

SEED PRACTITIONER LABS
CLIMATE FINANCE AND
POLICY PROTOTYPING

Building an Ecosystem of Eco-inclusive Enterprise Support Mechanisms and Collaborators

2019 | Ghana, Malawi & South Africa



Established by







Funded by







adelphi



## **Imprint**

Publisher: SEED c/o adelphi research gGmbH Alt Moabit 91, 10559 Berlin, Germany www.seed.uno | info@seed.uno

This brochure on 2019 SEED Practitioner Labs Climate Finance and Prototyping by SEED / adelphi research gGmbH is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

**Suggested citation:** SEED (2019). SEED Practitioner Labs Climate Finance and Policy Prototyping. Berlin, Germany.

Authors: Rollins Chitika, Isabell von Falkenhausen, Julia Haack, Rest Kanju, Tione Kaonga, Marlena Kiefl, Kathrin Kirsch, Ebenezer Kumi, Christine Meyer, Jonas Restle-Steinert, Camilla Shearman, Maggie Sloan, Alina Weiss.

Contact us: labs-policy-prototyping@seed.uno

Layout/Design: SiMPELPLUS



## **Contents**

Introduction	5
Ghana	7
Climate Finance	9
Malawi	19
Policy	21
South Africa	29
Policy	31
Climate Finance	30

# SEED Practitioner Labs Climate Finance and Policy Prototyping 2019

The 2019 SEED Practitioner Labs series in Ghana, Malawi and South Africa brought together over 320 leading investors, policy makers, banks, development finance institutions, civil society, eco-inclusive enterprises and intermediaries to jointly develop policy and climate finance solutions to challenges faced by eco-inclusive enterprises.

Lab practitioners, facilitated by SEED Prototyping Methodology, turned challenges into solutions as they co-created and mobilised support for robust prototypes that bring targeted financial and policy support to growing eco-inclusive enterprises.



- Deepen the understanding of challenges facing eco-inclusive small and growing enterprises in emerging markets
- **Co-create instruments** to fuel eco-inclusive entrepreneurship for green and inclusive economies
- Develop robust implementation and resourcing roadmaps for climate finance and policy instruments
- Explore the likely impacts of policy and financial instruments and tailor them towards the needs of small and growing enterprises
- Providing ample collaboration and networking opportunities across sectors





#### **SEED Practitioner Labs Process**

IDENTIFY
challenges facing
growing eco-inclusive
enterprises

REFINE
ideas and test solutions
to these challenges

DELIVER
climate finance and policy
instruments supported by
new partnerships

# Overview of Policy and Climate Finance Instruments

#### **GHANA**

- Climate Finance Knowledge Hub: Sharing technical know-how on the assessment, appraisal & financing of climate-smart enterprises
- Farmer Friendly Finance (FFF): Unlocking financing for smart agriculture through a community-based youth farming approach
- Pay2Pay: Mobile-enabled solution for working capital pre-financing for smallholder farmers
- **Microinsurance without Borders:** Effective delivery of microinsurance for SMEs in the agricultural sector
- · SOLFIN: Affordable lease-to-own financing for solar systems

#### **MALAWI**

- Malawi Waste Management Consortium: Building markets for waste innovation value chains
- Agriculture Insurance and Climate-Related Risk Assessment: Stimulating climate-smart agriculture markets
- Cooperative-to-Cooperative Platform: Expanding networks for community-led business development
- Off-Grid Renewable Energy Private-Public Partnership Model: Improving market access and affordable technology financing

#### **SOUTH AFRICA**

- Public-private sector convenor: Commercialisation of eco-innovations
- Cross-sector thought group: Facilitating labour absorption in SMMFs
- Online biomass platform and policy navigator. Incentivising activity in the biomass sector
- Platform for Climate-Resilient SME Financing: Institutionalising access to climate finance
- Equity Plug for Energy Efficiency Financing: Direct lending model for SMEs
- Climate-Smart Impact Investment Fund: Extending capital to SMEs in emerging markets
- Green Lend: Inclusive credit risk assessment across value chains





## **Practitioner Labs for Climate Finance, Ghana**

## Developing targeted climate finance solutions to support the growth of eco-inclusive enterprises

 CLIMATE FINANCE KNOWLEDGE HUB: SHARING TECHNICAL KNOW-HOW ON THE ASSESSMENT, APPRAISAL & FINANCING OF CLIMATE-SMART ENTERPRISES

The Climate Finance Knowledge Hub aims to address the knowledge gap of financial institutions on financing climate-smart enterprises through sharing technical know-how on the assessment, appraisal and financing of climate-smart enterprises through an online platform, training and certification of financial institutions and enterprises.

2. FARMER FRIENDLY FINANCE (FFF): UNLOCKING FINANCING FOR SMART AGRICULTURE THROUGH A COMMUNITY-BASED YOUTH FARMING APPROACH

Farmer Friendly Finance applies a community-based approach to support especially young graduates to set up their own farms as sustainable businesses and builds on bundled services to de-risk farmerpreneurs to facilitate access to finance.

3. PAY2PAY: MOBILE-ENABLED SOLUTION FOR WORKING CAPITAL PRE-FI-NANCING FOR SMALLHOLDER FARMERS

Pay2Pay offers a new way of obtaining financing for smallholders farmers through a platform payment system which serves an intermediary to connect farmers, financial institutions and other stakeholders such as offtakers or climate-technology service providers enabling for example the earmarking of payments.

4. MICROINSURANCE WITHOUT BORDERS: EFFECTIVE DELIVERY OF MICRO-INSURANCE FOR SMES IN THE AGRICULTURAL SECTOR

Microinsurance without Borders protects individual and small-scale farmers focusing on crops, livestock and aquaculture against climate-induced risks building on a multi-channel distribution system and awareness raising by NGOs.

5. SOLFIN: AFFORDABLE LEASE-TO-OWN FINANCING FOR SOLAR SYSTEMS

SOLFIN enables affordable lease-to-own financing for solar systems by providing financing for solar enterprises at favourable terms through a private equity fund, combined with asset-financing through loans by local banks.



#### With 87 participants from a wide range of organisations...

#### **CLIMATE FINANCE SOLUTIONS DEVELOPED BY**



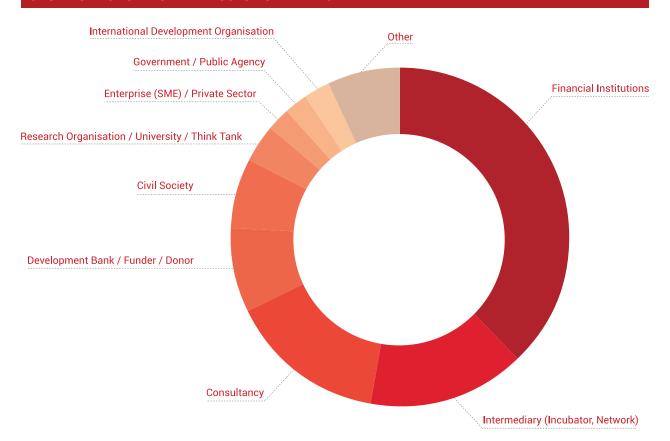








#### ORGANISATIONS INVOLVED IN SOLUTION DEVELOPMENT



ADB
ACTIVA Insurance
Acumen Fund
Advans Ghana
Afram Community Bank
Barclays Bank Ghana Limited
Barclays Bank of Ghana
Ecobank
Eman Microfinance Ltd
Employee Wellbeing Agency
Engineers Without Borders (Canadian)
Ernst & Young

GBL Insurance Brokers Limited
Ghana Agricultural Insurance Programme (GAIP)

Ghana Netherlands Business Council & Culture

GHL Bank

GIZ

Grass Root Hub

Green Finance Africa Foundation

**Growth Mosaic** 

Inclusive Innovations Inc Innovations for Poverty Action Institute for Sustainable Energy and

**Environment Solutions** 

International Chamber of Commerce

Ghana

Invest in Africa

Investisseurs & Partenaires

Jes Wystemberd Ltd Jireh Microfinance Ltd Kasa Initiative Ghana Letshego Ghana Limited MasterCard Foundation

MDF Consultancy

MicroEnsure Microfin Consult

Ministry of Finance

Mobile Business Clinic (MBC) Africa

Omni Bank

Opportunity International

RDF Ghana

Services Integrity Savings and

Loans

**Smart Recruitment** 

SNV Ghana

South Birim Rural Bank

Stanbic Bank

Strategic Youth Network for De-

velopment (SYND)

Success For People Micro Finance

Company

**Summit Vision Microfinance** 

Technoserve Translight Solar

Unimas Microfinance Ltd

**United Nations Capital Development** 

Fund

University of Energy and Natural

Resources

Wangara Green Ventures

YNREG



Climate-smart enterprises incorporate economically viable business concepts which offer solutions to mitigate climate change or adapt to its impacts. If supported technically and financially, these small and medium-sized enterprises (SMEs) have the potential to significantly contribute to the transition towards a local green and inclusive economy, as they include wide parts of the local population in their value chains and providing bottom-up solutions to climate challenges. Climate finance plays an important role in capacitating the SME sector to fulfill this role, yet to present there are only few financial institutions (FIs) that propose related services in Ghana.

To fill this gap, Ghana's own capital market needs to increase investments in climate-smart enterprises and significantly mobilize finance. Yet, the Ghanaian financial sector faces issues in the development of sound climate finance instruments resulting from a general knowledge gap about climate-smart enterprises. FIs have a limited ability to identify and appraise the value chain of climate-smart enterprises, lack a digital system to facilitate the collection of data needed for the assessment of climate-smart enterprises, as well as a framework for the assessment and risk-indexing based on non-financial indicators. In turn, the knowledge of local SMEs about financing opportunities related to climate finance tends to be low. Despite initiatives that support the development of climate-smart enterprises, capabilities to attract funding remain low requiring more targeted capacity building.

#### **Solution Overview**

The Climate Finance Knowledge Hub aims to address the knowledge gap of FIs on climate-smart SMEs by sharing technical know-how on the assessment, appraisal and financing of this target group. It enables FIs to identify and appraise climate-smart value chains to provide targeted financing for SMEs by providing the necessary knowledge, collecting relevant data and establishing a framework for the assessment of climate-smart enterprises and risk-indexing. The Hub will include enterprises throughout the platform and trainings to also increase their know-how on climate finance.

Focus:

Lab Cycle:

Climate Change Mitigation

Adaptation

Available Skills, Access to Finance Climate Finance, Ghana 2019

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

#### **Key Features**

9

**Ecosystem Impact:** 

Challenge Hosted by:

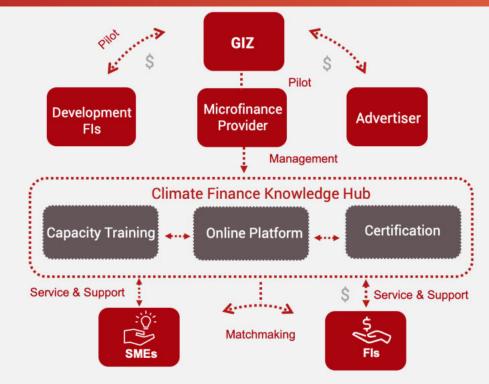
The Climate Finance Knowledge Hub will combine three interconnected features to foster capacity development in climatesmart enterprises financing:

- Online Platform to establish a central place where FIs and enterprises can access information about climate finance, funding sources, green business opportunities and impacts.
- 2. Capacity Development Trainings for local FIs and aspiring climate-smart SMEs on climate finance.
- Certificates for trained climate-smart enterprises and trained microfinance institution.

The Hub is designed as a one-stop-shop that equips FIs and climate-smart enterprises with technical know-how, certifications and training to ease the access to finance for climate-smart innovation. The set-up of the Hub is coordinated by GIZ and will be hosted by a local Ghanaian microfinance institution (MFI) as a digital platform. The digital platform supports SMEs and local FIs to learn about financial instruments and how to assess such enterprises. On the digital platform, both FIs and SMEs can not only access information and market data but also register for climate finance trainings that will support FIs to design sound financial instruments, encompassing: (1) appraisal and assessment of climate-smart enterprises, (2) risk profiling and indexing of climate-smart enterprises and (3) value chain financing for climate-smart enterprises.

Trained FIs and enterprises will be certified and displayed on the platform which will facilitate direct climate-finance matchmaking. The certify aims to support FIs and SMEs to apply for climate-finance based funding and support their related implementation. The Hub will contain a database for certified SMEs and FIs in climate finance/green business with detailed specialties.





