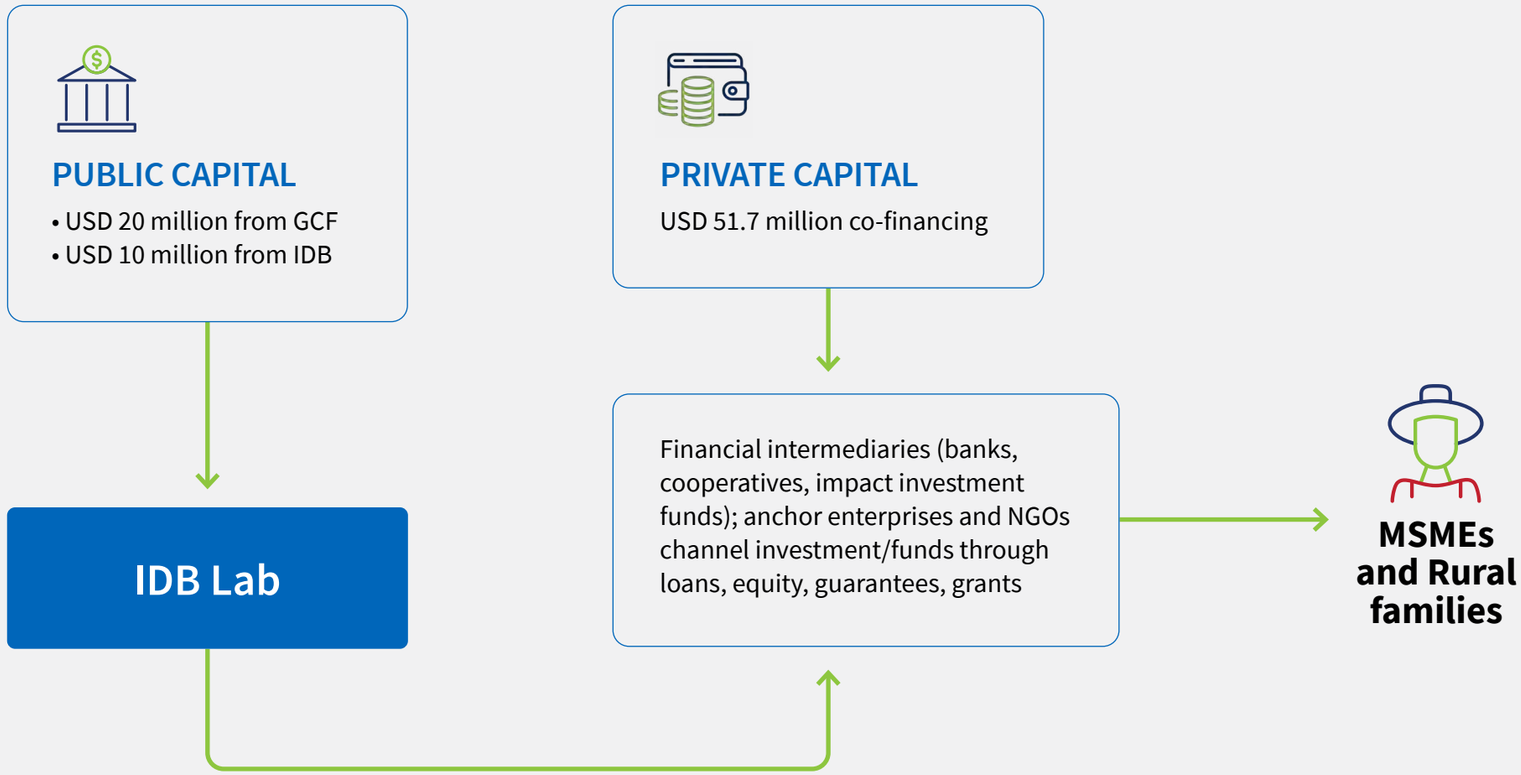
## MODEL

### DONOR ROLE:

Catalytic capital used to finance intermediary organizations to serve small scale farmers. Guarantees de-risk lending made by financial intermediaries

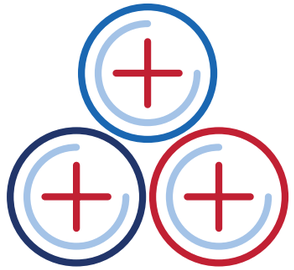
### ENABLING FACTORS:

De-risking (one example being a guarantee) helped to bring in private capital from financial intermediaries that did not previously fund agricultural enterprises



# F

# A donor guarantee supported, in part, the mobilization of private capital, and funded sectors that were not previously financed.



## ADDITIONALITY

**Donor support de-risked investment leading to mobilization of private investment and demonstrated new instruments for farmers.**

## FINANCIAL ADDITIONALITY

The guarantee provided by donors helped reduce the risk of lending for financial intermediaries, which will lead to private-sector capital being mobilized. Although only in part, the guarantee aided in mobilization. The overall project has mobilized USD 51.7 million from private sector companies, such as financial intermediaries, commercial banks, and impact investment funds.

## ECOSYSTEM ADDITIONALITY

The project has a demonstration effect on how financial institutions can cater to the financial needs of farmers with longer-term loans. Prior to this project, the agricultural sector was not receiving funding from banks, and as a result this model demonstrates how other funds can be structured to finance sectors that were not previously financed. The project also helped to develop links with intermediaries that are interested in, or committed to, financing climate smart agriculture, agroforestry, and resilience.

# F The facility focuses on improving climate smart agriculture practices that have mitigation co-benefits up to 9.2 million tons of $CO_2$ equivalent.

