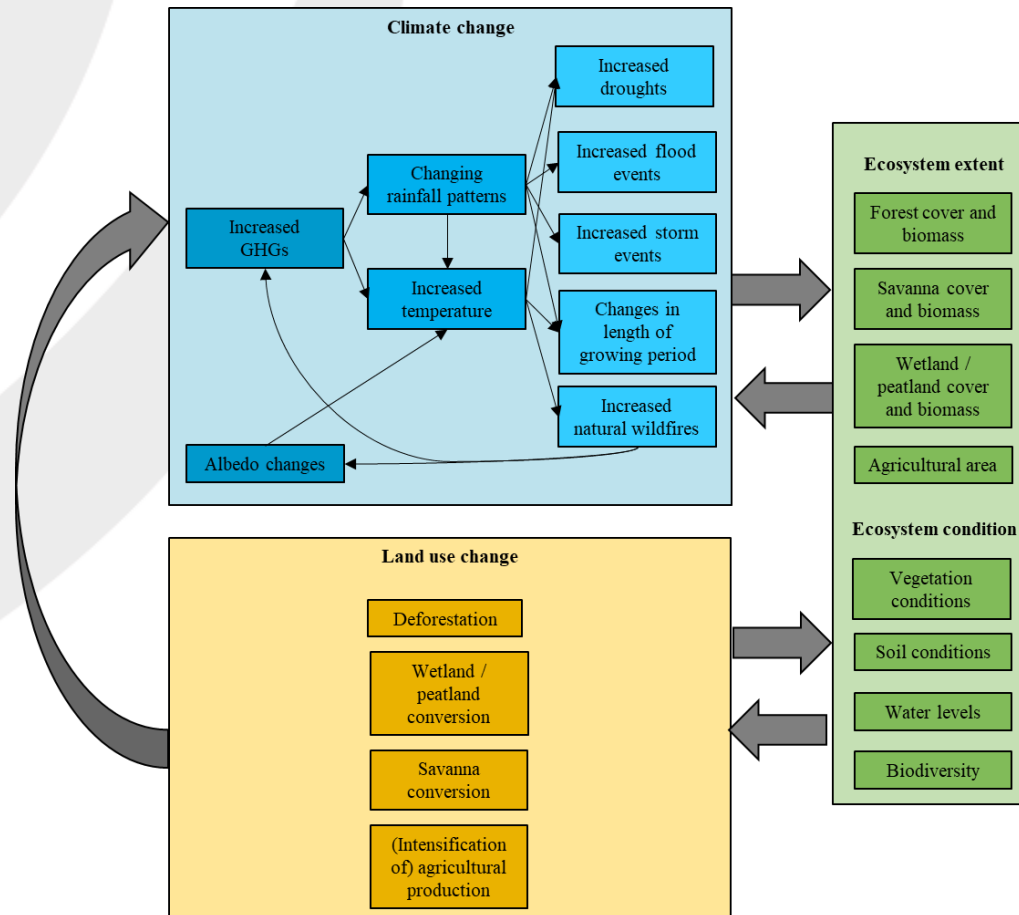


Session: Financing protection of natural forests

- **Eveline Trines** (Tropenbos International)
 - **Evans Sampene** (Tropenbos Ghana)
 - **Alejandro Vazquez** (Forestry Climate Change Fund)
 - **Charissa Bosma** (FMO)
- With thanks to **Michaël de Groot** (Rabobank)

Climate change and land use are interconnected



Setting the scene: deforestation, agriculture, and land-based ecosystems

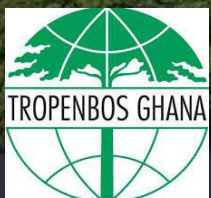
- Agriculture is the biggest cause of deforestation.
- Smallholders and/or family farms occupy an estimated 70 to 80% of the global farmland, producing more than 80% of the world's food.
- Locally-owned, sustainable land-use solutions are of paramount importance
- Although ~USD 73 Billion USD is invested in food value chains, only little reaches smallholders.
- **How can we reduce conflict over land and ensure that (climate, conservation, and biodiversity) investments reach the grassroots level?**

Program

- Tropenbos' business case development and interaction with Financial Service Providers in Ghana
- The Forestry Climate Change Fund
- The Dutch Fund for Climate and Development
- Discussion and Q&A

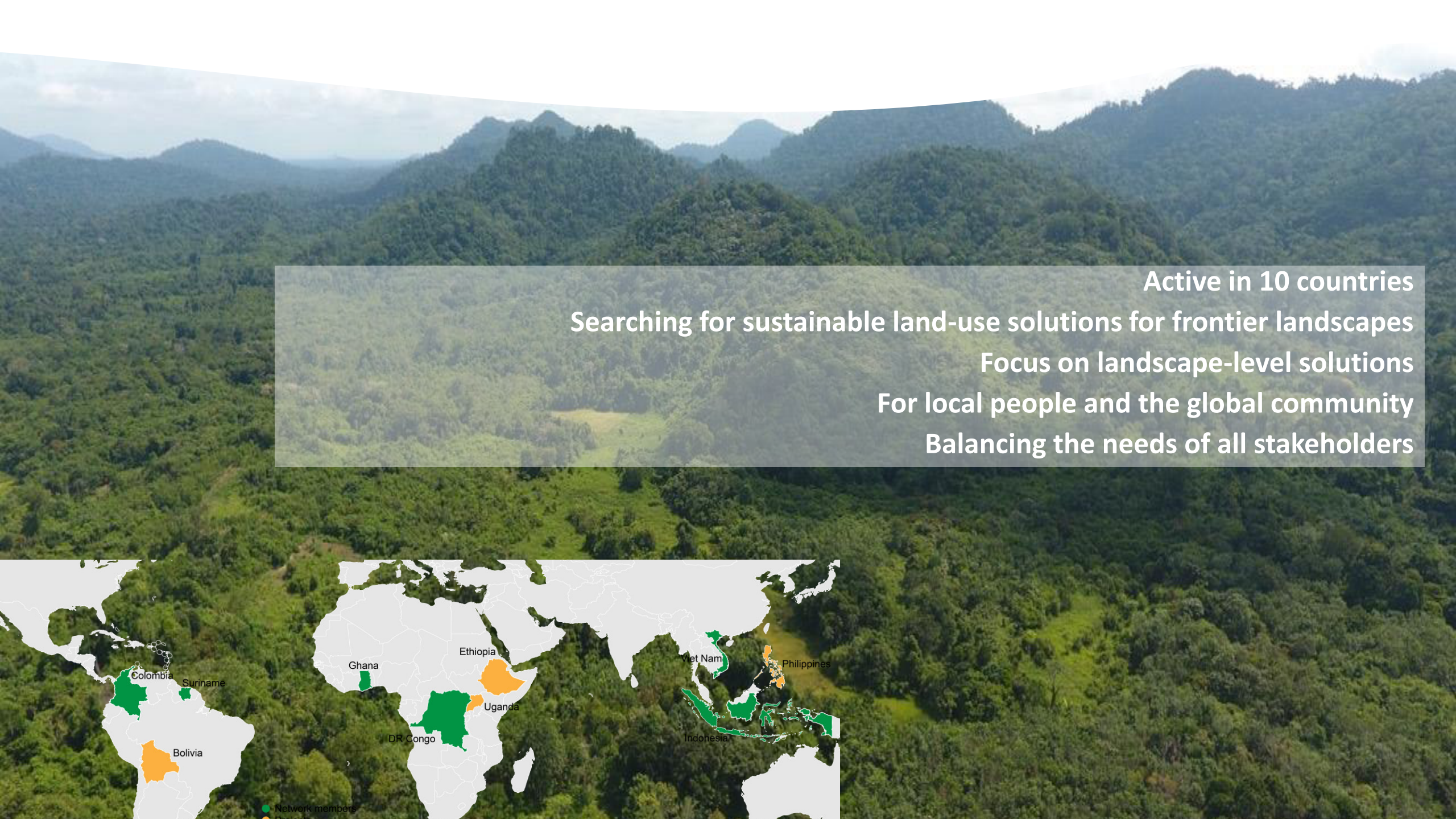
Protecting forests through the financial inclusion of local and indigenous communities