#### **Innovative Characteristics**

- Creates a common platform for FIs and SMEs bundling efforts to strengthen the climate finance sector
- Supports digitalization of the climate finance sector in an inclusive way
- Combines access to information on climate finance with practice-orientated capacity building trainings

#### **Target Market**

- Local Ghanaian FIs which are interested in developing climate finance instruments and capacities in the field. This includes rural and community banks, savings and loans associations, and financial NGOs with a focus on microcredit providers, which typically address SMEs.
- SMEs that are already or want to become climate-smart, mostly operating in strategic sectors for Ghana's NDC implementation process: energy; transport; agriculture, forestry and other land uses (AFOLU); and waste.

#### **Impact Potential**

This prototype will support the next generation sanitation technology and broader water and sanitation market and therefore have an impact on climate change adaptation markets in South Africa.

 Economic: A vibrant environment of financial instruments targeting climate-smart enterprises contributes to a replication of successful business models

- Environmental: Strengthen climate-smart enterprises in their role in a transition towards a local green and inclusive economy
- Financial: Credibility and capacity for (international) funding and partnerships of local FIs and climate-smart enterprises is increased

#### **Solution Developer**



#### **Contact Person:**

Evans Danor Maka: evans.maka@giz Cynthia Odonkor: cynthia.odonkor@giz.de

SEED Practitioner Labs Climate Finance empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.



Access to finance remains difficult for smallholder farmers in Ghana as their business is seen generally as risky by financial institutions (FIs). This perception is caused by multiple factors:

- Financial illiteracy and little business focus of farmers, leading to the assumption that farmers are unable to maintain the business well
- High-risk perception in the agriculture sector including diseases and pest infestation, low yield due to inefficient farming practices and extreme weather induced harvest losses, aggravated by climate change

Due to these high-risk perceptions, farmers and especially rural youth aspiring to set up an agricultural business are trapped in a lack of adequate funding to start up their own enterprise. They often are forced to rely on informal and risky loans such as relatives, friends or frauds. Many young graduates have lost faith in the agriculture sector and tend to migrate to Ghana's urban center where youth unemployment is a significant issue while innovative business ideas in rural areas are missing. A mechanism is needed that de-risks farmers and small and growing agribusinesses to enable farmerpreneurs to start a farming business that employs climate-smart agricultural practice.

#### **Solution Overview**

Farmer Friendly Finance (FFF) offers climate finance solutions to farmers, and especially young graduates, who want to set up a farming business as aspiring farmerpreneurs in the context of climate-smart agriculture. FFF bundles services to de-risk farmerpreneurs, offers access to finance and cooperates with rural communities to provide land to farmerpreneurs with the aim to address the challenge of climate change and youth migration which Ghana's agriculture sector is facing.

ocus: Climate Change Adaptation

Ecosystem Impact: Access to Finance, Entrepreneurial

Mind-Set, Available Skills & Talent

Lab Cycle: Climate Finance, Ghana 2019

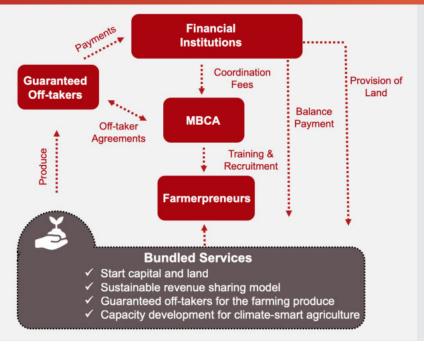
Challenge Hosted by: MBC Africa

#### **Key Features**

Farmer Friendly Finance offers wide-ranging services to accompany farmerpreneurs on their journey to set up a sustainable business under the principle of climate-smart agriculture within the first three years.

- Community-based approach: Communities lease land to farmerpreneurs to start-up their farming enterprise. A revenue sharing model ensures financial sustainability for the communities as they will participate in the revenues achieved through farming. A good relationship with communities is essential since they are the providers of land.
- 2. Access to financial services: Bundled services include value-chain financing of inputs, land from communities, access to the mechanization of farming activities, extension services and agricultural insurance. These services help farmers to set up a business and to lower or eliminate multiple risks associated with farming. Farmers consequently are more successful in obtaining financing from financial institutions.
- 3. Capacity developing services: Farmerpreneurs receive capacity building including both business practices as well as good agricultural practices to empower them to set up a financially and environmentally sustainable enterprise within the first three years.
- 4. Guaranteed off-takers for the farming produce contribute further to de-risking of the farmers to support access to financial services. Agreements with off-takers including buying prices are made before agricultural production is commenced. Thereby uncertainty of business operations and cost calculations are reduced.





#### **Innovative Characteristics**

- Unlocking financing to farmers to invest in climate-smart agriculture through a community-based approach
- Using guarantees and insurance to safeguard against risks in the agriculture sector
- Strengthening impacts of the agriculture sector through a mind-shift in the perception of farming towards a socially inclusive and climate-resilient business approach
- **Target Market**

The target group are young unemployed and non-youth graduates who want to become farmerpreneurs who live and want to stay in their communities (aged between 18 and 40).

The pilot phase will be rolled out with the following specifications:

- Three regions: Volta Region (North Dayi District), Eastern Region (Afram Plains District), Northern Region (district tbd)
- Communities: Up to 40 farmerpreneurs per region summing up to 120 farmers for all three pilot regions. For example, a group of six farmerpreneurs will be responsible for ten plots of lands given by the community on land areas between 200-500+ acres per region
- Climate-smart value chains: Maize, rice, sorghum
- Off-takers: Large food corporations such as OKLAW have already confirmed interest

#### **Impact Potential**

 Empowering local communities by spreading sustainable business models and creating jobs and improved livelihoods, as well as enhancing food security

- Creating a mindset shift towards an innovative, profitable and sustainable agriculture sector and offering rural youth business possibilities with the aim to lower urban migration and youth unemployment
- Combining state of-art climate-smart agriculture with local practices as a foundation for a transition towards a competitive and climate-resilient agriculture sector

#### Solution Developer



#### **Contact Person:**

Fred Yaw Asem: fyasem@gmail.com

SEED Practitioner Labs Climate Finance empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.



While the agricultural sector is the backbone of the Ghanaian economy, access to finance represents a significant challenge for smallholder farmers (SHFs). Among the central factors for banks' reluctance to invest in local agribusinesses are:

- High external risks factors such a crop disease, extreme weather events (floods and dry spells) and volatile prices for farm inputs (seeds and fertilizers);
- Lack of understanding of the nature of local agricultural enterprises, such as cyclical cash-flows while no adequate risk assessment tools are in place and a comparatively high monitoring and delivery costs; and
- High degree of informality of local small and growing agricultural enterprises, including credit history and low levels of literacy and financial literacy.

The few farmers who achieve to mobilize loans face a variety of issues: high interest rates (usually around 25%), short repayment periods and high collateral requirements. These unfavorable credit conditions in combination with the high external risk and cyclical cash flows make it often impossible to smallholder farmers to deliver on a regular repayment policy and mobilize sufficient working capital to maintain and eventually grow their business. This shows the need for an innovative finance tool tailored to the needs of smallholder farmers.

#### **Solution Overview**

Pay2Pay offers a new way of obtaining financing and access to markets to smallholder farmers and small and growing agribusinesses. It is a platform payment system that serves as an intermediary, bringing together financial institutions, smallholder farmers and business development services such as climate-technology service providers. The payment system is set up as a platform with the use of a mobile phone application reaching out to rural areas. Earmarking of pay-outs is used to ensure the proper utilization of money.

Focus: Climate Change Adaptation

Ecosystem Impact: Access to Finance; Infrastructure &

Technology

Lab Cycle: Climate Finance, Ghana 2019
Challenge Hosted by: MDF Training & Consultancy

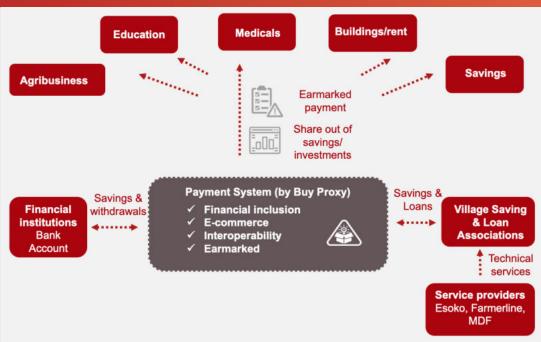
#### **Key Features**

Pay2Pay is a digital platform that offers an innovative financing mechanism to farmers and small and growing agribusinesses. The platform-based payment system coupled with mobile money transactions connects farmers to financial institutions. The digitized Village Savings and Loan Association model offers secure and easily accessible loans to farmers who are otherwise largely excluded from financial services. Savings are linked to formal financial institutions and mobile money operators. Mobile money transactions make the product user-friendly for farmers, as it is accessible from remote areas and who are familiar with the technology. The product addresses illiteracy through voice interfaces in local languages.

Climate-technology services provide information on best agronomic practices such as planting intervals, weather information including rainfall patterns, fertilizer and chemicals application, mechanization centers, access to market and certified seeds and seedlings through voice in local languages.

Earmarking of members savings is used at share-out to ensure the purposes and judicious utilization of the accumulated savings. Clients will indicate specific areas to spend their shareout money such as agribusiness, education, medicals, building/ rent, savings. Clients will be educated on how to use the platform to perform this function.





#### **Innovative Characteristics**

- Transforming traditional model of village savings and loan association which are common in rural Ghana into a safer digitized platform version
- Uses earmarking of pay-outs to ensure proper utilization
- Platform connects key players to provide range of services

#### **Target Market**

The platform addresses and connects smallholder farmers with existent Village Savings and Loan Associations with financial institutions and climate technology providers.

During the pilot phase, Pay2Pay will support 10,000 smallholder farmers during a period of two year working with multiple value chains. A pilot of the platform is already programmed.

#### **Impact Potential**

- Financial inclusion of SHFs, while decreasing farmers' financial vulnerability, strengthening livelihoods through a stronger productivity and ensuring proper utilization of savings through earmarking
- Smallholder farmers who were formerly excluded from financial services will have new financing opportunities, for working capital and investments into climate-smart technologies such as drip-irrigation systems
- Mitigation of and adaption to climate change will be enhanced through the dissemination of climate-smart agriculture

#### **Solution Developer**



#### Contact Person:

Richard Yeboah: rye@mdf.nl
Dominic Owusu Ansah: dan@mdf.nl

SEED Practitioner Labs Climate Finance empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.



Smallholder farmers in Ghana are underinsured. In the absence of risk-transfer solutions, many farmers are forced to respond informally to unexpected events of damage and fluctuating crop prices that can destroy expected returns from harvests and trap farmers and households in cycles of poverty. Considering this dynamic, underinsurance threatens income security and hinders sustainable growth of Ghana's agriculture sector.

In the light of climate change, extreme weather events such as floods and dry spells are increasing in frequency and scope, putting additional pressure on smallholder farmers. Experts predict that Ghana to lose about 5.5% of the value of the production of its eight main food crops on average per year (MCII & GIZ 2019) with impacts originating form drought, high temperatures, windstorms and floods among others (MCII & GIZ 2019). Thus, the need for microinsurance in the agricultural sector is evermore increasing. Yet, the market penetration of insurance products remains low at 1.14% (Cenfri, 2018). Apart from a general unawareness of the benefits of insurance products on the demand side, and a rather incomplete regulatory framework in order to increase the national insurance rate, the main causes of underinsurance are:

- High uncertainty that financial institutions associate with farmers as insurant and the reluctance of most insurance companies to support the low-income segment
- Seasonal incomes lead to an inability of farmers to pay a premium as it is structured currently and weather-indexed insurance is not yet effective in solving this challenge
- Financial illiteracy among farmers and the incapability of insurance providers to effectively target smallholder farmers

Focus: Ecosystem Impact: Lab Cycle: Challenge Hosted by: Climate Change Adaptation Access to Finance Climate Finance, Ghana 2019 Stanbic Bank

#### **Solution Overview**

Microinsurance without Borders aims to strengthen the resilience of smallholder farmers towards external shocks, focusing on value chains that are strongly affected by climate change. It comprises a comprehensive solution that fits the needs of smallholder farmers by combining a mobile-enabled insurance with technical assistance for climate-resilient agriculture, as well as financial literacy training for smallholder farmers to foster a financially inclusive and climate-resilient agricultural sector in Ghana and fill the insurance gap for smallholder farmers.

#### **Key Features**

Microinsurance without Borders brings together microinsurance experts, banks and insurance companies to co-create the most adequate weather-indexed insurance product. It offers a comprehensive insurance package for smallholder farmers against:

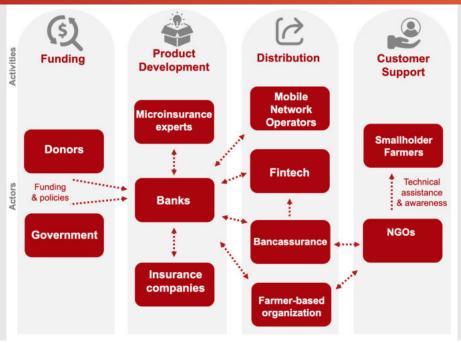
- Climate-related risks with an emphasis on crop and harvest lost
- Other agriculture risks (incl. post-harvest loss, pests, fire)

It combines a multi-level offering based on basic, medium and advanced insurance to tap into the full market potential and combines bancassurance, financial and mobile technology to reach farmers, as well as farmer-based organizations to distribute the insurance on the ground.

