

# Aid for Climate Refugees in Developing Countries: Microfinance?

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#### **ABSTRACT**

Climate change is objectively one of the major problems humanity faces and will continue to combat for the foreseable future. This is partly because the effects of climate change contribute to a multifaceted, manifold challenge not just experienced by the environment. For instance, poverty reduction and worldwide development are complicated, as individuals and groups must adapt. In developing countries, the severity of this adaptation is heightened, resulting in the people experiencing a higher vulnerability, or inability to cope with disruptive changes. Furthermore, climate refugees in developing countries, or people who are forced to leave their home region as a result of the effects of climate change, are placed in even higher vulnerability, given their minimized resources. Microfinancing offers a potential solution by providing tailored financial services like credit, savings, and insurance, empowering vulnerable populations to build resilience. However, challenges exist. Especially with climate refugees in developing countries, there is a higher likelihood of a lack of understanding of the lending process amongst borrowers and it is more difficult for borrowers to increase their incomes for repayment, given their lack of resources. An adapted banking model, intermediated microfinance, could mitigate these challenges by ensuring benefits for climate refugees and lending institutions. Through the presence of case studies, this paper will examine how intermediated finance and its connection with microfinance can promote growth and economic resilience amongst climate refugees despite "insurmountable" barriers.

# **Background**

At the moment, the main component of climate change increasing climate refugee numbers is global warming. A 2023 NASA analysis highlighting the change in global surface temperature compared to the long-term average from 1951 to 1980 indicated that Earth's surface temperature in 2023 was the warmest to date since recordkeeping was initiated in 1880. Additionally, the analysis found that the last ten years are the warmest years on record. This increasing trend can the melting of glaciers and ice caps, in turn, the increase of sea levels and the presence of flooding. Additionally, drought can occur from higher temperatures, interrupting the livelihoods of farmers and their economies. This desertification is evident near the Horn of Africa, where residents often engage in subsistence agriculture, a form of farming where crops are grown not in surplus, but rather in enough capacity to feed a farmer, their family, and community. As a result of constant drought, residents have been forced to flee to refugee camps in Kenya, overflowing the designated capacities. It is even more unfortunate that those who contribute the least to global warming are paying the price.

The origins of microfinancing are commonly thought to be rooted in the Grameen Bank of Bangladesh in the 1970s, however, this service can be traced even earlier to the mid-1800s, when theorist Lysander Spooner wrote about the benefits of such practice. However, the practice is commonly thought to be rooted in the 1970s for good reason, as microfinance programs of the time proved that borrowers could be trusted to repay their loans, and people in developing areas could be served without the need for subsidies from governments or any other institutions. According to FINCA, a global microfinance nonprofit widely praised for its village banking, "local service" methodology, the simple definition of microfinance is "the financial services provided to low-income individuals or groups who are typically excluded from traditional banking." These services are commonly composed of small capital loans or in



some cases money transfers and savings accounts. However, to better understand the connection between microfinance and its potential aid for climate refugees, one should know the "goals" of microfinance. In 2005, The Economic and Social Council of the United Nations proclaimed five goals for microcredit, as presented in Figure 1.

# 5 Goals of Microcredit

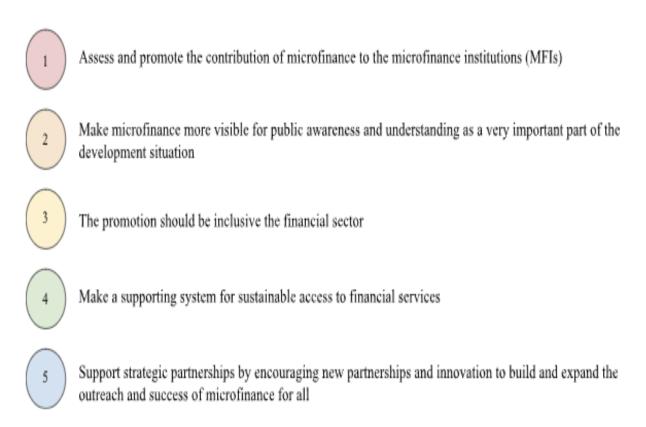


Figure 1. The UN's Proposed 5 Microcredit Goals

## **Initial Challenges and Limitations**

Traditional microfinance presents various challenges and barriers to aiding climate refugees, prompting the need for an intermediate service. But to understand this complementary service, one must understand the problems it addresses.

