Financing Ecosystem-based Adaptation (EbA) through Micro-Finance Institutions

Case information	
Action area:	**Adaptation**
Focus area:	Financing
Country:	Colombia and Peru (2012-2017) Colombia, Peru, Ecuador, El Salvador, Costa Rica, Dominican Republic, Benin, Madagascar, Senegal (2018-2019)
Sector(s) involved:	Banking, microfinance, environment, smallholder agriculture including livestock
Timeframe:	Since 2012, ongoing
Case summary:	**Although private sector involvement in climate adaptation finance is still a novelty, the United Nations Environment Programme is working with Microfinance Institutions (MFIs) to shift the paradigm.** MFIs cater to some of the most vulnerable populations, so if they promote sustainable adaptation products and services, they can target those who need them the most. Since 2012, the Microfinance for Ecosystem-based Adaptation (MEbA) project has provided technical assistance to MFIs so they may autonomously disburse loans oriented towards Ecosystem-based Adaptation (EbA) options. In the process, MFIs incorporate the tools provided by the project to increase the climate resilience of their clients and overall portfolio. Initially, three MFIs in Colombia and two in Peru participated in the project. Now, in its second phase, twelve MFIs are participating from six Latin American countries and three African countries. The long-term goal is that partner MFIs **extend specific loans to farmers for climate change adaptation measures and offer subsidized loans in return for expected climate benefits**. Barriers include identifying which adaptation measures qualify in which specific region and how credit officers can measure and report these to donors. The main climate challenges identified locally by one of the participating banks were increased temperatures and landslides as well as flooding caused by extreme rainfall. Resulting **yield losses are currently exacerbated by poor farm management practices and limited access to financial resources**. The project is aiming to help farmers adapt to climate hazards by identifying local adaptation measures and financing them with favorable conditions. **The project aligns well with Nationally Determined Contribution (NDC) adaptation targets and strategic areas in Colombia as well as in Peru.** In Colombia's NDCs, agriculture was identified as a key sector for adaptation with a **heightened importance as revenue generating activity in post-conflict rural areas**. Ten agricultural subsectors, including rice, coffee, livestock and combined systems, are planned to have improved capabilities to adapt to climate change and variability. In Peru, a strong focus is on **areas that have been previously deforested and where agricultural productivity is low due to degradation**. In this regard, EbA is a strong fit and aligns well with sector policies beyond the country's NDCs.
Case description	
Background	Commercial banks and microfinance institutions offering credits specifically for climate performance are still very rare. Local banks partnering with development finance institutions to channel donor funds usually do so for small and medium enterprises in

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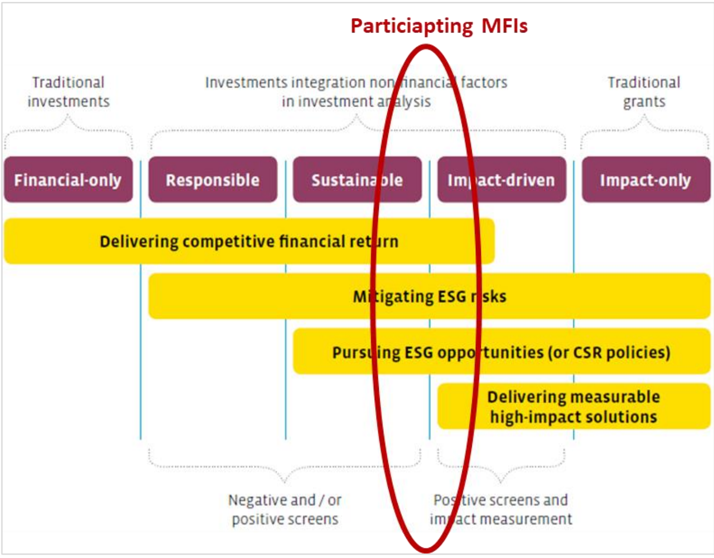
general, without further restrictions; or to larger companies able to comply with environmental-social safeguards. Such "green credit lines" that do exist, are usually limited to clean energy and energy efficiency loans. Agricultural lending is still quite limited, particularly to small-scale farmers because of the perceived risk by lending institutions of this activity and group.

