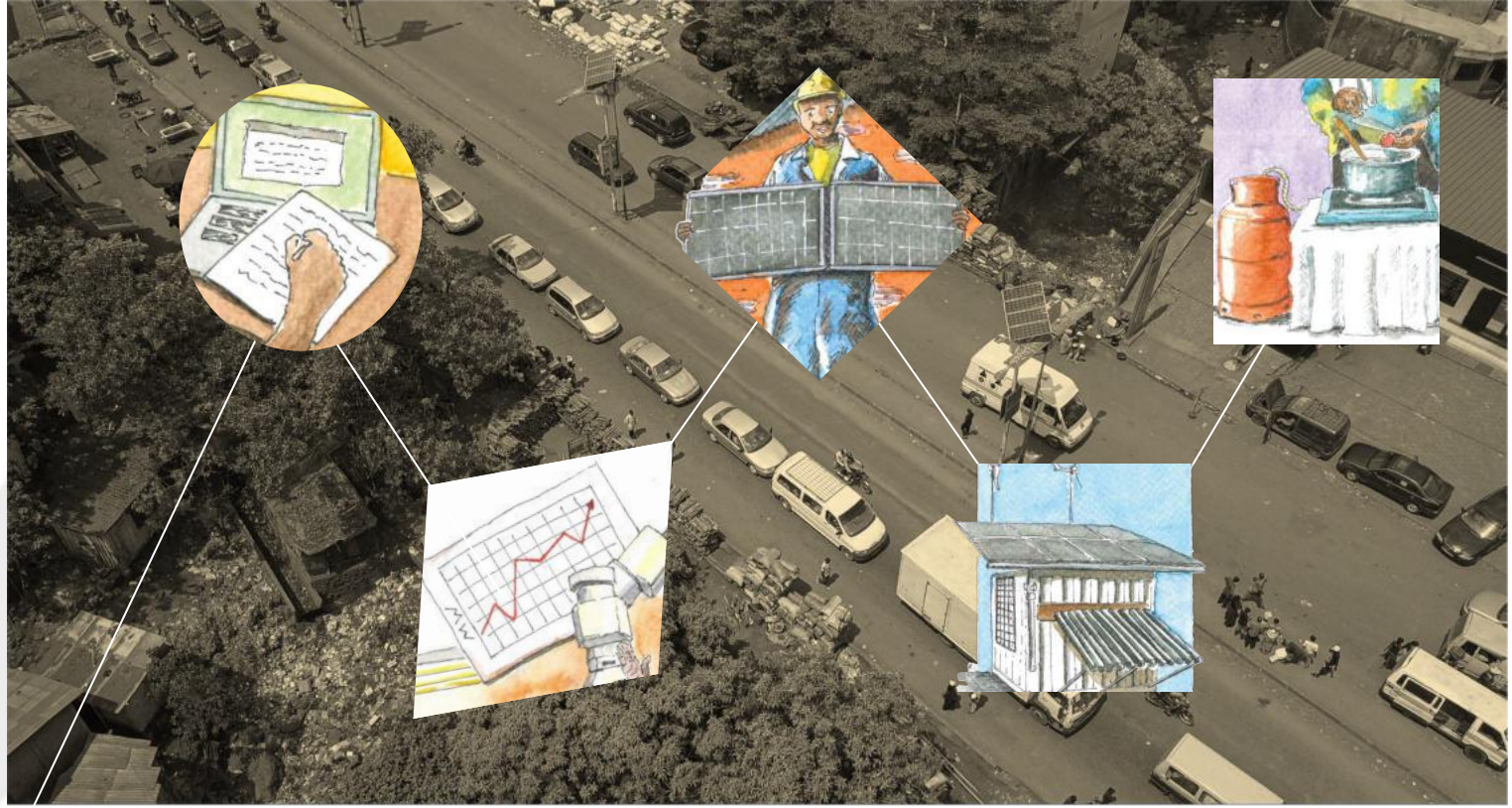




WORKSHOP

16 November, 2023



From Product to Impact:

Data Management in **Green Inclusive Finance**

Speakers



Marianella Feoli



Verónica Herrera



Michel Hanouch



Natalia Realpe



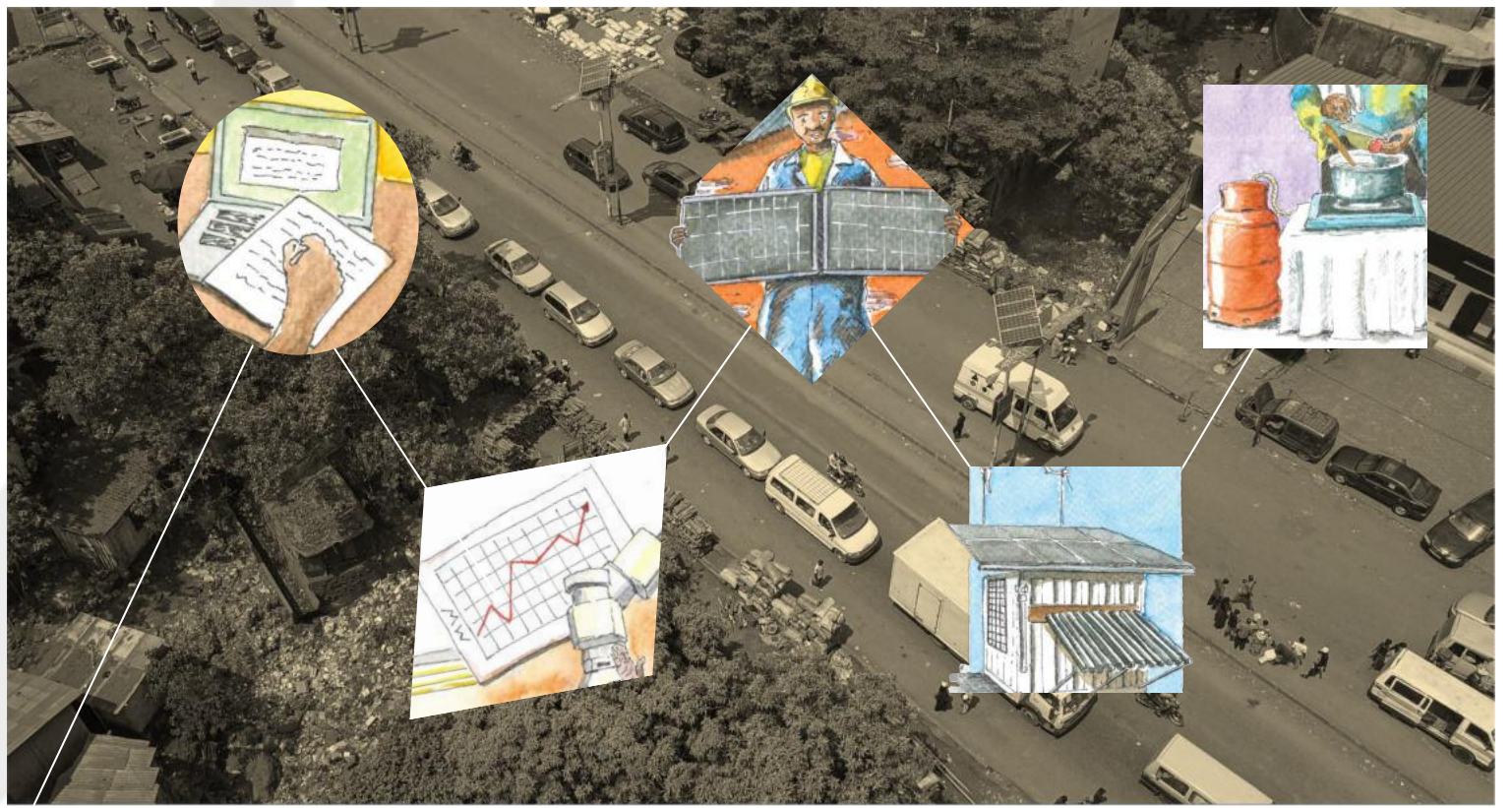


AGENDA

- Introduction to the Workshop
- Presentations – Background
 - HEDERA
 - FUNDECOOPERACIÓN
 - MICRÉDITO
 - CGAP
- Stations' Discussion
- Wrap-up



