CHAPTER 9

UNLOCKING US$ 1.5 TRILLION FOR LLA

KEY MESSAGES

- Public finance cannot close the US$ 187–359 billion annual adaptation gap. Private capital, including from local markets, is essential.
- Micro, small, and medium enterprises (MSMEs) employ 70% of the workforce in low-income countries. As critical drivers of livelihoods and local economic growth, they are essential for adaptation—but receive just 2% of global climate finance.
- A vast ecosystem of Inclusive Financial Service Providers (IFSPs) already lend US$ 1.5 trillion annually to low-income communities and MSMEs, with deep reach and trusted community presence. Although 75% of adults in low- and middle-income countries access their financial services, IFSP financing remains largely climate-agnostic.
- This essential channel of funding for vulnerable communities is itself at risk. Nearly half the IFSPs in some regions of Pakistan scaled back lending in the last decade, with 20% halting lending entirely, because of climate-related challenges.
- A study found that while the savings and credit services provided by IFSPs remains essential, new financial products such as flexible loans and climate-responsive microinsurance are urgently needed.
- Blended finance—deploying multilateral climate funds to de-risk IFSP portfolios and attract private investment—can unlock IFSP financing for Locally Led Adaptation (LLA).

Patient, Predictable, Accessible Finance

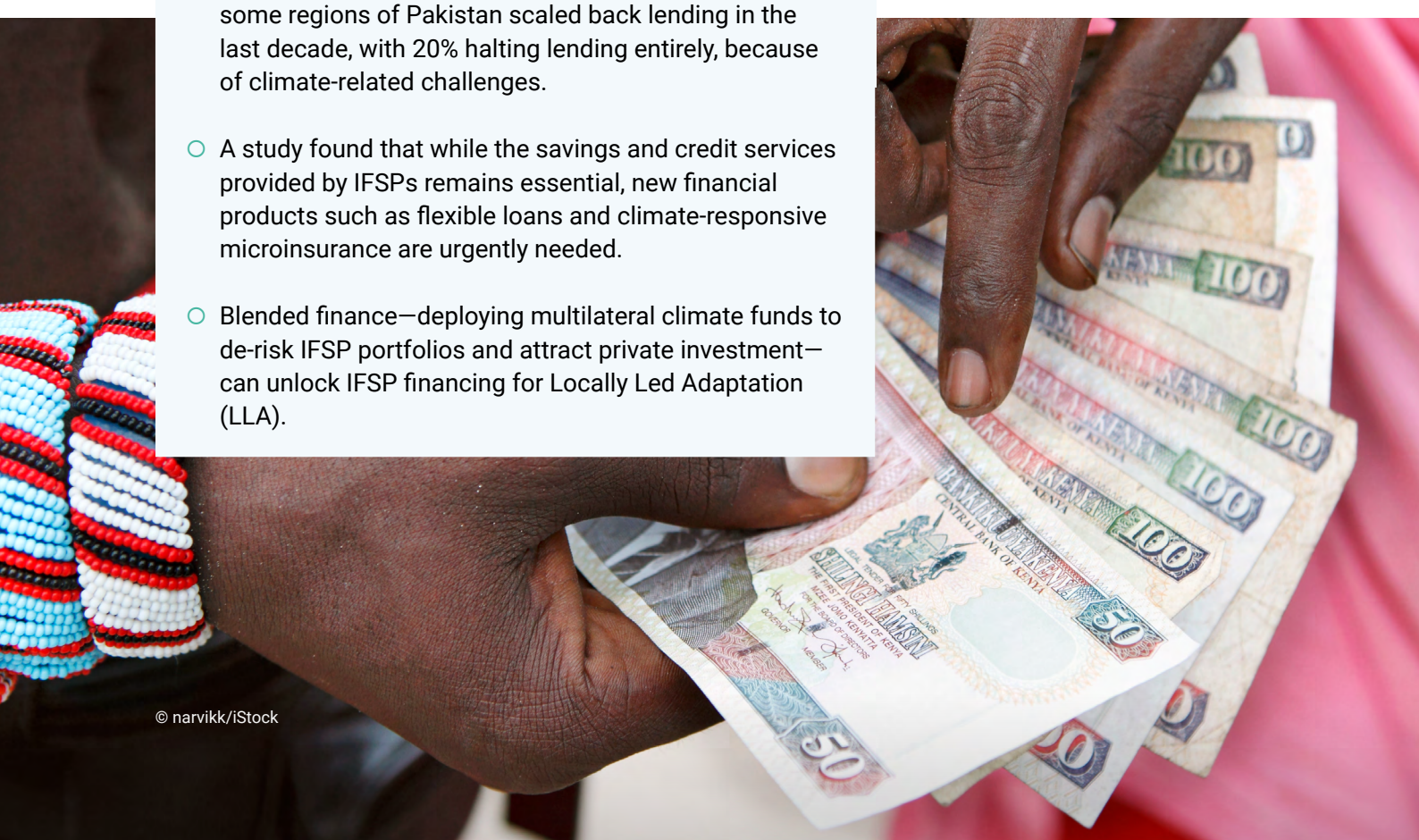
Investment in Local Capacities

Building Understanding

Transparency and Accountability

Collaborative Action and Investment

IN THIS CHAPTER



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> **I heard the warnings, but the shelter was too far. We stayed home and prayed the embankments would hold.**
>
> Masum Sheikh, farmer from Koyra, Bangladesh

RESILIENCE THROUGH INCLUSIVE FINANCE