In addition, Microinsurance without Borders works closely together with local NGOs to inform farmers about their climate-related risks, the benefits of the insurance product and technical assistance in implementing more climate-resilient agriculture practices as subsidised by the insurance.

#### **Microinsurance Without Borders**





#### **Innovative Characteristics**

- Links insurance with dissemination of Good Agricultural Practices to minimize losses: a key condition for farmers that access the insurance will be to undergo the training on good farming practices to minimize their risks and thereby reduce premiums overall.
- Provides easy access to insurance: Bundling a range of distribution channels through financial technology and bancassurance offering a farmer-friendly design through mobile-enabled distribution
- Awareness raising on the benefits of insurance: Together with a partnered NGO, the service will educate potential farmers on the need and benefits of the product to build trust in the insurance.

- Economic Impact: Decrease economic vulnerability of farmers, increase financial stability and financial literacy, while de-risking local smallholder farmers
- Social impact: Increasing the resilience of rural livelihoods against the growing climate-related risk by supporting income and food security

#### **Solution Developer**



#### **Contact Person:**

Stanislaus Deh: dehs@stanbic.com.gh Leona Abban: leona.abban@microensure.com

#### **Target Market**

Microinsurance without Borders targets smallholder farmers who work with value chains that are strongly affected by climate change and that are interested in the implementation of more climate-resilient agriculture practices. In the pilot phase, the insurance will target the Volta Region focusing on crops, livestock and acquaculture, the main production focus of the region. Close collaboration with local expert as well as field visits are foreseen to closely adapt the insurance to the needs of the farmers.

#### **Impact Potential**

 Environmental Impact: Increase climate resilience of farmers and capacitating small and growing agribusinesses by encouraging climate-resilient agriculture including the application of climate-smart technologies **SEED Practitioner Labs Climate Finance** empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.



Solar power has a huge potential to provide green and reliable off-grid energy in Ghana. There is a steadily growing number of small and medium enterprises (SMEs) which offer off-grid solar solution tailored to the needs of local communities and enterprises, especially to last-mile households which have not been connected to the grid. Yet, market penetration remains difficult due to the high upfront costs of solar products and there are no subsidies for the sector. In the absence of supportive financial products, off-grid solar energy remains more expensive than on-grid energy, making renewable energy options unattractive to potential local clients.

Common financial terms that have too high-interest rates and too short tenors for effective financing of solar energy. A new approach to financing solar products is needed to fill this market gap. A potential way to encourage local financial institutions (FIs) to support renewable energy enterprises is the provision of guarantees backing the high risk associated with early stage businesses and provide loans at concessional terms.

#### **Solution Overview**

SOLFIN is a climate finance product that targets SMEs in the solar energy sector and supports them to provide affordable solar systems through enabling a lease-to-own financing model. Thereby, SOLFIN addresses the lack of high upfront investments for solar technologies by enabling solar technology providers to offer solar systems complemented by the necessary finance product. In this way, reasonable interest rates and longer tenors can be offered to SMEs, end-users and households.

#### **Key Features**

SOLFIN brings together banks, venture capital funds, guarantee funds and solar energy enterprises to create a solar financing mechanism that enables households, public institutions and local SMEs to take up solar energy. Solar enterprises receive

Ecosystem Impact:

Lab Cycle: Challenge Hosted by: Climate Change Mitigation Infrastructure & Technology, Access to Finance Climate Finance, Ghana 2019 Wangara Green Ventures

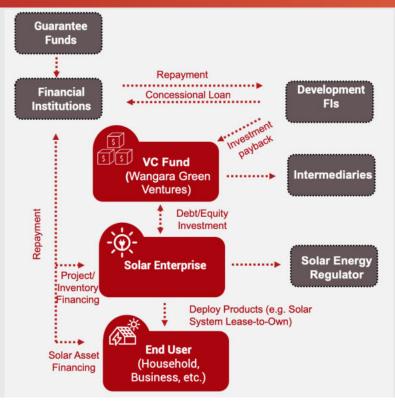
financing from both the evergreen fund of Wangara Green Ventures as well as from financial institutions. Key for this product are the concessional loans at interest rates of 16 – 18 % p. a. (in Ghana Cedi terms) and tenors of 5-7 years. These loans are provided can be provided to solar enterprises, who then on-lend to end-consumers and thereby take over the repayment risk from financial institutions, allowing lower interest rates and enabling a lease-to-own financing which gradually transfers ownership to the end-consumer upon lease payments. This option leverages the close interaction between solar companies and end-consumers and enable lending for small-scale transactions. Another option is the direct asset-financing of Fls to end-consumers which would apply for rather larger solar installations by industrial purchasers for example which are associated with lower risks.

SOLFIN capitalizes on the interaction of banks, green funds, guarantee funds and solar technology providers. Through bringing together different fields, SOLFIN bridges the missing gap of effective financing solar systems.

#### **Innovative Characteristics**

- Guaranteeing banks to back risks of innovative technologies
- Embedding customer financing through a lease-to-own model
- Connecting banks, green funds, guarantee funds and solar technology providers





#### **Target Market**

The participating solar enterprises will be part of the venture capital fund of Wangara Green Ventures and will therefore be screened by Wangara and undergo a detailed due diligence process to analyze their bankability. This allows to reduce risks for all stakeholders involved. The product will be targeted at residential customers and companies with low energy requirements in rural and urban Ghana. In the long-term, the target market should also include public institutions such as schools, hospitals, churches municipal and agencies.

#### **Impact Potential**

- Social: Providing access to electricity by propelling off-thegrid sustainable electrification and Improving conditions and affordability for local households
- Environmental: The transition to a low carbon economy will be facilitated by replacing conventional energy sources such as the burning of charcoal and kerosene with solar energy
- Economic: Increasing solar technology market penetration through addressing the missing middle financing gap in the energy sector

#### **Solution Developer**



#### Contact Person:

Yvonne Ofosu-Appiah: y.ofosu-appiah@wangaracapital.com Renald Appiah: r.appiah@wangaracapital.com

SEED Practitioner Labs Climate Finance empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.





## **Practitioner Labs for Policy Prototyping, Malawi**

## Developing targeted policy instruments to support the growth of eco-inclusive enterprises

#### MALAWI WASTE MANAGEMENT CONSORTIUM: BUILDING MARKETS FOR WASTE INNOVATION VALUE CHAINS

The Malawi Waste Management Consortium aims to improve access to information on the current government policy and opportunities for waste management policy-making, while also offering guidance for aspiring waste innovators to deliver solutions across waste value chains.

## 2. AGRICULTURE INSURANCE AND CLIMATE-RELATED RISK ASSESSMENT: STIMULATING CLIMATE-SMART AGRICULTURE MARKETS

This policy instrument aims to raise awareness and reduce the climate-related vulnerabilities of smallholder farmers and agribusinesses through decentralised climate-related risk assessment to inform evidence-based policy-making and capacity building trainings on potential climate-smart solutions, such as weather index agriculture insurance designed in cooperation with community-based organisations and local government.

## 3. COOPERATIVE-TO-COOPERATIVE PLATFORM: EXPANDING NETWORKS FOR COMMUNITY-LED BUSINESS DEVELOPMENT

The cooperative-to-cooperative platform supports the further coordination of cooperatives and public sector initiatives in Malawi by offering a co-operative performance index and capacity-building matchmaking opportunities that build on existing cooperatives and entrepreneurship data and solicit additional information to build a better picture of climate-smart agriculture value chains and the market potential of these value chains for public and governmental agendas.

## 4. OFF-GRID RENEWABLE ENERGY PRIVATE-PUBLIC PARTNERSHIP MODEL: IMPROVING MARKET ACCESS AND AFFORDABLE TECHNOLOGY FINANCING

This private-public partnership model furthers the electrification of (rural) Malawi by engaging technology suppliers, financiers and government around eco-inclusive enterprises offering off-grid renewable energy solutions and delivering capacity building for integrated distribution networks and targeted clean energy financing solutions.



#### With 90 participants from a wide range of organisations...

#### POLICY INSTRUMENTS DEVELOPED BY

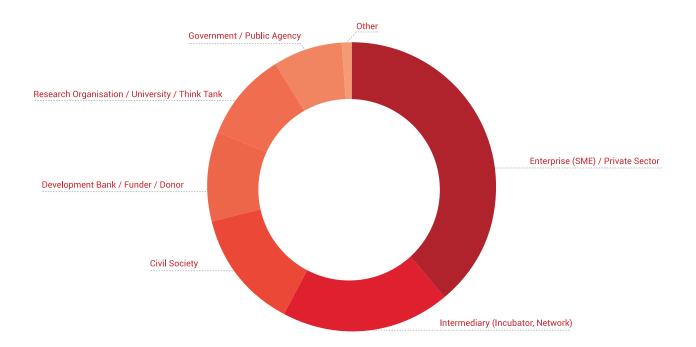








#### ORGANISATIONS INVOLVED IN SOLUTION DEVELOPMENT



Α	C	Α	D	Ε	S

African Agribusiness Academy African Business Institute

Agro and Packaging Enterprise

Ammele Enterprise Catholic University

Community Energy Malawi

CDH Malawi

Clean Energy Solutions Clinton Foundation

DGRV

**Eco-Building Systems** 

Eigna's Power

**Environmental Industries** 

European Union
Eqwip Consulting
Favoured Farms
Food Tech Solutions
Four T Cleaning Services
Fuzai Green Investment

GIZ

Global Communities Government of Flanders **Green Impact Technologies** 

Growth Africa HIMACUL

**Honey Products Industries** 

**ICCM** 

Intelligent Waste Julats Consulting Kombeza Foods Land O'Lakes

Lilongwe University of Agriculture

and Natural Resources

MAEVE Project MAFECO Majestics Solars

Malawi Bureau of Standards Malawi University of Science and

Technolgy m Hub

MicroInsurance

Ministry of Industry, Trade and

Tourism

Ministry of Youth Development and

Sports

**MUSCCO Integrated Project** 

Mzuzu Coffee Mzuzu E-Hub NASFAM NSTGA

Our World International

Polytechnic College, Department of

**Environmental Science** 

Potter's House

Rabson Food Gardens

Semicleaners

Solar Trade Association Takaaful Cooperative The Pigbreeder Fayde

Truss Group USAID Wijays

Wildlife and Environmental Society

Malawi

Zambia Development Agency

Ziweto Enterprise Zuwa Energy



In Malawi, waste generation is expected to triple by 2050¹. While the environmental concern for the management of urban waste is growing, Malawi's waste management system is still undeveloped and municipal budget for waste management are lacking. Furthermore, people are unable to afford the waste disposal services which are available – though heavily concentrated in Lilongwe and Blantyre. Due to gaps in waste management value chains and a lack of viable markets for waste management, the sector's opportunities for reliable employment and the economic value of waste innovation is often overlooked. Despite multiple opportunities and some best practice examples for waste management innovation, the sector lacks entrepreneurial interest and markets for closed-loop business models as well as business development services that build the capacities of these growing enterprises.

In light of these major waste and development challenges and the great potential of entrepreneurship to offer solutions, Malawi requires multi-stakeholder action to develop and support market-driven solutions for effective waste management and incorporation of waste into innovative production cycles as a resource.

#### **Solution Overview**

The proposed Malawi Waste Management Consortium supports the development of waste management markets and the alignment of policy around green and inclusive development approaches with entrepreneurial waste management solutions. The consortium aims to improve access to information on the current government policy for waste management and guidance for aspiring waste innovators by:

Establishing a consortium of waste management experts and ecosystem actors to improve knowledge sharing and collaboration between active and aspiring entrepreneurs, enterprise support institutions, intermediaries and policymakers through regular meetings and an online forum for knowledge sharing.

Focus: Climate Change Mitigation

Ecosystem Impact: Access to Markets; Reseach,
Development and Innovation

Lab Cycle: Policy, Malawi 2019

Challenge Hosted by: International Conservation and Clean up Management (ICCM)

#### **Policy Relevance**

The consortium's integrated approach to knowledge sharing and capacity building endeavours to influence policy makers and investors to better understand the benefits of sustainable waste management and align public sector activities and government support behind expanding opportunities for eco-inclusive entrepreneurship<sup>2</sup>.

Informing policy by allowing greater accessibility of information to government and the public on the current status of employment (formal and informal) within waste management value chains as well as best practice examples of innovation by small and growing enterprises across value chains.