Natalia Realpe Carrillo

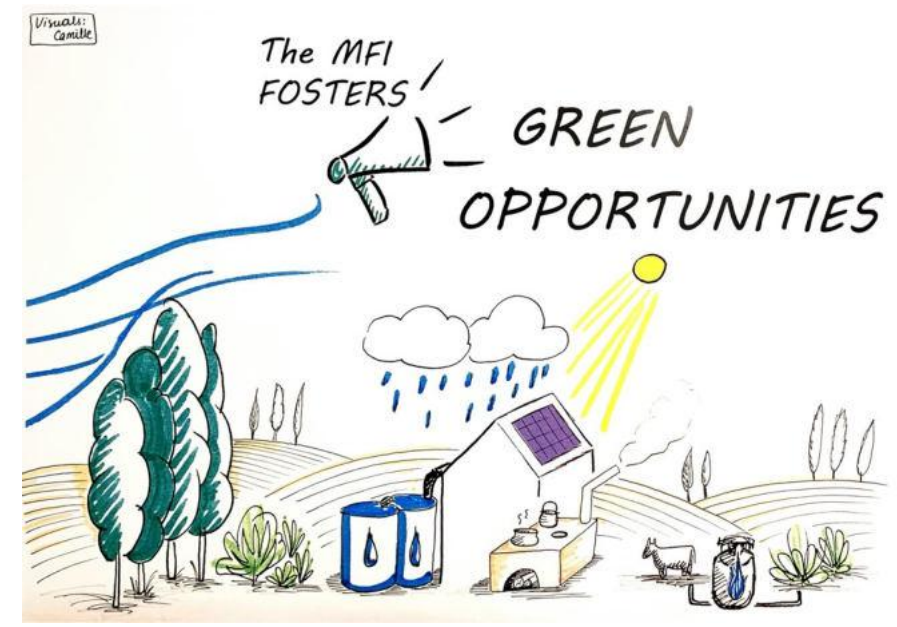


From Product to Impact: *Data Management* in **Green Inclusive Finance**

Fostering GREEN INCLUSIVE FINANCE

Data-driven decision-making at MFIs

**FIRST:
Vulnerabilities
identification**

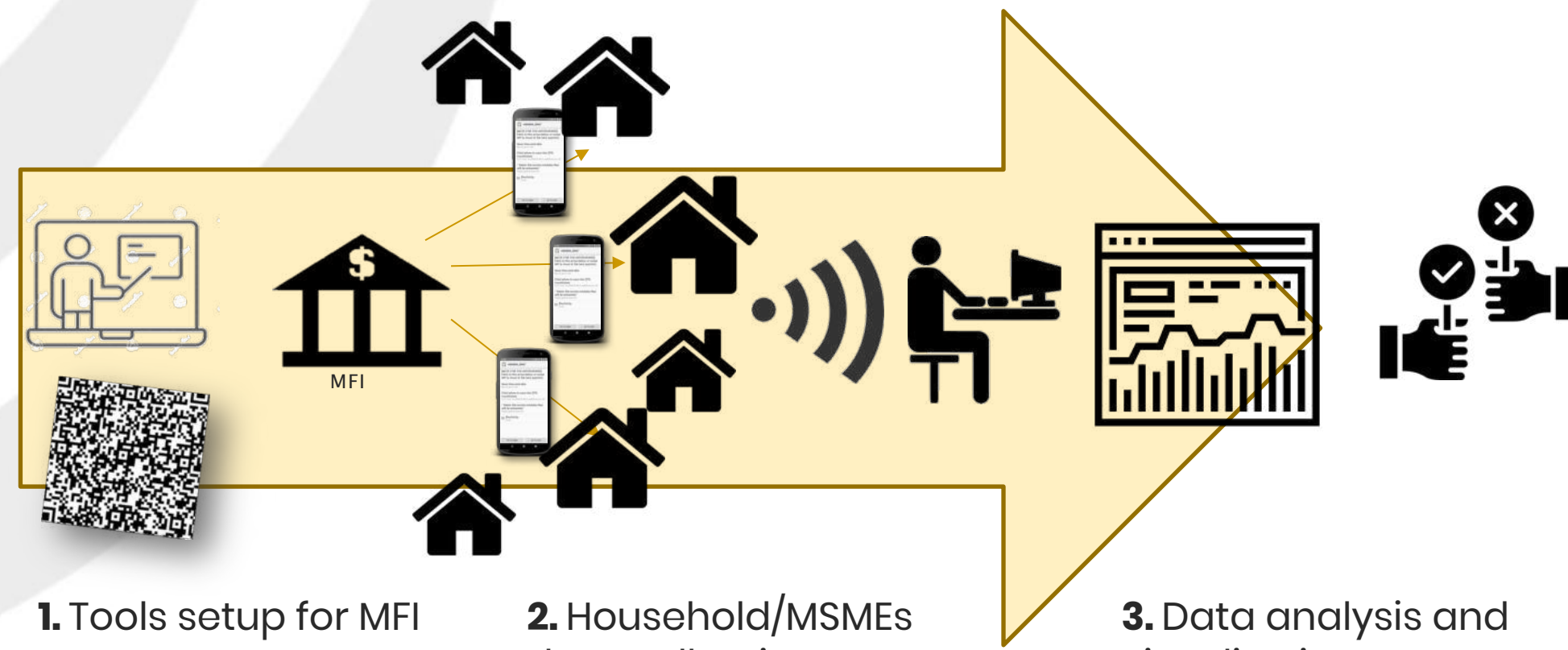


**MICROFINANCE AS A
CHANNEL TO ENABLE
ACCESS TO CLEAN AND
MODERN TECHNOLOGIES**

*How to identify the technology or
sustainable practice to finance?*



Foto: Cooperativa Fondesurco



1. Tools setup for MFI

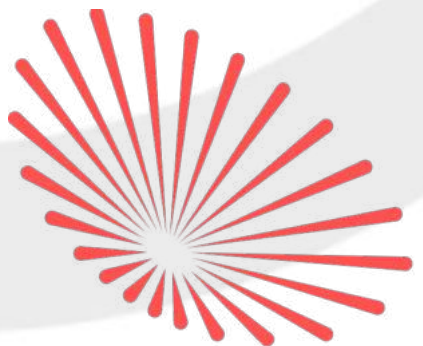
2. Household/MSMEs data collection

3. Data analysis and visualization



DATA COLLECTION & FRAMEWORKS

Frameworks



Electricity supply
(households and
productive uses -MSMEs)
&
Cooking solutions

Drinking water,
sanitation &
hygiene at the
household level

Food Insecurity
Experience Scale
at the household
level



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MICROFINANCE WEEK**
connecting the inclusive finance world

**Cooking
Solutions**

Electricity Supply



| ATTRIBUTES | | TIER 0 | TIER 1 | TIER 2 | TIER 3* | TIER 4 | TIER 5 |
|-------------------|--|--|------------------|------------------|---|---|---|
| Capacity | Power capacity ratings (W or daily Wh) | Less than 3 W | At least 3 W | At least 50 W | At least 200 W | At least 800 W | At least 2 kW |
| | Services | Less than 12 Wh | At least 12 Wh | At least 200 Wh | At least 1 kWh | At least 3.4 kWh | At least 8.2 kWh |
| Availability* | Daily Availability | Less than 4 hours | At least 4 hours | | At least 8 hours | At least 16 hours | At least 23 hours |
| | Evening Availability | Less than 1 hour | At least 1 hour | At least 2 hours | At least 3 hours | At least 4 hours | |
| Reliability | | More than 14 disruptions per week | | | At most 14 disruptions per week or At most 3 disruptions per week with total duration of more than 2 hours* | (> 3 to 14 disruptions / week) or ≤ 3 disruptions / week with > 2 hours of outage | At most 3 disruptions per week with total duration of less than 2 hours |
| Quality | | Household experiences voltage problems that damage appliances | | | | Voltage problems do not affect the use of desired appliances | |
| Affordability | | Cost of a standard consumption package of 365 kWh per year is more than 5% of household income | | | Cost of a standard consumption package of 365 kWh per year is less than 5% of household income | | |
| Formality | | No bill payments made for the use of electricity | | | | Bill is paid to the utility, prepaid card seller, or authorized representative | |
| Health and Safety | | Serious or fatal accidents due to electricity connection | | | | Absence of past accidents | |

| ATTRIBUTES | | TIER 0 | TIER 1 | TIER 2 | TIER 3 | TIER 4 | TIER 5 |
|---|---|---|------------------------------------|--|--|---|--|
| Cooking Exposure * | Emission: Fuel | Firewood, dung, twigs, leaves, rice husks, processed biomass pellets or briquette, charcoal, kerosene | | | | Biogas, ethanol, high quality processed biomass pellets or briquettes | |
| | Emission: Stove Design | Three-stone fire, tripod, flat mud ring, traditional charcoal stove | Conventional or old generation ICS | ICS+ chimney, rocket stove or ICS + insulation | Rocket stove with high insulation or with chimney, advanced insulation charcoal stoves | Rocket stove with chimney (well sealed), Rocket Stove gasifier, Advanced secondary air charcoal stove, forced air | Electricity, solar, LPG |
| | Ventilation: Volume of Kitchen * | Less than 5 m ² | More than 5 m ² | More than 10 m ² | More than 20 m ² | More than 40 m ² | Open air |
| | Ventilation: Structure | No opening except for the door | 1 window | More than 1 window | Significant openings (large openings below or above height of the door) | Veranda or a hood is used to extract the smoke | Open air |
| | Ventilation Level | Bad | | | Average | Good | |
| | Contact Time * | More than 7.5 hours | Less than 7.5 hours | Less than 6 hours | Less than 4.5 hours | Less than 3 hours | Less than 1.5 hours |
| Cookstove Efficiency | ISO's Voluntary Performance Targets (TBC) | Less than 10% | More than 10% | More than 20% | More than 30% | More than 40% | More than 50% |
| | Convenience | Fuel acquisition (through collection or purchase) and preparation time (hours per week) | More than 7 hours | | Less than 7 hours | Less than 3 hours | Less than 1.5 hours |
| Stove preparation time (minutes per meal) | | More than 15 minutes | | Less than 15 minutes | Less than 10 minutes | Less than 5 minutes | Less than 2 minutes |
| Safety of Primary Cookstove | | Serious accidents over the past 12 months | | | | No serious accidents over the past year | |
| Affordability ⁴ | | Levelized cost of cooking solution (fuel) more than 5% of household income | | | | Levelized cost of cooking solution (fuel) less than 5% of household income | |
| Fuel Availability | | Primary fuel available less than 80% of the year | | | | Primary fuel is readily available 80% of the year. | Primary fuel is readily available throughout the year. |

Water, Sanitation & Hygiene (WASH)

Drinking
Water

| Service level | Definition |
|-----------------------|---|
| Safely managed | Drinking water from an improved water source which is located on premises, available when needed and free of faecal and priority chemical contamination |
| Basic | Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing |
| Limited | Drinking water from an improved source where collection time exceeds over 30 minutes for a roundtrip to collect water, including queuing |
| Unimproved | Drinking water from an unprotected dug well or unprotected spring |
| No service | Drinking water collected directly from a river, dam, lake, pond, stream, canal or irrigation channel |



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Hygiene



BASIC

Availability of a handwashing facility on premises with soap and water

LIMITED

Availability of a handwashing facility on premises without soap and water

NO FACILITY

No handwashing facility on premises

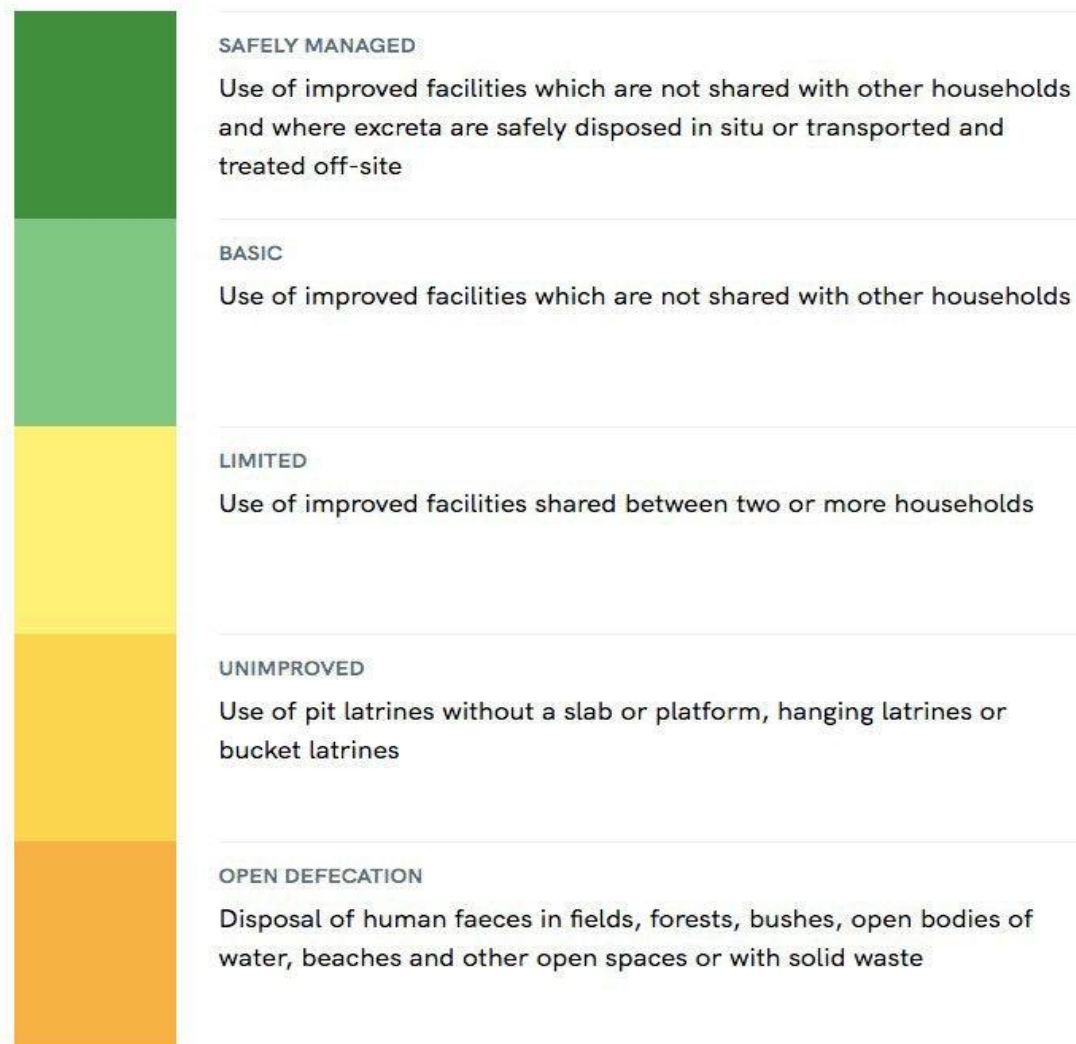




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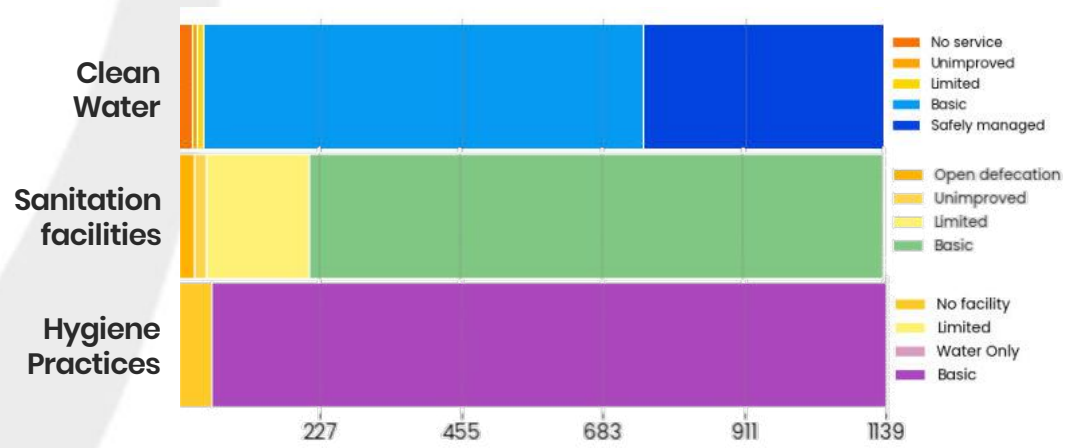
Sanitation