Masum Sheikh waits patiently for customers at his sugarcane juice stall on a hot and humid afternoon in Khulna, Bangladesh. His smile is warm, but his story carries the weight of a lifelong struggle against climate disasters.

Masum grew up in Koyra village, in Khulna district, where he farmed rice and raised fish on a modest scale, "enough to get by and send the children to school". Life was simple and predictable, until Cyclone Aila struck in May 2009. "I heard the warnings," Masum recalls, "but the shelter was too far. We stayed home and prayed the embankments would hold."

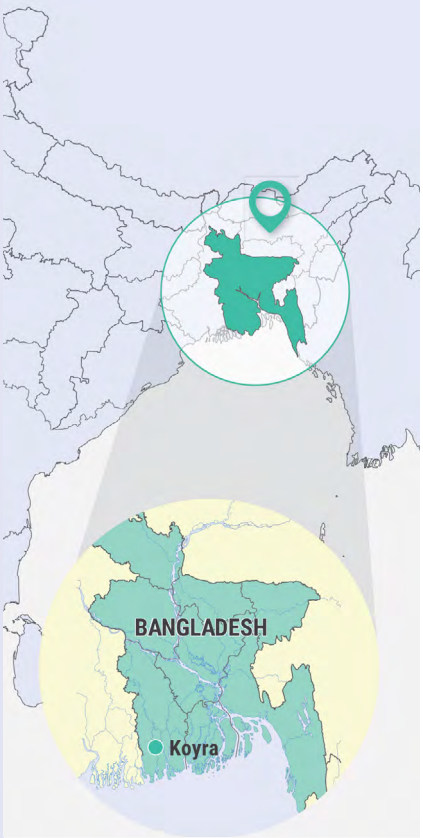
They did not. Tidal waves overran the barriers for the first time in living memory, destroying his house, salinizing his fields, and washing away his fish.

And so, his epic journey of survival began: a journey that mirrors the experience of millions facing climate-induced loss and damage worldwide.

Masum withdrew his small savings from an informal group to buy food and firewood. With his fields now unusable, he took a loan from a microfinance institution (MFI) to rebuild his home and move his family to Chittagong. There, his wife and eldest daughter found work in a garment factory while he sold sugarcane juice at the factory gate.

Four years later, longing for home, Masum and his family withdrew their savings again and took another loan to move to Khulna city, where he restarted his juice business. He sold juice there for five years, until the municipal council started constructing a bridge exactly where his business stood. He was forced into hard day labor—back-breaking work for a relatively old man.

Masum eventually built up enough savings to move back to his village, Koyra, in 2020 and start a fishpond. A few short months later, Cyclone Amphan devastated Koyra again. The embankments, damaged during Aila and never repaired, failed catastrophically. Masum's home and fishpond were destroyed once more.