European Microfinance week, 16 November 2022, Luxembourg



Tropenbos International Tropenbos Ghana

By Eveline Trines (Tropenbos International) & Evans Sampene (Tropenbos Ghana)



Active in 10 countries
Searching for sustainable land-use solutions for frontier landscapes
Focus on landscape-level solutions
For local people and the global community
Balancing the needs of all stakeholders



Background


- Agriculture causes 70% of global deforestation, predominantly through land for agrocommodities.
- Deforestation and forest degradation cause over 30% of climate change.
- 70-80% of farmland is occupied by family farms, producing >80% of the world's food.

Ref: FAO (2018) The State of Food and Agriculture - Innovation in family farming. FAO, Rome, Italy.

- Of the 570 million family farms worldwide, >500 million farms have <2 ha; >410 million are <1 hectare.

Ref: ESA working paper no. 14-02: "What do we really know about the number and distribution of farms and family farms in the world?". Background paper for The State of Food and Agriculture 2014.

- Integrating food production and forest conservation through agroforestry addresses some of the biggest global challenges such as climate change, the loss of biodiversity, and the increased food insecurity.
- Financing the transition of traditional smallholder practices to responsible agroforestry practices is extremely difficult.
- However, agroforestry is also financially more lucrative, with a higher RoI, compared to monocultures.



Our Ghana Experience

- Identification of key landscape challenges
- Call for business proposals addressing at least one key challenge
- Scrutiny by expert business panel
- Technical Assistance for the most promising business cases
- Discussions with local rural banks to check appetite
- Willingness to establish a dedicated credit line, backed-up by guaranties

Our Challenges

- Perceived risk
- Lack of capacity & financial literacy; record keeping, business & credit management, understanding the banking culture
- Small business scale
- Lack of loan history
- Absence of collateral
- Challenges to deliver proof of concept

- Aggregate (work with cooperatives or FFPOs)
- Blended finance
- Guarantees
- Modified fund structure
- Capacity building & Technical Assistance

Parts of our Solutions



Upsides

An aerial photograph of a lush green agroforestry landscape. The foreground is dominated by a wide, muddy brown river. The middle ground shows a dense canopy of green trees and crops, with two small, simple houses visible. The background is a continuation of the green landscape, suggesting a rural or semi-rural setting. The overall scene is vibrant and healthy, illustrating the concept of agroforestry.

- Agroforestry has a higher production per ha
- Thus a higher RoI per ha
- Less risk due to crop and economic diversification for farmer and financier
- Continuous cashflow
- More resilience to climate change
- More agro-biodiversity
- Less pressure on residual forests, thus less deforestation
- Less dependence on single crop

Trial in Ghana

Based on Rural Enterprise Development Fund (IFAD, AfDB, and nat. financiers)

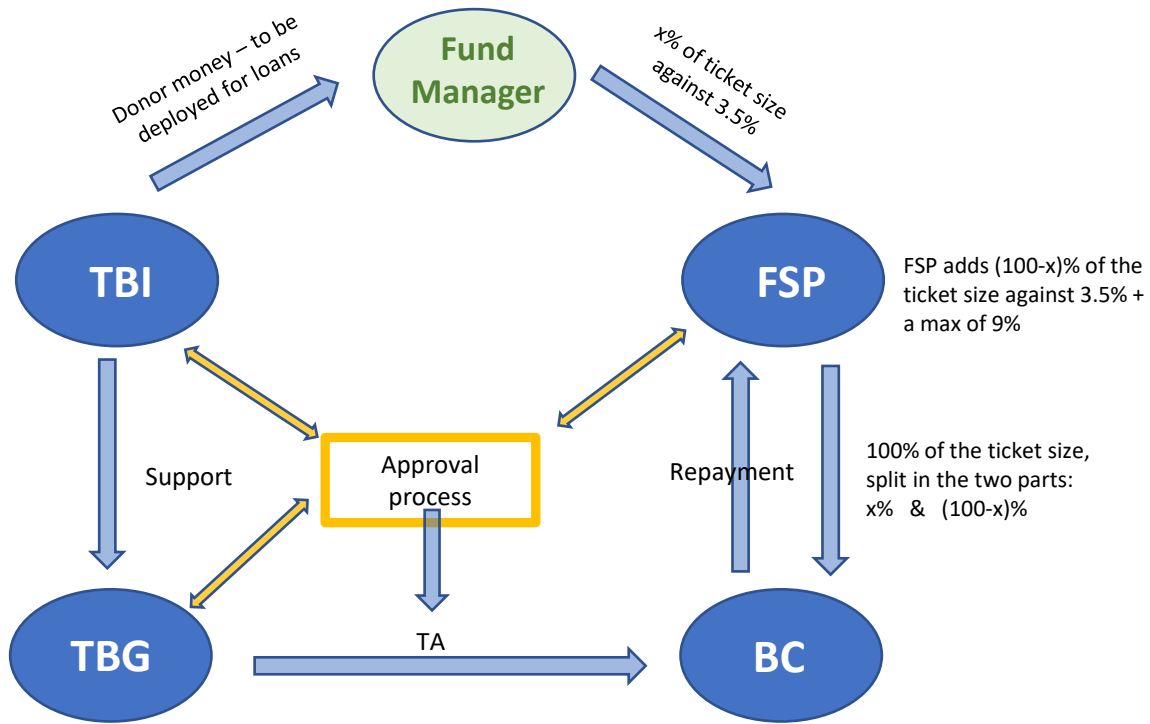
Highly concessional blend of:

- TA
- Guarantees
- To revolving fund



Mixed agroforestry field in the community forest concession of Bapandi Bambaka, DR Congo. Photo: Charles Mpoyi

RISK-SHARING MECHANISM



On our way to a revolving fund?



An aerial photograph of a lush green valley. In the foreground, a small village with several houses is visible, surrounded by dense forest. The valley extends into the distance, with rolling hills and mountains under a cloudy sky. A vertical white line is positioned to the right of the text.