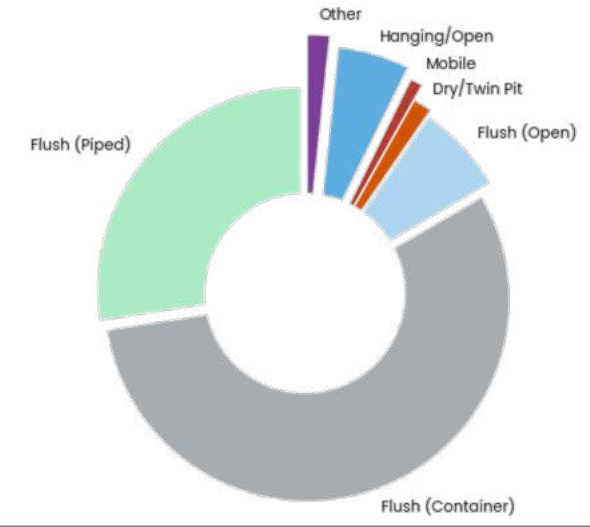
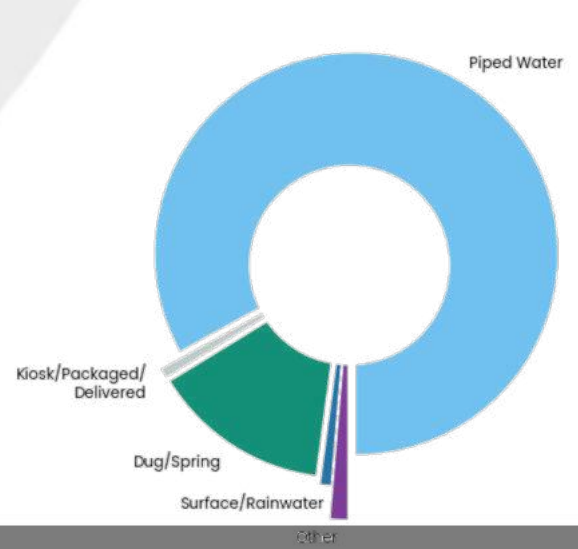
FOOD INSECURITY EXPERIENCE SCALE (FIES)

1. You were worried you would not have enough food to eat?
2. You were unable to eat healthy and nutritious food?
3. You ate only a few kinds of foods?
4. You had to skip a meal?
5. You ate less than you thought you should?
6. Your household ran out of food?
7. You were hungry but did not eat?
8. You went without eating for a whole day?

WASH/JMP Service Ladder for Households

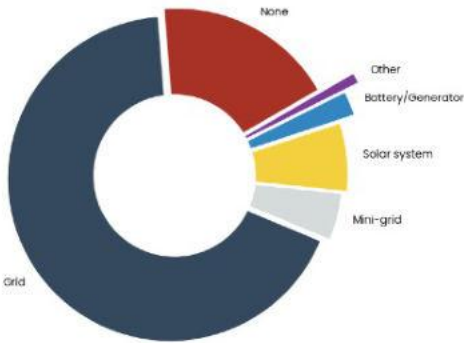


Drinking water source Sanitation facilities

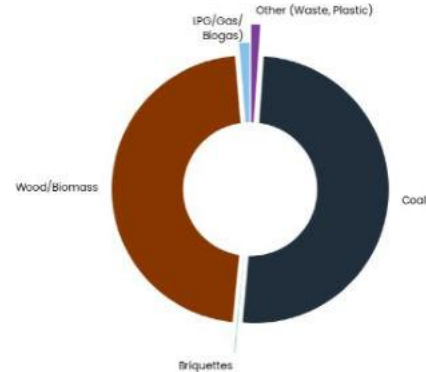




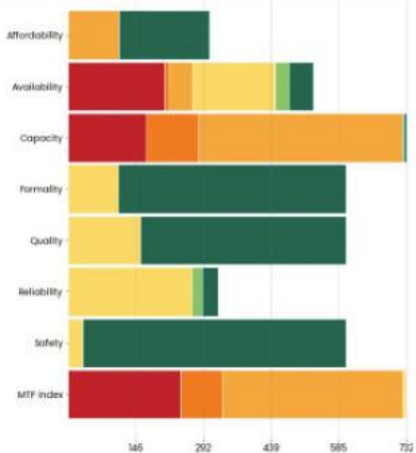
Power sources



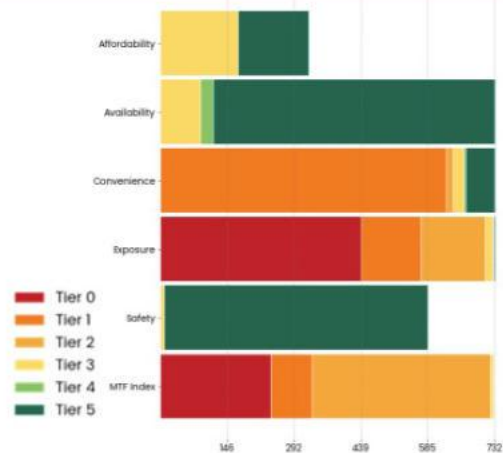
Cooking fuels



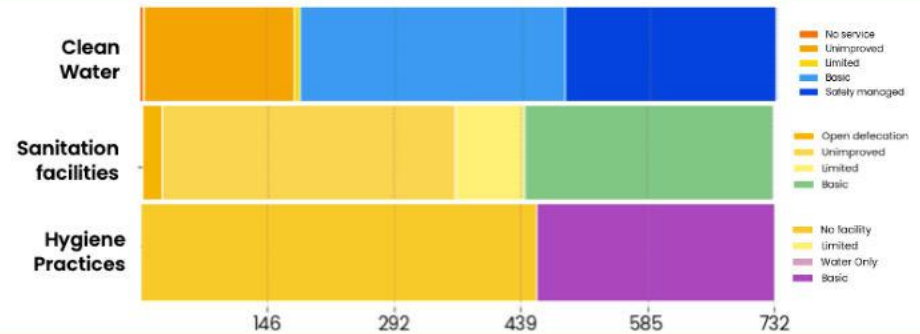
Access to electricity



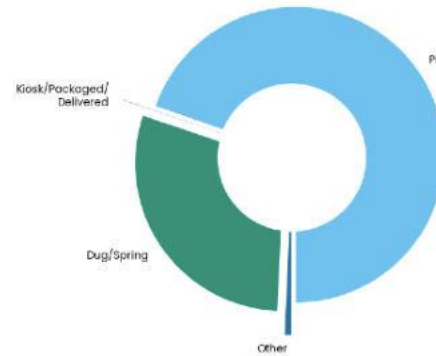
Cooking solutions



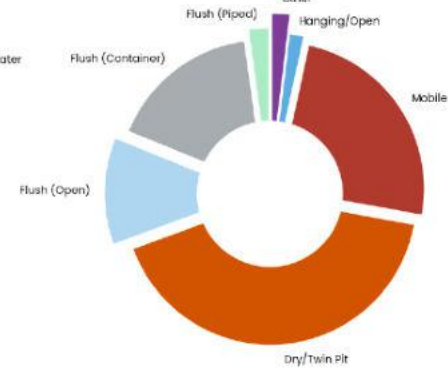
WASH/JMP Service Ladder for Households



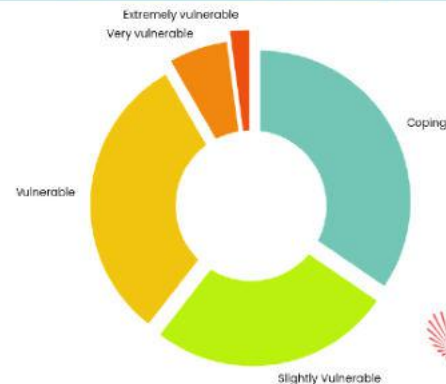
Drinking water source



Sanitation facilities



Health Vulnerability



IMPACT-R
Impact-Driven & Action-Based Research

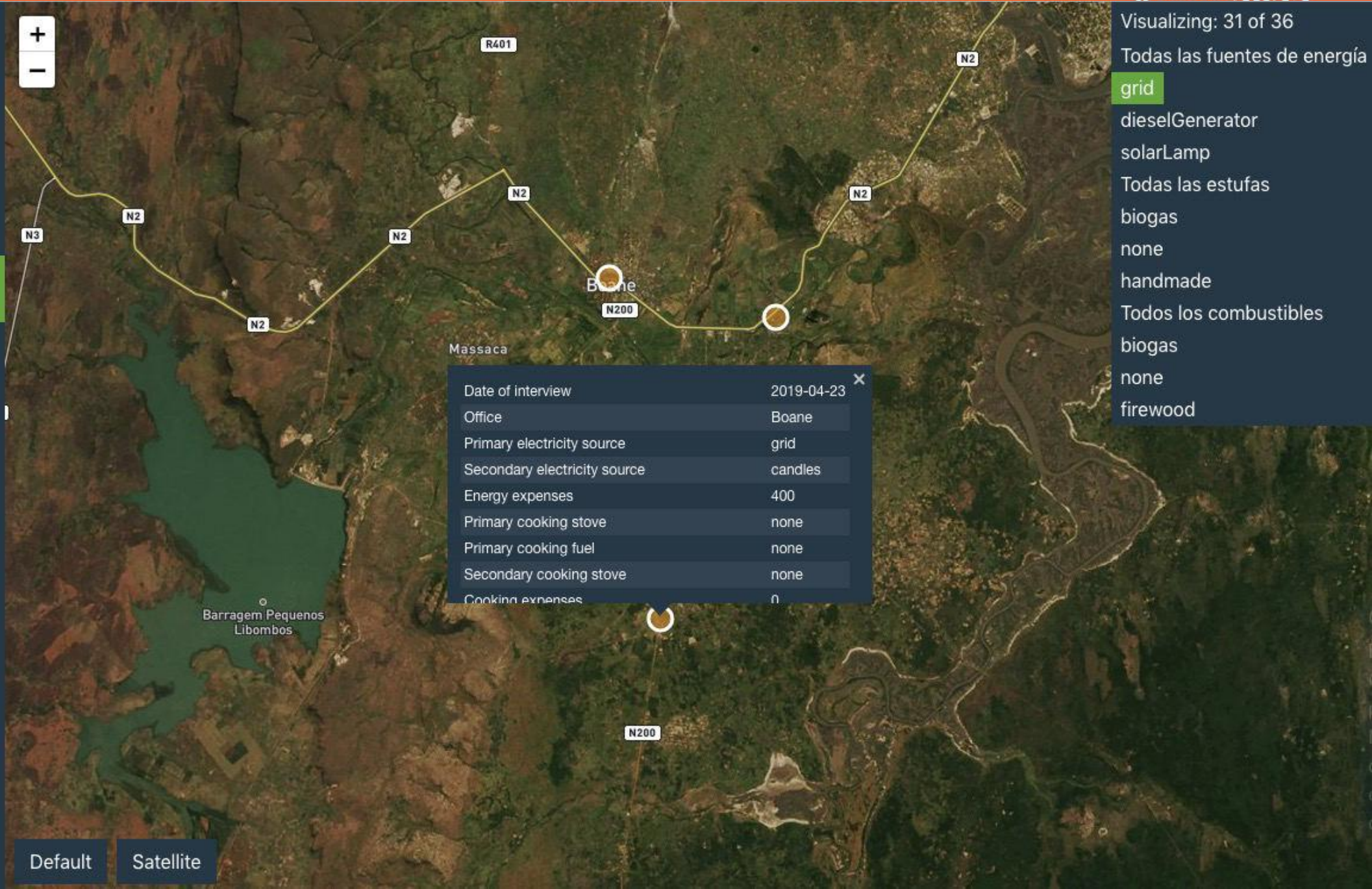


HEDERA

fp.eu



-  Home
-  About Energy Access
-  Map
-  Electricity
-  Cooking solutions
-  FAQ
-  My Institution
-  Logout



| | |
|------------------------------|------------|
| Date of interview | 2019-04-23 |
| Office | Boane |
| Primary electricity source | grid |
| Secondary electricity source | candles |
| Energy expenses | 400 |
| Primary cooking stove | none |
| Primary cooking fuel | none |
| Secondary cooking stove | none |
| Cooking expenses | 0 |