Bangladesh is one of the top ten most vulnerable countries on the planet, with the danger of its southern parts vanishing into the ocean in the next few decades.

Through the Covid-19 lockdown, Masum and his family worked hard to restore and partially restock the fishpond–until a particularly harsh monsoon flooded Koyra and washed away all the fingerlings. Masum was heartbroken and destitute.

He turned again to an MFI for support to restock his pond. As soon as he had repaid that loan, he took another, this time to set up a sugarcane juice stand in Khulna city. "My wife manages the fishpond," Masum says with a quiet determination. "But we need other sources of income. That's why I'm here again."

Masum's story, provided by CGAP, is not unique—it is the reality for millions across climate-vulnerable regions. It is a story of juggling a multitude of financial instruments—informal and formal—to respond to climate events and rebuild and diversify livelihoods.[97] Thirty-five percent of adults in low-income countries personally suffered a natural disaster or weather event in the last three years and two thirds of them lost income or assets as a result.[98]

IFSPs—MFIs, cooperatives, and banks that have emerged over the last five decades—are already central to how vulnerable communities survive, adapt, and rebuild.

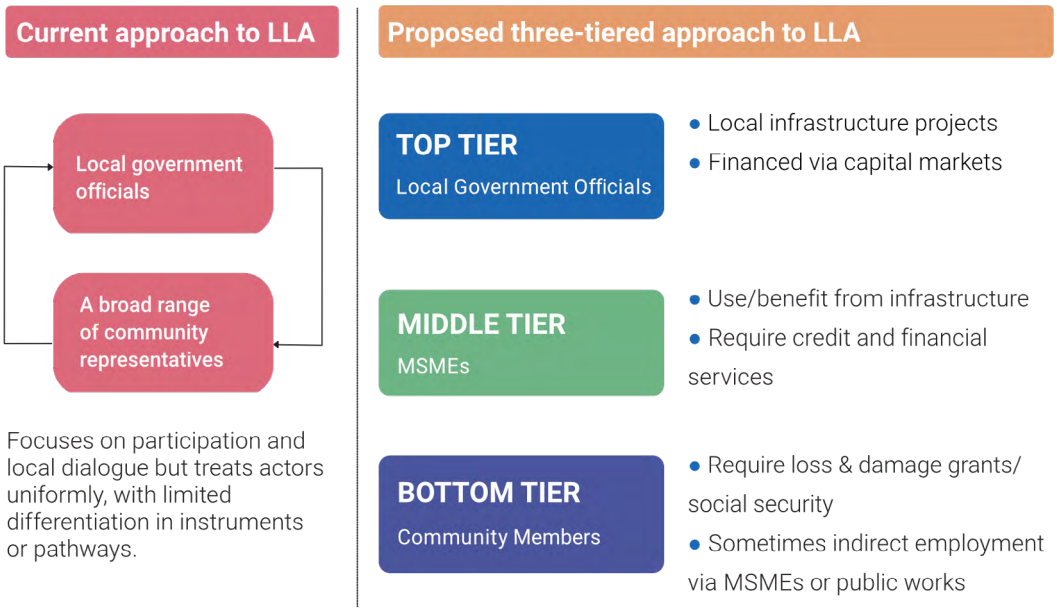
UNDERSTANDING ADAPTATION FINANCE NEEDS

Broadly, there are three categories of finance necessary for adaptation at the local level: finance for local governments to build resilient infrastructure; finance for micro, small, and medium enterprises (MSMEs) and agriculture; and social security payments for particularly vulnerable communities not served by inclusive financial service providers.[99]

Currently, discussions on local adaptation finance do not distinguish between these three very distinct categories, and often depend on grants rather than the credit which is essential to crowd in additional funding. As a result, the critical role of inclusive finance is often

overlooked. Inclusive finance refers to affordable, accessible, and appropriate financial services, especially for low-income individuals, smallholder farmers, and MSMEs that are traditionally underserved or excluded from formal financial systems. It goes beyond the basic provision of financial access, and focuses on equity, participation, and empowerment—ensuring that people and communities can use financial services effectively to improve their livelihoods, manage risks, and build resilience.

