



GLOBAL  
RESILIENCE  
PARTNERSHIP

# ACCELERATING CLIMATE RESILIENCE THROUGH FINANCIAL SERVICES INNOVATION IN AFRICA

## Talanoa Dialogue Input

APRIL 2018

*Photo credit: Mercy Corps, 2017*

## How do we get there?

Mercy Corps maintains a presence in 38 of the United Nations Framework Convention on Climate Change (UNFCCC) Non-Annex I Countries, 15 of which are classified by the UN as least developed countries (LDCs), where we work to alleviate suffering, poverty and oppression by helping people build secure, productive and just communities. Essential to achieving this mission is assuring that communities sustainably develop in a manner that is climate-resilient.



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Mercy Corps' work addresses the natural consequences of climate challenges while acknowledging the social, economic and political realities underpinning vulnerability. Our climate-resilient development (CRD) approach guides us to integrate climate adaptation strategies into long-term development objectives. This approach builds resilience to climate-related shocks and stresses through strategies that reduce poverty among vulnerable and marginalized groups, including measures aimed at increasing food security, enhancing social cohesion, and strengthening governance.

Broadly, we focus on strategies which aim to increase the use of climate information in decision-making at all levels; integrate climate change adaptation and disaster risk reduction into policies across scales; foster "climate-smart" economic opportunities; address climate drivers of conflict; and improve individual and community capacity to cope with climate change. In addition to positive adaptation benefits, most of these strategies lead to positive emission reduction outcomes as well, for example through work which establishes more sustainable natural resource management practices and policies which reduce or even halt drivers of deforestation. Mercy Corps' growing portfolio of resilience programming aims to enhance access to appropriate financial services that can strengthen vulnerable populations' ability to cope with and adapt to climate change impacts, while also looking at ways to strengthen the resilience of the financial sector to promote more responsive risk absorption in the face of serious and recurrent hazards.

To achieve these outcomes Mercy Corps works together with private, civic, and public sector actors to reduce vulnerability to climate risk. This work contributes to global actions and strategies that are essential for achieving both pre-and-post-2020 benchmarks by strengthening the climate-resilience of societies and economies. The UN climate change process supports this work by establishing the necessary enabling environment, including through the development of global policy frameworks and national adaptation planning processes, and by strengthening adaptation financing.

## › Africa Vision

### Why Focus on Finance for Climate Resilience?

Through its Regional Resilience Hubs established in 2011, Mercy Corps has been at the forefront of the resilience movement, working extensively in the drylands in the Sahel and the Horn of Africa (HoA) to model, test, and iterate resilience solutions to climate-related shocks and stresses. The connection between financial services and resilience has never been clearer. A growing body of evidence demonstrates that when people can access a range of *financial products*—from safe storage of money to savings, borrowing, and digital payment and remittance services—they are better able to plan ahead, manage risks, and absorb shocks when they happen.<sup>1</sup> This includes risk management and inclusive insurance products to protect against the effects of catastrophic loss due to disaster, weather, and crop failure, especially index insurance<sup>2</sup> and catastrophic loss insurance.<sup>3</sup> The risks facing low-income populations, businesses, and financial providers are vast and complex, and uninsured losses can lock these groups into vicious debt cycles.

There is also need to go beyond financial products and expand *risk-financing mechanisms* where there are repeated cycles of disaster and crisis. This includes response mechanisms that strengthen the financial sector in recurring crisis-prone environments. There are significant opportunities for development actors to

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<sup>1</sup> Aker, J., R. Boumniel, A. McClelland, and N. Tierney (2013) "How Do Electronic Transfers Compare? Evidence from a Mobile Money Cash Transfer Experiment in Niger." Tufts University

<sup>2</sup> Index insurance pays out benefits on the basis of a pre-determined index (e.g. rainfall level, seismic activity, livestock mortality rates) for loss of assets and investments resulting from weather and catastrophic events, without requiring the traditional services of insurance claims assessors, allowing a quicker claims settlement process.