- Visualizing: 31 of 36
- Todas las fuentes de energía
- grid
 - dieselGenerator
 - solarLamp
- Todas las estufas
- biogas
 - none
 - handmade
- Todos los combustibles
- biogas
 - none
 - firewood

Default Satellite



Welcome to your energy access dashboard

Home

About Energy Access

Map

Indicators

Electricity

Cooking solutions

FAQ

My Institution

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See <https://fontawesome.com/license>



Surveys: 36



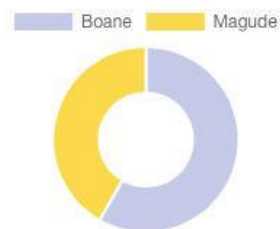
Clients connected to the grid: 31



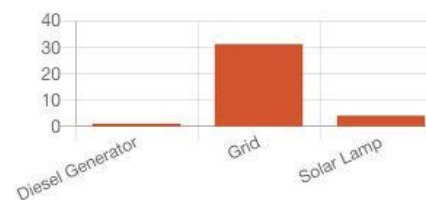
Electricity Index (MTF): 1.5/5

Cooking Index (MTF): 0.28/5

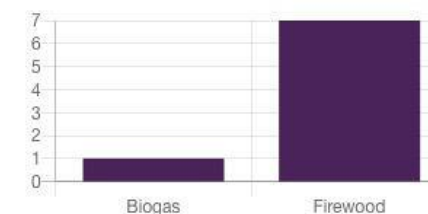
Where do the data come from?



Summary of client power sources



Primary cooking fuels



Surveys per office

| Office | Date of first collection | Date of last collection | Total number of surveys |
|--------|--------------------------|-------------------------|-------------------------|
| Total | 2019-04-01 | 2019-05-11 | 36 |
| Boane | 2019-04-01 | 2019-05-02 | 21 |
| Magude | 2019-04-01 | 2019-05-11 | 15 |

Collection overview (GPS)

[Go to map](#)





Multi-Tier Framework: Access to electricity

Background: How to measure access to electricity

The MTF approach measures energy access provided by any technology or fuel based on seven attributes that capture key characteristics of the energy supply that affect the user experience: Capacity, Availability, Reliability, Quality, Affordability, Legality, and Health and Safety.

Based on those attributes, it then defines six tiers of access, ranging from Tier 0 (no access) to Tier 5 (full access) along a continuum of improvement.



MTF Index: Access to electricity



Affordability



Duration



Quality



Legality



Home

About Energy Access

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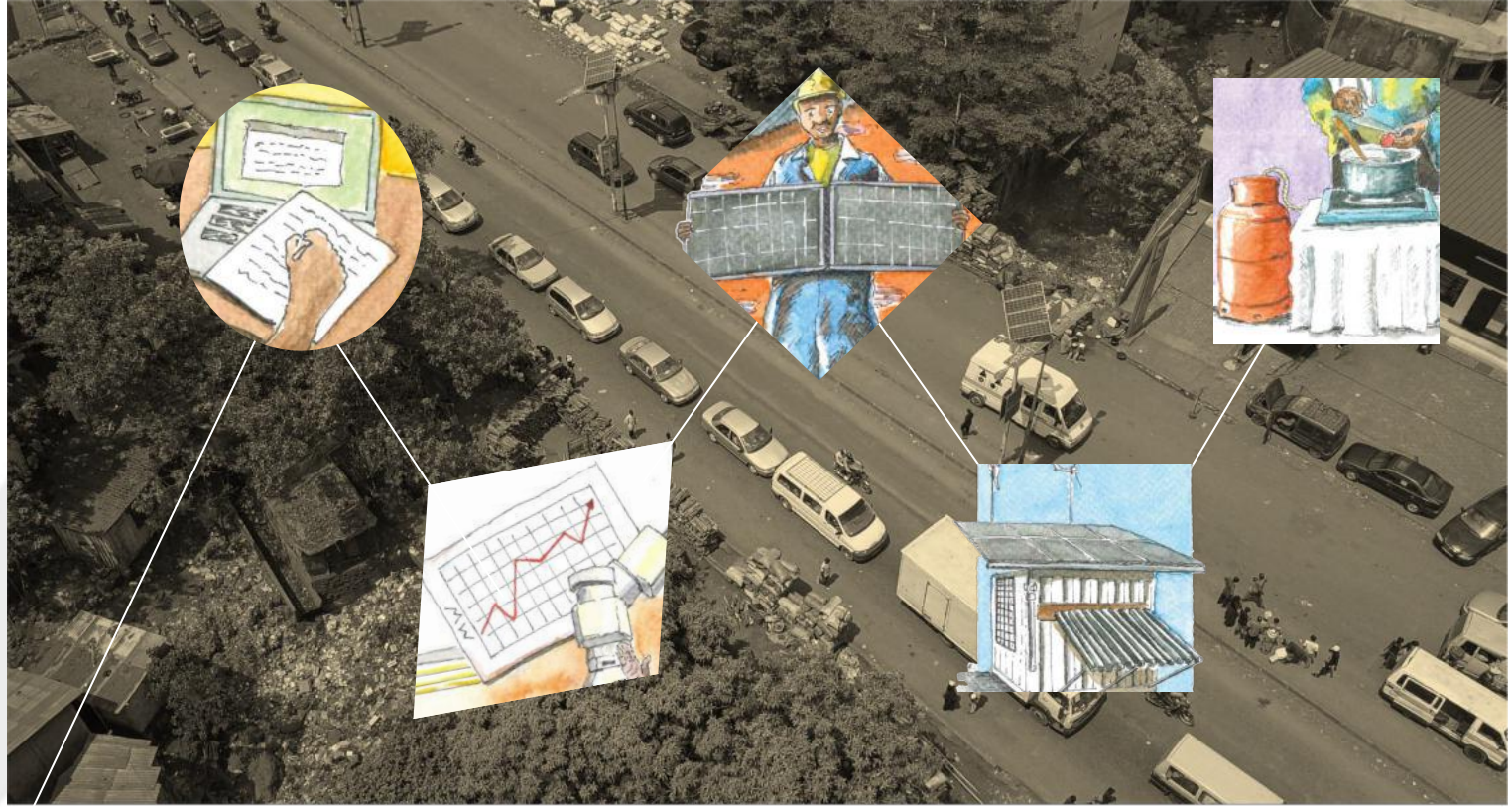
My Institution

Logout

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Marianella Feoli



From Product to Impact:

Data Management in **Green Inclusive Finance**



Fundecooperación
para el Desarrollo Sostenible



Fundecooperación

We are a non-governmental organization with a track record since 1994, **promoting economic, social, and environmental development** to achieve a transformed and sustainable Costa Rica aligned with the Sustainable Development Goals of Agenda 2030.

We have the **support of national and international organizations** thanks to our institutional, financial, and environmental stability. We have inter-institutional and inter-sectoral **alliances** that we offer to our clients with financing, training, advice, and participation in sustainable development projects.



We work to **improve the socio-productive, environmental, and gender conditions** of the population in Costa Rica, allowing for environmentally respectful economic and social development **through financing for entrepreneurs and business owners**

Our Mission



Our vision is



Our vision is to be the leader in Costa Rica **in financing sustainable development projects** that generate positive impact for environmentally respectful economic and social development



Projects

Loans



- 1** ■ **Projects, non-reimbursable funds from international cooperation or private companies, for innovation, knowledge generation, piloting.**
- 2** ■ **Customized Credit, the option for individuals and micro-businesses in need of accessible and flexible financing that understands the specificities of each activity or business**

As an organization specializing in sustainable development, climate actions, and credits for sustainable micro-businesses, at Fundecooperación, we have two engines to execute our mission and create synergy between both areas...

Some of our products include:



Investment Loans: Finance the purchase of land, acquisition, construction, remodeling or repair of infrastructure, purchase of equipment or machinery, work vehicles and assets, and construction of commercial, agricultural, industrial or service facilities.

Line of Credit: Working capital for labor, raw materials, assets, bonuses, short-term investments, and other actions necessary for business operations.

Tier Two Banking: Loans to other financial institutions and cooperatives, which include reimbursable financing among their services and promote sustainable development.

Green City Loans: Urban agriculture, green areas, green architecture, green city, eco-design, productive chains, and sustainable tourism.

Responsible and Adapted Fishing Credit: Implement transformative actions for the medium- and small-scale fishing fleet.

PRO+CLIMA Agricultural Credit: Implement climate actions on farms and in agricultural activities.

PRO+CLIMA Livestock Credit: Implement climate actions on cattle farms, to increase the availability of water and food, to better farm conditions, and to improve animal health, among others.

Mujeres Natura Credit: Promote women's business and economic participation in environmental issues, with differentiated conditions: biodiversity management, the purchase of specialized and efficient equipment or machinery, working capital, improvements to infrastructure and processes, or final products.