FIGURE 1. Refining Categories of Adaptation Finance Needs at the Local Level



Local Governments: Building Large Infrastructure

Local governments lead large-scale adaptation projects—flood barriers, irrigation systems, resilient roads—that need long-term financing and public oversight. This makes them ideal recipients of institutional funds from international financial institutions and climate funds.

Large-scale adaptation projects such as irrigation systems are ideal recipients of institutional funds.

A growing range of options are becoming available for local governments, although limitations in local government budgets and technical capabilities often present challenges. These include innovative solutions, such as green municipal bonds, that allow local governments to tap into capital markets. Cape Town's US$ 83 million green bond in 2017, for instance, was four times oversubscribed, financing critical water storage and flood defenses.[100]

BOX 1. MOBILIZING PRIVATE FINANCE FOR LOCAL GOVERNMENTS: KENYA'S COUNTY GREEN PREPARATION FACILITY

County governments are stepping up as critical actors in climate adaptation in Kenya. For years, they have faced a major obstacle: limited access to structured, long-term financing to implement locally led climate solutions. The County Green Preparation Facility—an initiative launched by Financial Sector Deepening Kenya in 2024 and managed by PricewaterhouseCoopers (PwC)—was created to close this financing gap. The Facility provides a dedicated platform to:

- Mobilize capital for locally led climate adaptation projects.
- Prepare and structure projects to meet investor requirements.
- Connect counties with private and public sector partners.

In its first year, the Facility has worked with 10 diverse counties to identify, prepare, and package high-priority, climate-smart initiatives across key sectors, including water and sanitation, renewable energy, and waste management. Notable examples include the US$ 50 million Nanyuki Bulk Water Project in Laikipia County, set to benefit over 85,000 residents; the Mwea Makutano Water Project in Kirinyaga County; and innovative waste-to-value and solarization pilots across multiple counties.

A central innovation of the Facility is its project aggregation approach, which bundles multiple small, standalone projects into robust investment pipelines. This strategy makes county-led initiatives far more attractive to institutional investors and development partners by improving economies of scale; reducing transaction costs; and increasing the bankability of climate-smart projects.

With technical support from PwC and other partners, several projects have already moved from early concepts into detailed feasibility studies—an essential step toward investment readiness.

The Facility has sparked significant market interest, including engagement with the Nairobi Securities Exchange to explore green bond issuances; and a growing appetite from Development Finance Institutions for blended finance solutions that leverage both public and private capital. Momentum continues to build, with several projects now entering early-stage due diligence for capital market entry.

The Facility demonstrates the transformative potential of inclusive finance to connect local adaptation priorities with global investment flows. By preparing county-led projects for institutional funding, Kenya is unlocking new pathways for climate adaptation; attracting private capital into traditionally underfunded sectors; and translating local resilience goals into scalable, impactful solutions.

MSMEs as Engines of Local Resilience

MSMEs, including smallholder farmers, employ 70% of the workforce in low-income countries.[101] As critical drivers of livelihoods and local economic growth in climate-vulnerable regions, they are essential for adaptation—but receive just 2% of global climate finance.[102]

As climate change intensifies, MSMEs require comprehensive financial services—including credit, savings, insurance, and digital payments—to withstand shocks and seize emerging opportunities. Access to credit, insurance, and savings can transform the ability of MSMEs to invest in climate-smart solutions: drought-resistant seeds, solar-powered pumps, raised homesteads, and diversified livelihoods.

However, as CGAP notes, IFSPs that lend to them often lack access to public climate funds. Blended finance tools—like concessional credit, loan guarantees, and insurance—can help mobilize private capital. For instance, the Boosting Green Employment and Enterprise Opportunities program in Ghana unlocked private loans for 1,200 MSMEs, 40% of which secured follow-on investments, by offering blended finance with first loss guarantees. A toolkit to help IFSPs tailor financial services for adaptation needs has been developed by MicroSave Consulting (MSC).

