

# Strengthening climate adaptation and resilience through financial services

July 2025

# MSC is recognized as the world's local expert in economic, social and financial inclusion



International financial, social and economic inclusion consulting firm with **25+** years of experience



**>450** staff in **10** offices around the world



Projects in **~68** developing countries

## Our impact so far

**>550**  
clients

**>1,400**  
publications

Assisted development of digital G2P services used by  
**>875 million** people

Implemented  
**>950 DFS** projects

Developed  
**>300 FI products**  
and channels now used by  
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**Trained >11,100**  
leading FI specialists globally

## Some of our partners and clients





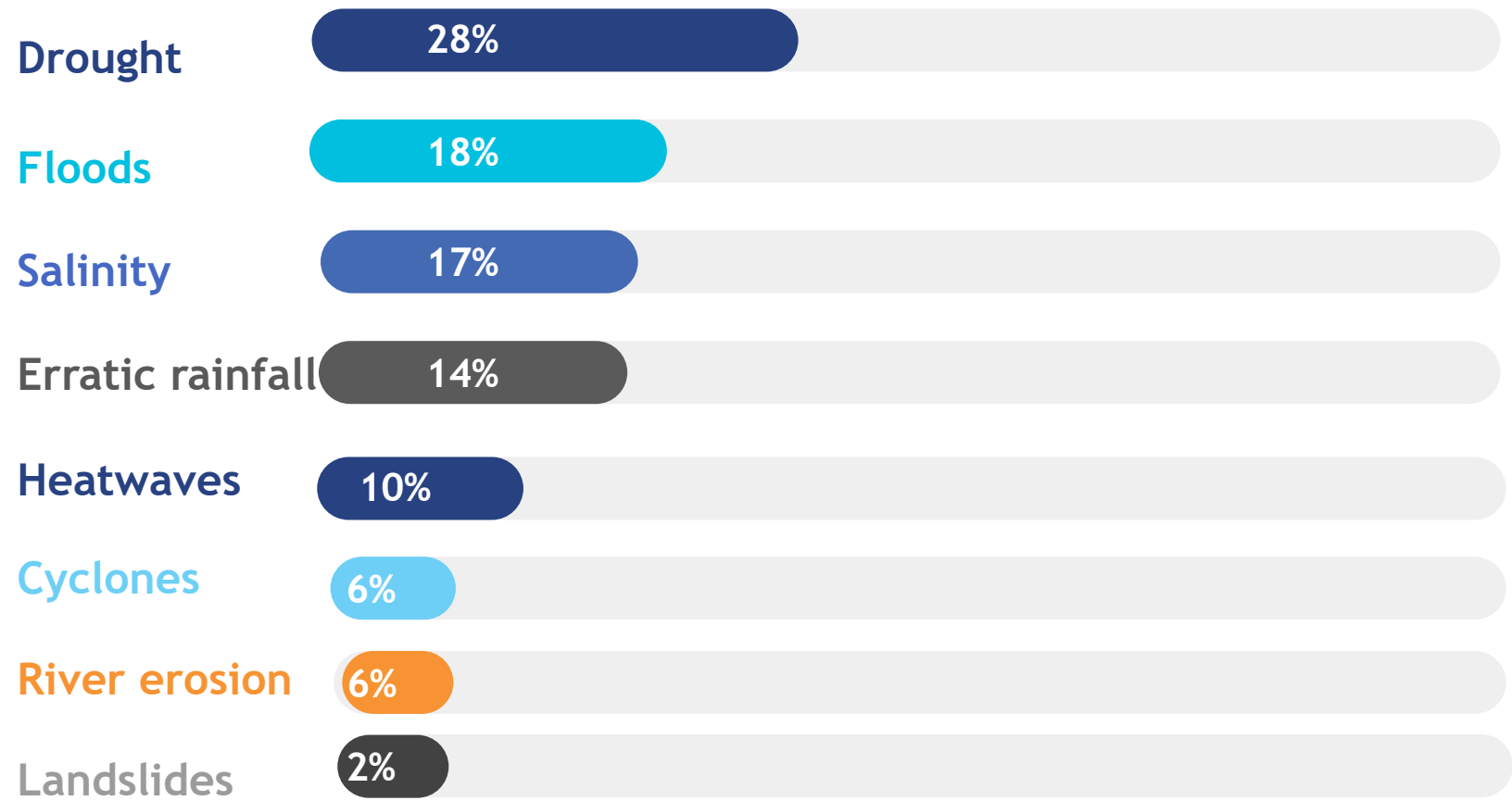
# The challenge before us all ...

- Today, developing countries require USD 215-387 billion each year (UNEP) to adapt to escalating climate impacts ...
- This figure will balloon to USD 315-565 billion annually (CPI)
- In 2023, under the Biden regime, despite heady promises made at COP29 in Baku, developed countries only contributed about USD 83.3 billion (OECD) of climate finance for developing nations.
- UNFCCC estimates that in the 2017-2021 period, less than 17% of commitments were dedicated to projects with a specific focus on local communities ...
- Of these a vanishingly small (10-15%?) percentage was dedicated to adaptation
- Public sector finance alone cannot bridge the annual US\$ 187-359 billion global gap in adaptation finance. Private finance is required.
- We need to change current largely grant-based paradigm for locally-led adaptation.