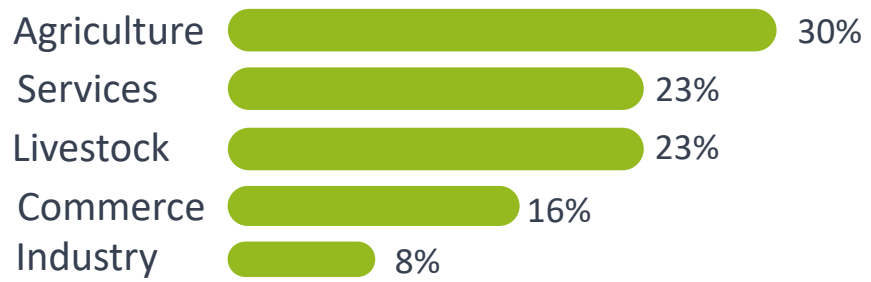
Our loan program during the last 8 years

20 USD million

Approved loans and credit lines

40 USD million

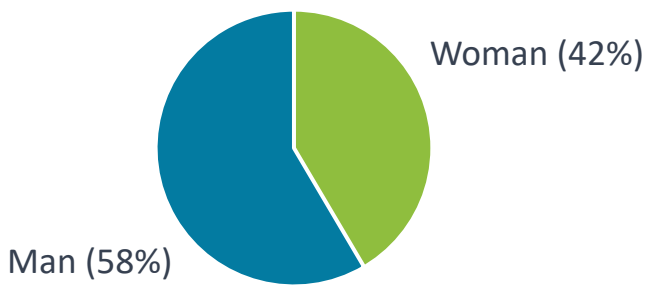
Amount disbursed



Total amount



Total borrowers



+1.000

Clients

Total amount

70%

Micro

30%

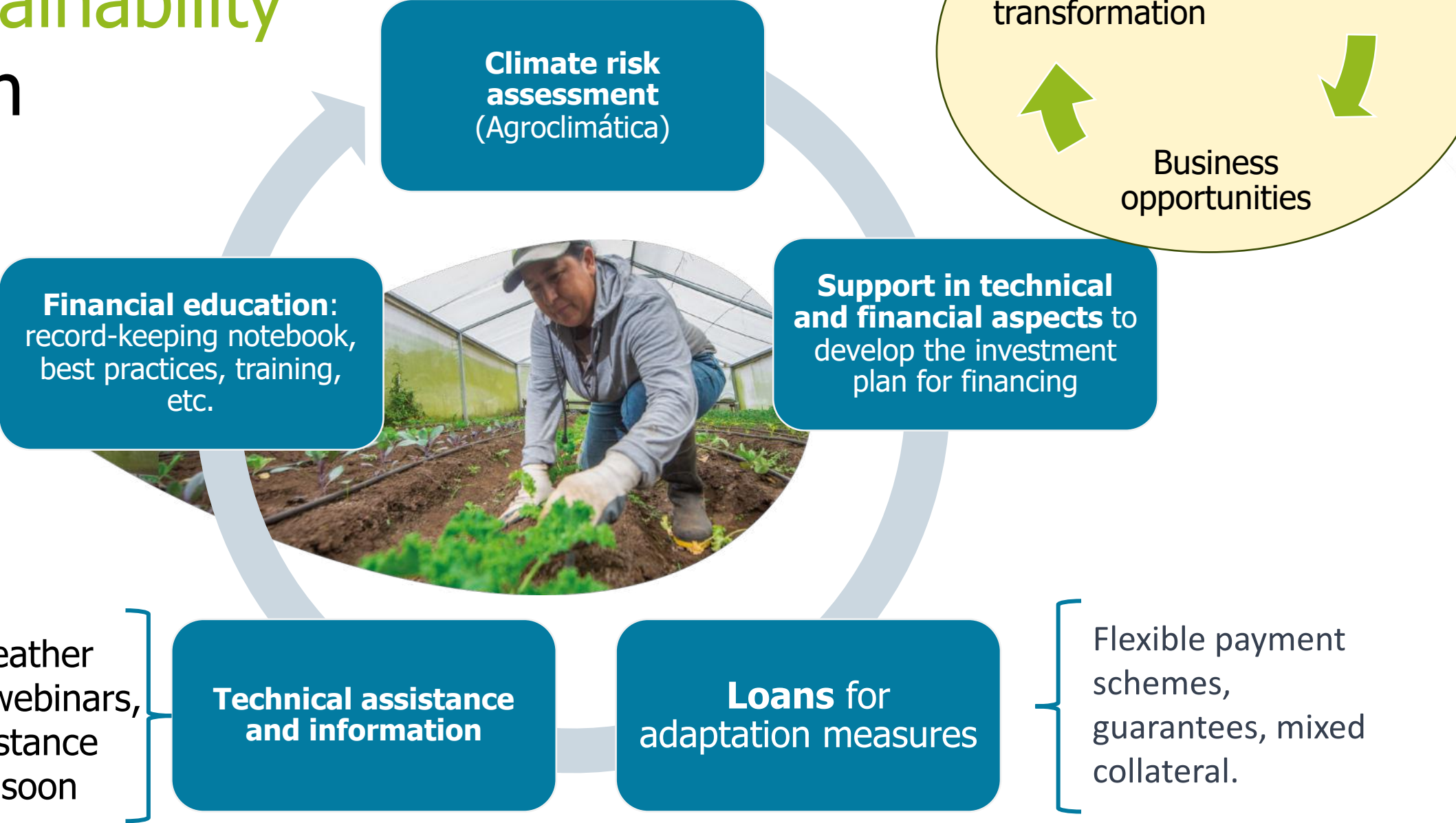
SMEs

Total borrowers

90%

Micro

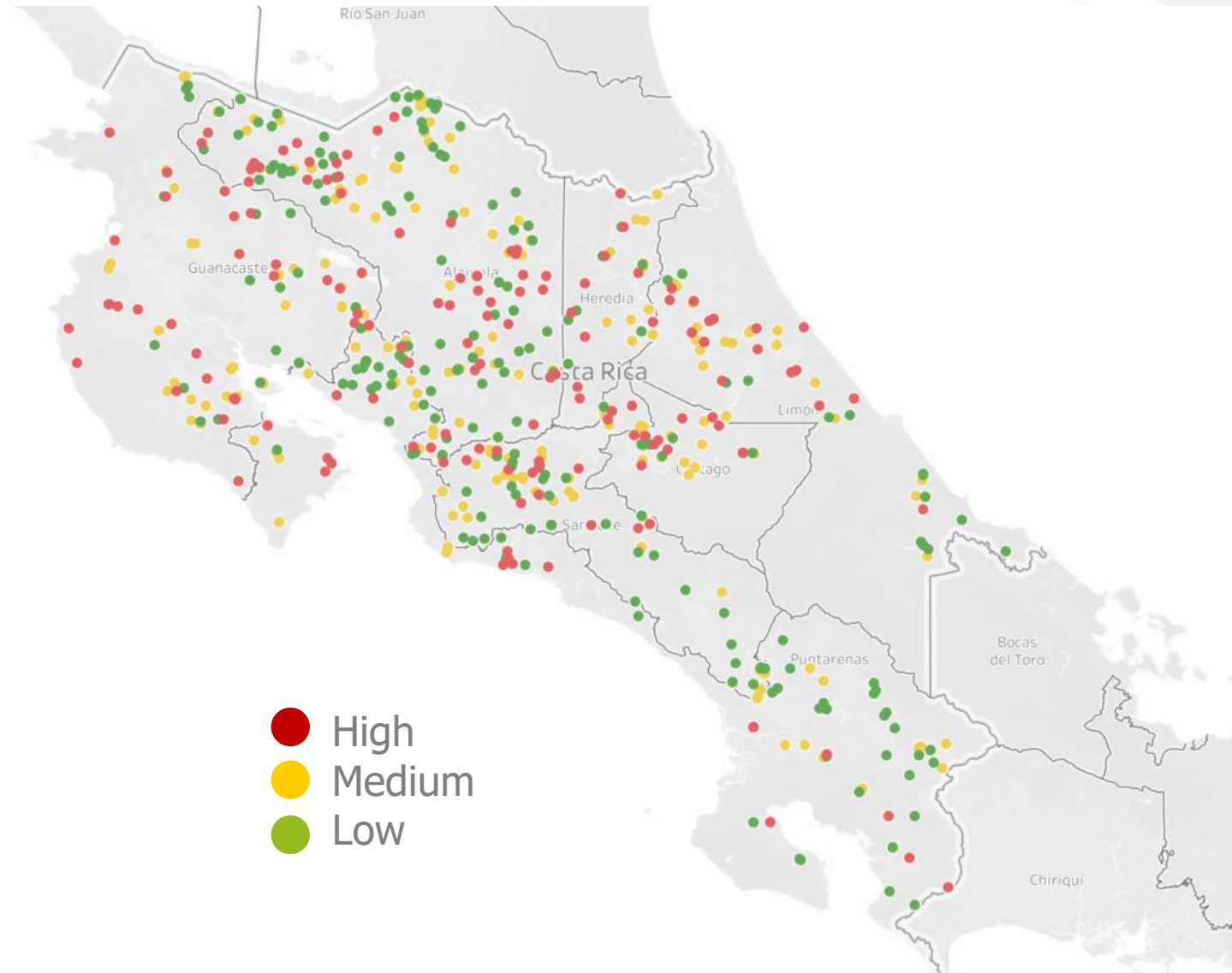
Our sustainability approach



Climate risk

Soil risk

Technical risk
(Livestock or crop risk)



Riesgo climático Alto

Se presenta un riesgo alto de estrés climático, principalmente debido a la precipitación y humedad relativa. El área seleccionada está expuesta a riesgos de sequía.

- La temperatura media es 20.6 °C y la oscilación media entre máximas y mínimas es de 5.8 °C.
- Humedad relativa media 79%.
- La precipitación acumulada es de 3440 - 4205 mm y la distribución temporal es regular.
- La elevación del sitio está en un rango entre 1201 - 1250 m.s.n.m.

Riesgo de suelo Medio

Se identifica que existen restricciones de suelo moderadas para el desarrollo adecuado del cultivo, principalmente por textura y pendiente.

- La vocación del suelo es AGRICOLA, con textura arcilloso, presenta un drenaje interno excelente y fertilidad aparente baja.
- La pendiente es de 21-25%.
- Grado de erosión fuerte.
- La profundidad del suelo es alta y es mayor a 100 cm.
- Riesgo de deslizamiento de laderas medio.

Riesgo de cultivo Bajo

No existen restricciones significativas que limiten el desarrollo adecuado del cultivo y sus buenos rendimientos.

- La variedad de CAFE es OBATA.
- El área a sembrar es de 10.50 Ha.
- La tenencia de la tierra es propia.
- La experiencia del productor/a es alta (Más de 5 años).
- La categoría de la semilla es certificada (Comprada en casa comercial, vivero, etc).
- La variedad del cultivo es de ciclo largo (15 años).
- El rendimiento potencial de la variedad seleccionada es alto.
- La probabilidad de aparición de plagas y enfermedades es alto.
- Sistema de Riego: No existente.
- Manejo del cultivo: Tecnificado.
- Se aplican medidas para el control de plagas y enfermedades.

| | | | |
|-----------------------|-------------------------|----------|------------|
| Ciclo productivo | 10/12/2022 - 10/12/2023 | | |
| Cultivo | CAFE / OBATA | | |
| Ubicación de la finca | SAN VITO | | |
| Latitud | 8.924499 | Longitud | -82.883693 |

Medidor de CO2

Esta actividad presenta emisión baja de CO2Eq

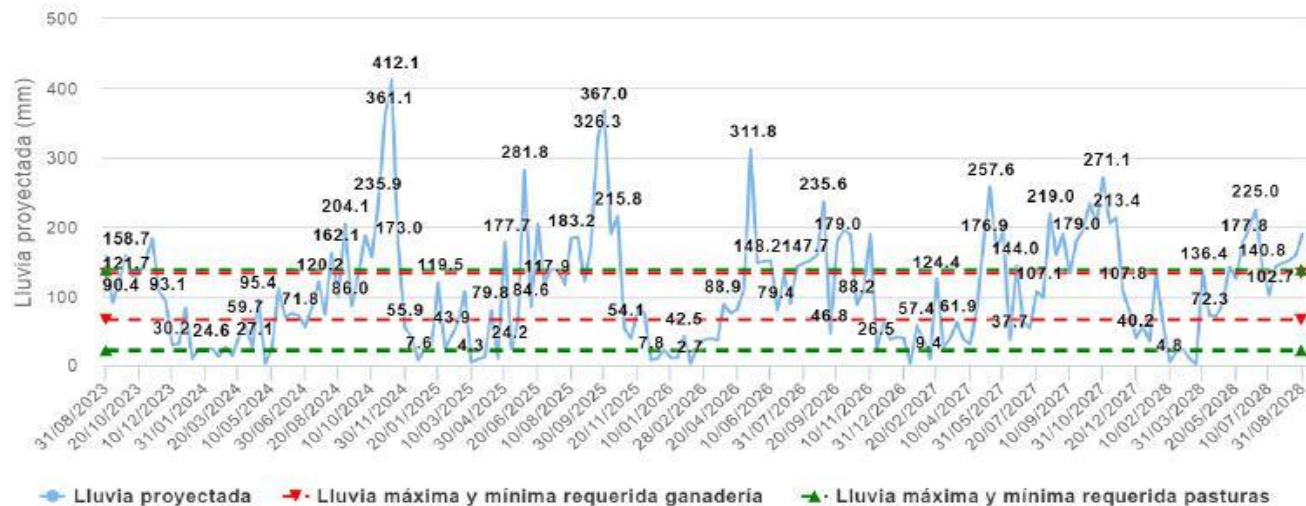


Nivel de riesgo

Medio 5.7



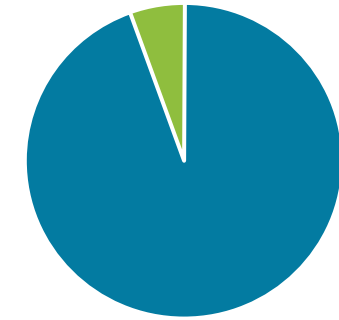
Lluvia proyectada



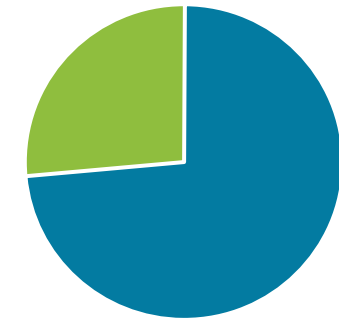
Las líneas discontinuas son el umbral para el desarrollo óptimo de la raza de ganado y pasturas, en términos de la variable presentada.