<sup>3</sup> Financial providers carrying this insurance can write-off loans made to business owners whose homes and businesses are destroyed or damaged as a result of natural catastrophes and ensure their own liquidity.

use both liquidity<sup>4</sup> and risk-guarantee facilities either as stand-alone or combined interventions. In countries where there is an existing social safety net, these facilities can offer surge financing to protect the resilience of communities and serve as a collective crisis modifier, allowing existing resilience initiatives to scale up to address unexpected shocks. Another mechanism is pre-positioned financing that automatically releases funding based on pre-defined triggers to enable rapid scale-up of protective activities to prevent negative coping strategies. These facilities should sit within a continuum of support, preceded by forecast-triggered financing for adaptive action and followed by traditional response funding for acute humanitarian needs.

Two innovative programs--TRADER and LEAP--funded by the Global Resilience Partnership<sup>5</sup> aimed to address climate resilience using the financial services sector as an entry point. Strengthened in combination with other climate adaptation strategies, appropriate financial products and risk financing mechanisms can be effective mechanisms for reducing the impacts of shocks and stresses on livelihoods and facilitating durable recovery. Mercy Corps' experience with these two programs affirms tangible benefits of strengthening local financial systems for climate resilience as a complement to the global framework of the post-2020 climate actions.

## **TRADER in East Africa: Financing Resilience through the Livestock Value Chain**

Climate change is aggravating the frequency and severity of drought, floods, livestock disease, price fluctuations, trade bans, conflict over natural resources and other hazards that define the complex risk portfolio of the more than 30 million livestock producers and traders across the Horn of Africa (HoA). Historical marginalization, population growth, land degradation, and poorly developed telecommunication and transportation infrastructure are just some of the many stresses and systemic constraints compounding the impact of these hazards and perpetuating cycles of crisis and poverty among vulnerable livestock-keeping households.

In spite of the risks, the dynamic livestock market system has repeatedly proven itself an effective tool for risk management and wealth creation.<sup>6</sup> Pastoralists who do not use markets to manage their livelihood risk usually lose most or all of their herds in cycles of shocks, while those who do use markets on a continual basis--not just for stress sales--are some of the wealthiest in the HoA.<sup>7</sup>

Growth in commercial trade and markets, a growing middle class, and increasing domestic and international demand for animal products are creating new livelihood opportunities for livestock-keeping populations in the HoA. Many of the region's pastoralists and agropastoralists are responding to change with significant benefit to themselves and the economy.<sup>8</sup> However, lacking sufficient access to appropriate financial services, markets, and other resilience capacities necessary for managing climate-related risks, millions of livestock-

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<sup>4</sup> Liquidity facilities are primarily in natural disasters, both acute disasters such as earthquakes or in protracted disasters, such as drought and climate shocks. They must be established pre-disaster and serve an immediate need to stabilize, reduce losses, and ensure the resiliency of financial providers.

<sup>5</sup> The Global Resilience Partnership (GRP) is an independent partnership of public and private organisations joining forces towards a sustainable and prosperous future for all, focusing on the most vulnerable people and places. GRP believes that resilience underpins the achievement of sustainable development in a rapidly changing world. <http://www.globalresiliencepartnership.org/>

<sup>6</sup> Evidence from Mercy Corps' USAID-funded *Revitalizing Agriculture/Pastoral Incomes for New Markets for Enhanced Resilience and Recovery (RAIN+)* project and *Pastoralist Areas Resilience Improvement through Market Expansion (PRIME)* project in Ethiopia

<sup>7</sup> Catley, A. and Aklilu Y. (2012) 'Moving Up or Moving Out: Commercialization, Growth and Destitution in Pastoralist Areas'

<sup>8</sup> Dyer, KW (2012) 'Pastoralism in the Horn of Africa: Diverse Livelihoods Pathways', Future Agricultures Consortium (FAC), CAADP, Policy Brief: 6.

keeping households remain vulnerable and marginalized, unable to reap the benefits presented by these larger socio-economic trends.