## ADAPTATION

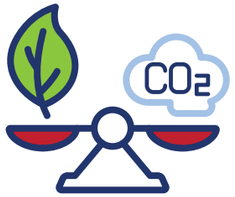
**Provides technology and inputs for adaptation, such as drip irrigation systems, resistant seed substitution, diversification, and changes to agricultural cycles for adaptation**

**Expected Impact:**
Financial intermediaries provide financing to farmers to acquire climate-smart seeds and genetic material

## RESILIENCE

**Provides information for farmers on new, resilient varieties of crops, and climate-resilient productive processes; improves access to climatic data and processing technology**

**Expected Impact:**
Partnerships with technical assistance providers (agricultural extension services, agricultural research centers) that will train farmers on improved seeds, irrigation technologies to be resilient




## MITIGATION IMPACT

**Encourages agroforestry activities, such as restoration, to meet nationally determined contributions. Forests currently absorb 30 percent of $CO_2$ emissions annually, and restoration helps mitigation efforts**

**Expected Impact:**
By its end, the project is expected to reduce emission by 9.2 million tons of $CO_2$ equivalent by improving management of about 200,000 hectares of land or forest

## HUMAN IMPACT

**Based on increasing income through provision of loans to help farmers increase productivity, increasing revenue**

**Expected Impacts:**
**Income and Livelihoods.** Support over 800,000 people and increase productivity of farmers by 10 percent

**Access to basic services.** Assist farmers to transition to low-emission, climate-resilient agriculture solutions

# F

# The facility's success in climate finance can be attributed to its flexibility in the use of instruments MSMEs prefer.

1

**Developing innovative mechanisms that meet the beneficiaries' needs can increase uptake of financing solutions.**

Intermediaries prefer loans as they are not familiar with other instruments, resulting in only one guarantee, one equity investment, and two loans. The flexible amortization structure also allowed IDB to fund more MSMEs as the tenure offered by GCF allows financiers to provide long-term funding previously not offered, resulting in scaling mitigation projects.

2

**Ensuring streamlined approval processes will prevent delays in pipeline development that ultimately can slow down the growth of businesses that can support climate action.**

Delays in approval of the facility resulted in pipeline changes as GCF approval process is onerous, delaying mitigation efforts.

# Sources

Dalberg, Stakeholder interviews, 2021

GCF, CSA Risk Sharing Facility for MSMEs, accessed June 2021

# CASE STUDY G

## BIOCARBON INITIATIVE FOR SUSTAINABLE FOREST LANDSCAPES (ISFL)

Donor catalytic capital for communities to develop sustainable land management projects and access revenue from carbon credits

DONOR SUPPORT

CATALYTIC CAPITAL

TECHNICAL ASSISTANCE (TA)

# G BioCarbon ISFL supports sustainable land use and creates income opportunities for emission reduction through carbon credits.

## CLIMATE PROBLEM

Deforestation and forest degradation from unsustainable agricultural practices

## FINANCING GAP

High transaction and monitoring, reporting, and verification (MRV) costs for emission-reduction projects

## BENEFICIARIES

**Project Location:** Colombia, Ethiopia, Indonesia, Mexico and Zambia
**Beneficiaries:** Communities include Sumatra (Indonesia), Mexico (Nuevo León, Coahuila, Chihuahua, Durango)

## SOLUTION

**A blended finance model pilot for large-scale, integrated land use programs as a means for generating emissions reductions by:**

- Focusing on major land uses in a jurisdiction, working collaboratively to ensure mutual benefits
- Offering TA on sustainable land use that results in emission reduction
- Connecting beneficiaries with the private sector by purchasing carbon credits, creating livelihood opportunities

# G

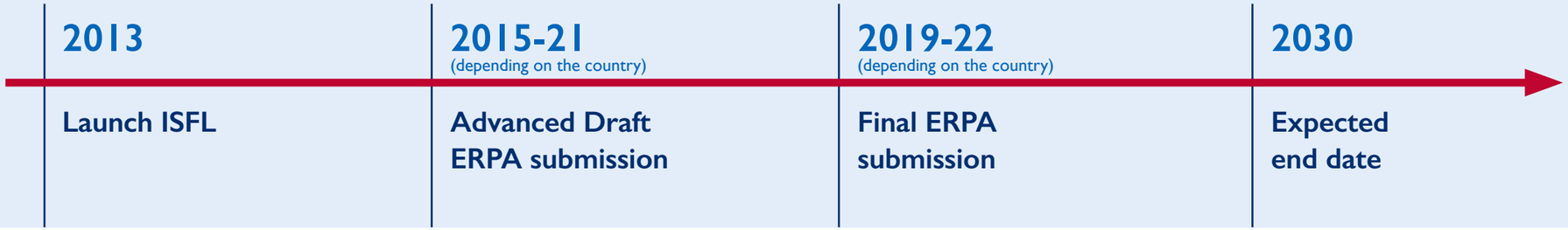
# The BioCarbon Fund has mobilized over USD 400 million for projects that benefit communities through an Emissions Reduction Purchase Agreement.

## OVERVIEW

**BioCarbon Fund ISFL is comprised of USD 112 million of the BioCFPlus ISFL, and USD 107 million from its third funding tranche. It is supported by various governments (including Germany, Norway, UK, US, and Switzerland) and provides critical investment finance needed to establish an enabling environment for sustainable land use and develop systems for monitoring, reporting and verification (MRV) for emission reductions.**

- To date, most of the ISFL work has focused on toward implementing the preparations on the ground, working with governments, the private sector, and communities.
- The fund provides results-based payments for reductions in GHG emissions through an Emissions Reduction Purchase Agreement (ERPA).
- Private-sector investors participate in the fund either through the compliance or voluntary window to purchase carbon emission reduction credits on their behalf, through ERPA. Proceeds from credits are shared between project stakeholders and communities as per benefit-sharing agreements within the ERPA.
- The TA facility supports project development and implementation through grant-funding.