Adaptation actions

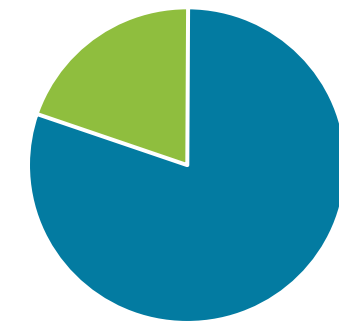
Only **6%** of producers with high climate risk had implemented measures **before** obtaining the credit



High risk



Medium risk



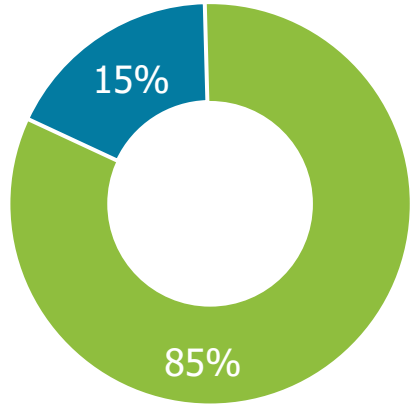
Low risk

● With adaptation measures

● Without adaptation measures

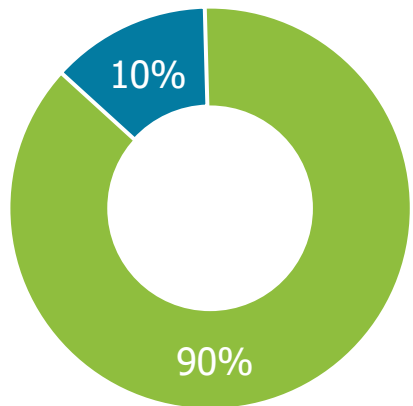


Agriculture



85% of our active clients in the **agricultural sector** implement practices such as drip irrigation, living fences, organic fertilizers, soil conditioning, rainwater harvesting, crop diversification, water reservoir, composting, and waste management, etc.

Livestock and fishing

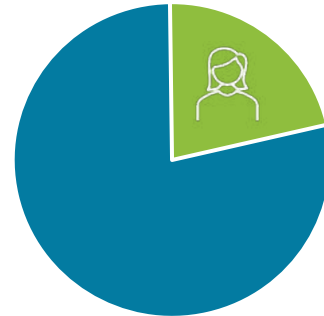


90% of our active clients in the **livestock and fishing sector** implement practices such as forage pastures; protection of water sources; rainwater reservoir, rotational grazing, silage, responsible fishing techniques.; respect for fishing bans, up-to-date permits, etc.

Guarantee fund to reduce gender gaps

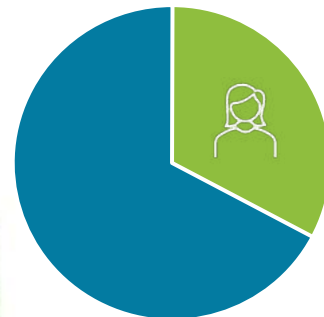
Regular loans

Loan amount



Woman
(22%)

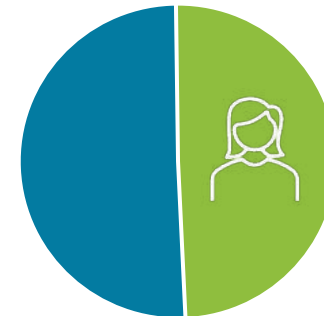
Total clients



Woman
(31%)

Guarantee fund

Loan amount



Woman
(49%)

Total clienst



Woman
(52%)





Fundecooperación

para el Desarrollo Sostenible

Permita que apoyemos su **actividad productiva**



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+(506) 2225-4507



info@fundecooperacion.org

www.fundecooperacion.org

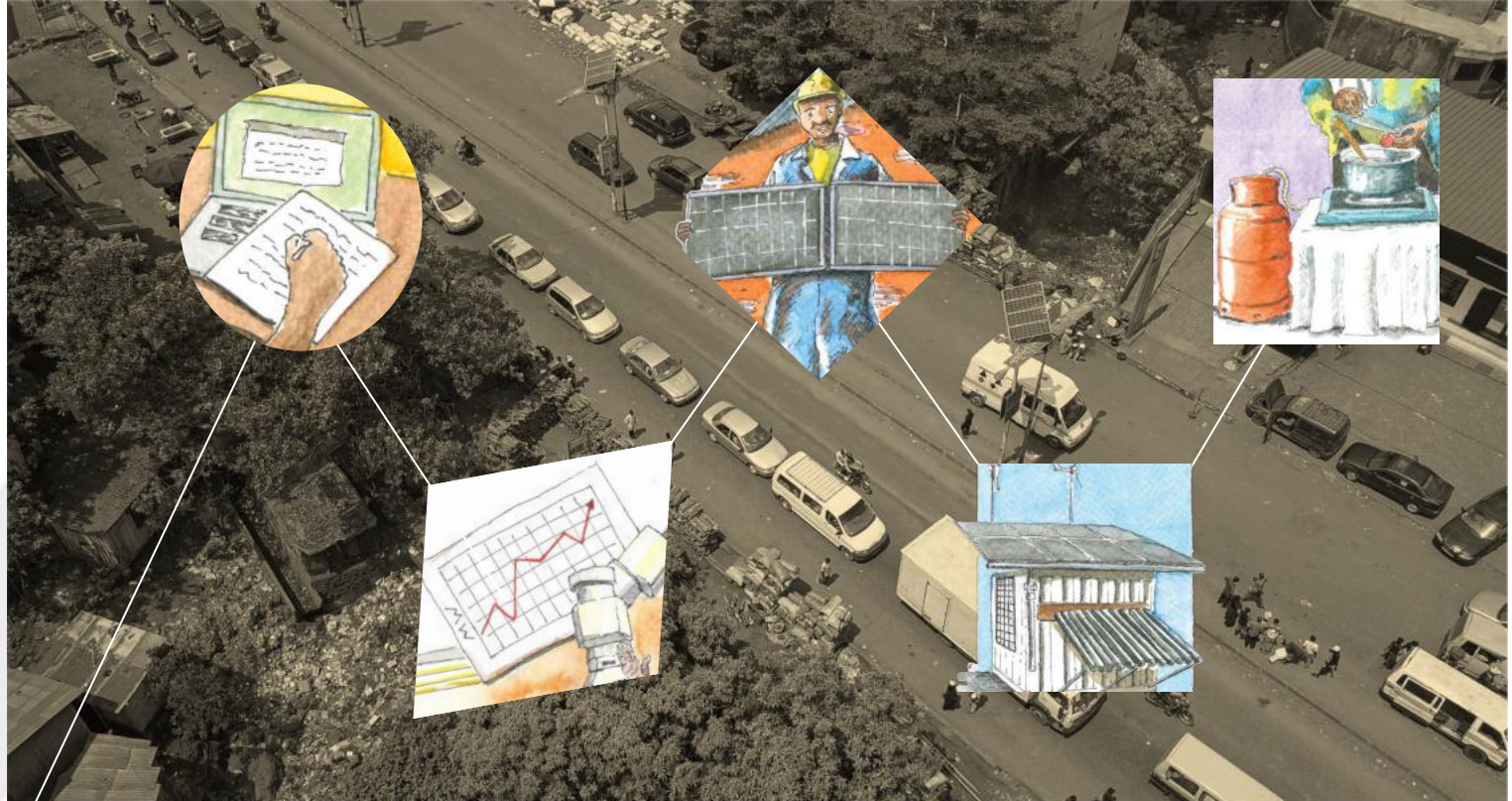


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Verónica Herrera
MiCrédito
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From Product to Impact: *Data Management* in **Green Inclusive Finance**



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Recognitions





We help reduce carbon footprint and air pollution.



Financing to customers who do not have electricity in their homes or are looking for energy efficiency.



Client gets her loan and buys her technology and the supplier installs it in her home.



Effects such as: improvement of your health, impact on the environment and reduction of your energy bill.





We seek to improve the quality of life and reduce the impact of environmental pollution.



We are looking for customers who do not have a decent bathroom or access to quality water.



MiCrédito is looking for a strategic partner to provide and advise on a sanitation or water solution



The client and his family get a sanitary battery and drinking water.



Positive impacts on the environment, such as: reducing contamination of the aquifer, rivers, lagoons and other water sources.



We establish strategies based on the SDGs



Achieving our environmental objectives



We design loans with a high social impact



Environmental policies are created



We perform monitoring and reporting



Staff and customer training



Environmental activities: garbage collection, tree planting, etc.



Alliances with relevant stakeholders in potable water, sanitation and clean energy such as: BID, Water For People, AMEC, CentroSmart, Plastitank, Cewas, Tecnosol, Solubrite



Communication campaign





Digital transformation in all transactional aspects of the organization.



We have a staff committed to protecting the environment.



Cloud data storage



Digital meetings and presentations



Communication campaigns to motivate to reduce, recycle, and reuse



Solar panel installation projects



Installation of water filters in the offices for responsible water consumption.



We designed a financial product with high social impact



Presented to the Board of Directors for approval



We are looking for strategic allies to sign agreements to provide service, technical assistance or training.



We train personnel



We are looking for a community leader to organize future events..



We organize fairs in areas of greatest need and promote funding in conjunction with allies, community leaders and collaborators.



Customers apply for credit.



MiCrédito approves financing.



The client invests and improves his quality of life.

**+9.5K people impacted with the
Clean water and sanitation loan.**

**+7.6K people impacted with
Access to Energy**

**+550 trees saved from paper
reduction**

**+300 trees planted in green
areas**

**+15 tourist sites visited to
collect garbage**

**+4K people impacted with
Satellite Agricultural Insurance**



EUROPEAN
MICROFINANCE WEEK
connecting the inclusive finance world

MiCrédito
Creemos juntos!!!

Thank You!