Drafting policies for waste management to expand on initial governmental efforts to regulate the waste management sector (largely through establishing City Council Waste Transfer Stations) and to ensure alignment of sector development with green and inclusive development agendas by supporting closed-loop and socially inclusive business development.

Developing a digital platform and online marketplace to collect comprehensive statistical data from enterprises and intermediaries on the current status of waste enterprises in Malawi and offer opportunities to enterprises and aspiring entrepreneurs to access capacity building support and market information to support the growth of waste management value chains.

[1] Kaza, S., Yao, L., Bhada-Tata, P., Van Woerden, F. (2018). What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank. [2] Eco-inclusive enterprises are micro-, small- and medium-sized enterprises (MSMEs) that deliver combined environmental, social and economic benefits.





#### **Key Features**

The Malawi Waste Management Consortium aims to improve coordination among private and public sector actors, including policy makers, eco-inclusive enterprises and intermediaries through the following:

- Sector scoping activities to collect information and build a better picture of who is active within (formal and informal) waste management in Malawi.
- 2. Publicly mapping the location and reach of waste markets to support the greater coordination of waste actors and alignment of government initiatives with support for innovative solutions that move beyond waste collection to the whole value chain.
- Face-to-face meetings offered by the consortium primarily through ad-hoc events and policy dialogues will encourage collaboration and cultivate partnership-building opportunities between government, eco-inclusive enterprises and others.

#### **Benefits to Eco-Inclusive Entrepreneurship**

The consortium will combine data and information collection on the status of the waste management sector, best practice examples of socially inclusive and closed-loop waste management entrepreneurship. This consortium will create new opportunities for waste management solutions in Malawi, indicating to investors and government that waste innovation can be profitable, as well as socially inclusive and green. Aspiring entrepreneurs and established enterprises will benefit from the consortium's collaborative events and processes for sharing knowledge and cultivating new opportunities for supporting waste innovation through policy.

#### **Role of Government**

Currently, waste innovation does not feature in any government sanitation programmes. In order to strengthen government action (at all levels) in delivering waste management solutions this policy instrument advocates:

- Involving public sector actors directly as Consortium members to inform policy-makers about the potential of eco-inclusive, closed-loop business models across waste value chains.
- Exploring opportunities for the deployment of public funds (and support with leveraging private sector funds) to develop value chains for waste management entrepreneurs, from collection to processing and remanufacturing of waste as a resource.
- Providing access to information on the current government policy and taking measures to better regulate waste management and private sector development as the consortium builds markets for waste management in alignment with existing development agendas.

These actions must extend beyond major cities will support the expansion of existing governmental activities such as the recent plastic bag ban and the establishment of municipal Waste Transfer Stations across Malawi.

#### **Solution Developer**



International Conservation and Clean up Management (ICCM) Malawi

Contact person:

Victoria Ifould: iccmanagementmalawi@gmail.com

SEED Practitioner Labs Policy Prototyping work with policymakers, eco-inclusive enterprises and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts



Agriculture anchors Malawi's economy, accounting for a third of gross domestic product (GDP) and experiencing an annual growth rate of 6% on average. The sector is also responsible for the provision of jobs to around 80% of the population – particularly for women and youth (Benson et al., 2018). Eco-inclusive enterprises¹, highly concentrated in the agriculture sector, play a significant role in implementing strategies for economic growth, food security and social inclusion in Malawi. However, changing weather patterns resulting from climate change such as fluctuating temperatures, changing rain patterns and weather shocks can destroy expected returns from harvests and trap farmers and households in cycles of poverty. This is exacerbated due to high levels of dependency on rain-fed agriculture.

In Malawi, agribusinesses and smallholder farmers in particular remain highly vulnerable to climate change. Awareness levels of the impacts of climate change and potential adaptation strategies – such as climate smart agriculture (CSA) practices and investment in climate resilient agriculture inputs, technology and risk mitigation measures – remain low. Additionally, there are few attractive financial instruments available to protect these enterprises from such shocks and stimulate investment in climate-smart agriculture practices.

#### **Solution Overview**

Public-private sector coordination is required to address the challenges posed by climate change to small and growing enterprises in Malawi's agriculture sector. The policy instrument for **stimulating markets for climate-smart agriculture value chains** will build decentralised capacity building networks (supported by public and financial sector partners). This instrument aims to raise awareness and reduce the climate-related vulnerabilities of smallholder farmers and agribusinesses by developing and delivering risk management and adaptation solutions which are catered to these enterprises and the localised enterprise ecosystems in which they operate. The core activities proposed include:

Focus: Ecosystem Impact: Climate Change Adaptation Access to Finance, Access to

Markets

Lab Cycle:

Policy, Malawi 2019

Challenge Hosted by: MicroInsurance Services Ltd.

#### **Policy Relevance**

This policy instrument and its solution for building decentralised networks for climate-smart agriculture across Malawi has key implications for sustainable development and climate change adaptation strategies, including for sector-specific agriculture policies. The instrument aims to:

**Inform policy agendas by collecting data and evidence** through agricultural associations and municipal extension services on the uptake and barriers to investment in climate-smart practices.

Implement policy that increases awareness of and access to climate-smart solutions to meet growing demand for climate-resilient agriculture inputs (e.g. seeds and fertilisers) and technologies (e.g. irrigation systems) through decentralised capacity building networks.

Decentralised climate-smart agriculture and risk assessment campaigns, such as farmers' awareness field days and mass meetings, facilitated through agriculture associations and district agricultural extension officers to support smallholder farmers and agribusinesses in assessing and managing climate-related risks.

Capacity building trainings on potential climate-smart solutions including opportunities to invest in climate-smart inputs and measures to mitigate impacts of fluctuating weather patterns, such as weather index agriculture insurance designed by insurance providers in cooperation with participating agriculture associations.

<sup>[1]</sup> Eco-inclusive enterprises are micro-, small- and medium-sized enterprises (MSMEs) that deliver combined environmental, social and economic benefits.

## **Agriculture Insurance and Climate-Related Risk Assessment**





#### **Key Features**

This proposed solution engages agricultural associations, local government officials and financial actors (beginning with insurance providers) in facilitating the growth of community-based networks for climate-smart agriculture value chains. The policy instrument is operationalised in a multi-step process:

- Awareness meetings (either in person or through an association) where enterprises through agricultural associations and municipal extension officers are made aware of climate risks across value chains.
- Group risk assessment offers more comprehensive analysis and data collection to determine major climate-related risks based on current agricultural practices and geographical characteristics.
- Climate-smart solution counselling around tailored mechanisms for risk mitigation, including weather index insurance, and capacity building recommendations.
- Ongoing climate-smart capacity building support is offered and financed, for example, through the reinvestment of insurance premiums in trainings and climate-smart inputs.

#### **Benefits to Eco-Inclusive Entrepreneurship**

This policy instrument enables smallholder farmers and agribusinesses across Malawi to:

Improve awareness of the benefits and increase uptake of climate-smart agriculture practices to improve productivity and sustainable business practices.

**Invest in climate-smart practices and risk management mechanisms** through decentralised markets for insurance solutions that reinvest insurance premiums in capacity building opportu-

nities through agriculture associations, among other solutions that build climate-resilient value chains.

#### **Role of Government**

Government, from national to local levels, plays a central role in supporting the growth of climate-smart agriculture value chains. The success of this policy instrument's approach depends on:

**Support of local governments and policy-makers** who are already offering support to smallholder farmers and agribusinesses through agriculture input subsidies and other measures to ensure public sector support is aligned with climate-smart objectives.

Commitment to and mechanisms for utilising the information collected on the current status of climate-smart agriculture and uptake of solutions to guide future policy-making in line with Malawi's socially inclusive and environmentally sustainable development objectives.

#### **Solution Developer**



MicroInsurance Services Ltd.

Contact person: Gift Livata: gift.livata@microinsurance.mw

SEED Practitioner Labs Policy Prototyping work with policymakers, eco-inclusive enterprises and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts



Malawi's agriculture sector is facing multiple challenges related to the threats of climate change. Changing weather patterns resulting from such as fluctuating temperatures, changing rain patterns and weather shocks can destroy expected returns from harvests and trap farmers and households in cycles of poverty. This is exacerbated due to high levels of dependency on rain-fed agriculture.

Cooperatives have proven to be a central organisational model for social inclusion, economic growth and a multiplier of capacity building efforts across economic sectors. Cooperatives rooted in communities support the activities of smallholder farmers and agribusinesses that are the core of employment in agriculture sector. They support these enterprises to access climate-smart technology and extension services. However, agriculture cooperatives in Malawi lack coordination and there are limited opportunities or platforms for sharing best practices. Additionally, many cooperatives have limited knowledge and skills for supporting climate-smart agriculture approaches. They also tend to fail to attract younger generations of agribusinesses and have weak links to markets for sustainable agriculture value chains.

#### **Solution Overview**

The Cooperative-to-Cooperative Platform for Climate-Smart Agriculture is a digital platform offering combined performance indexing, knowledge sharing, and matchmaking between cooperative unions and cooperatives across Malawi. The platform supports the further coordination of cooperatives and public sector initiatives in Malawi. This proposed policy instrument combines:

Co-operative performance assessment and index that builds on existing data and mapping of active cooperatives and cooperative unions across Malawi and solicits additional information through cooperative unions to build a picture of climate-smart value chains and the market potential of these value chains for public and governmental use.

Cooperative-to-Cooperative Matchmaking for Capacity Building around youth entrepreneurship that links best practice cooperati-

Focus: Climate Change Adaptation

**Ecosystem Impact**: Business Development Services,

Entrepreneurial Mindset

Lab Cycle: Policy, Malawi 2019

Challenge Hosted by: Malawi Federation of Cooperatives

(MAFECO)

#### **Policy Relevance**

The cooperative-to-cooperative platform will support the drafting and implementation of targeted policy for the development of climate-smart agriculture value chains by:

**Informing policy agendas** with evidence on climate-related risks and climate-smart agriculture practices and by streamlining cooperatives performance indexing and data collection for evidence-based policy-making.

**Influencing the Cooperative Development Policy drafting**<sup>1</sup> by ensuring that climate-resilient business models are prioritised within policy and a commitment to youth entrepreneurship for climate-smart agriculture is strengthened.

ves and cooperative unions, as assessed by the cooperative performance index, with those in need of capacity building to adopt climate-smart agricultural practices and access markets.

#### **Key Features**

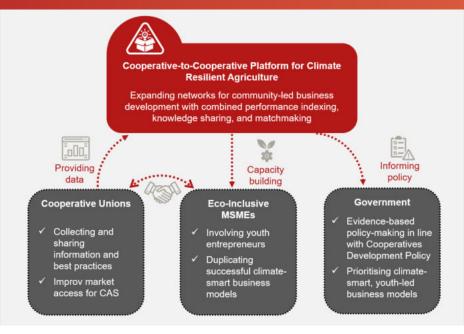
This proposed solution for leveraging the community-based networks and capacity build opportunities offered by cooperatives:

 Employs decentralised approach to co-operative performance surveying which relies on networks of cooperative unions to solicit additional information on membership demographics, major climate-related risks, uptake of climate-smart value chains and market reach of cooperative networks.

[1] Malawi's Cooperative Development Policy from 1997 is currently being revised. Government of Malawi (1997). Cooperative Development Policy. Retrieved from: https://cepa.rmportal.net/Library/government-publications/Cooperative%20Development%20Policy%201997.pdf/at\_download/file.

## **Cooperative-to-Cooperative Platform**





- Launches integrated digital platform and roadshow of networking opportunities, allowing cooperatives in need of capacity building support to link with best practice cooperatives that have effectively engaged youth entrepreneurs and supported the development of climate-smart agriculture value chains.
- 3. Offers targeted capacity building support packages for youth-led climate-smart entrepreneurship to inform cooperatives of the existing policy environment and extend access to support (in the form of toolkits and/or smaller group workshops) in enlisting youth entrepreneurs to deliver climate-smart agriculture business models.

#### **Benefits to Eco-Inclusive Entrepreneurship**

This proposed policy instrument combines a cooperative performance index and matchmaking platform to cultivate entrepreneurial mind-sets and youth-led, eco-inclusive agricultural enterprises<sup>2</sup>. Youth entrepreneurship offers great potential in the transition to a climate resilient and socially inclusive Malawian economy. The platform supports this transition by ensuring:

Activation of youth-led agribusinesses and involvement in cooperatives through the delivery of business development services which directly target youth involvement and the growth of business-oriented cooperatives for sustainable agriculture markets.

Capacity building support is made available to growing youthled eco-inclusive enterprises to adopt effective climate-smart business models and improve market access through their involvement in cooperatives across Malawi.