Questions & Discussion

- Experiences elsewhere?
- Other suggestions?
- Anyone out there, trialing the same?



FCCF: Timeline and history






FCCF: Focus on regeneration of Secondary and Degraded tropical forests



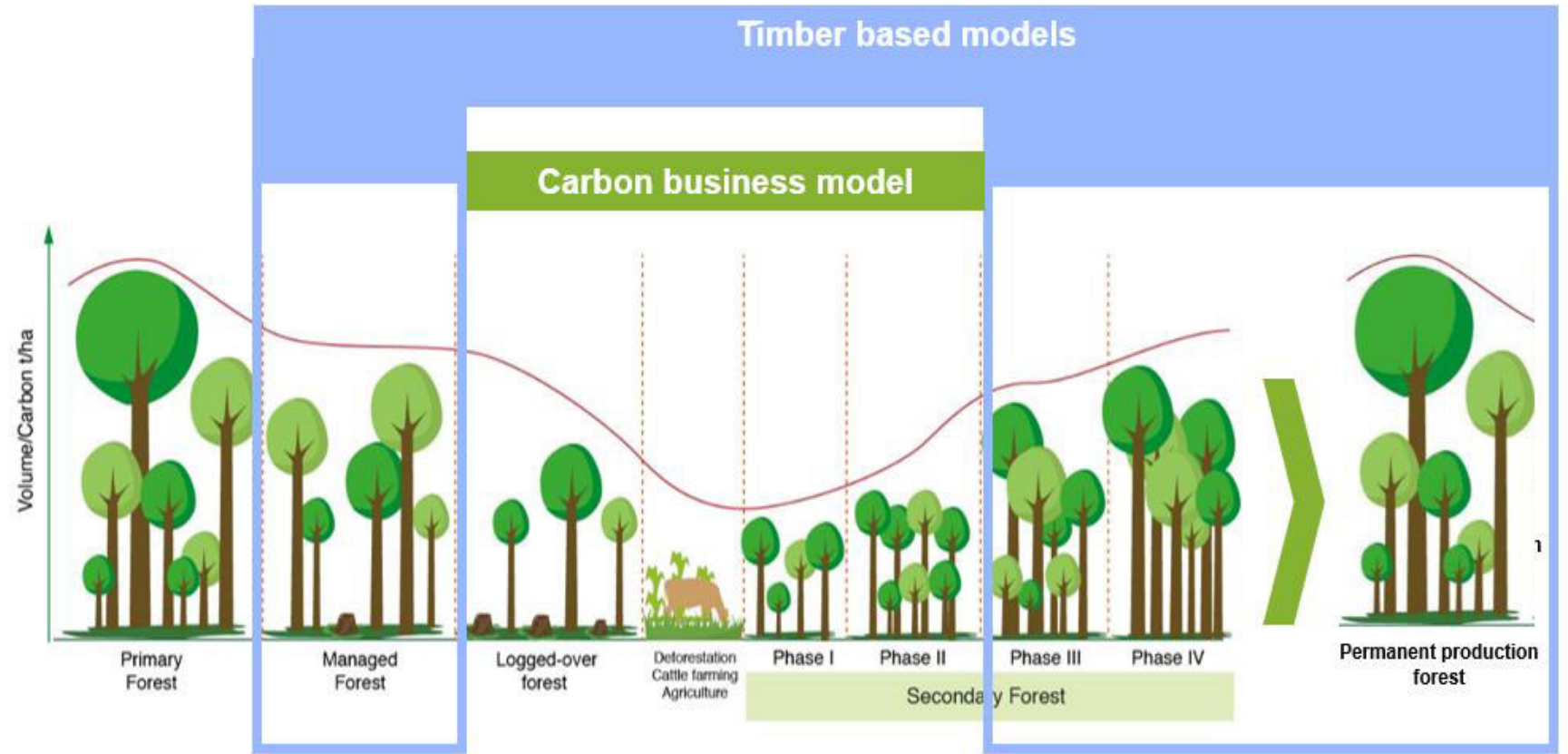
FCCF: Theory of Change



	BASELINE	INPUT	OUTPUT	OUTCOME	IMPACT
 Natural Capital	<p>SDF* are not sufficiently valued economically, leading to deforestation and degradation, particularly for young SDF</p>	<p>Investment and mobilization of finance for entities providing financial and technical resources for sustainable management and restoration of SDF</p>	<p>Investees have access to financial and technical resources for sustainable management and restoration of SDF</p>	<p>SDF of local forest owners are under management and deforestation rates are reduced. Active management improves forest growth, biodiversity value, species composition and carbon stocks.</p>	<p><i>SDF become permanent natural forests with high biodiversity and significant carbon stocks</i></p> <p><small>SDG 13 - Climate Action SDG 15 - Life on land</small></p>
 Wood Value Chains	<p>The lack of markets and demand for SDF wood, including <u>lesser known</u> species and lesser qualities inhibits their sustainable management</p>	<p>Investments in processing industries & commercialization and financing of equipment for the transformation of wood from SDF</p>	<p>Investees market products based on wood from SDF Investees commit to use lesser-known and lesser quality wood</p>	<p>Sustainable value chains for SDF wood develop Value chains finance the sustainable management of SDF and remunerate forest owners in line with opportunity costs</p>	<p><i>The sustainable management of SDF is a scalable, economically attractive land use option sustained by wood as a valued material</i></p> <p><small>SDG 8 - Decent Work & Economic Growth SDG 9 - Industry, Innovation & Infrastructure SDG 12 - Responsible Production & Consumption</small></p>
 Equity & Inclusion	<p>Small and medium forest owners, local and indigenous communities lack fair access to formal forest value chains</p>	<p>Technical assistance and investment policies focused on benefit sharing and fair sourcing along the value chain.</p>	<p>Fair sourcing policies are implemented by investees Investees provide decent, inclusive employment</p>	<p>The value generation in the SDF value chain is distributed, fairly, including to small and medium forest owners & local and indigenous communities The share of women in the investee workforce increases</p>	<p><i>Socio-economic opportunities provided by an inclusive SDF sector lead to cohesive and resilient rural communities</i></p> <p><small>SDG 1 - Poverty reduction SDG 5 - Gender Equality</small></p>