## MECHANISM TIMELINE



G

# Donors supported the model through provision of catalytic capital and technical assistance.

## MODEL

### DONOR ROLE:

Catalytic funding used to purchase carbon credits and technical assistance for sustainable land use

### ENABLING FACTORS:

The BioCarbon Fund ISFL embedded MRV experts to reduce the likelihood of overestimating emission reductions that can result in underdelivery in projects

### PUBLIC CAPITAL

- Six government agencies
- USD 6 million in TA facility funds
- (BioCFPlus) funded by Canadian International Development Agency

### PRIVATE CAPITAL

- USD 87 million leveraged from 11 private companies
- BioCarbon Fund purchases carbon emission reduction credits for investors through ERPA from the individual projects

**USD 112.26 million BioCFPlus ISFL &**
**USD 107.08 BioCF tranche 3 &**
**USD 87 million private capital**

**BioCarbon Fund**

Results based payments for reductions in GHG

$CO_2$

**Carbon Reduction Projects**

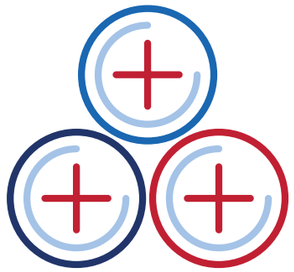
**BioCPlus ISFL**

Capacity-building and training

**Projects Beneficiaries**

G

# Catalytic funding from donors has attracted over USD 80 million from the private sector via carbon credits.



## ADDITIONALITY

**Donor support was able to leverage additional private funding and supported capacity building for farmers.**

## FINANCIAL ADDITIONALITY

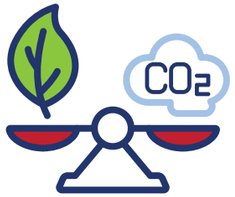
The project has received a majority of its funding from donors and has leveraged over USD 80 million from the private sector across all tranches. Private-sector funding is leveraged through World Bank's approach to private-sector engagement. The World Bank partners directly with local and international firms to participate in the program's carbon market. In Ethiopia, for example, the BioCarbon Fund partnered with Nespresso to help smallholder farmers adopt sustainable practices in supplying coffee beans. The private-sector funding is both matched to activities supported with grants and other investments that flow after regulatory changes and capacity building. Additional financing also includes government funding to support the land use planning agenda; funding from specific contributors through individual in-country development assistance programs; GEF funding; International Development Association funding; and International Bank for Reconstruction and Development funding.

## ECOSYSTEM ADDITIONALITY

The project has improved knowledge and capacity-building for improved land use and productivity through training. Over 26,000 land users have been trained on sustainable land use in addition to the 31,427 people trained through the Nespresso program.

# G

# The Fund's approach is based on mitigation through reforestation and conservation, agroforestry, bio-energy, and sustainable farming.




## MITIGATION IMPACT

**Includes forest restoration and conservation as mitigation efforts.**

### Achieved Impacts:

- Over 4,600,000 hectares of land has been brought under sustainable management, and 3,590 hectares have been reforested
- Over 27,000 land users have adopted sustainable land management practices (of which 25 percent are women) and over 49,000 received training on productivity
- 5 emissions reduction purchase agreements signed

### Expected Impacts:

- Almost 38,000 ha reforested or afforested in by 2031; 88,342 land users who have adopted sustainable land management practices
- Potential payments for up to 36 million tons of emissions reductions for four of the five country programs (Colombia, Ethiopia, Mexico and Zambia)

## HUMAN IMPACT

**Based on improving income and livelihoods for farmers through emission reduction payments.**

### Achieved Impacts:

**Income & livelihoods.** Approximately 62,000 people now have access to benefits such as assets/services relating to emission reduction payments

**Access to basic services and equity and empowerment.** The project works towards closing gender barriers. Approximately 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)

G

# The TA facility was instrumental in ensuring projects obtained verification and payments.

1 **Structuring mechanisms in a way that limits time to payment is important to keep parties engaged.**

If the duration of payments takes an extended period, stakeholders are less engaged. Payments for verified emission reductions (ERs) can take up to 3 years, which affected overall generation of ERs and the amount of payment received.

2 **Leveraging technical resources through partnerships can support the execution of projects and increase the speed of climate action.**

Partnerships with academic institutions to assist with MRV was beneficial for verification and building knowledge for communities, helping to avoid misinformation on ER payments.

3 **Using an integrated approach to land use rather than focusing on forestry alone helps maximize impact.**

The ISFL program built off past experience that identified the need to take a broad view across a jurisdiction of land to avoid leakage (i.e. pushing harmful activities to locations outside of the area of focus) and to achieve sustainable reductions in emissions.

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BioCarbon Fund, What is the BioCarbon Fund, accessed July 2021

BioCarbon Fund, Annual Report, 2020

Climate Council, Deforestation and climate change, 2019

World Bank, BioCarbon Fund Experience, 2011

World Bank, Insights and Experiences from the BioCarbon Fund Emission Reductions Projects in the Land-Use Sector: An Overview, 2020

# CASE STUDY H

## AFRICA CLEAN ENERGY FINANCE (ACEF)

Technical assistance to catalyze private capital toward clean energy projects through a model that focuses on improving viability of energy projects in Africa

### DONOR SUPPORT

- CATALYTIC CAPITAL
- TECHNICAL ASSISTANCE (TA)
- GUARANTEES AND RISK INSURANCE

# H

# Africa Clean Energy Finance (ACEF) addresses early-stage development costs for clean energy projects.

## CLIMATE PROBLEM

Africa gets around 80 percent of its electricity from fossil fuels. Carbon emissions are rising with the growing population. Africa has untapped potential sources of renewable energy which require investment to create the generation capacity for clean energy to meet growing needs