Vulnerable Communities–Leveraging Social Protection

The poorest, including subsistence farmers and informal workers, often lack access to credit or repayment capacity. They need grant-based support to build and recover resilience. Effective mechanisms include disaster compensation, social protection grants, and community-based adaptation funds for localized challenges. Governments will need to continue and deepen efforts to digitize social protection payments to enhance the efficiency and timeliness of payments to climate affected people. Programs like the KALIA initiative in Odisha, India, deliver cash transfers, insurance, and interest-free loans, helping farmers invest in adaptive seeds and technologies while diversifying livelihoods.

THE HIDDEN US$ 1.5 TRILLION OPPORTUNITY

The current adaptation finance architecture is failing to deliver support where it is needed most.

First, the overall volume of adaptation financing remains critically low, with the current annual adaptation finance gap estimated at US$ 187–359 billion.[103] Public funds alone cannot bridge this gap. Mobilizing significant private sector capital for adaptation must become an urgent priority.

Second, the limited funds that do exist often fail to reach the grassroots. In the 2017 to 2021 period, less than 17% of commitments were dedicated to projects with a specific focus on local communities, leaving them without the resources they need to build resilience.[104] Local capital markets must play a catalytic role.

Most IFSPs currently lack climate-specific financial products tailored to the realities faced by MSMEs, smallholder farmers, and vulnerable households.

The global network of IFSPs represents a critical yet underutilized channel for addressing both challenges. They offer a tested, transparent, and scalable conduit for channeling catalytic finance from global climate funders directly to vulnerable communities. This vast ecosystem—comprising thousands of banks, cooperatives, mobile money providers, MFIs, and other local lenders—already extends over US$ 1.5 trillion annually in loans to low-income communities and small businesses.[105] IFSPs also have deep reach and trusted community presence—75% of adults in low- and middle-income countries now have access to financial services through these institutions.[106] Yet, most of this capital remains climate agnostic.

By unlocking private capital at the grassroots level, IFSPs can amplify scarce public funds and bridge the gap between global commitments and local adaptation action. However, most IFSPs currently lack climate-specific financial products tailored to the realities faced by MSMEs, smallholder farmers, and vulnerable households. Emerging toolkits, like the one developed by MSC, are now helping IFSPs design innovative loan structures, insurance solutions, and blended finance models to better serve adaptation needs.

How MSMEs Navigate Climate Risks

A deeper dive into the impact of climate events on IFSP clients provides valuable insights for strengthening the role of inclusive finance in supporting locally led adaptation. In 2025, MSC conducted a study on the impact of climate change on the agriculture clients of BURO-Bangladesh, the country's third-largest NGO-MFI. Agriculture is the mainstay for two thirds of BURO's three million clients.

> **During severe floods, many of us are forced to sell cattle at very low prices to meet immediate needs. We give up valuable long-term assets for short-term relief, which affects recovery.**
>
> Tangail Sadar, Farmer, Bangladesh

The BRACED framework defines three core resilience capacities to manage climate-related shocks:

1. **Anticipatory capacity**: The ability of social systems to anticipate and reduce the impact of climate extremes before they occur. These include investments, for instance, to change traditional practices, adopt climate-resilient seeds and livestock breeds, and make capital upgrades.
2. **Adaptive capacity**: The ability to adjust actions or characteristics to moderate long-term climate risks or exploit new opportunities. These include investments, for instance, in shifting production techniques, diversifying income sources, and improving climate risk management, while overcoming strong attachment to traditional methods.
3. **Absorptive capacity**: The ability to cope with and recover from immediate shock, using tangible assets, such as savings and food stocks, and intangible resources, such as social networks. These require savings, emergency credit, and community-based coping mechanisms to manage recurrent shocks, especially flooding and cyclones. (Bangladesh has long-term experience with flooding and cyclones, so absorptive strategies are more commonly adopted amongst BURO's members.)

> **Government grants do not reach many fisherfolk. I also notice that farmers with crops and animals get more relief or grants than we do in fisheries. We have to depend on microfinance institutions.**
>
> Fisher, Cox's Bazar, Bangladesh

The study found that BURO's customers adopt a range of strategies to anticipate, absorb, and adapt to the impacts of climate change (see Figure 2). While savings and credit remain essential, many households would greatly benefit from flexible loans and climate-responsive insurance products. BURO already offers a broad suite of products that align with the anticipatory, adaptive, and absorptive needs of its clients (see Table 1).