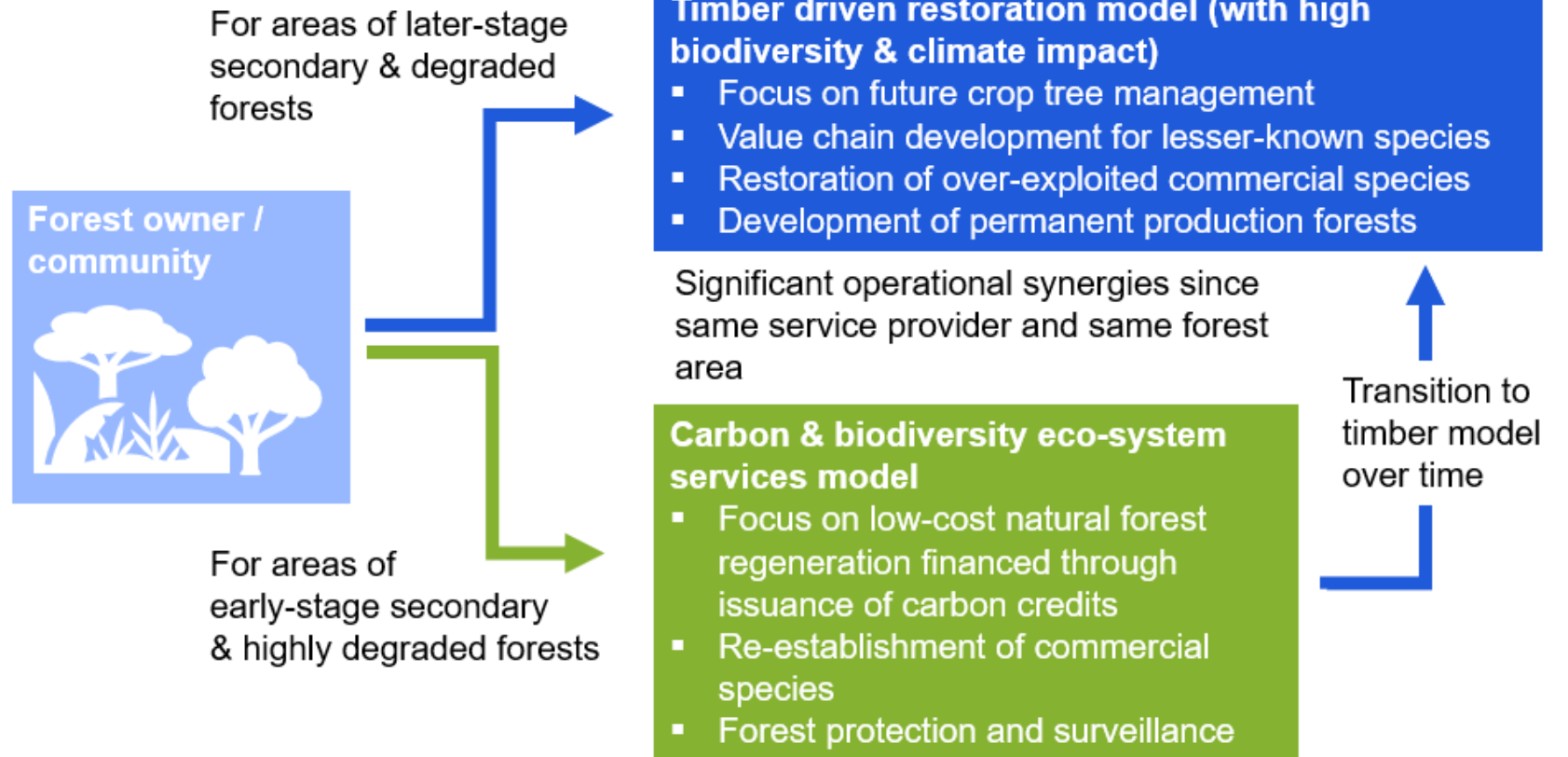
SDF: Secondary and Degraded Forests

FCCF: Degradation curve and restoration of tropical forests

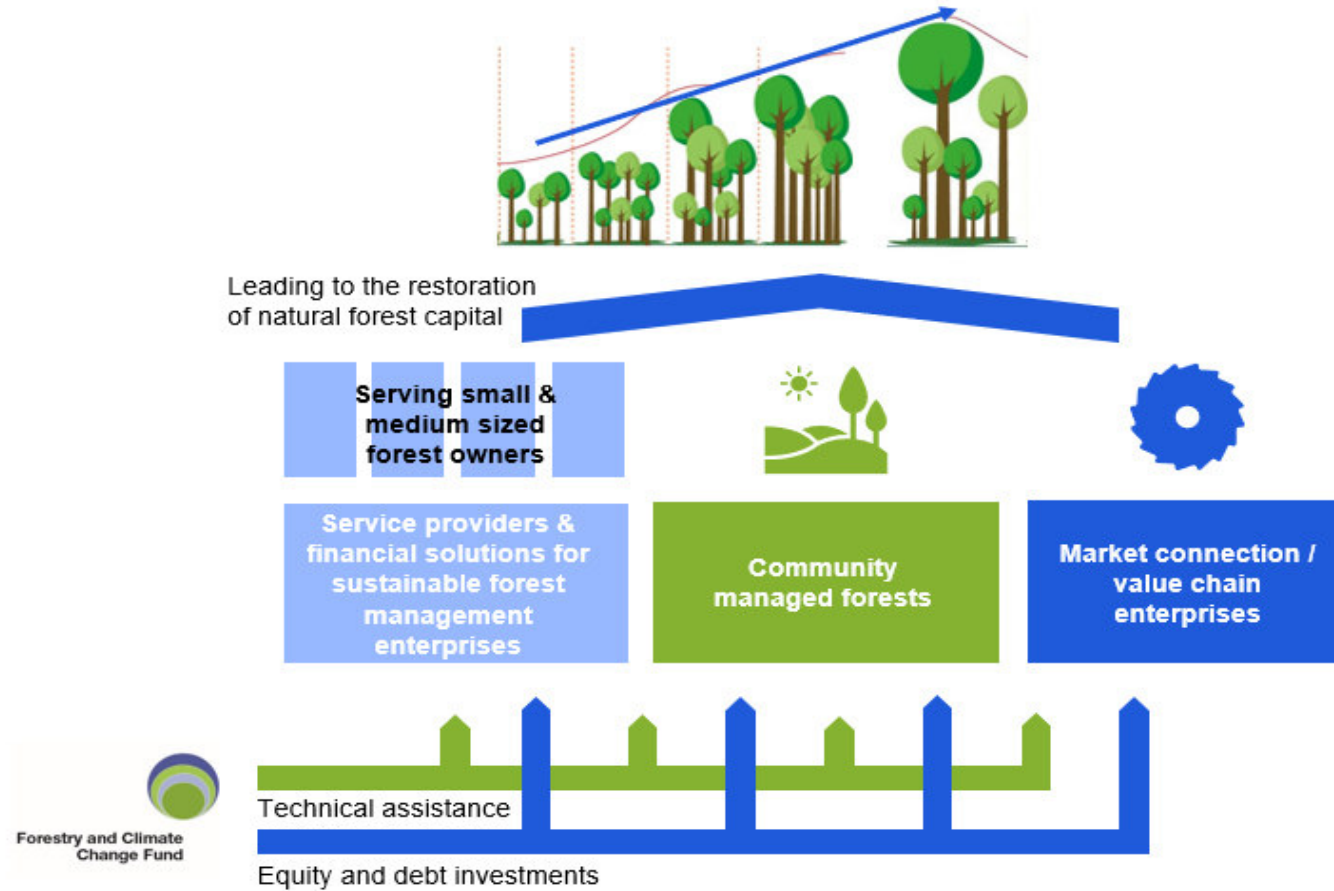


Source: CATIE / FCCF

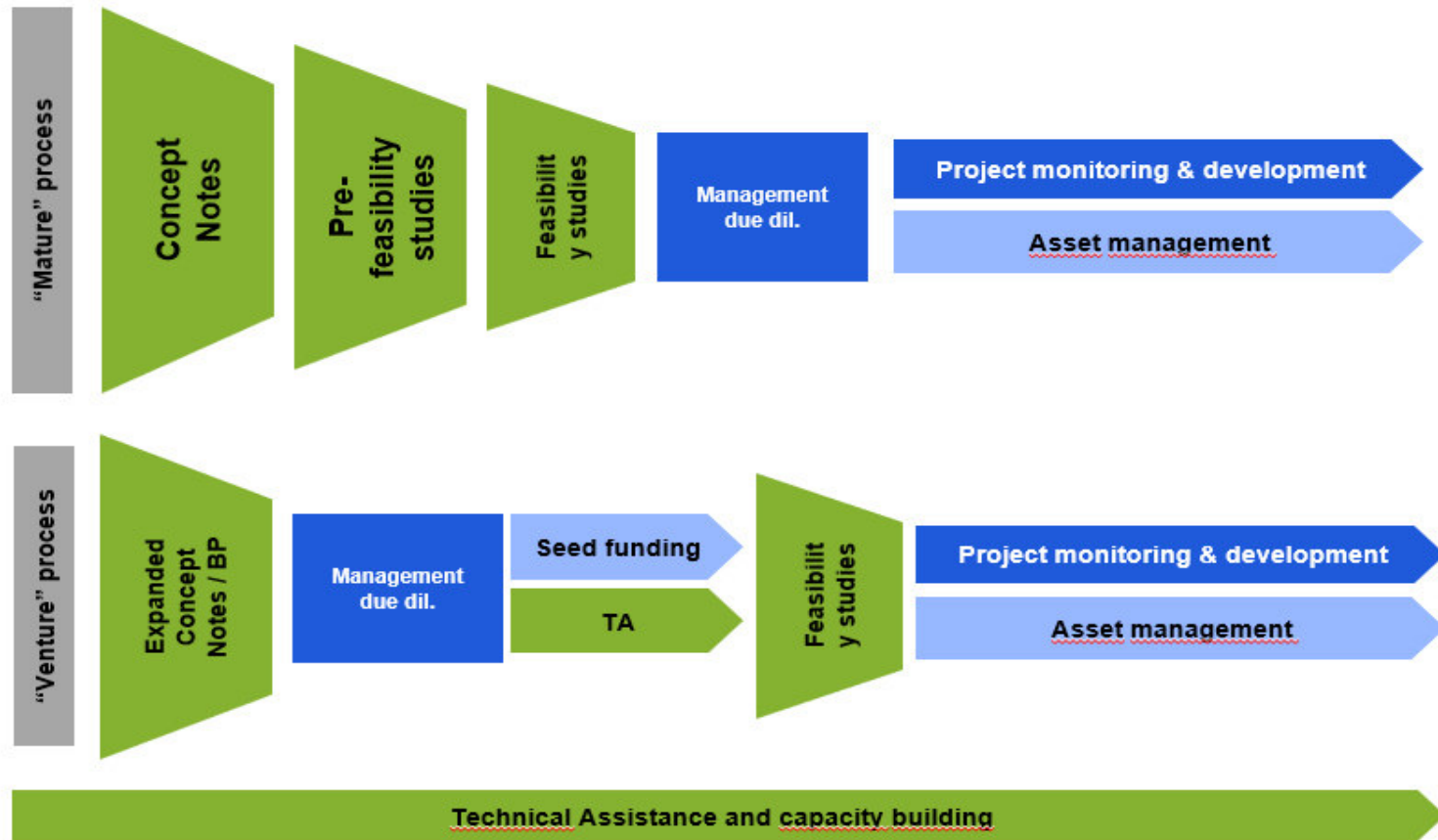
FCCF: Holistic forest restoration model








FCCF: Business Model



FCCF: Flexible investment process



FCCF: Financing instruments

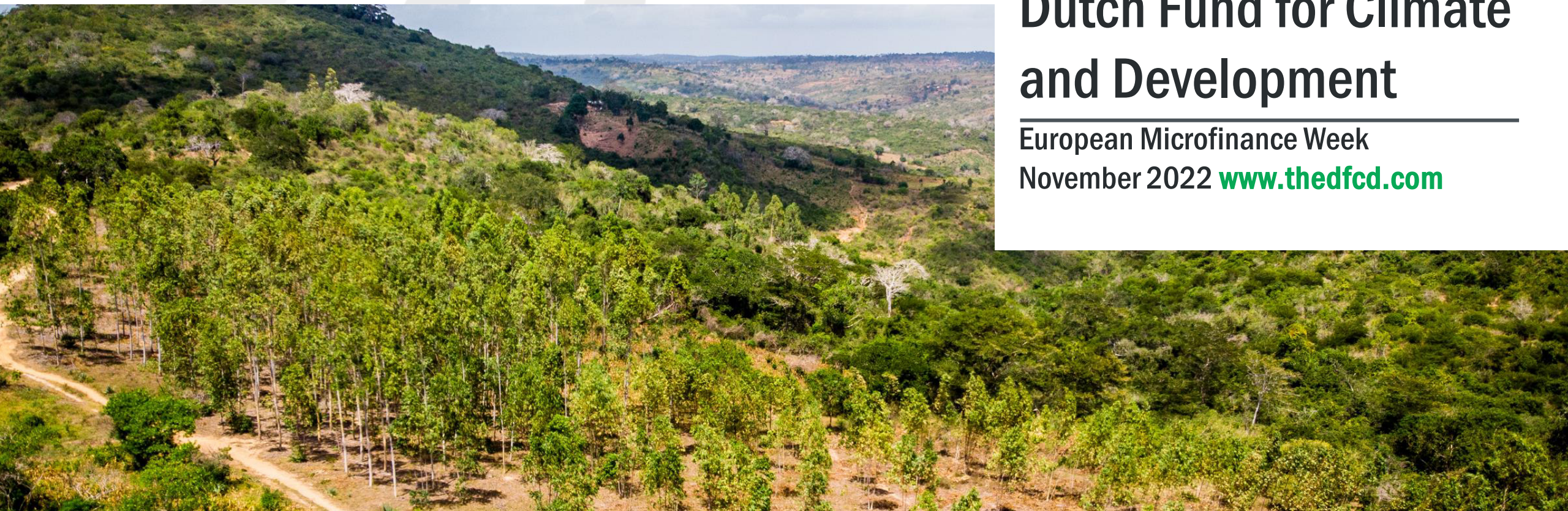
	Financing	Terms & Conditions
	Start-up equity Inclusion of sweat equity Sub-ordinated debt	FCCF equity : Sub-ordinated debt pricing: Sweat equity: Security / recourse:
		Equity IRR Interest rate + profit participation Salary discount Unsecured
	Venture debt - Capex	Pricing: Security / recourse: Tenor:
		Senior debt (variable rates) Machinery asset pledge 6 - 10 years, amortizing
	Venture debt – Natural capital	Pricing: Security / recourse: Tenor:
		Senior debt (variable rates) Land use right / biological assets / carbon According to land lease/use agreement
	Venture debt - Working capital	Pricing: Security / recourse: Tenor:
		Senior debt (variable rates) Inventory / invoices 1-2 years, renewable
	Forest community debt finance	Pricing: Security / recourse: Tenor:
		Senior debt (fixed rates) Depending on use equivalent to venture debt 1 – 5 years