One obstacle MFIs (Microfinance Institutions) create for borrowers is their comparably higher interest rates than commercial banking. The MFI interest rate ranges from 12% to 30% while commercial banks range from 8% to 12%. To sustain their operations consisting of costs like time and human capital, MFIs must charge extremely high interest rates. This can result in already vulnerable refugees being left in a worse situation, as borrower indebtedness increases from these sky-high interest rates.

While considering the borrowers' demographics, it is crucial to note these climate refugees are from "developing countries". While developed nations almost always have an adult literacy rate of 96% or better, developed nations only have a literacy rate of around 65%. Due to this lower literacy rate, it is more likely that climate refugees are unable to understand basic financial concepts, which can make it extremely difficult to sustain MFIs, who have a more difficult task of both trusting borrowers and educating them.



Additionally, because these borrowers are likely to be considered "international borrowers" for MFIs, there is an additional cost of outreach, one higher than if the borrowers were domestic. Furthermore, outreach to climate refugees is exponentially more difficult, given the lack of present infrastructure and geographical challenges. Figure 2 presents a summary of the mentioned challenges.

#### Traditional Microfinance's Critical Challenges

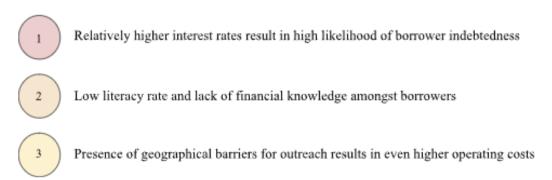


Figure 2. Some of Microfinance's Challenges

#### **Intermediated Microfinance**

Intermediated microfinance can create beneficial results for both MFIs and climate refugees, the best of both worlds. Traditional microlending involves group-based joint liability loans (GBL). This refers to an informal group with similar economic intentions to utilize a bank independently or collectively. On the other hand, intermediated microfinance relies on an MFI appointing local intermediaries or agents to identify and recommend potential individual borrowers. These loans are on a longer duration than traditional loans. Theoretically, the benefits of this innovative model are numerous. Due to a large number of intermediaries, competition creates a lower market interest rate, which is beneficial for borrowers. Additionally, intermediated loans can drive an increase in employment, develop small businesses, increase socioeconomic equity, and stimulate new investment against climate change. Of course, there are challenges with the model, one of which is the fact that intermediaries take risks with lending. To combat this, the intermediary can design the loan's structure, size, and other logistics. This model stimulates microfinance, which can be observed in Figure 3.

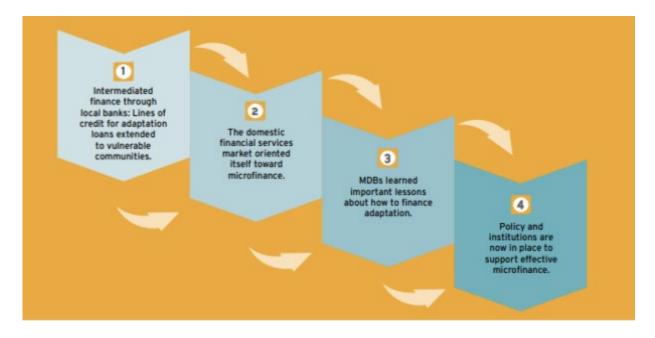


Figure 3. How Intermediaries Drive Microfinance

#### **Case Studies**

The two case studies presented to exemplify microfinance's impact on climate refugees are Tajikistan and Jamaica.