## FINANCING GAP

Clean energy projects often face high early-stage development costs and lack access to early-stage finance

## BENEFICIARIES

**Project Location:** Africa
**Beneficiaries:** Hard-to-reach areas with no regular access to electricity such as community of Taiba N'Diaye in Senegal and Tanzania

## SOLUTION

**The model uses blended finance to improve viability of clean energy projects to access private capital by:**

- Providing technical assistance and covering early-stage development costs for clean energy projects. (Development costs include engineering, legal, consulting, and other third-party costs)
- Providing catalytic capital and guarantees from DFC and other private and public investors for projects that show commercial viability

# H

# ACEF is a grant facility for early-stage renewable energy projects, funding TA to prepare them for investment.

## OVERVIEW

**ACEF provides preparation grants to improve viability of clean energy projects, assisting projects to meet upfront planning costs prior to seeking investment on commercial terms. It prepares projects to scale up and expand energy provision.**

- ACEF provides grants (USD 20 million funding) for early-stage support to energy projects for investor-readiness. Funds are used on engineering (e.g. project design and technology assessment), legal (e.g. permits and financing agreements), and third-party costs (e.g. environmental or social impact studies).
- Once a project is commercially viable, it can access investment from DFC or other investors.
- Between 2012 and 2017, USD 812 million was mobilized from public and private sources to scale 17 of the 27 projects ACEF supported.
- DFC uses political risk insurance of up to USD 250 million to de-risk projects.

## MECHANISM TIMELINE

H

# ACEF raised over USD 800 million by preparing 27 projects for commercial and concessional financing.

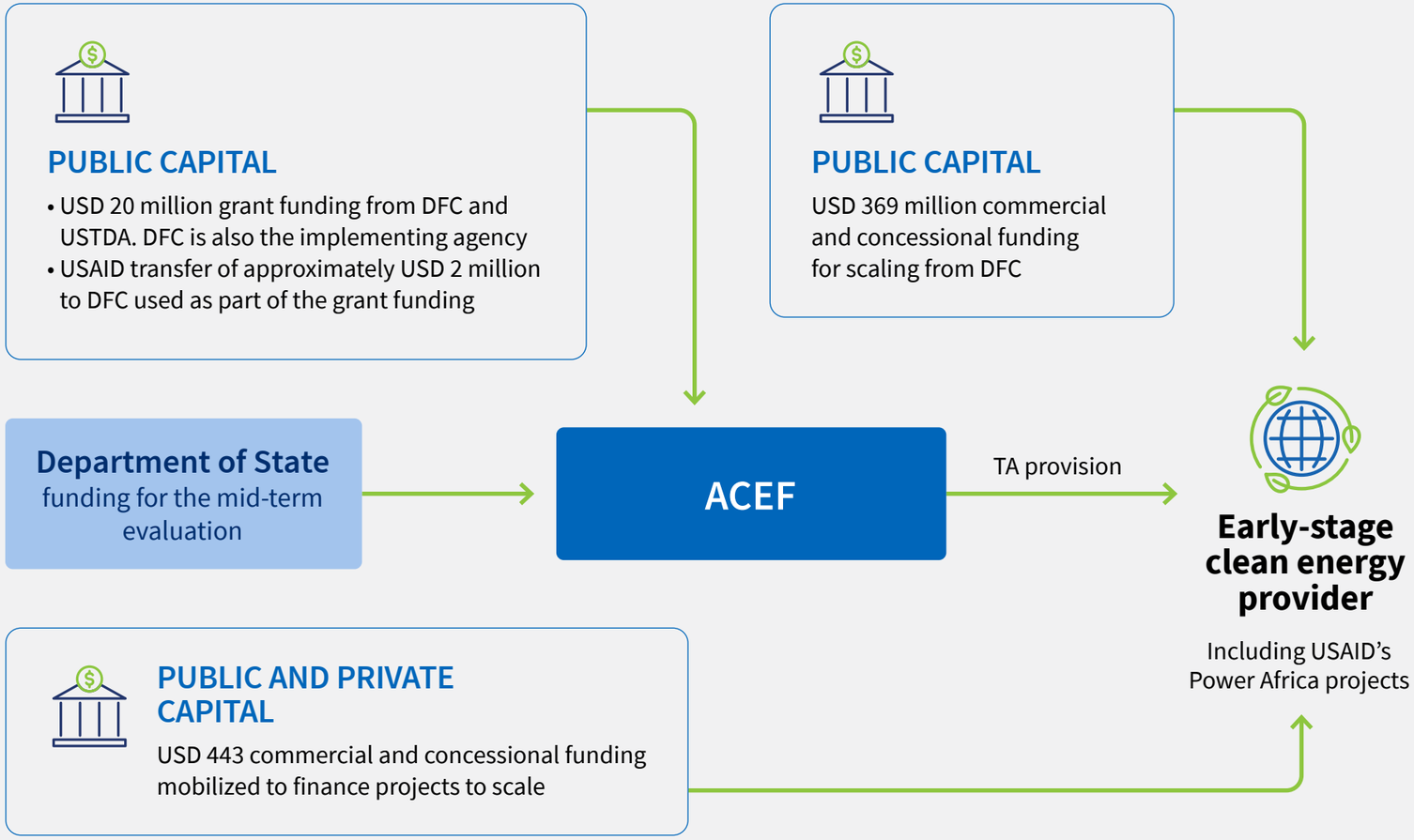
## MODEL

### DONOR ROLE:

Technical assistance, guarantees, and catalytic capital helped transition ventures from early stage to commercial viability