Dutch Fund for Climate and Development

European Microfinance Week

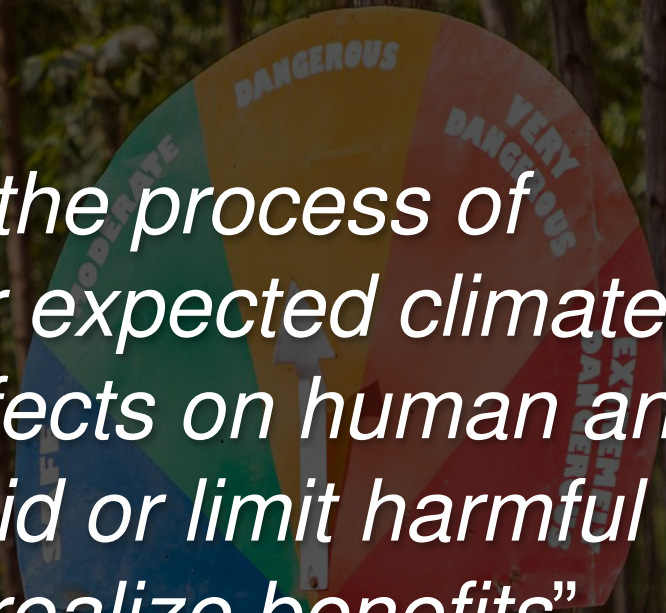
November 2022 www.thedfcd.com



Photograph is of a smallholder micro-plantation in Kenya, enabled by Komaza, an out-grower platform that supports rural farmers with planting trees on degraded land, improving incomes, reducing the risk of landslides, and strengthening biodiversity. Komaza received a USD 7.5 mln DFCD Land Use Facility investment in July 2020.

Climate adaptation is “the process of adjustment to actual or expected climate conditions and their effects on human and natural systems to avoid or limit harmful consequences and/or realize benefits”

IPCC, 2018



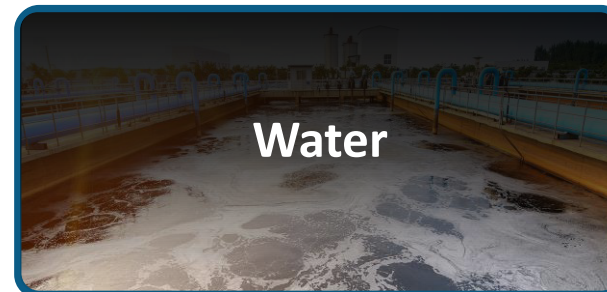
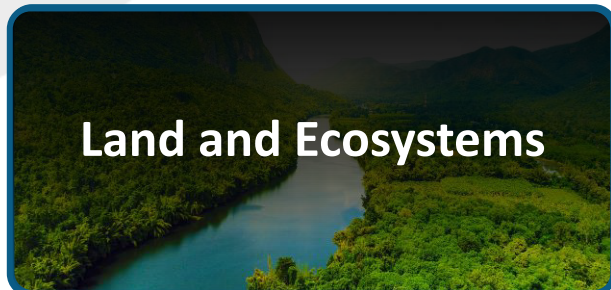
FIRE DANGER INDEX

FDI Range	Level	Fire Behavior	Control Measures
0-9	Low	Only light fires likely to start. Smoke and spotting of ash.	Controlled burning operations can be done without creating a fire hazard. Care must be taken.
10-19	Moderate	Light to moderate spotting of ash.	Controlled burning operations can be done without creating a fire hazard. Care must be taken.
20-29	High	Moderate spotting of ash.	Controlled burning operations can be done without creating a fire hazard. Care must be taken.
30-39	Very High	High spotting of ash.	Controlled burning operations can be done without creating a fire hazard. Care must be taken.
40-49	Extremely High	Very high spotting of ash.	Controlled burning operations can be done without creating a fire hazard. Care must be taken.



