



# How can microfinance improve climate change adaptation?

The experiences of Rwandan smallholder

farmers & research outlook



# Speaker:

Professor Olga Biosca Yunus Centre for Social Business and Health Glasgow Caledonian University

## **Moderator:**

Dr.-Ing. Natalia Realpe Carrillo





Part of the Green Inclusive and Climate Smart Finance Action Group (GICSF-AG) webinar series





# The GICSF Action Group

The Green Inclusive and Climate Smart Finance Action Group (GICSF-AG) is a **unique** multi-stakeholder think-tank for environmentally responsible inclusive finance

### **OBJECTIVES**

- Discuss current challenges and strategies in green inclusive finance
- Improve knowledge and actions of inclusive finance actors on environmental issues
- Enhance cooperation among green inclusive finance actors
- Increase international attention on green inclusive finance
- Develop dedicated tools, recognized as "standard" by the inclusive finance sector, to support green inclusive finance
- Publicize and disseminate its findings
- Enhance the interest and concrete commitment of all actors (MFIs, investors, etc.)
   in green inclusive finance





# **Members**

Launched in February 2013 in Berlin and hosted by the European Microfinance Platform (e-MFP), the GICSF-AG has **150+ members** with different levels of engagement, affiliated with **75+** institutions, including:

ADA, Advision Finance, Agora, Alterfin, Antwerp University- IOB, Babyloan, BBVAMF, BFC, BIO, BNP Paribas, Cerise, Clarmondial, COFIDES, Digital Frontiers Institute, Envest Microfinance, ESAF, European Microfinance Network, KIVA, FDL, GAWA Capital, Global Environment Facility, Grameen Crédit Agricole MF Foundation, HEDERA, IFAD, IFU, ILO, Inpulse, LMDF, MAIN, MFC, MFR, MicroEnergy International, Microfinanza Srl, M-CRIL, myclimate, Sparkassenstiftung, Nitlapan, Palladium Europe, PAMIGA, reNature, SIDI, SOS Faim Belgium, Triple Jump, Univ. Bergamo, Univ. Genève, Univ. Lux, Rabo Foundation, RFR, REDCAMIF, ULB-CERMi, UNCDF, SPTF, World Bank, YAPU Solutions

# **Coordinated by the GICSF-AG Heads:**

- Natalia Realpe Carrillo, HEDERA & IASS Potsdam
- Davide Forcella, JuST Institute & CERMi









# GICSF-AG Website: https://e-mfp.eu/gicsf-ag



Green Index: Assessing Environmental Performance



**Trainings & Workshops** 



Publications & Online Library



**Ongoing Activities** 



Webinars



Definitions, Tools & Initiatives



**Events** 



Podcasts









https://www.e-mfp.eu/green-index

Developed by the e-MFP GICSF-AG

# Aligned with:

- International initiatives
- USSEPM Dim 7, co-developed with SPTF & CERISE





# GREEN INDEX 3.0 Digital Solution



https://www.emfp.eu/green-index

- The GICSF-AG is pleased to provide an online digital solution for the Green Index 3.0! The tool is publicly available and free of charge for everyone, to be used for data collection or training
- The Green Index 3.0 digital tool has been developed by A HEDERA https://hedera.online/ for the GICSF-AG



# https://hedera.online/gicsf ag tools/green-index-digital.html



The digital tool for the Green Index 3.0 has been conceptualized by Davide Forcella, Natalia Realpe Carrillo, and Alfonso Caiazzo and developed by Alfonso Caiazzo (HEDERA) as a service for the GICSF-AG





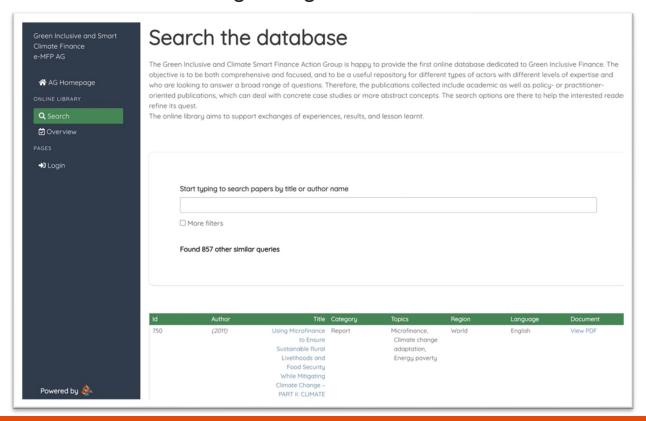
# Green Inclusive Finance Online Library



 Online library dedicated exclusively to green inclusive finance, publicly available, containing 500+ documents and growing!

https://gicsf-ag.hedera.online

Do you have a publication that should be there?
Send it to us to share with the sector!