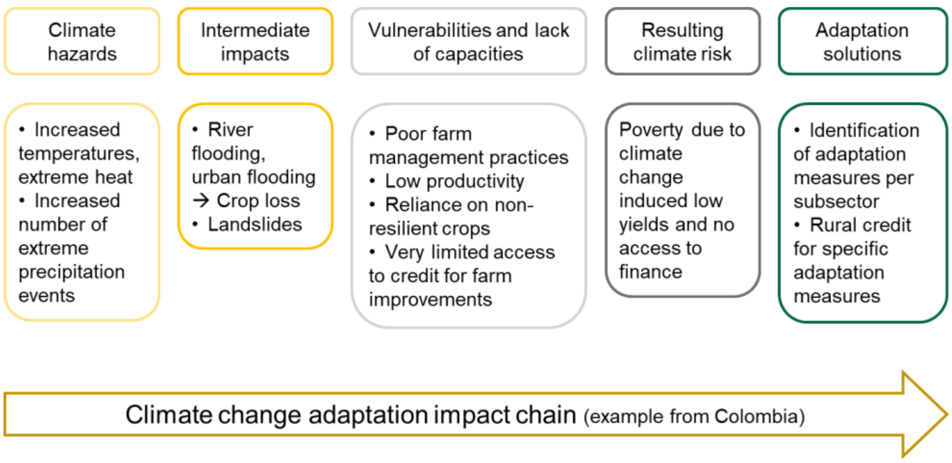
Participating MFIs operate on a commercial basis and usually have substantial portfolios in agriculture. The majority of their clients live in rural areas and in many localities they are the only credit institution present. The MFIs use grant resources from donor organizations to conduct capacity building for their loan officers and in the long-run to offer subsidized loans for climate change adaptation.



The MEbA project was conceived to increase capacity in microfinance institutions by introducing and promoting adaptation-specific financial products and services. The main pillars of the project are (1) assistance in the development and implementation of **new financial products and services tailored to rural populations that are vulnerable to the effects of climate change**; (2) provision of customized capacity building to MFIs, technical partners and clients; and, (3) support of the establishment of an enabling environment for the microfinance sector to become a key player in financing adaptation practices.

Adaptation hypothesis

Below is an example of a climate change impact chain with identified adaptation options for one region in Colombia.



Activities	The overall aim of the project is to **increase lending for EbA**. The long-term vision is to establish subsidized green credit lines offered by state development banks or other development finance institutions that MFIs can access and channel to smallholder end beneficiaries. In a stepwise approach, MEbA has identified **MFIs as entry points for capacity building and product development for EbA.** In its first phase, MEbA built capacities in five microfinance institutions in Colombia and Peru in the following areas: 1. **Awareness raising** among small-scale farmers on climate impacts and EbA alternatives: Capacity building for farmers was carried out by partnering agricultural extension providers. **Demonstration farms** showcasing EbA best practices were additionally installed as an inspirational capacity building measure. 2. **MFI staff training** on key climate change and environmental conservation concepts: Capacity building was offered for credit officers and managers within participating banks. 3. **Management of agro-climate risks** and improvement of information management systems at portfolio level through methodology development and IT solutions, depending on MFI demand. 4. Development of EbA-oriented micro-lending services (product development): A **detailed cost-benefit analysis of various adaptation measures in agricultural subsectors in selected regions of Colombia and Peru** was carried out in order to calibrate necessary financial terms for specific adaptation measures. In the end, **credit conditions were defined** in order to service necessary loans for the identified adaptation measures. 5. **Fostering partnerships** with technical entities to assist clients in implementing EbA options. With the development and testing of sector-specific tools and solutions, partner MFIs are now autonomously promoting EbA-oriented loans and catering to specific needs of their clients while improving efficiency and reducing operating costs. MEbA also works with government ministries and development finance institutions (DFIs) to set an enabling environment for replication and scale-up. Now, in its second phase, the MEbA concept is being replicated in twelve MFIs in Colombia, Peru, Ecuador, El Salvador, Costa Rica, Dominican Republic, Senegal, Madagascar and Benin.
Institutions involved	Funding: The project is funded by the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety of Germany (BMU), under the framework of the International Climate Initiative (IKI). Implementing organization: United Nations Environment Programme (UNEP) – Latin America and the Caribbean Office. Executing partners: Frankfurt School of Finance & Management (Frankfurt School-UNEP Collaborating Centre for Climate & Sustainable Energy Finance) (2012-2016) Fundecooperación para el Desarrollo Sostenible (2018-2019) YAPU Solutions (2018-2019) <u>Partner Microfinance Institutions Phase I</u> Colombia: Bancamía, Contactar, Crezcamos Peru: Fondesurco, Solidaridad <u>Partner Microfinance Institutions Phase II</u> Colombia: Interactuar, Coomultagro, Fundación delamujer Peru: Caja Rural Los Andes, Cooperativa de Ahorro y Crédito Norandino Dominican Republic: Adopem Costa Rica: Fundecooperación para el Desarrollo Sostenible El Salvador: Banco de Fomento Agropecuario Ecuador: BancoDesarrollo Benin: Comuba MF Senegal: Caurie MF