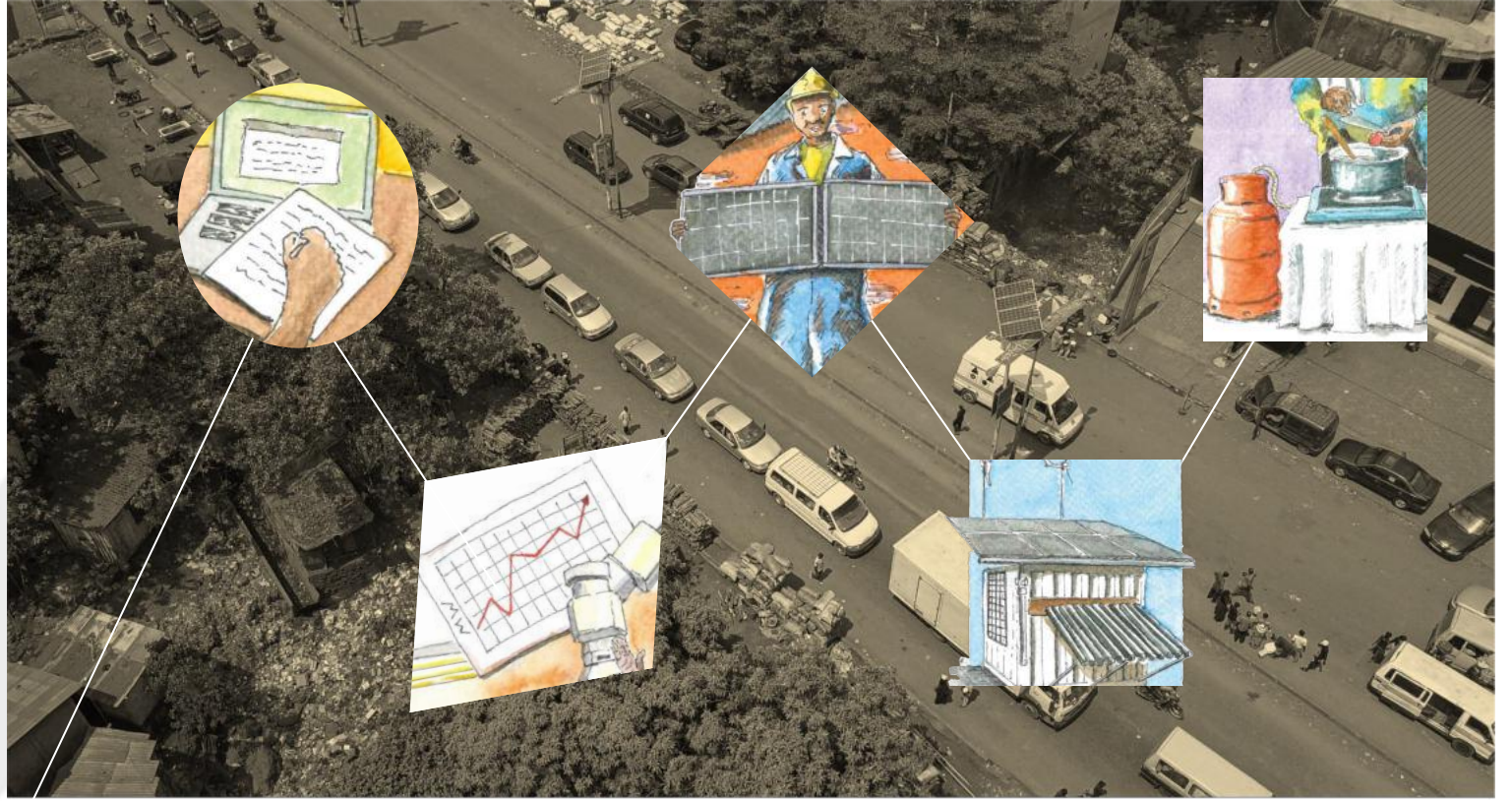
 www.micredito.com.ni

 MiCredito  MiCrédito  MiCrédito  @MiCreditoNica





Michel Hanouch
 CGAP



From Product to Impact:

Data Management in **Green Inclusive Finance**



European Microfinance Week

From Product to Impact

Michel Hanouch

Senior Financial Sector Specialist

The business case complications

1

Most products are subscale partly because of the diversity of customer needs. Where on the spectrum between tailored to flexible, will we find the value – scale balance?

2

Balance between affordability and impact, particularly evident in the insurance discussion

3

Climate solutions are often complex or new to inclusive FSPs and their customers and **require TA**

4

Partnerships are essential -TA, service providers, government (subsidy, training), donors, funders, other FSPs

5

External subsidy is often required, but complicated by lack of clear definitions of resilient and adaptive products

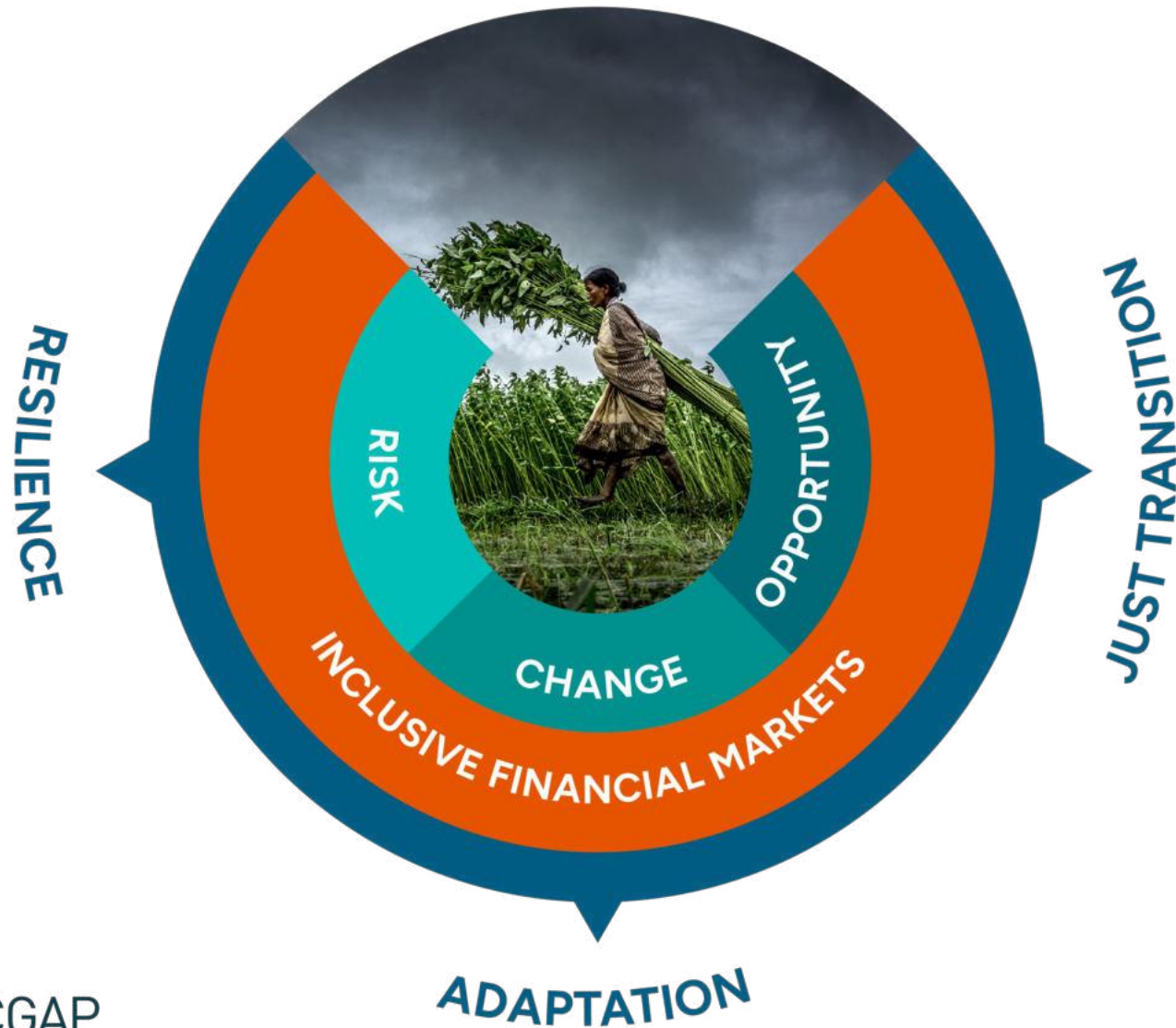
Risk (3rd party); survey;
Tx; staff; location;
competitor; other?

TA providers, solution
providers, funders, govt
departments (others?)
with aligned incentives



| | | |
|---------------------------|---|---|
| Savings | A Saving to build risk preparedness Climate adaptation savings accounts | B Emergency savings Resiliency funds |
| Credit | C Borrowing to build risk preparedness Broad climate adaptation loans D Climate-specific inputs credit E Climate-specific asset financing F Diversification loans | G Emergency borrowing H Relief loans Recovery loans |
| Credit + insurance | I Insuring to support borrowing Bundled loan/insurance products | |
| Insurance | J Index insurance K Area yield index insurance L Traditional insurance M Holistic insurance Insuring against risk | |
| Payments | N Payments to build risk preparedness Climate adaptation payments | |

You can't solve for climate change without financial inclusion



Climate change impacts the lives of the poor in ways that bring risks and change as well as new opportunities for development.

CGAP sees financial inclusion playing a role across this continuum, enabling poor people to pursue the responses they see fit.

Resilience, adaptation, and a just transition all require an inclusive financial system.

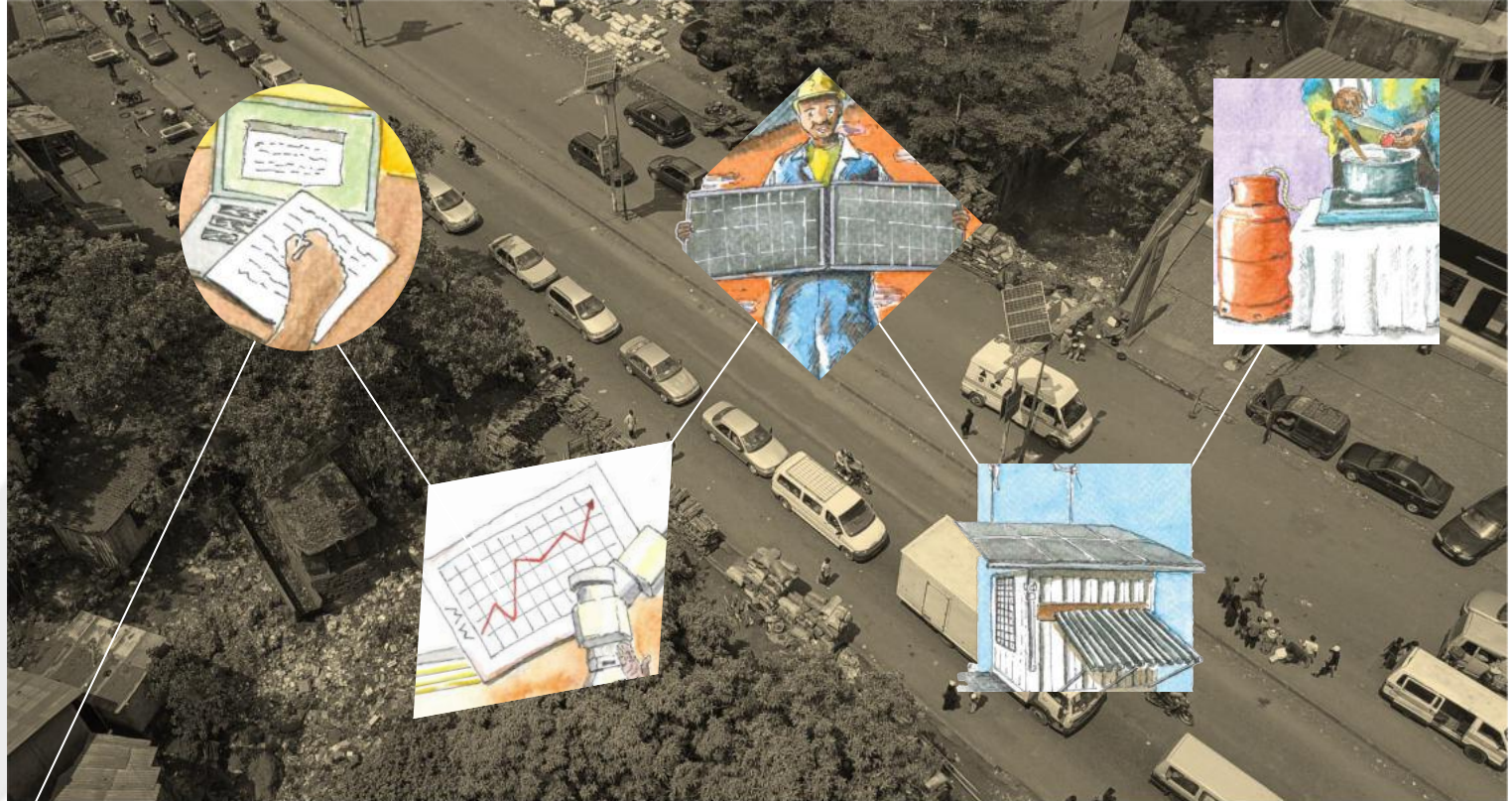


Thank you

To learn more, please visit cgap.org

Connect with us on these social channels:



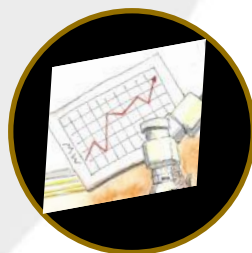


DISCUSSION

From Product to Impact: *Data Management* in **Green Inclusive Finance**



Environmental Strategy



Risk & Impact Management

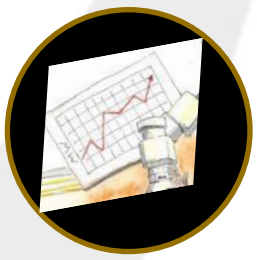


Green Product



Environmental Strategy

Objectives & regulations



Risk & Impact Management

Metrics, monitoring, investment



Green Product

Design, taxonomies & needs assessment

10 MIN each station



**Environmental
Strategy**
Objectives &
regulations



**Risk & Impact
Management**
Metrics, monitoring,
investment



Green Product
Design, taxonomies &
needs assessment



Natalia Realpe



Peter Zetterli



Michel Hanouch





Dania Obert



GROUP 1



Verónica Herrera



GROUP 2



Marianella Feoli



GROUP 3

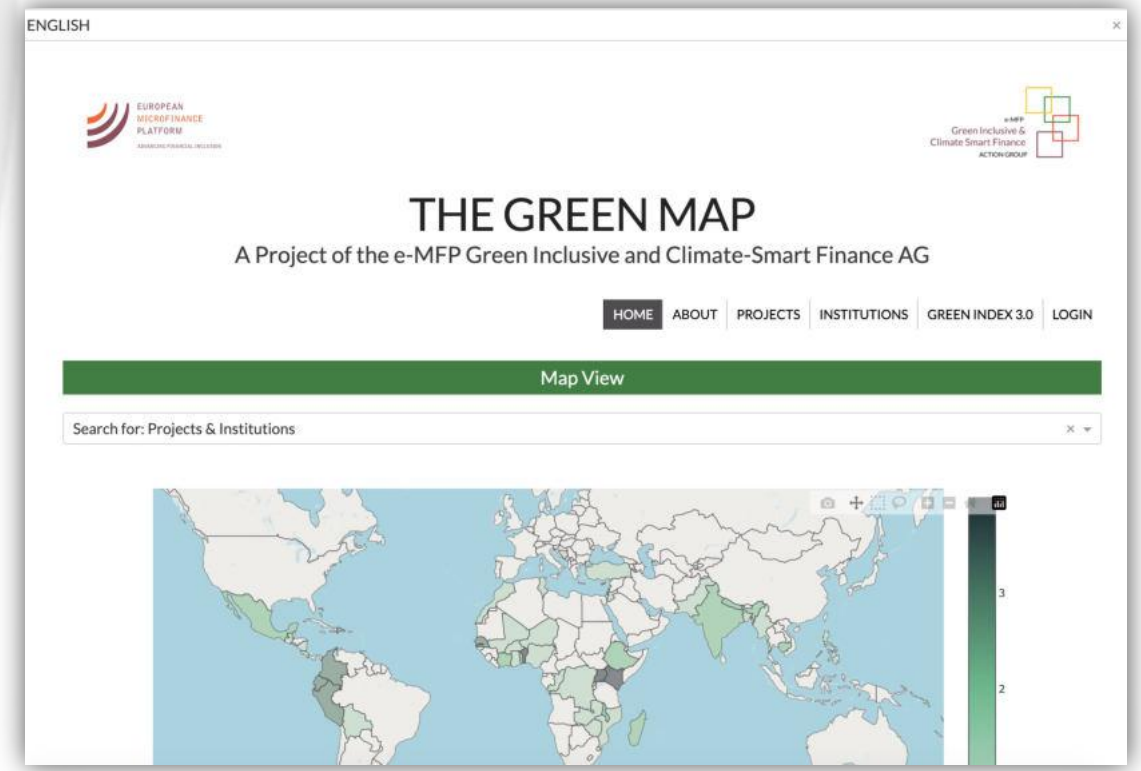


■ Give us your feedback 😊



LEARN FROM OTHER INSTITUTIONS:

The Green Map



<https://e-mfp-green-map.hedera.online/>

KEEP LEARNING: TRAINING IN GREEN INCLUSIVE FINANCE IN ENGLISH/SPANISH/FRENCH

e-mfp.eu/gicsf-trainings-workshops

Training on Green Inclusive Finance in English, en español, en français

The e-MFP Green Inclusive and Climate-Smart Finance Action Group is happy to provide a full training on Green Inclusive Finance to all its members and the sector at large. The training is organized in modules according to the topics. With the support of the Government of the Grand Duchy of Luxembourg, the GICSF-AG has been reviewing the modules, translating them to French and Spanish and producing audio-visual training materials that you can find here below.

Access to the structure and content of the training in [English](#), en [español](#), en [français](#)

Find below the **introduction videos** for each module as well as the **training materials** in English / en español / en français:



Module 1: Introduction to green inclusive finance
[Introduction video](#) & [Training material](#) in English

Module 1: Introduction à la finance verte inclusive
[Vidéo d'introduction](#) et [Matériel de formation](#) en français

Módulo 1: Introducción a las finanzas verdes inclusivas
[Video de introducción](#) y [Material de formación](#) en español



Module 2: Green strategy
[Introduction video](#) & [Training material](#) in English

Module 2: Stratégie verte
[Vidéo d'introduction](#) et [Matériel de formation](#) en français

Módulo 2: Estrategia verde
[Video de introducción](#) y [Material de formación](#) en español



Module 3: Assessment & management of vulnerabilities
[Introduction video](#) & [Training material](#) in English

Module 3: Évaluation et gestion des vulnérabilités
[Vidéo d'introduction](#) et [Matériel de formation](#) en français

Módulo 3: Evaluación y gestión de vulnerabilidades
[Video de introducción](#) y [Material de formación](#) en español



Module 4: Assessment & management of negative environmental impacts
[Introduction video](#) & [Training material](#) in English

Module 4: Évaluation et gestion des impacts négatifs sur l'environnement



Module 5.1: Green loans for clean energy/efficiency
[Introduction video](#) & [Training material](#) in English

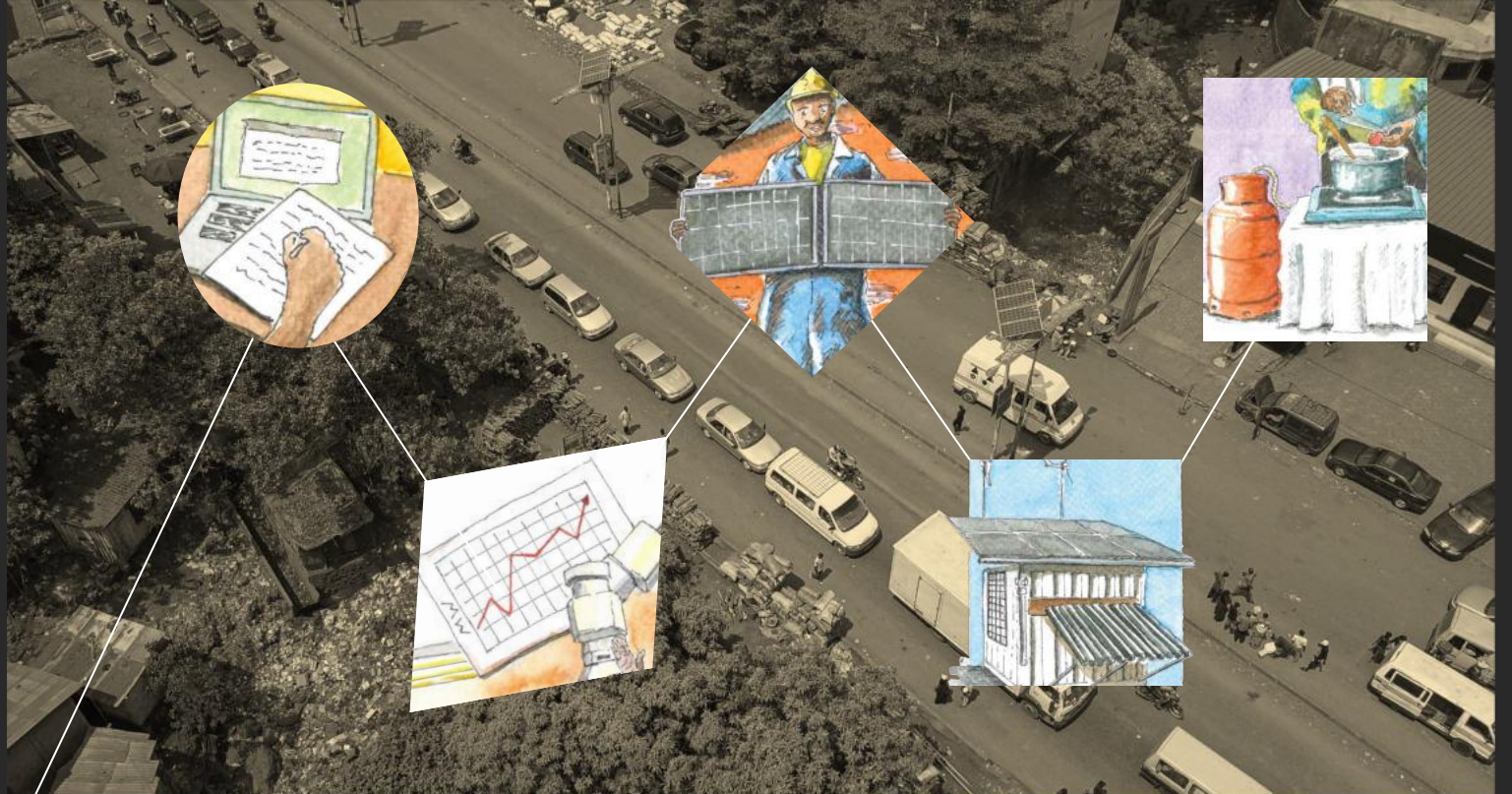
Module 5.1: Introduction aux crédits verts pour l'énergie propre et l'efficacité énergétique
[Vidéo d'introduction](#) et [Matériel de formation](#) en français



Module 5.2: Green loans for sustainable agriculture & CC adaptation
[Introduction video](#) & [Training material](#) in English

Module 5.2: Crédits verts pour l'agriculture durable et l'adaptation au changement climatique

<https://www.e-mfp.eu/gicsf-trainings-workshops>



THANK YOU'!

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