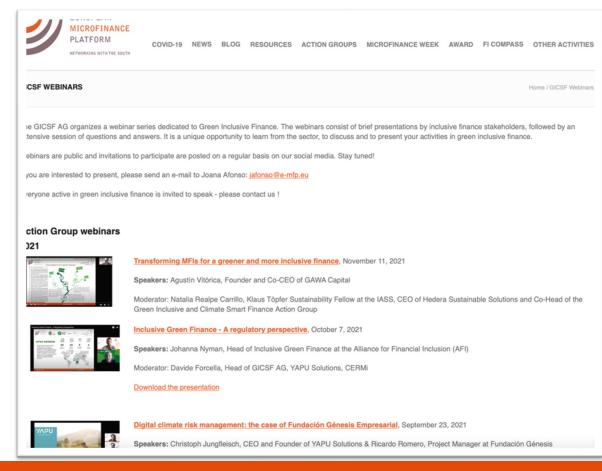


# Monthly Webinar Series on Green Inclusive Finance



- Webinar videos and presentations available online
- Best practices in the sector
- 20+ webinars!
- Over 2000 attendees!

https://www.e-mfp.eu/gicsf-webinars







# **Training on Green Inclusive Finance**



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

Interested in attending a training?
Contact us!

- 1. Green Inclusive Finance
  - 2. Green Strategy
- 3. Assessment & Management of Vulnerabilities
- 4. Assessment & Management of Negative Environmental Impacts
  - 5. Green Financial and Non-Financial Products and Services
  - 6. Green Inclusive Finance and Gender
- 7. Green Inclusive Finance and Digitization





# How can microfinance improve climate change adaptation? The experiences of Rwandan smallholder farmers & research outlook





# How can microfinance improve climate change adaptation?

The experiences of Rwandan smallholder farmers & research outlook

Prof. Olga Biosca

Principal Investigator: Dr Karin Helwig

Dr Michael Mikulewicz Emanuella Christensen



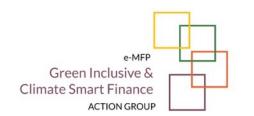


Patrick Mugiraneza
Dr Liberata Mukamana



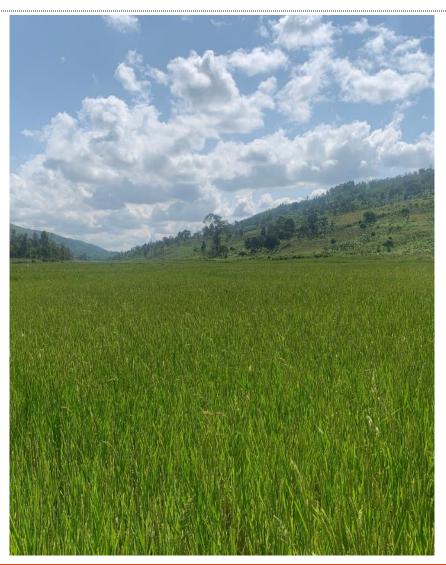






# **Outline**

- Our projects
- Research objectives
- Rwandan context
- Methods
- Findings
- Conclusions
- Future research outlook







# Our projects on microfinance and climate justice

- Two related, interdisciplinary projects carried out by researchers from GCU's Mary Robinson Centre for Climate Justice and GCU's Yunus Centre for Social Business and Health and University of Rwanda (2018-19, 2020-21)
- Funded by Opportunity International and GCU GCRF funding, in partnership with Urwego Bank







# Aim and 'select' research objectives

Our aim was to better understand how microfinance might be optimized to support climate change adaptation and to what extent access to climate-resilient solutions can be widened through MFIs in Rwanda.

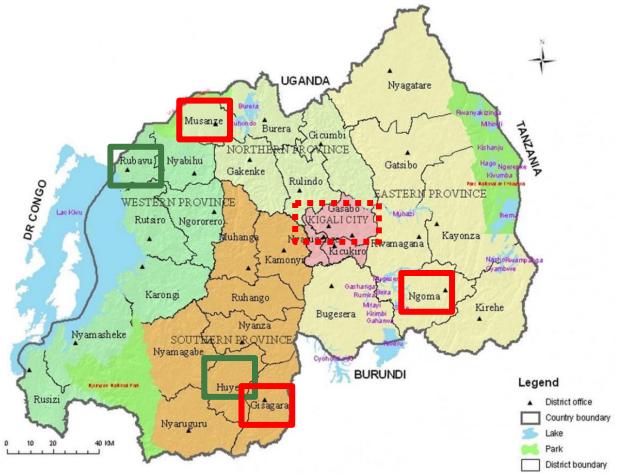
# Focus today is on:

- Perceptions on the effects of microfinance on farmers' adaptive capacity and on local development
- Examined strategies to make microfinance more effective in building climate resilience





Our research in context



Green: 2018-19 study

Red: 2020-21 study





# Research methods

- Desk research (academic and grey literature)
- Survey with smallholder farmers (n=370, incl. Kigali)
- In-depth qualitative interviews with smallholder farmers (n=30, excl. Kigali)
- Participatory mapping and transect walks in a sector of each research area: Butaro (Musanze), Murama (Ngoma), and Kansi (Gisagara)
- Stakeholder interviews with representatives of NGOs, MFIs, and private companies.







Sample characteristics (% exc. age)	Gisagara	Musanze	Ngoma	Total
Age	44	41	46	44
Female	60	37	34	44
No formal education	23	9	16	17
Married	71	80	86	79
House mud and wood bricks	60	55	45	53
Electricity (grid) and solar energy	41 and 35	67 and 9	63 and 24	80
Public tap and piped water	36 and 14	63 and 8	68 and 5	65
Harvest loss (during last season)	28	59	46	44
Current loan with URWEGO	34	65	42	47
In a farmer coop/ SACCO*/ VSLA**	97	87	97	94
Total	90	87	93	270

<sup>\*</sup>SACCOs are Savings and Credit Cooperative Organizations

<sup>\*\*</sup>VSLAs are Village Savings and Loan Associations





# Microfinance and climate change adaptation

 Clients largely praise microfinance as a key tool for increasing their productivity and climate resilience. It enables them to take steps to better cope with climate risks.

 Loans are mainly invested in fertilizers and seeds, which is due to URWEGO's loan design.

Well, loans help me in my agricultural activities, for example, I may have a field to cultivate and seeds to plant but don't have any money to buy fertilizers or pay workers. (M8)







# Barriers for equal access to microfinance

- 1. Financial insecurity and low-income: Eligibility of savings groups and coops (upfront initial share fee, membership fees, regular monthly payments).
- Lack of education, training and mentorship
- Fear and lack of confidence

For now, I am not on the level to afford it (joining a cooperative), I can't afford weekly contribution, I may join and become indecent. (G6)

I assume (that those who do not take out loans) maybe they lack people to give them advice. (N4)

Why people do not access loans? The first thing is fear and the second thing is lack of knowledge. (M9)





# **Recommendations for MFIs**

# Loan products

- Cash loans for agric. inputs (seeds, pesticides, fertiliser, labourers)
- Agric. infrastructure loans or lease: •
  irrigation systems, sowing & harvesting
  equipment, transport, post-harvest storage
- Loans for environmental protection (terracing, tree planting, sustainable land management)
- Improve speed of loan disbursement, subsidised interest rates, flexibility for adverse weather events
- Emergency funds interest free loans, grants, or in-kind support

# Services

- Training clients on financial literacy, business, climate change, adaptation…
- Build capacity within MFIs on green finance and climate adaptation (e.g. agronomists)
- Equitable insurance access (high-risk areas) & harvest (vs. loan) insurance
- Collateral guarantees for assetless youth and women
- Explore market linkages
- Partnerships for financial inclusion (with, e.g., FinTechs/ mobile phone companies, 'graduation programmers', etc.)





# **Future research outlook**

- Limited academic literature (need for multidisciplinary teams, understanding partners and funders, well-defined roles and RQs, etc.)
- The relationship between adaptation, microfinance and climate justice needs to be further explored.
- Academic literature needs to better understand access, use and refinement opportunities of MF products and services for adaptation.
- Need to explore responsible and just options for financial inclusion to the poorest (especially youth!).
- There is plenty of (pilot) innovation in the area... and research opportunities!







# Thank you!!

# Get in touch:

Olga Biosca

Olga.Biosca@gcu.ac.uk



@obiosca

An event organized by the Green Inclusive and Climate Smart Finance Action Group (AG-GICSF) Do you want to be a presenter or moderator in the webinar series? Please contact us:

Heads of the GICSF-AG:

Natalia Realpe Carrillo: <a href="mailto:natalia@hedera.online">natalia@hedera.online</a> e-MFP contact:

Davide Forcella: <u>davide.forcella@yahoo.it</u>

Joana Afonso: <u>jafonso@e-mfp.eu</u>