	Madagascar: Vahatra ONG	
Cooperation with	n/a	
Finance	Phase 1: • € 4 million project size, 11,8000 micro-loans disbursed by 2017 • 100% grant financing from donors to develop tools and processes • Loans 100% financed from participating MFIs' balance sheets • Average loan size: 1,300 USD • Average farm size: 1-5 hectares Phase 2: • € 1 million extension • Banks' own capital + grants from donors in the ratio 1:3 • Technical Assistance grant and credit line co-financing from BNP Paribas for 2 selected MFIs	
Impact of activities	**More than eight thousand smallholder farmers** in Colombia and Peru have received awareness raising training on the topic of EbA measures and a total of **11,800 loans have been disbursed**. Nearly 3,000 farmers have received some level of **training** on EbA methods. Almost 2,000 MFI staff members have also received training on key aspects of the MEbA project. MEbA has **proven the business case** for MFIs to approach the agriculture market with sound methodologies and tools to promote sustainable adaptation.	
Case learning:		
Why is it good practice	**MFIs are well positioned to serve as intermediaries to reach small, vulnerable farmers** in areas, where services are usually scarce. Providing capacity building and investment resources for local financial intermediaries on new topics such as EbA, places them in a position to be multipliers for better management practices. When credit officers receive **training on the specific requirements of adaptation loans** (defining the use of proceeds, longer term, offering grace periods), they are better able to pro-actively market these to bank clients. **Approaching adaptation to climate change differentiated by region and land use type** is necessary in order to achieve meaningful resilience outcomes. The climate risk assessments conducted for participating MFIs went to a **level of detail** usually not achieved in credit programmes.	
Success factors	From the point of view of a participating local bank, the mix of actors providing **multiple sources of financing for a common cause** is a great benefit. This way the time-consuming process of developing a new credit line is not entirely dependent on one funding source and the respective short project cycles. For phase two, **mandatory co-financing by participating MFIs** was built in to enhance buy-in and uptake of the project. One third of technical assistance costs is provided by MFIs now, whereas loans continue to come from the banks' balance sheets.	
Overcoming barriers/ challenges	What were the main barriers / challenges to delivery?	How were these barriers / challenges overcome?
	Information: There is a lack of localized information on costs and benefits of EbA measures – both for farmers and credit officers. Verifying that investments are actually achieving the intended impact is a challenge, as well as implementing practical and cost-efficient impact monitoring. New credit lines only work if financial terms are attractive enough	Technical assistance grants were provided by donors to cover the costs of localized cost benefit analyses in various geographic regions and sub-sectors. Providing Technical Assistance for MFIs to become more efficient in their procedures. Part of this increased efficiency helps compensate increased verification requirements.