#### **Role of Government**

In order to increase coordination among cooperatives and develop markets for climate-smart and youth-led agribusinesses, government support is required to:

- Advocate within policy for youth-led entrepreneurship to deliver climate-smart agriculture solutions, leveraging the support of agriculture extension services in particular.
- Audit and record achievements of cooperatives through a transparent system for improved performance indexing and matchmaking.
- Operationalise key recommendations of the Cooperative Development Policy and the Department of Cooperatives through targeted measures that enlist the support of all levels of government for knowledge sharing and capacity building for climate-smart and socially inclusive agricultural markets.

#### **Solution Developer**



Malawi Federation of Cooperatives (MAFECO)

Contact person: John Mulangeni: jmulangeni@gmail.com

SEED Practitioner Labs Policy Prototyping work with policymakers, eco-inclusive enterprises and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts

[2] Eco-inclusive enterprises are micro-, small- and medium-sized enterprises (MSMEs) that deliver combined environmental, social and economic benefits.



Malawi has one of the lowest electricity access rates in the southern African region. Currently only 11% of the population have access to electricity, with a strong divide between urban (42%) and rural areas (4%) where most of the population live<sup>1</sup>. Also, only 13% of households use solar products and generally the uptake of renewable energy sources remains low<sup>2</sup>. This is due to solar and other renewable energy products being largely unaffordable for households, despite the growth of enterprises offering local (offgrid) renewable energy solutions to address some of these major challenges.

Especially rural communities, where electrification levels are particularly low and markets for energy solutions are often undeveloped, could benefit from policy measures to improve the affordability and accessibility of last mile renewable energy solutions offered by small and growing eco-inclusive enterprises<sup>3</sup>.

#### **Solution Overview**

Sustainable energy for Malawi's rural communities can only be achieved through the mobilisation of the private sector on a significant scale. Public Private Partnerships (PPPs) which support eco-inclusive entrepreneurship in the energy sector combine the corporate and financial sector's capital and its technological and financial know-how with community-based knowledge and policy expertise of the public sector. The electrification of (rural) Malawi will be supported through engaging technology suppliers, financiers and insurers around eco-inclusive enterprises offering off-grid renewable energy solutions. This multiple stakeholder coordination is central to improving marketing and distribution of off-grid energy products in Malawi through combined:

Capacity building trainings for greater coordination between private and public sector actors around improving market reach and access to off-grid solar solutions and the capacity of eco-inclusive enterprises to access financing and markets for their activities.

**Clean energy financing** supported by pay-as-you-go models and leveraging existing public funds for off-grid renewable energy investments.

Focus: Climate Change Mitigation
Ecosystem Impact: Access to Finance, Access to

Markets

Lab Cycle: Policy, Malawi 2019

Challenge Hosted by: Community Energy Malawi

#### **Policy Relevance**

The PPP model for developing off-grid renewable energy markets will engage policy-makers in:

Improving national energy policy implementation by translating existing commitments and targets into public and private sector initiatives (enlisting local governments in particular) for the development of off-grid renewable energy markets as a viable rural electrification solution.

**Drafting policy and realigning existing policy** to realise the potential of off-grid renewable solutions driven by eco-inclusive enterprises.

**Integrated distribution networks** for streamlined product delivery and ongoing servicing by eco-inclusive enterprises located directly in rural communities.

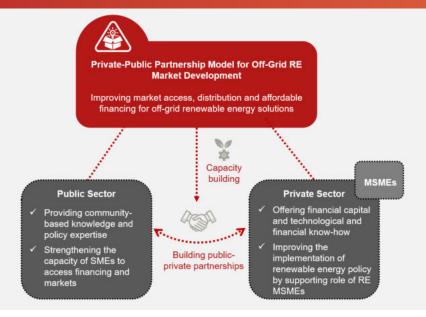
#### **Key Features**

This PPP model for off-grid renewable energy solutions offers a platform for the public sector, eco-inclusive enterprises from the renewable energy and off-grid sector, RE product retailers and finance institutions. The specific activities proposed include:

 Developing decentralised markets backed by government support for off-grid renewable energy solutions by, for example, facilitating regular dialogue forums with key technology providers, distributors, local governments and financiers to better understand the main challenges facing the growth of markets for climate-smart and socially inclusive business models in the energy sector.

## Off-Grid Renewable Energy Private-Public Partnership Model





- 2. De-risking investment in off-grid renewable energy markets by lowering barriers to entry into the sector, such as through reducing licensing and administrative barriers and discriminatory taxes, for example VAT on off-grid solar lighting solutions. This could involve leveraging clean energy financing through public funds, including the Rural Electrification Fund<sup>4</sup> which focuses on grid-based solutions and tends to overlook the potential of off-grid solutions to reach rural communities.
- **Benefits to Eco-Inclusive Entrepreneurship**

PPP mechanisms aim to deliver benefits to rural communities across Malawi which are in need of electrification solutions through the close coordination of public and financial sector actors. This model delivers capacity building opportunities for:

Local governments to learn about the benefits and available financing and product servicing support for off-grid solar solutions offered by smaller enterprises that deliver combined environmental, social and economic benefits across their value chains.

Local banks to better develop financing mechanisms that are responsive to technology providers' and eco-inclusive enterprises' needs and constraints for long-term financing in order for these enterprises to invest in off-grid technology leasing (or purchase) and business development measures.

#### **Role of Government**

Public sector support is required to ensure that off-grid RE enterprises are able to access and expand markets for effective rural electrification. Among other potential measures, the following recommendations enlist the role of the government in improving market access and affordable financing for off-grid renewable energy solutions:

- Direct engagement of public sector actors as key stakeholders alongside private sector (particularly eco-inclusive enterprises) and financial actors within PPP.
- Integrating local governments and communities in the implementation process of the national energy strategies to improve the implementation of the existing policy frameworks.
- Sharing learnings about benefits and available financing and product servicing support for off-grid solar solutions.

#### **Solution Developer**



**Community Energy Malawi** 

Contact person: Edgar Bayani,

edgarkbayani@communityenergymalawi.org

SEED Practitioner Labs Policy Prototyping work with policymakers, eco-inclusive enterprises and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts

<sup>[1]</sup> SEforAll Africa Hub (2018). Malawi. Retrieved from: www.se4all-africa.org/seforall-in-africa/country-data/malawi/

<sup>[2]</sup> Business Innovation Facility (2016). Off-grid lighting and phone charging study. Retrieved from: www.bifprogramme.org/sites/default/files/attachments/malawi\_off\_grid\_and\_phone\_charging\_survey.pdf

ging\_survey.pur
[3] Department of Energy Affairs (2018). Malawi Rural Electrification Programme. Retrieved from: www.energy.gov.mw/index.php/projects/rural-electrification-projects/malawi-rural-electrification-programme

ncation-programme.
[4] Department of Energy Affairs (2018). Malawi Rural Electrification Programme. Retrieved from: www.energy.gov.mw/index.php/projects/rural-electrification-projects/malawi-rural-electrification-programme.



## **Practitioner Labs for Policy Prototyping, South Africa**

## Developing targeted policy instruments to support the growth of eco-inclusive enterprises

#### 1. PUBLIC-PRIVATE CONVENOR: COMMERCIALISATION OF ECO-INNOVATIONS

This solution to the valley of death faced by enterprises with products and services in climate change adaptation will convene public and private actors to provide customised support and improved coordination among stakeholders.

#### 2. CROSS-SECTOR THOUGHT GROUP: FACILITATING LABOUR ABSORPTION IN SMMES

This thought group will link policy makers and intermediaries to de-risk labour absorption for SMMEs by addressing the framework conditions for job creation and identifying SMMEs for targeted support.

#### 3. ONLINE PLATFORM AND POLICY NAVIGATOR: INCENTIVISING ACTIVITY IN THE BIOMASS SECTOR

The online platform will provide packaged value chain information and a policy navigator to simplify regulatory compliance and access to incentives for biomass enterprises looking to scale.



#### With 83 participants from a wide range of organisations...

#### POLICY INSTRUMENTS DEVELOPED BY



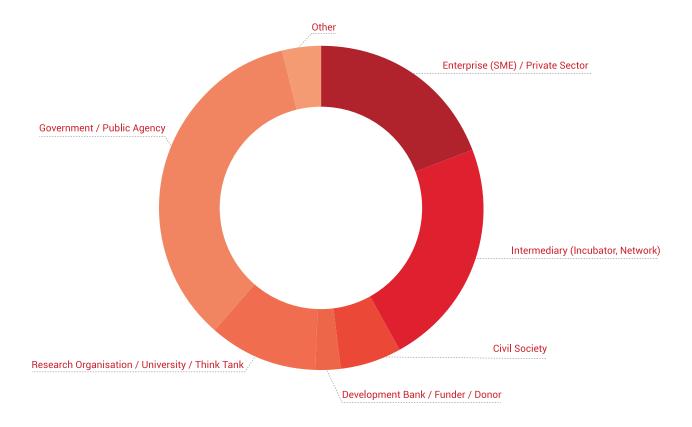








#### ORGANISATIONS INVOLVED IN SOLUTION DEVELOPMENT



Absorb

African Agricultural Solutions

Ashoka

Ayango Biodiesel **Candid Colours** Catalyst for Growth

**CIC Network** 

Collective Value Creation

Council for Scientific and Industrial

Research (CSIR)

Department of Economic Develop-

ment

Department of Environment, Fores-

try and Fisheries

Department of Science and Innova-

tion

Department of Science and Techno-

logy

**Department of Small Business** 

Development

Department of Trade and Industry

Do Better Business

EcoSasa

Ekasi Energy

**Embassy of Belgium** 

**Energy Lab** 

Envirocrete (Pty) Ltd

**EU** Delegation **Ewaste Africa** 

**GBVC** 

Gordon Institute of Business Sci-

ence

Government of Flanders

Greenovation Hogan Lowells Hustlenomicsx

Independent Consultant, former MP **Industrial Developent Corporation** Institute of Business Advisors South

Africa

International Labour Organisation

Mocha Fetoha

National Apex Co-operative of South

Africa

**National Treasury** 

**NPTCSA** Palladium

**Property Point** 

Raizcorp

Sarebi

Seda

Services Seta

**SIMODISA** 

South African Supplier Diversity

Council

South African Transport Centre of

Excellence

South South North

Southern Africa Trust

Trade and Industrial Policy Strate-

gies

**Tutwa Consulting UN Environment** 

Verda Waste

Verdant Bio Agri Pty Ltd

Water Research Council



Adaptation to climate change and the effects it has in multiple sectors requires innovative solutions that respond to rapidly evolving market needs and demands. Eco-inclusive enterprises are well placed to innovate in adaptation markets, and to contribute to the development of South Africa. Despite this, many businesses and innovators are failing to scale their eco-innovations and are prone to the valley of death when commercialising their product or service. A lack of coordination between stakeholders providing support to innovative businesses leads to SMEs not being able to access a smooth pipeline of support.

#### **Objectives**

- Independent institution to serve as a one-stop-shop for innovation and commercialisation support
- Access to finance through improved coordination
- Access to markets through bundled demand, pre-commercial procurement and increased market research and information

#### **Solution Overview**

One solution to this challenge is to set up an independent institution 'the convenor' that brings public and private stakeholders together with a focus of providing support for the commercialisation of next generation technologies for water and sanitation. The convening independent institution would host a platform of support services including funding, market information, and opportunities for pre-commercial procurement.

The prototype is designed to complement existing initiatives such as the Water Technologies Demonstration Programme (WADER) and South African Sanitation Technology Demonstration Programme (SASTEP). The WASH sector can serve as a pilot sector before scaling the solution to other markets, especially those related to climate adaptation and mitigation.

Focus: Ecosystem Impact:

Lab Cycle:

Challenge Hosted by:

Climate Change Adaptation R&D and Innovation, Access to

Finance, Access to Markets Policy, South Africa 2019

Trade & Industrial Policy Strategies

(TIPS)

#### **Key Features**

The convenor is a **one-stop-shop** to direct entrepreneurs to available resources. It combines public and private stakeholder support with diverse services such as market validation or financial support schemes.

**Feedback loops** at the end of each support scheme provides relevant information on the added value of the platform and potential improvements, and feed into additional support for entrepreneurs.

Customised enterprise mentorship will allow entrepreneurs to grow on both a business and personal level. It fosters good networks and improves overall satisfaction with the support offered.