DFCD Priority Sectors

EUROPEAN
MICROFINANCE WEEK
connecting the inclusive finance world

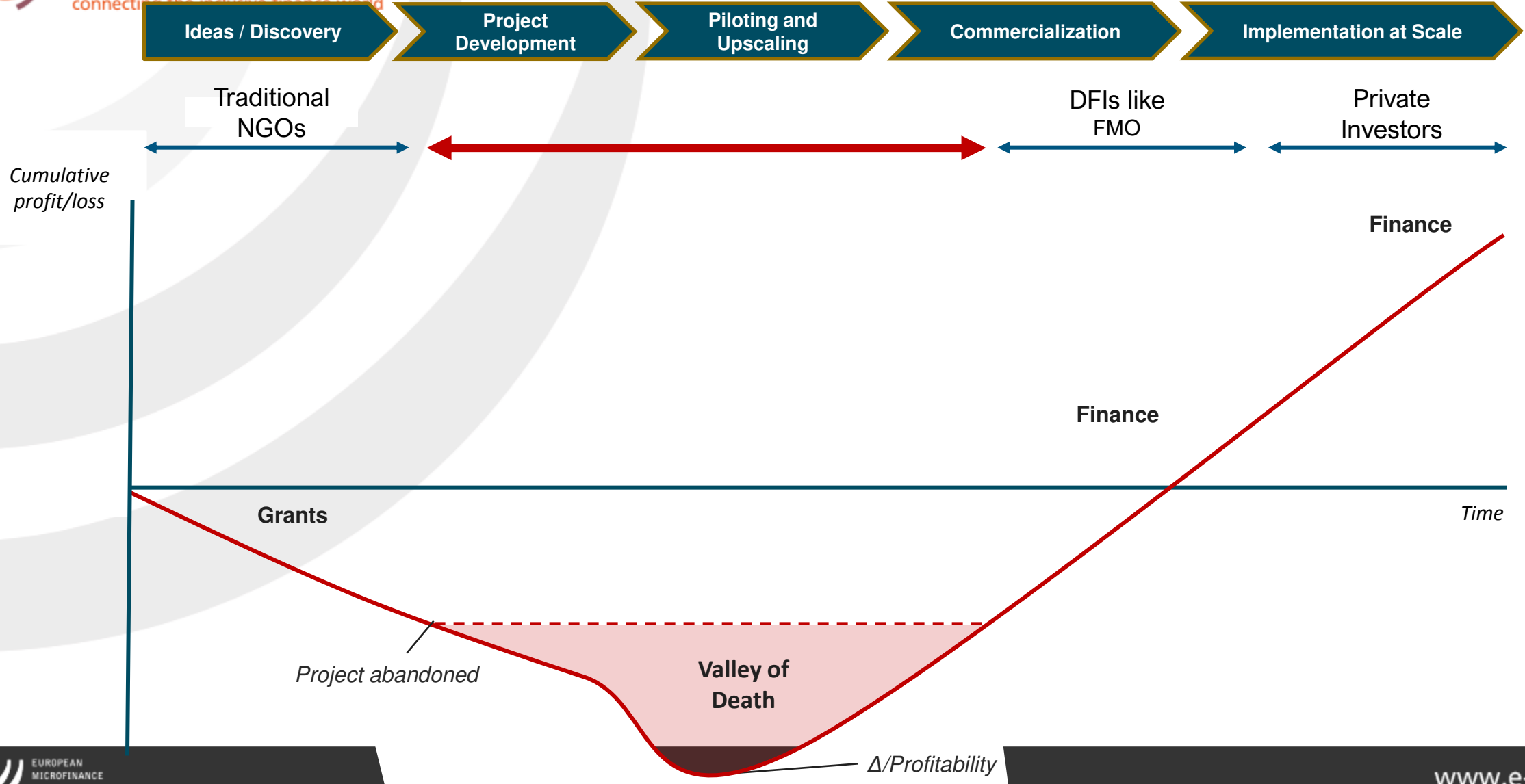


Mission	To enable private sector investments in projects aimed at climate adaptation and mitigation in developing countries, particularly to strengthen the climate resilience of vulnerable populations and ecosystems.
Management	Consortium of FMO, SNV, WWF and CFM
Size	EUR 160 mln
Structure	Origination Facility (30 mln), Land Use Facility (55 mln), Water Facility (75 mln)
Instruments	Full range: Technical Assistance, Grants, Debt, Equity, Mezzanine
Donor	Dutch Government Ministry of Foreign Affairs
Launch	May, 2019
Investment Period	Until 2022 (with reinvestments afterwards)
Fund Term	Until 2037 (incl. possible extension)
Geographies	Developing countries (Minimum 25% LDCs, 25% NL-Priority Countries)
Sub-targets	Minimum 50% of investments in adaptation
# targeted investments	25 Land Use Facility, 30 Water Facility, 35 Origination Facility bankable business cases
Risk appetite	High risk with concessional return targets: 75% revolvability by 2037
Ticket size	Grants up to EUR 350,000, Equity/Debt EUR 1 mln – EUR 10 mln



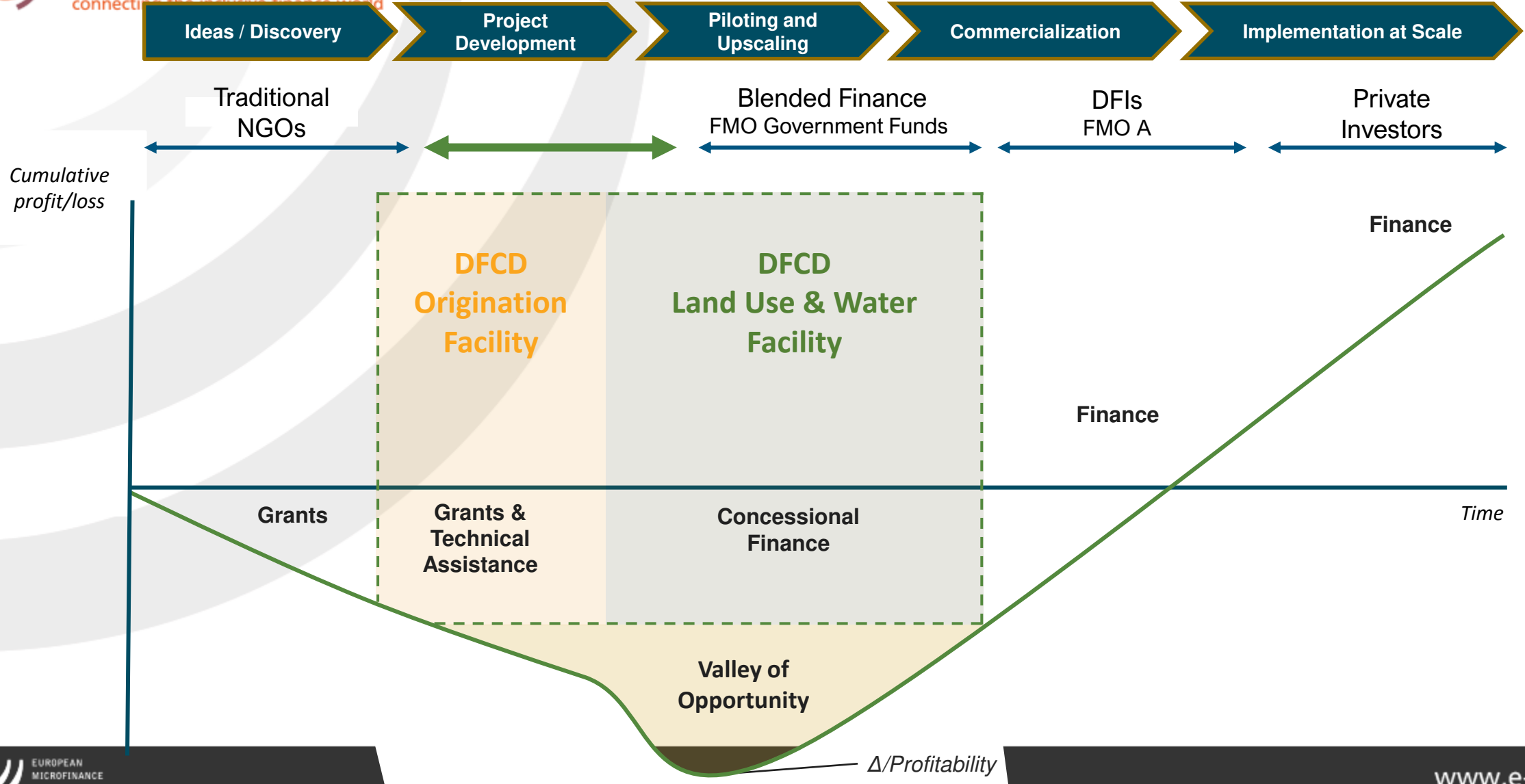
The project / finance lifecycle

EUROPEAN
MICROFINANCE WEEK
connecting the inclusive finance world



The project / finance lifecycle

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A collaborative governance structure



An aerial photograph of a rural landscape. In the foreground, there are several large, rectangular greenhouses with dark roofs, arranged in a grid-like pattern. To the right of the greenhouses, there are rows of young plants in a field, possibly a nursery or a small-scale farm. The background shows a hazy, open landscape with scattered trees and a distant horizon. The sky is overcast and grey.

A “**Landscape Approach**” is a way of managing the landscape by long-term collaboration among multiple stakeholders, with the purpose of achieving sustainable landscapes.

A “**Landscape**” is a socio-ecological system that consists of natural and/or human modified ecosystems, and which is influenced by distinct ecological, historical, economic and socio-cultural processes and activities.