Fisherfolk are less able to access grants than others, and so depend on microfinance institutions.

Communities rely on savings, credit, and social networks to recover from shocks.

FIGURE 2. How BURO's Clients Respond to Climate Change

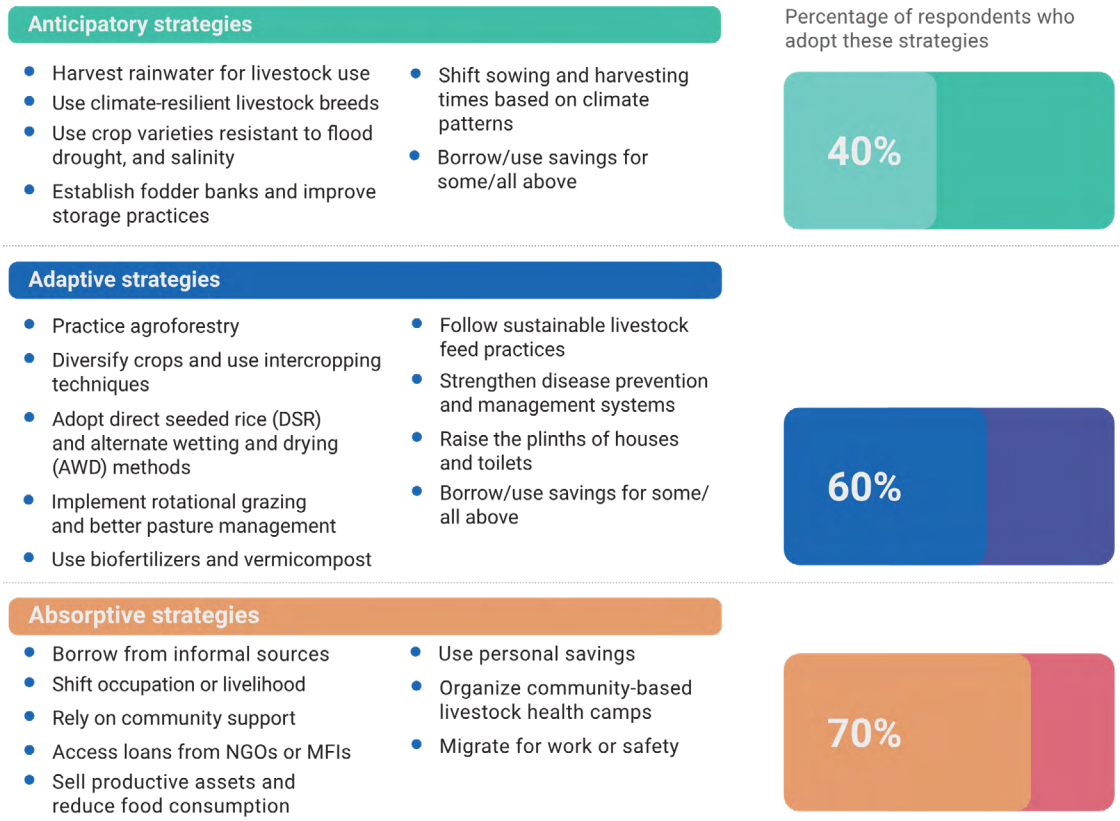


TABLE 1. How BURO Products Support Local Climate Resilience

PRODUCT	PURPOSE	ANTICIPATORY	ADAPTIVE	ABSORPTIVE
General Loan	Group-based, joint-liability loans providing working capital to disadvantaged households			
Microenterprise Loan	Based on household cash flow, business projections, and the borrower's reputation in the community			
Agriculture Loan	Supports landless and marginal farmers in organized groups			
Hand/ Emergency Loan	Protects household economies and assets, financing festivals, marriages, healthcare, and education			
Disaster Loan	Provides immediate cash to help households recover from natural disasters and protect assets			
Water & Sanitation Loan	For access to safe water, and to fund bathroom installations			
General savings	Like a current account, where customers can save or withdraw on demand			
Contractual savings	A recurring deposit account for customers to use to build up lump sums for investments or to fulfil social obligations, such as weddings, funerals, or children's education			

The study generated critical insights for strengthening the role of inclusive finance to support LLA:

- **Localized climate impacts require tailored solutions**: Climate risks affect livelihoods differently within MSMEs and agriculture, requiring LLA techniques to assess hazards, risks, impacts, responses, and needs.
- **New financial products are urgently needed**: Flexible loans, microinsurance, and hybrid savings-credit tools are essential to help vulnerable communities anticipate, adapt, and absorb climate shocks. BURO is now working on more flexible loans and new insurance products to respond to the findings of the study.