#### **Tajikistan**

First is Tajikistan, a country in Central Asia, with a high dependency on glaciers for its hydro industries and is thus in a vulnerable state due to climate change. The intermediate agent was CLIMADAPT, a finance facility that provided financing to small businesses for sustainable practices to build climate resilience. Households, farmers, and communities can access the intermediary through Tajik banks and MFIs. Figure 4 highlights CLIMADAPT's investments and achievements between February 2016 and July 2018. Figure 5 highlights a development caused by CLIMADAPT's aid.

**PORTFOLIO SPLIT OVERALL CREDIT LINE** SAVINGS ACHIEVED (NUMBER OF SUB-LOANS) 49 934 MWH/ANNUM 58% 9,0 US\$ MILLION Value of sub-projects Share of energy-efficient Primary energy savings from technologies supported the sub-projects supported supported 39% 3 099 13 MILLION M<sup>3</sup>/ANNUM Share of water-efficient Water savings generated from Number of projects supported technologies supported the sub-projects supported 3% 695 TONS/ANNUM 10,0 USS MILLION Size of credit line Soil erosion reduced from Share of sustainable land management the sub-projects supported technologies supported

Figure 4. CLIMADAPT's Investment



Figure 5. Small scale water resource development in Tajik rural communities

#### Jamaica

Next is Jamaica, a large island in the Caribbean Sea. The country's main climate vulnerability is sourced from its Atlantic Ocean hurricane belt location. Climate refugee numbers have skyrocketed over the past years as a result of hurricanes causing flooding, droughts, damage, and reducing freshwater availability. JN Small Business Loans Limited (JNSBL) was appointed as the intermediary to aid these people, providing micro-loans to groups in primarily the agriculture sector. Figure 6 highlights JNSBL's growth from 2016 to 2020.

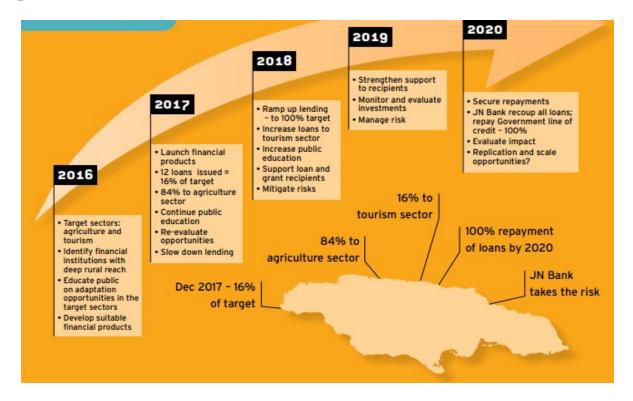


Figure 6. JNSBL's Aid

## **Present Challenges and Solutions**

Theoretically, the major issue with intermediated microfinance remains in borrower readiness and financial understanding. It is difficult for intermediaries to convince borrowers to invest their loans in sustainable and climate-resilient technologies, reducing the chances of repayment. To solve this issue, intermediaries can work with MFIs and local banks to institute educational resources, providing communities with information regarding the benefits of sustainable practices.

Additionally, government policies and ideologies in certain nations may require more effort from intermediaries and MFIs to practice and institute their benefits. There may be lacking financial understanding not solely within the climate refugee community, but also amongst government and sector officials. To combat this, intermediaries can implement specialists to aid officials in identifying areas for improvement.

#### **Conclusion**

Microfinance, despite being a relatively unknown mechanism for building climate resilience, hosts a multitude of potential benefits for climate refugees in developing countries, especially through the use of intermediaries. Through the case studies discussed, it is evident that certain models allow communities to build climate resilience through increasing income, investing in practical technologies, and spreading financial and climate readiness. Still, the practice has and will continue to run into hurdles, thus more research should be encouraged for both institutions and scholars. This will result in a safer, more sustainable, and climate-resilient world.



## Acknowledgments

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