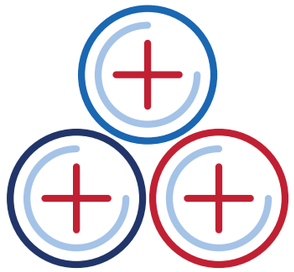
### ENABLING FACTORS:

ACEF's approval process was efficient because project proposals were processed and approved by DFC with well-established bureaucratic procedures



H

# Political risk insurance by DFC mobilized capital, enabling 17 clean energy projects to scale.



## ADDITIONALITY

**ACEF mobilized public and private finance, had demonstration effects, and helped develop a pipeline.**

## FINANCIAL ADDITIONALITY

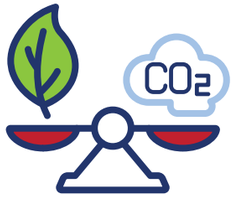
DFC mobilized USD 30 for every USD 1 from ACEF to scale financial support for clean energy from both public and private sector actors, such as SunFunder Inc. (a solar financing company for sub-Saharan Africa). Political risk insurance from DFC was important to mobilize capital, protecting investors from changing regulations (i.e. changes in tariffs that can reduce revenue, impacting returns for investors).

## ECOSYSTEM ADDITIONALITY

The technical assistance support provided through preparation activities (engineering, legal, consulting, and third-party costs) in the ACEF project resulted in a pipeline of 27 projects, 17 of which received commercial funding. Without donor funding, the projects would not have been able to receive commercial funding. Donor funding also resulted in demonstration effects, as the TA was replicated in the Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT).

# H

# The activity added over 400MW of renewable energy in 11 countries, reducing reliance on backup generators and kerosene.




## MITIGATION IMPACT

**Provide energy with minimal impact on the environment through clean energy projects such as solar and wind.**

### Achieved Impacts:

- The project has supported 27 renewable energy projects that have added 470 Megawatts (on and off grid) in 11 countries
- Supported minigrid in Lake Victoria and Ringiti (Kenya), which before the project relied on kerosene, petrol, and disposable batteries

### Expected Impact:

The NextGen solar power plant in Tanzania, which received grant funding from ACEF, is expected to reduce greenhouse gas emissions by approximately 10,500 tons of $CO_2$ annually

## HUMAN IMPACT

**Based on increasing access to basic services through provision of electricity.**

ACEF improves income and livelihoods through employment on the construction of clean energy projects

### Expected Impacts:

**Income & Livelihoods.** 600 jobs are expected to be created in Senegal

**Access to basic services.** Expected expansions in access to power: Senegal project (2 million people); NextGen solar power plant in Tanzania (50,000 households); Boshof Solar Power in South Africa (30,000 households)

ACEF also electrified rural areas in Kenya

# H

# Coupling technical assistance with other support has been effective in scaling clean energy projects.

1

**Using TA can support businesses to overcome high costs associated with energy projects as well as provide the needed expertise for these projects to scale.**

The barriers that TA addresses include lack of access to financing, high early-stage development costs, availability of local management and technical expertise, and navigating regulatory frameworks and political climates.

2

**Coupling a TA facility with risk insurance helps in mobilizing public and private capital to scale clean energy projects.**

Twenty-seven clean energy projects received technical assistance to improve business viability. DFC provided political risk insurance to help mobilize catalytic capital from public and private investors to scale 17 of the 27 projects.

# Sources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Dalberg, Stakeholder interviews, 2021

DOS, Evaluation of the United States-Africa Clean Energy Finance Initiative (US-ACEF), accessed July 2021

DFC, OPIC's Africa Clean Energy Financing Facility Supported 27 Early-Stage Projects Since 2012, 2017

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Climate Policy Initiative, Blended Finance in Clean Energy: Experiences and Opportunities, 2018

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Mainstream Renewable Power, Taiba N'Diaye wind, accessed June 2021

Renewvia Energy, Operating minigrids, accessed July 2021

Evwind, USTDA supports development of solar power plant in Tanzania, 2014

# ANNEX

USAID
FROM THE AMERICAN PEOPLE

# Supplemental Case Studies

## THE FOLLOWING TWO CASES STUDIES ARE INCLUDED AS AN ANNEX:



While useful insights can be drawn from these experiences, their impacts set them apart from the other cases presented in this resource. In Indonesia, the Corporate Sustainability Bond led to the destruction of forests that were home to Indigenous People. In Colombia, the BioREDD+ case demonstrated climate impacts but has not yet demonstrated financial additionality in terms of capital mobilization.

# CASE STUDY I

## THE CORPORATE SUSTAINABILITY BOND FOR NATURAL RUBBER PRODUCTION

A multi-tranche class structure that uses donor guarantees and input grants to support sustainable rubber production in Indonesia

### DONOR SUPPORT

**GUARANTEES AND RISK INSURANCE**

**STRUCTURING FUNDS & FINANCIAL INSTRUMENTS**

# I

# The project uses investment grade bonds to mobilize private capital for sustainable rubber production.

## CLIMATE PROBLEM

Degraded land and deforestation in Indonesia, Jambi and East Kalimantan provinces

## FINANCING GAP

Private capital from non-traditional investors typically not available for conservation projects

## BENEFICIARIES

**Project Location:** Indonesia (Jambi and East Kalimantan).
**Beneficiaries:** Rural community members who will be employed and trained by Royal Lestari Utama

## SOLUTION

**An innovative model that aimed to promote sustainable natural rubber production through forest conservation by:**

providing catalytic capital from public and private actors is meant to be used to conserve 27,000 hectares of land.