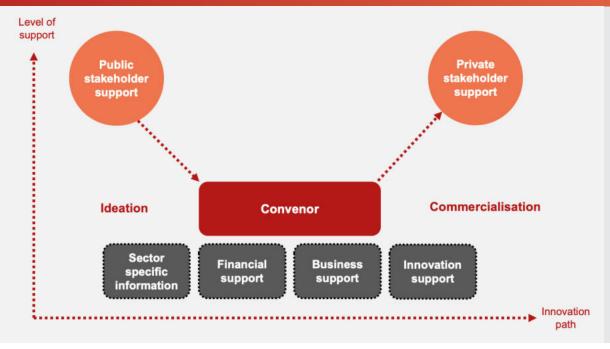
#### **Policy relevance**

Opportunity for ecosystem building in adaptation markets through coordinated policy implementation

- Improving targeted support and policy implementation during commercialisation of innovations in water and sanitation, taking into account specificities of adaptation markets
- · Working towards SDGs 6, 8, and 9.
- Improving water and sanitation management and promoting entrepreneurship and innovation







#### **Benefits to Eco-Inclusive Enterprises**

The convenor creates value for eco-inclusive enterprises by increasing their access to and awareness of support mechanisms and providing targeted support based on their business model and sector. It also improves their access to finance and markets by providing relevant information and linking public and private sector programmes.

#### **Impact Potential**

This prototype will support the next generation sanitation technology and broader water and sanitation market and therefore have an impact on climate change adaptation markets in South Africa.



Greater understanding of market dynamics and market validation in adaptation markets

Increased demand for climate smart products / services through increased awareness and market feedback



Support the development of eco-innovations in the water and sanitation sector

Contribute to saving water resources



Skills development in new technologies

Improvement of quality of life through access to improved sanitation

#### **Role of Government**

Public sector support is required to ensure that the convenor is able to link public and private initiatives to support enterprises, and to provide targeted support programmes. Recommendations to ensure strong policy maker contribution to the convenor include:

- Sharing information about current policy initiatives and programmes to support enterprises in the commercialisation of their innovations
- Providing relevant links to regulatory frameworks for the sector, as well as contact persons who can support enterprises to navigate these regulations
- Support the replication of the platform to other sectors relevant to climate change mitigation and adaptation

#### **Solution Developer**



Trade & Industrial Policy Strategies (TIPS)

TRADE & INDUSTRIAL POLICY STRATEGIES

More than 20 years of supporting policy development through research and dialogue

#### **Contact Person:**

Shakespear Mudombi: shakespear@tips.org.za Muhammed Patel: muhammed@tips.org.za

SEED Practitioner Labs Policy Prototyping work with policymakers and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts.



SMMEs have a designated role as job creators in South Africa. With an unemployment rate hovering around 27%<sup>1</sup>, SMEs have been identified by policy makers as a vehicle of job creation, particularly for marginalised communities such as women, youth, and low-income families. South Africa's National Development Plan envisions a 2030 where 90% of jobs are created by SMMEs.

Despite the importance accorded to SMEs as job creators, SMEs still struggle to grow their business, both in terms of annual turnover, as well as number of employees. From the perspective of an incubator, accelerator, or enterprise intermediary, there is a gap between the opportunities for job creation in the SME sector, and the current ability of SMEs to absorb labour and provide quality jobs. This prototype therefore looks at the framework conditions that support climate-smart enterprises to grow and create quality jobs in the green economy to contribute to SDG 8: Decent Work and Economic Growth.

#### **Objectives**

- Facilitating a conducive and labour absorbing environment for SMMEs
- Tailoring SMME support programmes and schemes to the needs of different sectors and sizes, especially in green sectors
- Encouraging feedback loops between enterprises, intermediaries and policy makers
- Ensuring that SMEs are provided with support and incentives to create quality jobs that address high unemployment in youth and marginalised communities

Focus: Climate Change Mitigation and

Adaptation

Ecosystem Impact: Access to available skills and

talent, Business Development

Support

Lab Cycle: Policy, South Africa 2019

Challenge Hosted by: South African Renewable Energy Business Incubator (Sarebi)

#### **Solution Overview**

This prototype targets the strengthening of an enabling environment to promote SME growth and related labour absorption. This is to be achieved through increasing access to incentives for SMEs, as well as targeting size- and sector-based programmes to encourage growth. To ensure that efforts to encourage SME labour absorption are well targeted and coordinated, this prototype proposes the formation of a thought group to identify, review, and target structured interventions that will incentivise the growth of SMEs that are perceived to have potential for yielding high job creation opportunities. The thought group will act as an information platform for intermediaries and policy makers to unblock barriers facing SMEs when it comes to job creation, as well as to target programmes and investments based on sector. A focus on green jobs will help to define green sectors with high potential for job creation and encourage SME growth and iob creation within these sectors.

#### **Policy relevance**

Ensuring that policy efforts to support SMEs to create jobs are well targeted according to sector and need.

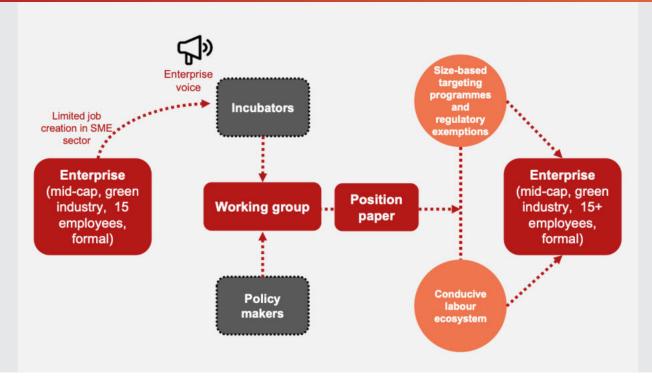
Incorporate a strong feedback loop with intermediaries that support enterprise growth.

Working towards SDG 8 targeting sustainable economic growth, employment and decent work for all.

<sup>[1]</sup> Business Tech 2019: South Africa's unemployment rate climbs to 27.6%. Retrieved 11.10.2019 from https://businesstech.co.za/news/business/316782/south-africas-unemloyment-rate-climbs-to-27-6/







#### **Key Features**

- Identification of new / additional incentives that promote labour absorption in the SME sector and ensuring that intermediaries can connect enterprises to these incentives
- Convening public and private stakeholders to share information about labour absorption among green SMEs in regular meetings
- Provision of feedback from intermediaries to ensure targeted programmes and understanding of the potential and gap in SME job creation
- Development of a position statement and identification of a spokesperson to be used for advocacy purposes

#### **Benefits to Eco-Inclusive Enterprises**

The proposed prototype aims to strengthen the framework conditions for SMEs to create jobs. The de-risking mechanism will address current barriers to labour absorption, and enable SMMEs to grow their workforce more readily in green sectors. The mechanism will help enterprises to access well-targeted support, intermediaries to connect SMEs to relevant programmes, policy makers to achieve job creation, and for the public to access quality jobs.

#### **Impact Potential**

SMME growth and the creation of quality jobs in green sectors holds the potential to have a significant impact on the South African economy and the livelihood of its citizens.



Increased economic growth through SMMEs

Quality job creation and a reduction in unemployment



Growth in green sectors to support the transition to a green and inclusive economy



Improved quality of life through stable and well supported jobs with appropriate benefit schemes

#### **Solution Developer**



South African Renewable Energy Business Incubator (SAREBI)

#### **Contact Person:**

Helmut Hertzog: helmut@sarebi.co.za

SEED Practitioner Labs Policy Prototyping work with policymakers and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts.



As a country vulnerable to adverse effects of climate change such as drought and wildfire, South Africa has mobilised to clear invasive and alien plant species, including those that threaten water security in the country and destabilise land use. Along-side government investment through the Working for Water (WfW) programme, private landowners and other aligned private and public sector parties have invested in clearing waterways to ensure security of water supply. There are an increasing number of SMMEs who are directly involved in invasive plant eradication and beneficiation in a variety of value chains, yet largely fail to scale for a number of reasons.

Increasing demand for energy and a long-term commitment to mitigating and adapting to climate change means that there may be ample opportunities for converting biomass to energy in South Africa. Using biomass for thermal energy through combustion presents an alternative energy source, and the sale of biomass processed fuels is an opportunity to bring clean heating energy to off-grid communities, addressing social inequalities and energy poverty.

Despite this opportunity, eco-inclusive enterprises often face difficulties to start and scale a business in this sector. There are a number of factors that can hinder business growth, including policy and legislative barriers. For example, when converting raw biomass material into a processed fuel, combustion of the biomass material produces certain pollutants that triggers environmental legislation and regulatory frameworks to which businesses must comply, such as environmental impact assessments and air quality licenses. Regulatory hurdles and poor information flow on market opportunities, feedstock availability and the business ecosystem linkages are contributing factors that hinder business success.

#### **Solution Overview**

To incentivise small business activity in biomass sectors, this policy prototype looks to the biomass-to-energy value chain to pilot a mechanism that will catalyse sound decision-making in the biomass sector, leading to the implementation of sustainable invasive alien clearing, harvesting and biomass utilisation projects that connect to well-supported thermal energy markets. In order to address the challenges that small and medium businesses in this sector currently face, the prototype involves setting up a knowledge-sharing platform to provide localised

Focus: Climate Change Adaptation and

Mitigation

Ecosystem Impact: Access to Markets, Business

Registration and Licensing
Lab Cycle: Policy, South Africa 2019
Challenge Hosted by: Department of Environment,

Forestry and Fisheries (DEFF)

value chain specific information, biomass to energy case studies, and information on how to navigate regulatory frameworks, policy and fiscal incentives.

- An easy-to-access, text-light tool that displays **species-spe- cific** source to market **value chain opportunities** and case studies.
- A policy navigator that packages fiscal incentives, and describes policy and regulatory frameworks at each stage of the value chain.
- A help desk function, that acts as a point of contact for policy packages and fiscal incentives.
- A mentorship and support model to encourage knowledge sharing.

#### **Policy relevance**

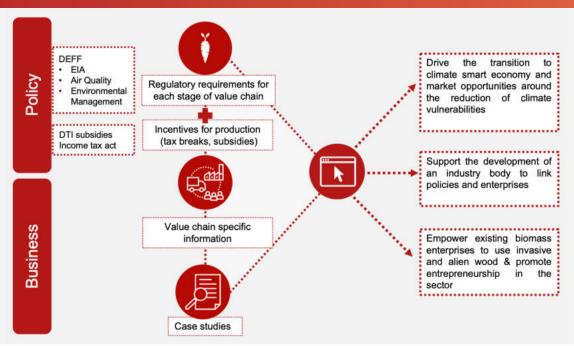
Supporting South Africa's priorities of moving towards renewable energy sources, reducing risks associated with climate change, and stimulating the economy through supporting small and growing enterprises.

- · Increasing enterprise access to information
- Policy navigator feature to help enterprises to navigate policy and regulatory frameworks that govern the sector, and identify policy and fiscal incentives related to their activities
- Pave the path towards the establishment of an industry body or association to advocate for the sector at a policy level and act as a link between biomass enterprises, government programmes, and policy makers

## **Online Biomass Platform and Policy Navigator**







#### **Key Features**

The prototype addresses a gap in how information is provided to enterprises, and how the public sector can stimulate activity in a priority eco-inclusive sector. The value added of this prototype is the combination of both business information and policy navigation aspects, organised by value chain activities to be accessible and relatable to enterprises. By packaging clear and accessible information about potential fiscal incentives and regulatory requirements by activity, enterprises can make a quick calculation of the potential cost (and opportunity) of operating at that level of the value chain. This, combined with information about the market and case studies that showcase successful market interventions, allows enterprises to make a cost-benefit analysis and understand what is required at each stage.

To ensure the continued relevance of the platform, the information will be regularly updated with policy information, as well as with case studies and source to market opportunities. It is foreseen that the development of this prototype will occur in parallel to the **development of an industry body or association** that will eventually govern and update the platform.

#### **Benefits to Eco-Inclusive Enterprises**

This policy instrument enables small businesses operating in the biomass sector to, amongst other issues:

- Reduce costs of compliance with regulation by making policy requirements clearer and by promoting fiscal incentives available.
- Improve understanding of the quality and availability of feed waste, and the transport and organisation of logistics around inputs.
- Explore case studies of successful business models across
  the value chain, and to evaluate the costs and benefits of
  operating at different stages of the value chain.

#### **Role of Government**

Government plays a central role in the conceptualisation, governance, and implementation of this prototype. Firstly, the government through the Department of Environment, Forestry, and Fisheries, will **provide key information** regarding the species-specific value chain opportunities, policy and regulatory frameworks, as well as fiscal incentives for activity in this sector. The DEFF will also play a key **coordinating role** between government departments and enterprises to ensure that information is up to date and relevant. The government will also be involved in the development of an industry body that will take up **governance of the platform**, act as an intermediary between the core stakeholders, and provide industry advocacy opportunities for policy development.

#### **Solution Developers**







Department of Environment, Forestry and Fisheries, South South North and Ekasi Energy

#### Contact person:

Garth Barnes: GBarnes@environment.gov.za
Amanda Dinan: amanda@southsouthnorth.org

Dave Lello: dave@ekasi.energy

SEED Practitioner Labs Policy Prototyping work with policymakers and intermediaries over a multi-step collaborative process to design policy instruments which increase access to and improve the quality of support mechanisms for socially inclusive and environmentally sustainable enterprises looking to scale their environmental, social and economic impacts.