With funding from the Global Resilience Partnership, and in partnership with the first Shariah-compliant microfinance institution in Kenya, Crescent Takaful Sacco (CTS), Mercy Corps collaborated with livestock traders, pastoral communities, meat exporters, county government officials, Islamic scholars, and other key stakeholders to unlock a solution for building livestock-keeping households' resilience to climate extremes and triggering sustained and inclusive growth in the HoA drylands.

Implemented during a 20-month period in 2016/17 in northeastern Kenya, the Taking Risk out of Agricultural Trade for Relief and Development, Enhanced with Resilience (TRADER) project developed, tested, and refined an innovative livestock value chain financial product called Mifugo Kash Kash (MKK). Literally translated as "cashing livestock", MKK aims to leverage pastoralists' innate resourcefulness and entrepreneurialism to improve the pastoral-market interface and translate animal wealth into financial wealth for the resilience and wellbeing of vulnerable livestock-keeping households. TRADER was based on the theory of change that if small-scale livestock traders in the HoA were afforded reliable and consistent access to working capital and a secured and consistent end market for their livestock, then livestock keepers—both traders and producers—would experience increased wealth and improved capacity to manage climate-related risks.

During the course of the program period, more than 2,000 livestock-keeping households—or approximately 10,835 individuals in Wajir County, northeastern Kenya—benefited from livestock sales stimulated by the MKK pilot. Through Shariah-compliant financing to 14 livestock trader groups and negotiated purchase orders with meat exporters in Nairobi, TRADER injected approximately \$124,500 USD in capital into the Wajir livestock market system, including \$38,200 USD leveraged from the private sector (CTS and livestock traders). An additional 2,145 vulnerable households—or approximately 12,875 individuals—benefited from fodder sales stimulated by TRADER's introduction of a short-term subsidy designed to increase off-take of weakened livestock from drought-affected pastoral areas, put cash into the hands of vulnerable livestock-producing households, support MKK traders to meet end buyers' quality requirements in the face of drought, and minimize CTS's reputational risk in Wajir and financial risk for operations.

Mercy Corps sees *ability* in *vulnerability*, and believes that when connected to options and opportunities, even the most vulnerable households can contribute to a better future for themselves and their communities. Learning from TRADER reaffirms that a relatively small investment over a short time-frame can help strengthen adaptive capacity to climate risks and spark transformative change if channeled through programs that prioritize partnership with the private sector, engage pastoralists as active partners--not passive beneficiaries--and position international NGOs as *facilitators* of solutions that are risk-informed, shock-responsive, and market-driven. Key too is commitment to managing adaptively through continuous cycles of knowledge generation and application.

## LEAP in the Sahel: Adapted Financial Services for Adapting to Climate Change

In Sahelian countries like Mali and Niger, climate change has intensified the effects of drought, contributing to poor harvests and low quality pasture land threatening agropastoralists' livelihoods.<sup>9</sup> Since 1900, Niger has experienced cyclical drought with 13 major droughts that have led to 6,500 deaths and affected more than 2 million people.<sup>10</sup> The vast majority of Mali's population lives in a medium to medium-high climate vulnerability belt, dependent on rainfed agriculture for their way of life.<sup>11 12</sup>

Under the Global Resilience Partnership, Mercy Corps built a coalition of partners to unlock one of the barriers preventing resilience to the impacts of climate and environmental shocks and stresses: an unadapted financial sector and the financial exclusion of rural agropastoralists, especially women. In its 18 month pilot, from January 2016 to September 2017, the LEAP project advanced the case that access to appropriate and tailored financial products and services will allow vulnerable agropastoralists to secure financial capital, increase investment in new economic opportunities, and better manage financial resources and anticipate risk, enabling them to increase their resilience to shocks and stresses and speed recovery.