# 1

# The USD 95 million fund aims to support sustainable rubber production in Indonesia.

## OVERVIEW

**The Corporate Sustainability Bond for Natural Rubber Production (part of TLFF) is a USD 95 million long-dated sustainability bond to finance sustainable natural rubber production across heavily degraded areas in the Jambi and East Kalimantan provinces.**

- The project is a USD 95 million multi-tranche class structured corporate sustainability bond coupled with partial credit guarantee offtake of future production (75 percent by Michelin).
- Class A notes are investment grade, targeting institutional investors from Southeast Asia. Class B1 and B2 notes targeted investors who have capacity to take on relatively higher risk than Class A bonds but have an explicit impact mandate.
- USAID is responsible for up to USD 33.25 of first loss through guarantees for Class A investors. Royal Lestari Utama (RLU) is responsible for first losses up to 5 percent of the USD 70 million guarantee loan (USD 3.5 million), in case of default.

## MECHANISM TIMELINE

# The fund is a multi-tranche class structure with a guarantee to help attract institutional investors for Class A bonds.

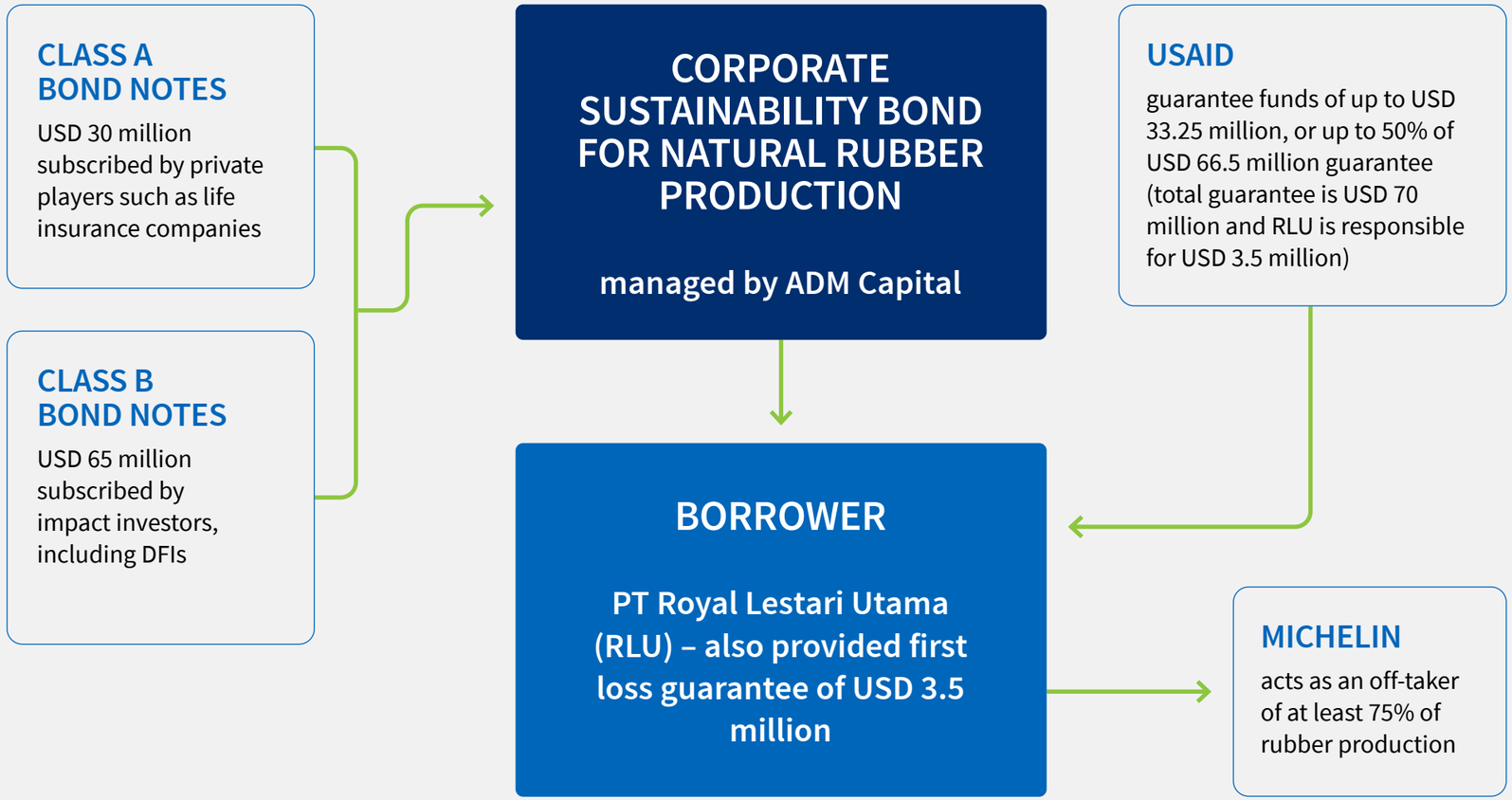
## MODEL

**DONOR ROLE:**

Guarantees and development of innovative bond structure reduced risk for investors

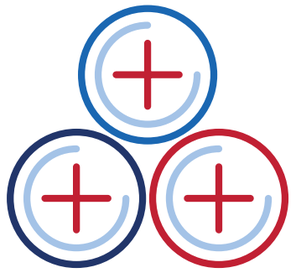
**ENABLING FACTORS:**

Investment grade bonds attracted private not typically seen in conservation projects



I

# Donor support led to mobilization of funds and pipeline development.



## ADDITIONALITY

**Donor support for the project created financial additionality by mobilizing capital from private investors.**

## FINANCIAL ADDITIONALITY

A guarantee on the investment grade bond (Class A) by a donor was additional in mobilizing private capital (e.g. life insurance companies).