# **Practitioner Labs for Climate Finance, South Africa**

# Developing targeted climate finance solutions to support the growth of eco-inclusive enterprises

#### 1. PLATFORM FOR CLIMATE-RESILIENT SME FINANCING: INSTITUTIONALISING ACCESS TO CLIMATE FINANCE

The platform will build on existing infrastructure to support investors and SMMEs by building a common understanding of the climate resilience market, facilitating investment-readiness and deal flow matchmaking processes, while building SMMEs' capacity through a customised "capacity building journey".

#### 2. EQUITY PLUG FOR ENERGY EFFICIENCY FINANCING: DIRECT LENDING MODEL FOR SMES

This model for energy efficiency financing for SMEs "plugs the gap" with equity by generating a paradigm shift in commercial banks through market, technology and supplier engagement and systematic technical assistance.

#### 3. CLIMATE-SMART IMPACT INVESTMENT FUND: EXTENDING CAPITAL TO SMES IN EMERGING MARKETS

The solution for an Impact Investment Fund for Climate-Smart Entrepreneurial Solutions brings together networks of active impact investors and potential future investors to deliver equity to climate-smart SMEs in their efforts to reach commercial scale.

#### 4. GREEN LEND: INCLUSIVE CREDIT RISK ASSESSMENT ACROSS VALUE CHAINS

This credit risk assessment mechanism aims to increase lending to climate-smart SMEs through risk scorecard development that incorporates alternative data across enterprise value chains.



# With 62 participants from a wide range of organisations...

### **CLIMATE FINANCE INSTRUMENTS DEVELOPED BY**



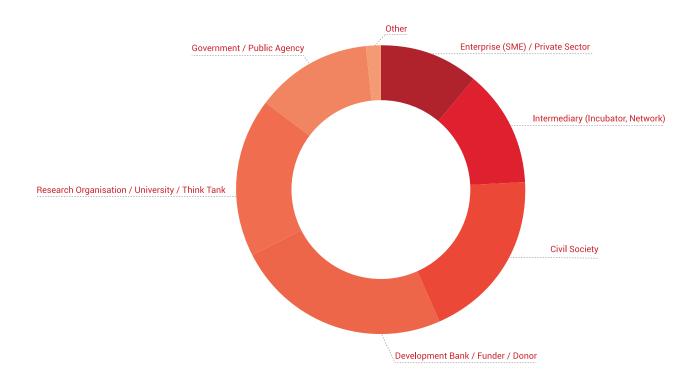








# ORGANISATIONS INVOLVED IN SOLUTION DEVELOPMENT



African Development Bank Group

AISA / KECES bigen Group Carbon Trust Catalyst for Growth

Chemonics Dalberg

Department of Agriculture, Rural Development and Environmental

Affairs

Department of Environmental Affairs

(DEA)

Development Bank of Southern

Africa (DBSA)

EDSE Programme (funded by the EU)

**Embassy of Finland** 

Embassy of the Kingdom of the

Netherlands European Union FinMark Trust

Freelance BDS Provider Freelance Consultant

GIZ

Greater Impact Green Cape GreenOvation HIVOS IDC ILO

Impact Amplifier

Impact Investing South Africa (Ber-

tha Centre)

Kruger to Canyons Biosphere National Professional Tertiary Co-operative of South Africa Limited OneWorld Sustainable Investment

Group PROPARCO REEDISA (Pty) Ltd Sanctuary Management

SANEDI SEDA SH Consults South Africa LED

Swiss Economic Cooperation (SECO)

The Innovation Hub-CIC

**TIPS** 

**UN Environment** 

UNDP

USAID / SA Led Programme

Veza Consulting



Climate change resilience remains underinvested in South Africa, hampering the growth and development of entrepreneurial activity and innovation for climate adaptation and resilience. Over 25% of entrepreneurs stop their businesses due to a lack of funding opportunities as customised financing instruments are either not available or are not accessible to start-up enterprises<sup>1</sup>. Eco-inclusive enterprises offering services and goods that builds climate resilience are even less attractive to traditional banks or investors as their assumed return expectations are sometimes lower or anticipated over a longer term and therefore associated with a higher uncertainty than conventional business operations that primarily focus on high return.

Despite available climate finance (e.g. Community Adaptation Small Grants Facility), there are low levels of climate finance awarded to eco-inclusive SMMEs in South Africa due to a mismatch between financier requirements or fund metrics and SMME expectations, available financial information and proposal writing capacities. As a result, early stage enterprises fall in the 'valley of death' and become the missing middle.

# **Solution Overview**

The proposed prototype builds on existing efforts to map and create a climate resilience investment-readiness ecosystem to support eco-inclusive SMMEs in building their capacity and enhancing the flow of timely, targeted and vetted deals for potential investors. The platform will support investors and SMMEs by building a common understanding of the climate resilience market, facilitating investment-readiness and matchmaking processes, and building SMMEs capacity through a customised "capacity building journey". The journey offers various steps to be taken towards matchmaking, based on the SMMEs specific stage of enterprise development and investment readiness, as well as the interests and requirements of specific potential funders. There are three sequential components:

 Climate Resilience Market: Advocating for and formalising the growth of SMME-led climate resilience innovation and activities through a "starter pack" aimed at awareness raising for SMMEs and funders alike. Development of a climate resilience Focus: Climate Resilience; Climate Change

Adaptation & Mitigation

Ecosystem Impact: Access to Finance

Lab Cycle: Climate Finance, South Africa 2019
Challenge Hosted by: OneWorld Sustainable Investments

knowledge sharing database, including case studies of good practice. Under this component, the platform offers market intelligence and value chain analysis services, which are aimed at ensuring market access for SMMEs and the development of customised growth models.

- 2. Investment Readiness: Providing investment readiness services for SMMEs through a customised 'capacity building journey', depending on the stage of enterprise development of the SMMEs and the needs of potential investors. Actively facilitating matchmaking of investment ready SMMEs with potential funders, once SMMEs have completed the capacity-building journey.
- 3. Online Deal Room: Creating and facilitating a network of potential funders and SMMEs in the climate resilience market. Establishing an online deal room for realising matchmaking opportunities and facilitating deal closure/co-investment opportunities. Monitoring of the progress of SMMEs post-funding and reintegrating lessons learned and improving the services offered by the platform.

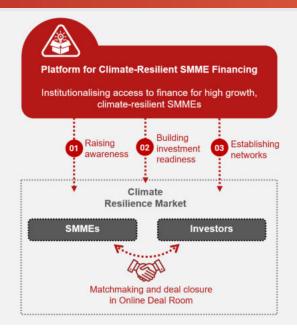
# **Key Features**

- Shining a light on and facilitating existing opportunities for investment in climate resilience.
- Proactive engagement of SMMEs and potential investors, as well as other stakeholders in the field (incubators, academic and research institutions, business developers).
- Investors have access to a pipeline of timely, vetted and standardised investment deals.
- SMMEs and financial actors will benefit from a customised journey towards awareness raising, investment readiness, matchmaking and deal making.

[1] Global Entrepreneurship Monitor (GEM) (2017). South Africa Report 2016/2017. Can

# **Platform for Climate-Resilient SME Financing**





# **Innovative Characteristics**

- Creation and active facilitation of an ecosystem for support of climate resilient investment opportunities.
- Showcase return on investments in climate resilience by disseminating success stories of social and environmental impacts, as well as profitability.

# **Target Market**

The platform aims to guide eco-inclusive SMMEs and potential investors through the necessary steps to increase deal flow on the climate resilience market. "Missing middle" eco-inclusive SMMEs in the climate resilience space looking to move beyond the start-up stage and expand their activities will be the main beneficiaries. However, the platform can also serve as a roadmap for other stakeholders who would like a better understanding of investment opportunities in climate resilience. Throughout the three sequential components, SMMEs, academic institutions, R&D units, government departments, databases with respective matchmaking platforms, funders and investors, capacity building institutions, incubators, and business development service providers will be involved depending on their expertise.

#### **Impact Potential**

SMMEs offering services and goods that build climate resilience not only have an impact on the environment and social wellbeing but also enhance South Africa's climate resilience. This prototype shines a light on existing and creates new opportunities for investments in climate resilience. It supports the growth of eco-inclusive enterprises in the climate resilience space and therefore can foster innovation and expand the range of available climate smart or eco-inclusive products and services. Through improved coordination among existing stakeholders, awareness issues are overcome and financing opportunities for SMMEs are

created or facilitated. Ongoing market intelligence and analysis services for SMMEs ensure that the multiplier effect within the South African economy is maximised, as SMMEs are analysed in the context of their specific value chains and the impact of an enterprise along its value chain is also taken into account.

# **Solution Developers**









Impact Amplifier, Trade & Industrial Policy Strategies (TIPS), GreenCape

#### Contact person:

Belynda Petrie: belynda@oneworldgroup.co.za Maximilian Pichulik: max@impactamplifier.co.za Jack Radmore: jack@green-cape.co.za

Gaylor Montmasson-Claire: gaylor@tips.org.za

SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.



Current energy efficiency financing and funding programmes for the private sector in South Africa target major infrastructure and large-scale projects while typically support a mixed mandate, with combined renewable energy, resource efficiency and/or clean technology support. Within this, the pipeline for clean technology and renewable energy projects are more advanced than for energy efficiency. Furthermore, small and medium-sized enterprises (SMEs) in particular in South Africa fail to access financing to invest in energy efficiency measures.

#### **Solution Overview**

In order to address the challenges with finding alternative routes to financing energy efficiency for SMEs that secure the buy-in of financers, a paradigm shift is required to enlist the support and financing of the commercial banks through a bespoke facility that will:

- Establish a highly efficient and tailored application review and applicant credit vetting process
- Offer 15,000 unsecured short-term loans over a 5 year period, at rates in the range of prime+1.25% (best case) to ±prime+3.5% p.a. for a range of standardised technological interventions from vetted suppliers
- Dynamically manage the lending criteria and vetting process, managing for risk and defaults
- Manage and bridge cash flow constraints which might arise from unforeseen defaults (>6% of portfolio)

In developing this financing model for energy efficiency financing for SMEs in South Africa, it is clear that:

- Private co-financing is crucial and interventions will require equity contribution from the borrower
- Further public co-funding is needed to
  - complement GCF funding (as principal sponsor, alongside DBSA)
- support the facility when cash flow constraints arise, to avoid adjusting lending rates upwards

If defaults rise above the modelled 6%, the only viable option (to avoid adjusting rates upwards and constraining the market response), is

Focus: Climate Change Mitigation

Ecosystem Impact: Access to Finance

Lab Cycle: Climate Finance, South Africa 2019
Challenge Hosted by: Carbon Trust with Development

y. Carbon Trust with Development Bank of Southern Africa (DBSA)

to "plug the gap" with equity; where the return on this equity itself must not drive the facility's blended cost of capital up significantly. The proposed solution for an equity plug might be offered by an impact investor and/or DFI. In light of the coordination challenges presented by creating an equity plug, an effective multi-donor steering process is required to integrate effectively the equity plug provider in the financing model. The institutional arrangements should facilitate the equity gap provider to have substantial influence on the evolving operational and risk management processes and steer participation at programme level. Its design should also reflect the equity plug provider's risk and return expectations (including consideration for graduated and/or risk enhancement options).

#### **Key Features**

The equity plug facility should have the following attributes:

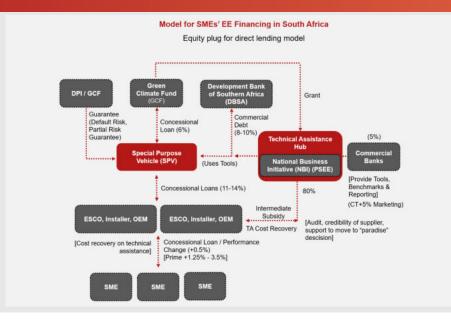
- The equity plug should be available when called upon in the event of cash flow challenges due to (managed) defaults, act as a bridging facility
- The equity plug must charge very low interest rates (and/or access rates)

The equity plug provider (as co-funder) should have the following attributes:

- Have a stake in promoting energy efficiency, low carbon implementation, SME resilience and/or economic development in South Africa, aligning to the facility's objectives
- Be willing to provide highly concessional equity
- Express refined impact reporting expectations, aligned to those established for the programme
- Participate alongside the GCF and DBSA in biannual performance reviews, take a minority position in programme steering and take a regular role with influence in quarterly facility operational reviews

# **Equity Plug for Energy Efficiency Financing**





# **Target Market**

The ambition is to finance ±15,000 EE interventions, focused on SMEs and with the following breakdown:

Typical profile					Number of
Organisatio- nal size	Maximum turnover (ZAR/annum)	Max number of employees	Max energy cost (ZAR/ annum)	Typical cost of energy for turnover (ZAR/ ZAR)	interventions anticipated to be supported
Small	Ave. R12m	50	< R 750 000 / year	12%	500
Medium	Ave. R32m	200	R 750 000 – R 45 million	12%	14,000
Large	>R64m	> 200	> R 45 million / year	2.5%	500

The facility is to be *sector-agnostic*. However, major energy savings opportunities lie in Manufacturing; Agriculture, Forestry & Fisheries and Mining. Therefore, additional efforts for project pipeline development will target these sectors<sup>1</sup>. Loans are to be in the range of R50,000 – R2 million, averaging roughly R75,000 for SMEs and R450,000 for large enterprises.