	for MFIs to perform additional monitoring and verification steps.	
	Institutional: Participating microfinance institutions had capacity gaps regarding climate change in general, adaptation measures that clients can take, green credit line development, and climate benefit monitoring. Somewhat informal credit rating processes at MFI level and lack of strong impact monitoring of the triple bottom line. MFIs' core business is lending; they are not professional providers of agricultural extension. They therefore reach limits when advising farmers on best practices. Usually, loans are not monitored in detail after disbursement and no monitoring of use of proceeds occurs.	Technical assistance included capacity building and targeted training for bank staff, especially credit officers in branch locations, where adaptation measures are planned to be financed. Better questions in credit assessment process, index on adaptation capacity progress, rating system. Linking MFIs with entities that have long experience in the respective regions and provide agricultural extension to farmers who are also loan beneficiaries. These Technical Assistance providers can be involved in the required verification procedures to prove the intended positive impacts of a loan (economic, environmental and social).
	Financial: Investors with the risk appetite to lend for the long term in agricultural primary production are rare. The perceived risks of new measures such as EbA frightens the providers of impact capital even more.	Once the credit lines for EbA are fully operational, and loan terms finalized, this programme can serve as an example of how concessional climate finance can achieve adaptation results.
Lessons learned	Even the private sector, commercially driven entities such as commercial banks and MFIs need substantial support in the form of grant financing in order to help them move away from business as usual and gradually test new processes aimed at sustainable adaptation. Due to the high perceived risks and associated costs of new technologies, practices and lending procedures, commercial players will always weigh their stakeholders' interests (returns) against potential development impacts. **New ways of lending**, such as green credit lines or loans for adaptation measures, **need to present a clear business opportunity in the form of increased income or reduced costs**.	
How to replicate this practice	Replication can happen within the participating banks' portfolios or with further banks in other regions or countries. **Lending for adaptation has a global market potential. In Latin America and the Caribbean, there are 11.5 million small agricultural producers, representing a USD 12.8 billion market.** **- Replication within participating banks' portfolios:** The following steps are suggested to replicate adaptation lending in any other sector or region: First, localized climate risk and vulnerability assessments should be carried out and tailored to the regional presence of the bank and relevant sectors in the portfolio. Out of a long list of adaptation measures that either reduce exposure or vulnerability, a short list of adaptation measures that require financing needs to be distilled. Finally, a credit product needs to be developed for such specific measures. **- Replication with other financial intermediaries:** The above also applies to new banks wanting to participate in the programme. A first climate change risk assessment at portfolio level differentiated by geographic region, sector and/or client segment should be followed by deep dives into sectors and regions that represent a financing opportunity for the bank. In addition to these steps, a capacity-building process must take place within the financial	

	institution to improve risk and information management, ensuring that the proposed solutions are embedded in their business procedures.
Further information	
Contact for enquiries:	UN Environment: Jacinto Buenfil, MEbA project manager Jacinto.buenfil@un.org Jessica Zapata, MEbA manager Colombia, Jessica.zapatajimenez@un.org Gustavo Mañez, Regional Climate Change Coordinator, gustavo.manez@un.org
Further key resources:	GIZ publication on financing EbA, mentioning the MEbA project: https://www.adaptationcommunity.net/wp-content/uploads/2018/06/giz2018-en-eba-finance-guidebook-low-res.pdf
Website(s):	Background information on the UNEP MEbA initiative: http://unepmeba.org/en/ Overview of adaptation measures, their costs and benefits: http://unepmeba.org/fileadmin/user_upload/pdf/Microfinance%20for%20Ecosystem%20based%20Adaptation_EN.pdf Bancamía press release on the local project: http://www.fundacionmicrofinanzasbbva.org/en/bancamia-implanta-proyecto-adaptacion-cambio-climatico-para-agricultores/ IDB information on working with Bancamía: http://www.iic.org/en/projects/project-disclosure/11619-02/bancam%C3%ADa-financing-rural-producers-and-microentrepreneurs
Case study author:	Dr. Katalin Solymosi, UNIQUE forestry and land use GmbH
Case study contributor:	Jacinto Buenfil, MEbA project manager
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Registered offices
Bonn and Eschborn, Germany

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn
T +49 61 96 79-0
F +49 61 96 79-11 15
E info@giz.de
I www.giz.de

Support Project for the Implementation
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Author
Dr. Katalin Solymosi, UNIQUE forestry and land use GmbH

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