LANDSCAPE APPROACH

Example: Kafue Flats, Zambia

connecting the inclusive finance world

Bankable
Grants/Subsidies



\$12m
Manage Cattle Farming



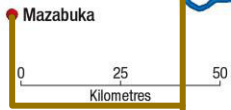
\$2m
Fish processing plant



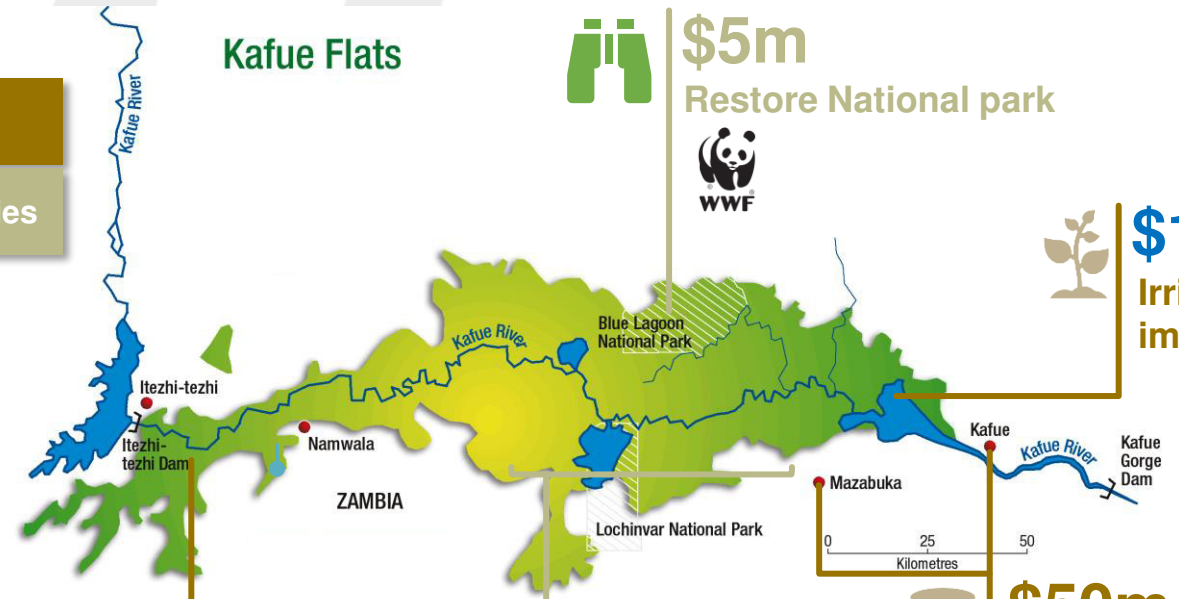
\$5m
Restore National park



\$10m
Irrigation improvement



\$50m
Water treatment system



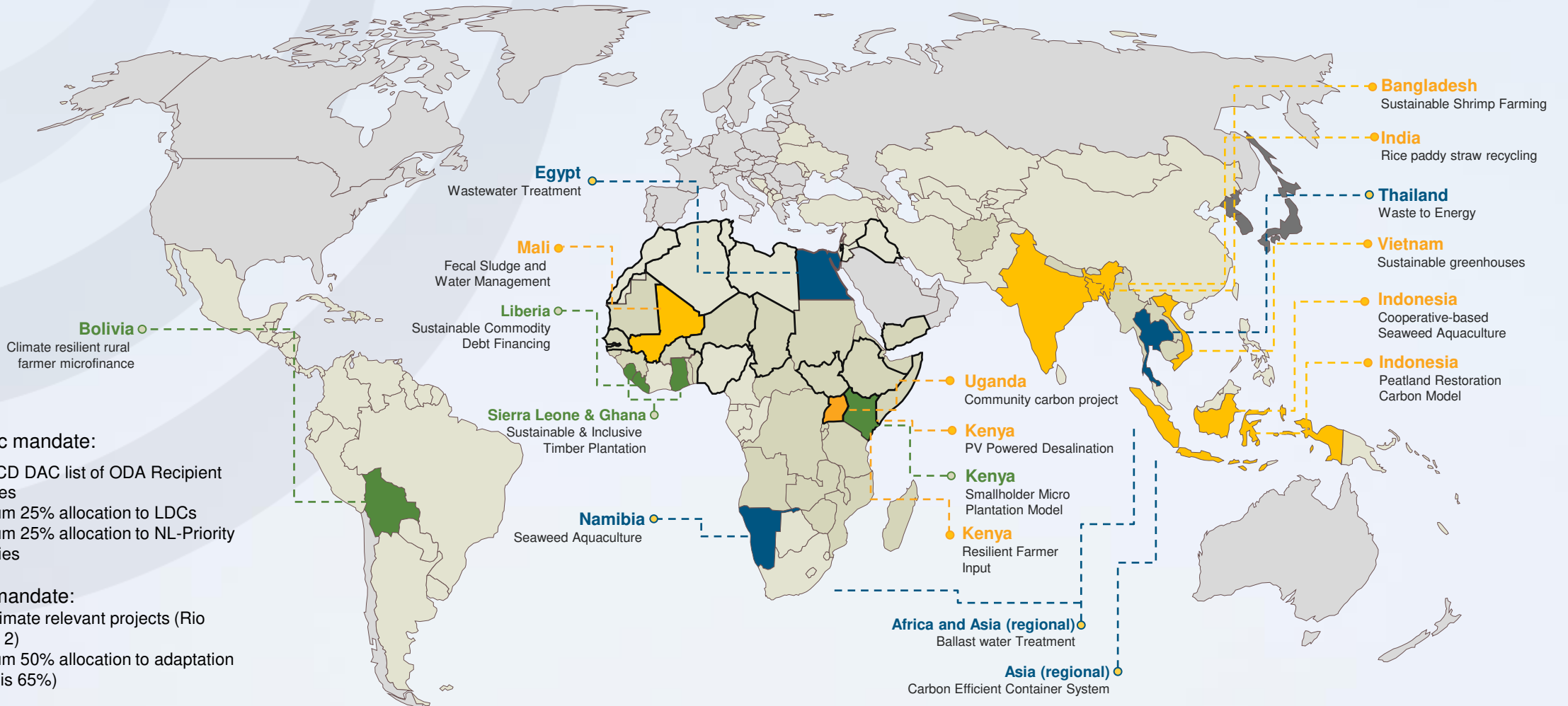
Example

DFCD Project Overview

EUROPEAN MICROFINANCE WEEK
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Legend

- Origination Facility projects
- Land Use Facility projects
- Water Facility projects



Geographic mandate:

- All OECD DAC list of ODA Recipient countries
- Minimum 25% allocation to LDCs
- Minimum 25% allocation to NL-Priority Countries

Thematic mandate:

- Only climate relevant projects (Rio Marker 2)
- Minimum 50% allocation to adaptation (target is 65%)



Komaza designed a forestry model to get Kenyan smallholder farmers out of poverty and to address the large and fast-growing wood market in Africa. Komaza offers these farmers the option to plant fast growing trees, like eucalyptus and melia (a native, drought resistant species) on their untapped parts of land. This provides farmers with the opportunity to generate additional income over a longer period.

Project Type	Micro-forestry
Location	Kenya
DFCD LUF Investment (Equity)	USD 7.5 mln
Ha of forest under sustainable management	4,974 (baseline)
# of smallholder farmers supported	16,029 (baseline)
GHG sequestration (tCo2eq)	TBD



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