BURO's customers adopt a range of strategies to anticipate, absorb, and adapt to the impacts of climate change.

- **Climate change threatens IFSP sustainability**: MSC's work shows that the portfolio-at-risk for one African MFI may double within three years due to climate-related defaults. In Pakistan, MFIs devastated by flooding withdrew from several regions, cutting off financial access where it was needed most (see Box 2).
- **De-risking IFSP operations is critical**: Without support, IFSPs may exit climate-vulnerable geographies, further marginalizing at-risk communities. Blended finance solutions from multilateral funds can mitigate risks while mobilizing private capital for adaptation.

BOX 2. CLIMATE IMPACTS ARE FORCING INCLUSIVE FINANCE INSTITUTIONS TO SCALE BACK LENDING

Nearly half of the inclusive finance institutions in Pakistan scaled back lending in specific districts or provinces in the last decade, with 20% halting lending entirely, because of climate-related challenges.

CGAP, a global partnership of more than 40 leading development organizations, collaborated with the Pakistan Microfinance Network (PMN) to survey the impact of climate change on inclusive finance institutions. The most affected regions are Punjab and Sindh, which together accounted for 90% of PMN members' gross loan portfolio in 2022.

The survey found that 40% of inclusive finance institutions have reduced lending to certain sectors, with agriculture and livestock/poultry being the hardest hit. This has notable gender implications: while women in Pakistan have significantly lower overall labor force participation, those who are employed are more than twice as likely to work in agriculture compared to men.

Additionally, 27% of respondents reported that climate risks have had a significant impact on their branch networks. Among these, half have permanently closed branches in climate-affected areas, while the other half abandoned plans to expand into these regions.

UNLOCKING THE POTENTIAL OF IFSPs

IFSPs are already embedded in climate-vulnerable communities and uniquely positioned to deliver finance where it's needed most. They know their clients, understand local risks, and deliver trusted, transparent, and accountable services. They could be strategically repurposed to accelerate locally led adaptation. However, they face rising exposure to climate-driven defaults and portfolio risks. Without support, they may withdraw from the very communities that need them most.

The solution lies in blended finance: deploying multilateral climate funds to de-risk IFSP portfolios and attract private investment. The Green Climate Fund, for instance, reports a 1:5.5 leverage ratio—demonstrating how modest public dollars can unlock significant private flows. By leveraging multilateral and bilateral climate funds through blended finance instruments, it is possible to de-risk IFSP operations in high-vulnerability regions; crowd in private investment via local capital markets; and ensure climate finance reaches the most affected communities.

In an age where money for adaptation is alarmingly scarce, the path forward is clear: leverage IFSPs to channel funds where they are needed most, and blend public and private capital to stretch scarce adaptation dollars. Strengthening IFSPs directly supports five core LLA principles:

- **Patient, Predictable Finance**: Leveraging trusted, local financial institutions to deliver adaptation funding efficiently.
- **Investing in Local Capabilities**: Building IFSP capacity to expand services rather than retreat from high-risk areas.
- **Deepening Climate Risk Understanding**: Using IFSPs' extensive community networks to gather data on hazards, impacts, and indigenous adaptation strategies.
- **Transparency and Accountability**: Capitalizing on proven systems developed by the inclusive finance industry over decades.
- **Collaborative Investment**: Channeling multilateral funds into blended finance instruments to crowd in private capital and maximize impact.

We stand at an inflection point. Inclusive finance offers us a chance to unlock US$ 1.5 trillion in private capital to build resilience where it matters most. With the right investments, millions like Masum won't just survive climate shocks—they'll thrive.