## ECOSYSTEM ADDITIONALITY

Donor-supported pipeline development. Donors provided a grant to help design and structure the Fund. The grant assisted the Fund to complete its first transaction with RLU.

# I

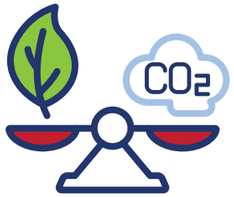
# The project failed to meet its mitigation targets as forests have been destroyed instead of being conserved.

## ADAPTATION

**Includes efforts of employing sustainable production techniques for natural rubber.**

The project provided training on sustainable farming practices.

**Expected impact:**
24,000 farmers will be trained on sustainable farming and receive agricultural infrastructure to safeguard against climate change




## MITIGATION IMPACT

**Conserves and sets aside half of the 88,000 hectares of concessions as protected areas.**

**Expected impact:**
Commercial plantations in Jambi will serve as a buffer zone to protect the 143,000 hectare Bukit Tigapuluh National Park, supporting increased protection of important biodiversity and endangered species, such as Sumatran elephants and tigers. However, a report by Mighty Earth shows the RLU has destroyed forests that were home to Indigenous Peoples and endangered species.

## HUMAN IMPACT

**Improves income and livelihoods through employment opportunities from the natural rubber industry.**

**Expected impact:**
16,000 people are expected to be employed and trained by RLU at project maturity. 24,000 local farmers will receive access to technical assistance, agricultural infrastructure, rubber tapping, extension services, and integration into the RLU supply chain.

The project also destroyed forests that were home to Indigenous People.

# 1 Despite a funding structure that attracted institutional investors, there is need to have stronger safeguards for Indigenous People.

## 1

**Using investment grade bonds that are coupled with guarantees can attract institutional investors not typically seen on conservation projects.**

The Class A bonds were rated by Moody's and subscribed by institutional investors from Southeast Asia, such as life insurance companies, increasing the pool of funds and resulting in more projects at scale.

## 2

**Incorporating frameworks focused on Indigenous People into mechanism can avoid unintended results.**

The project displaced Indigenous People due to lack of stronger safeguards.

# Sources


Convergence, Corporate Sustainability Bond for Natural Rubber Production, 2019

SB, Did Lack of Transparency Invalidate Asia's First Corporate Sustainability Bond?, 2020

# CASE STUDY J

## BioREDD+

A TA fund designed to strengthen Colombia's capacity to mitigate and adapt to climate change, protect biodiversity, and support the development of remote and impoverished communities

DONOR SUPPORT

TECHNICAL ASSISTANCE (TA)

GUARANTEES AND RISK INSURANCE

J

# BioREDD+ is a results-based payment model for emission reduction projects.

## CLIMATE PROBLEM

Compromised environmental ecosystems and biodiversity is threatened by habitat destruction, caused by unsustainable land use practices

## FINANCING GAP

Investments for improving capacity of REDD+ to increase participation in restoration projects

## BENEFICIARIES

**Project Location:** Colombia (Tumaco, Buenaventura, and Chocó Sur).
**Beneficiaries:** Local communities who have clear legal deed to their land and have directly agreed to REDD+ project development

## SOLUTION

**A blended finance model that aims to support biodiversity conservation and responsible use of natural resources in Colombia by:**

- Promoting capacity building to train beneficiaries on natural resource management and provide payments on emission reduction activities
- Providing performance-based payments for emission reduction activities

# J

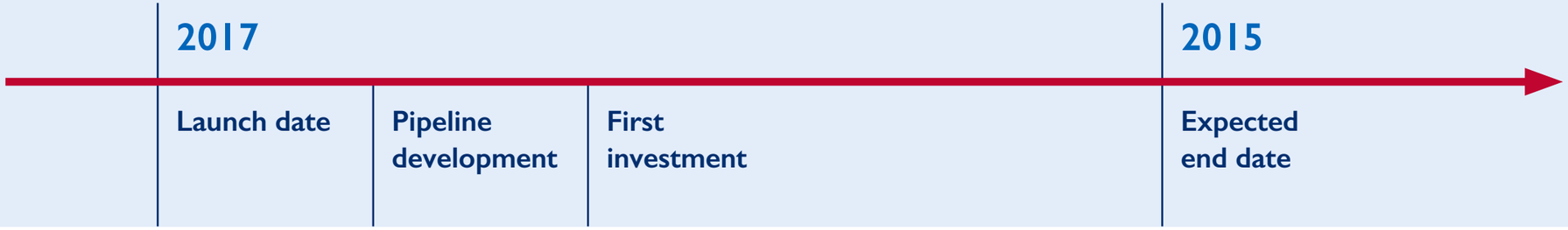
# BioREDD+ projects are financed through a TA facility, increasing capacity for climate change and biodiversity conservation.

## OVERVIEW

**BioREDD+ is a USD 30 million technical assistance fund designed to strengthen Colombia's capacity to mitigate and adapt to climate change, protect biodiversity, and support the development of remote and impoverished communities.**

- The project supported policy and regulation, including a decree to establish a national registry system for voluntary REDD+ projects.
- Development Credit Authority (DCA) provides guarantees of up to 50% of the value of invested funds. However, the project did not manage to leverage any private sector investments.
- Funding of projects is done through the Environmental Activity Fund, used to acquire highly qualified services from Colombian entities and individuals via local subcontracts, purchase orders, short-term technical consultancies for climate change, and biodiversity conservation capacity building.
- Beneficiaries received performance-based grant awards to engage and build local capacity in communities and organizations.