### **Impact Potential**

Securing the equity plug provider would provide the desired cofunding to complement the GCF and DBSA funding within the Private Sector Energy Efficiency Programme (PSEE), improving the overall profile and reach of the programme. Significantly, the co-funder would provide the critical bridge finance to support the continued operation of the facility without the detrimental rates escalation that would be required otherwise.

The potential impact of the direct route to market is the definitive demonstration potential of the facility – testing and demonstrating solutions that incumbent actors are unfamiliar with or averse to –, including proving:

1. Significance of SME EE market and project pipeline

[1] Excluding coal mining

- 2. Adoption of SME-appropriate credit vetting processes and its application for EE financing
- 3. Potential for risk mitigation through robust technology and supplier positive lists
- 4. Ease of financing standard technologies
- Reliability of benchmarks and standardised tools in application and impact evaluation

Each of these measures will bring significant efficiency to lending procedures and serve to establish, until now, only theorised market potential of EE financing for SMEs. The collective ambition is that financers will better understand the opportunity and have developed tailored loan products that continue to serve the market by the close of the facility.

Furthermore, greater access to EE financing for SMEs in core sectors across South Africa will enable enterprises at the core of South Africa's economy to improve the environmental sustainability of their activities while greatly reducing their carbon footprints in support of South Africa's green economy transition.

### Solution Developers



**Carbon Trust** 



Development Bank of Southern Africa (DBSA)

#### Contact person:

Christelle van Vuuren: Christelle.van Vuuren @Carbontrust.com

SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.



Climate-smart small- and medium-sized enterprises (SMEs) offering climate change adaptation and/or mitigation solutions directly through their products and services - have the potential to drive economic growth and employment as well as combat the adverse effects of climate change. There are many examples in Southern Africa of these small and growing enterprises that incorporate marginalised populations (including women and youth) in their value chains as suppliers, employees and customers. However, entrepreneurship in the region is largely characterised by many micro-enterprises and big corporates, with a general lack of growth stage enterprises. This "missing middle" gap of later stage SMEs, especially climate-smart SMEs, is largely caused by a lack of access to growth capital - with their financing needs beyond the level of microfinance while also being underserved by commercial banks, business angels and early stage private investors.

In developing new opportunities for impact investing that target climate-smart SMEs, many (impact) investors are reluctant to invest in light of the political, economic and legal climate of these emerging markets. Major barriers to impact investing in Southern Africa include, but are not limited to:

- General lack of awareness and understanding of impact investment as a concept and investment practice in emerging markets by policy-makers, mainstream investors and the general public
- Lack of capital supply across the risk/return spectrum
- Difficulty sourcing viable investments that meet both financial and social/environmental objectives
- · Limited availability of innovative fund and deal structures
- · Inadequate policy and regulatory environment
- Poor linkages between social enterprises, investors and support programs/networks

Focus: Climate Change Adaptation & Mitigation

Ecosystem Impact: Access to Finance

Lab Cycle: Climate Finance, South Africa 2019

Challenge Hosted by: Hivos Impact Investments

Additionally, the emphasis within impact investing on innovation with increasingly complicated financial products under constant development and the dominance of large financial players challenges the capacity of many climate-smart SMEs to understand and access existing investment opportunities that are relevant to their business models.

#### **Solution Overview**

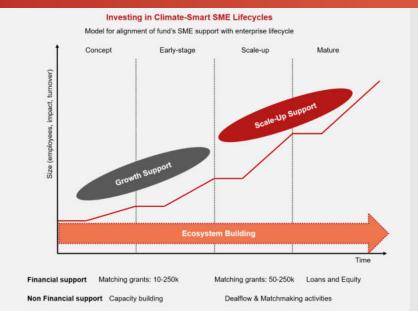
43

In light of these challenges to "missing middle" climate-smart SMEs and the development of relevant impact investing opportunities in emerging markets, the solution for an *Impact Investment Fund for Climate-Smart Entrepreneurial Solutions* brings together networks of active impact investors and potential future investors to de-risk and deliver equity to climate-smart SMEs in their efforts to reach commercial scale. This impact investment fund will:

- Create a collaborative impact-investing ecosystem for climate-smart entrepreneurship through ecosystem building activities that build a common understanding of investment opportunities and develop financing models specifically catered to climate-smart small and growing enterprises in emerging markets.
- Develop a pipeline for investment-ready climate-smart SMEs by engaging enterprises throughout their lifecycles to access the necessary technical assistance and business development services to improve their ability to attract growth capital.
- Deliver capital investments to target SMEs that mitigate the risk to financiers by leveraging development funding in a risk facility, thereby building a long-term investment case and improving the financial risk appetite of investors.

# **Climate-Smart Impact Investment Fund**





# **Key Features**

The impact-investing fund's approach is explorative and iterative, premised on tech-driven learning formats and the engagement of experts in delivery of technical assistance through non-financial support. The *Impact Investment Fund for Climate-Smart Entrepreneurial Solutions* offers climate-smart SMEs:

- More responsive assessment criteria than commercial financiers and a leaner cost structure that reduces the costs accrued by target enterprises.
- **Digital support** for a less human resource intensive investment approach combined with technical assistance.
- Partnership-building opportunities to engage and mobilise a variety of future impact investors.

The combined financial and non-financial support offered is a graduated model that guides enterprises from grant to loan/debit financing to equity investment opportunities.

#### **Target Market**

### **Climate-Smart SMEs**

The fund specifically target climate-smart SMEs across Southern African that struggle to move beyond the start-up stage and access scale-up financing. The fund will extend equity capital to these target SMEs ranging from 250,000 – 3 million Euros.

# **Network of Climate-Smart Impact Investors**

Within this solution, the ideal impact investors are audacious, interdependent, deeply aware, able and ready to take calculated risks and to empower others (not just themselves), unstoppable in their search for a deeper impact combined with proving the financial business case, and wise enough to be systemic, but with the humility to continue learning. Innovation is key and there is a need to keep supporting the pioneers and frontrunners in the financial sector. There is a role for all to play, including financial institutions, donors, public sector, and intermediaries (accelerators/BDS).

# **Impact Potential**

The Impact Investment Fund for Climate-Smart Entrepreneurial Solutions offers access to finance solutions to climate-smart SMEs that enables these enterprises to scale their activities, generating more jobs and increasing their contributions to environmentally sustainable and socially inclusive economies. These enterprises offer innovative solutions for emissions reductions, water use efficiency, clean production, climate-resilient agriculture, circular production and more. Improving access to finance for later stage climate-smart SMEs will support climate change mitigation and adaptation strategies as well as the achievement of global Sustainable Development Goals.

# **Solution Developers**





**Hivos Impact Investments and Hivos Foundation** 

# Contact Person:

Marnix van Holland: mvanholland@hivos.org
Martijn Blom: martijn@hivosimpactinvestments.com

SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.



Financers are generally reluctant to finance climate-smart smalland medium-sized enterprises (SMEs) because they operate with technologies or business models which financial institutions, such as commercial banks, are often unfamiliar. Additionally, enterprises seeking growth financing lack substantial credit history, and many of them are unable to offer any collateral. In light of these interrelated challenges, solutions are required to overcome the following and deliver long-term financing to climate-smart "missing middle" SMEs looking to scale their activities and contributions to socially inclusive, green development:

- SMEs' lack of credit history resulting from limited available data on credit worthiness
- · High risk aversion of financers to early and growth stage SMEs
- Lack of new data sources across value chains employed in traditional risk assessments

### **Solution Overview**

**Green Lend** is a credit risk assessment mechanism (risk scorecard) designed to increase lending to climate-smart SMEs through risk assessment catered to the needs and data available to these enterprises. This mechanism leverages data that traditionally are overlooked by commercial banks to build a credit risk framework responsive to climate-smart SMEs that embraces the reality of the diverse and often messy data availability of climate-smart SMEs across their complex value chains.

Value chain analysis and the use of data across different nodes of the value chain can support both SMEs and financiers to overcome challenging and often hazy data collection and analyses within credit risk assessments. A value chain approach to credit risk that incorporates new data forms will look to which data are found along a specific value chain – collecting data from key actors at different stages from inputs to production, processing and distribution, marketing and consumption. For example, warehouse receipting could be used to mirror a credit history of SMEs (also in the informal sector) and provide additional "new" data relevant

Focus: Climate Change Adaptation &

Mitigation

Ecosystem Impact: Access to Finance

Lab Cycle: Climate Finance, South Africa 2019

Challenge Hosted by: FinMark Trust

to assessing the credit worthiness or risk of financing these enterprises.

The proposed credit risk model **offers a risk management mechanism** catered to the needs of small and growing climate-smart enterprises that will:

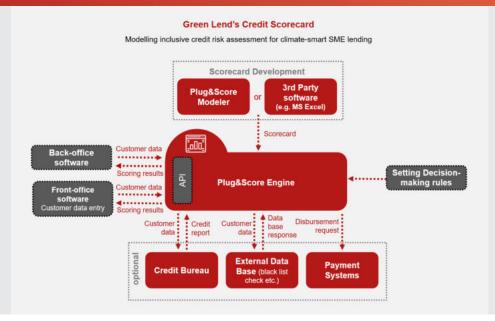
- Manage risk by identifying clients who are at risk and using this
  to better understand how clients at risk progress from arrears
  (overdue debt), to default, to unrecoverable. In the proposed
  credit risk assessment model, the statistical equivalent is sensitivity where S = Identified defaulters
  True defaulters.
- The model offers risk management that **is balanced**, meaning that it does not penalise clients who are unlikely to default. Accordingly, this balanced approach applies the statistical equivalent for precision or specificity, S = \frac{1dentified non-defaulters}{The process of the latest tension of the lates
- Furthermore, Green Lend's risk assessment model is applied in a sustainable manner with a strong ability to forecast on new data points, where the statistical equivalent is out-of-sample performance.

#### **Key Features**

Green Lend's model for credit risk assessment breaks with traditional credit risk models by employing alternative data. This approach is unique in its ability to provide information to prospective lenders

- · Incomes are informal (and unrecorded)
- · Credit history is unavailable
- · Income levels are low in the market





In particular, this inclusive credit risk assessment model capitalises on the trend of a **societal drive towards increased data collection**. As SMEs and entrepreneurs' data footprint increases, more information is available to relate to credit risk outcomes. Available data — or alternative data, from the perspective of the banking sector — includes call records which are increasingly stored, cleaner and more accessible; health record information (e.g. on vitality); and social media data (under certain circumstances). By leveraging readily available data, financial institutions can have a clearer picture of the reliability and riskiness of their clients, greatly reducing their risk aversion to financial data-poor climate-smart SMEs.

**Target Market** 

This credit risk assessment model is specifically catered to the business models of climate-smart and socially inclusive SMEs that offer combined environment, economic and social benefits across their value chains, especially to women and youth as suppliers, employees and customers. In particular, these enterprises support marginalised communities to better adapt to and mitigate the impacts of climate change. In South Africa and the region many of these enterprises fail to attract investment beyond the scale of microloans or grants (10,000 – 20,000 EUR) and below the scale of commercial finance (100,000 – 200,000 EUR and above) that is required to scale-up their activities. This credit risk model intends to provide a better picture to commercial banks of the credit worthiness of these "missing middle" enterprises by locating and collating data that these enterprises are readily able to provide.

# **Impact Potential**

The climate finance solution for credit risk rating that incorporates alternative forms of data will increase investment in climate-smart SMEs at the base of the South African, regional and global economies. This solution offers commercial banks effective tools to better understand and develop targeted lending solutions for these enterprises offering innovative climate-

smart products and services, which catalyse socially inclusive and green economies.

# **Solution Developer**



#### Contact person:

Jaco Weideman: JacoW@finmark.org.za

SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.









seeds.uno/facebook



@SEED\_SustDev



seeds.uno/youtube



feedburner.com/SEED-News

# SEED FOUNDING PARTNERS











# **IMPLEMENTING PARTNER GHANA**









# IMPLEMENTING PARTNER SOUTH AFRICA



#### **SEED PARTNERS**