LEAP's fundamental premise was that the financial sector in Mali and Niger is out of sync with the needs of a major potential client base; at the same time, this client base--whose livelihoods are intricately connected to the climate--cannot effectively adapt to the impacts of climate change at the scale that's required without drawing upon appropriate financial services. LEAP worked with a broad-based group of partners in both countries, including financial service providers (Soro Yiriwaso in Mali, ASUSU S.A. in Niger), mobile network operators (Airtel Niger, Orange Niger, Orange Mali), insurance (Planet Guarantee) and other organisations (Positive Planet and HNI) in a private-sector driven approach. This approach built the foundation for climate resilience through prototyping demand-driven adapted savings, credit, and insurance services delivered digitally through mobile phone technology. Among LEAP's prototypes are savings and credit products tailored for VSLAs, digital-based financial education, warehouse storage credit and index-based microinsurance.

LEAP's experience affirmed the value of private-sector driven models to scale resilience solutions. In just 18 months, using an agent-based model, over 8,300 members from 312 savings groups and 900 members from 18 cooperatives opened e-wallets and MFI accounts. In a six month period, over 1,300 members from 66 savings groups (88% female) applied for and received loans via mobile transfer for a total of \$153,000 USD, with a 100% repayment rate. Loans were largely used to enhance or diversify savings groups' livelihood activities. MFIs loaned an additional \$25,000 to 18 cooperatives through warehouse storage credit, a scheme that enables groups of producers to store a portion of their harvest as collateral for a loan, and then repay the loan after several months when the market price is higher. Microentrepreneurs (55) looking to start a new business or improve and diversify their livelihoods opened digital commitment savings accounts, which channeled \$7,700 in loans in 3 months. Over 227,000 Malian and Nigerien agropastoralists accessed financial education messages on the 321 mobile platform developed by HNI and Orange and through radio, and over 15,700 were trained in entrepreneurship and financial literacy.

<sup>9</sup> RoN 2006, cited in). Asfaw, Pallante, and Palma, "Diversification Strategies and Adaptation Deficit: Evidence from Rural Communities in Niger."

<sup>10</sup> Bokar Moussa et al., "Economics of Land Degradation and Improvement in Niger," in *Economics of Land Degradation and Improvement - A Global Assessment for Sustainable Development*, ed. Ephraim Nokonya, Alisher Mirzabaev, and Joachim von Braun, 2016, <https://doi.org/10.1007/978-3-319-19168-3>. Moussa et al., "Economics of Land Degradation and Improvement in Niger."

<sup>11</sup> USAID "Mali Climate Vulnerability Mapping," 2014.

<https://www.usaid.gov/sites/default/files/documents/1860/MALI%20CLIMATE%20VULNERABILITY%20MAPPING.pdf>

<sup>12</sup> Zemadim B (2016) The Challenges of Rainfed Agricultural Practices in Mali-Redefining Research Agenda- A Short Communication. *Adv Plants Agric Res* 4(1): 00128. DOI: 10.15406/apar.2016.04.00128



*A women's savings group in Bandiagara, Mali accessing their e-wallet account (credit: Mercy Corps, 2017).*

These services--while still early models that require further iteration--are beginning to fill one of the gaps in the menu of resilience capacities necessary for agropastoralists to manage climate-related risks. A project after-action review in February 2018 confirmed the enthusiasm of private sector partners to continue to develop and market adapted digital financial services to rural agropastoralist clients, but much work remains to scale truly climate-responsive financial services to two of the fastest growing--and climate vulnerable--countries on the continent.

## Opportunities to Scale up Action

As the global community progresses towards the long-term vision of the Paris Agreement commitments to address drivers of climate change, it is critical to invest also in developing more immediate capacities to absorb and adapt to climate-related shocks and stresses. Both traditional donor funding and new models like the Global Resilience Partnership are essential platforms to explore, test, iterate and scale resilience solutions, and further national climate change commitments.

LEAP and TRADER demonstrate that financial services designed to strengthen climate resilience are a must, but there are no shortcuts to transformative change. For innovation in financial services to outpace climate-related risks for a rapidly growing population dependent on pastoral and agropastoral livelihoods, national governments, other non-Party stakeholders and the UN Climate Change process have much to contribute.