## MECHANISM TIMELINE



J

# The BioREDD+ project was supported by a USD 30 million grant from USAID.

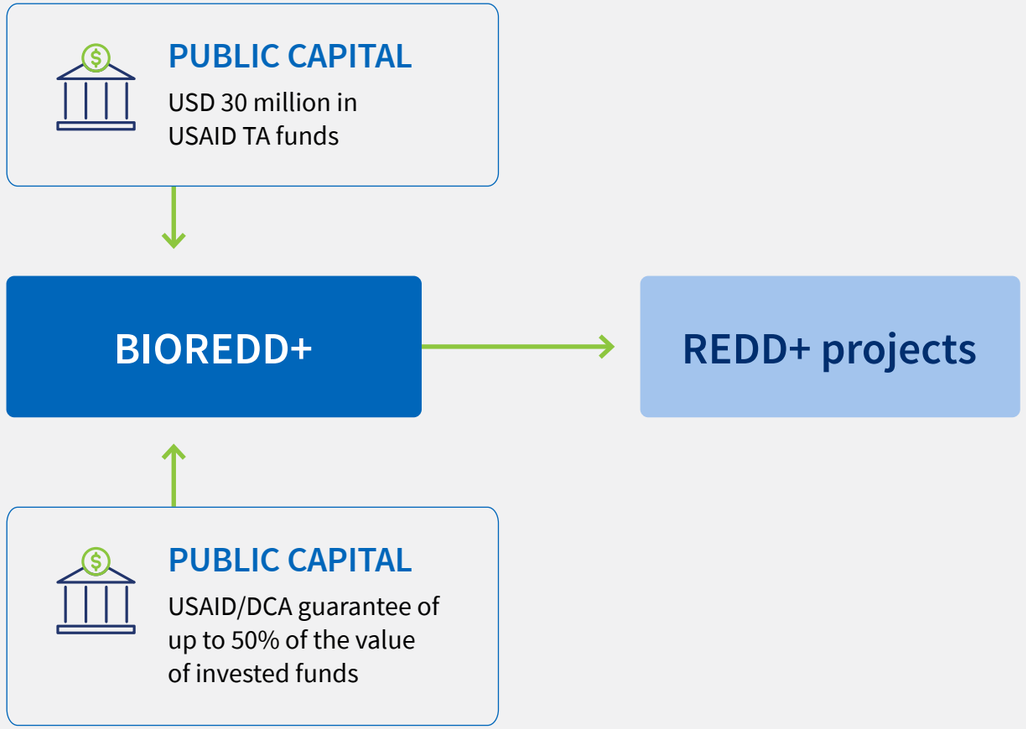
## MODEL

### DONOR ROLE:

Technical assistance for policy reform and biodiversity conservation, guarantees to help de risk investments

### ENABLING FACTORS:

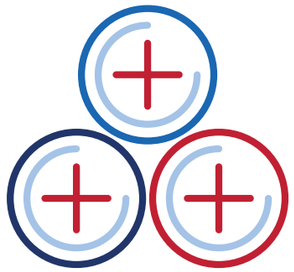
Use of scientific tools, such as remote-sensing, improved the quality of emission reduction estimates, resulting in livelihood improvements through emission reduction payments




*This project was unable to mobilize private financing*

J

# Donor support was additional in policy, sector, institutional change, assisting in over 30 REDD+ laws, policies, and strategies.



## ADDITIONALITY

**Donor support for BioREDD+ led to policy and regulation reforms.**

## ECOSYSTEM ADDITIONALITY

Donor support resulted in policy, sector, and institutional change of over 30 laws. Policies, strategies, plans, agreements, or regulations addressing climate change and biodiversity conservation were proposed, adopted, or implemented as a result of the project. This includes the decree to establish a national registry system for voluntary REDD+ projects. The project also supported over 46 public and private organizations with improved capacity for effective environmental resource management.

J

# BioREDD+ surpassed its emission reduction targets by 41 percent as more communities, than expected, adopted sustainable practices.

## ADAPTATION

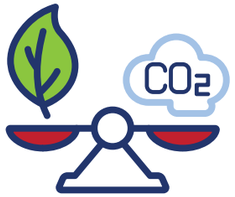
**Includes efforts of sustainable land use and responsible fishing.**

## RESILIENCE

**Includes information dissemination, mitigation tools, technologies, and methodologies.**

### Achieved impacts:

- Worked with the Mayor's Office from Tumaco to identify strategies to improve local capacity with the aim of preventing, mitigating, and adapting to climate change events with a focus on the risk of rising sea levels and tsunamis
- The project also supported the government's Unit for Territorial Consolidation to strengthen productive and economic resilience through development of Naidi, a fast-growing native palm species, that can help limit soil erosion when planted on slopes




## MITIGATION IMPACT

**Includes efforts to avoid deforestation and regeneration of forests.**

### Expected impact:

Projected emission reductions for the BioREDD+ portfolio amount to more than 25 million tons of $CO_2$ emission equivalents in the first 10 years, 41 percent above the project target

## HUMAN IMPACT

**Increases income and livelihoods through performance-based payments on emission reduction activities.**

### Achieved impacts:

- Over 7,000 people received payments of over USD 1.6 million for ecosystem services
- Over 5,000 people received training on natural resource management

# J

# Mobilization of private capital for conservation projects is still weak in Colombia, reducing the potential of mitigation efforts.

**Using video messaging can be effective in communicating sustainable practices.**

Video resulted in more than USD 340,000 in generated sales of carbon credits, resulting in fast adaptation of solutions, which can support the increased adoption of projects and increase the speed of climate action.

# Sources

Climate Link, BioREDD+ Brochure, accessed July 2021

USAID, Biodiversity - Reduced emissions from deforestation and forest degradation program, 2015