- **Encourage national governments and international donors to reduce traditional silos between emergency and development funding.** Across the globe, financial losses from chronic and acute crises and disasters are on the rise, having reached an average of \$165 billion per year over the last 10 years.<sup>13</sup> In response, national governments and international donors face pressure to draw funding away from basic public services or to divert funds from development programs to react to frequent humanitarian emergencies due to lack of existing infrastructure and regulations that could ease access to financial products and risk mitigation measures. Lack of access to financial services reduces the ability to cope with future shocks and stresses and increases the need for ongoing external assistance. When donors and humanitarian actors segregate funds for 'emergency' responses and 'development interventions' it ignores the fact that many countries face recurrent acute and chronic crises and require a mixture of financial interventions that can adapt to the environment.

<sup>13</sup> <http://blogs.worldbank.org/psd/disaster-risk-and-climate-threats-taking-action-create-better-financial-solutions>

- **Finance innovative climate resilience programs.** Donor funding, both traditional and new models, should encourage a variety of approaches to building climate resilience--including more investment in financial inclusion for climate adaptation--and allow for more risk-taking and adaptive management. Longer-term funding is necessary to facilitate partnerships necessary to spark systemic and sustainable change. Funding should also promote robust monitoring and evaluation for resilience, including tracking the performance of financial services programming on the outcomes and impact on resilience in addition to traditional financial services indicators (i.e. repayment rates).
- **Promote an enabling environment where the private sector can deliver solutions to climate challenges.** Based on lessons from LEAP in Mali and Niger and TRADER in Kenya, this includes the enabling environment for expansion of affordable and reliable telecommunications and digital payments infrastructure, security and roads for private businesses to extend coverage to rural areas and allow for safe cash in/out points, and regulations that promote competition and innovation in mobile money services (with appropriate consumer protections and recourse mechanisms).
- **Promote enhanced understanding of climate risk on livelihoods among financial services and technology providers.** Understanding the unique risks that different segments of the population, as well as their needs, is essential for the market to develop services that respond to the needs and vulnerabilities of agropastoralist clients and are effective in the face of climate change impacts.
- **Promote knowledge generation and adaptive programming for resilience to climate extremes.** Strengthening resilience requires big ideas; yet, testing big ideas comes with risk to the communities we aim to serve. To maximize value for money, minimize unintended negative consequences, and drive impact for resilience to climate extremes at scale, donors must prioritize operational learning and provide implementing partners with an enabling environment to manage adaptively. This includes utilizing pilot approaches embedded within locally-owned systems and ensuring constant diagnosis and feedback loops so programming take advantage of windows of opportunity – new products, actors, or market segments.
- **Encourage traditional donors, the private sector, and implementing partners to identify opportunity in crisis.** Shocks are not inherently negative events. Large, climate-related shocks can disrupt systemic processes that have long perpetuated cycles of poverty and vulnerability, opening windows of opportunity to trigger positive, transformative change. Private, public, and civil society actors should be primed and encouraged to identify and capture these opportunities before the windows close. Programs must prioritize partnership with the private sector, engage pastoralists and agropastoralists as active partners--not passive beneficiaries--and position international NGOs as *facilitators* of solutions that are risk-informed, shock-responsive, and market-driven.
- **Increase Islamic finance for resilience to climate extremes:** Globally, religious self-exclusion from formal financial institutions is highest in Sub-Saharan Africa.<sup>14</sup> Islamic finance has a formal and growing presence with increasing demand in 21 African countries. The expansion of Islamic finance, and especially microfinance, has the potential to offer more effective tools for improving financial inclusion than conventional finance in several countries, especially Kenya, Nigeria, and Somalia. Through TRADER, Mercy Corps learned that the specific Islamic principle applied to livestock value chain financial products is an important determinant of the products' capacity to support resilience to climate-related shocks.

<sup>14</sup> <https://www.imf.org/external/pubs/ft/wp/2014/wp14149.pdf>

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Mercy Corps is a leading global organization

powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



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