# Poor households in Bangladesh are exposed to frequent climate shocks, and face multiple hazards throughout the year (survey of BUR0 customers).

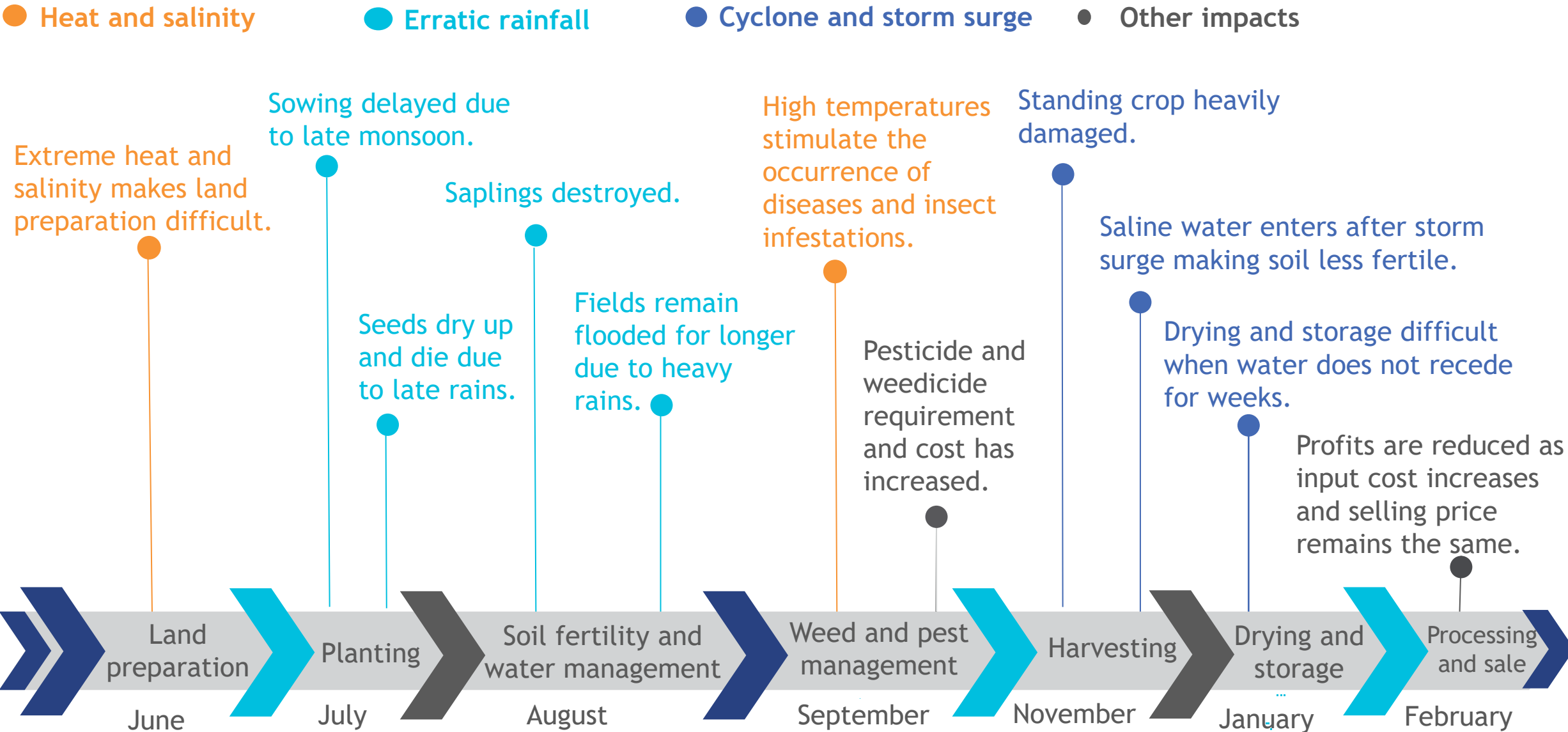
Percentage of respondents (%) exposed to climate events.



## Climate hazards (2024)

- In 2024, Bangladesh experienced an extra 57 days of extreme heat.
- The monsoon season for the year was particularly severe, with prolonged flooding in low-lying areas.
- Major rivers like the Brahmaputra, Ganges, and Meghna experienced higher water levels than usual.
- Saltwater intrusion further inland affected groundwater quality in coastal regions.

# Impact of erratic weather on *Aman* rice cultivation cycle - Khulna District



## **An outlier: *The Role of Microfinance in Household Livelihood Adaptation in Satkhira District, Southwest Bangladesh* (Fenton et al., 2017)**



Microfinance helps households **cope** with flooding by enabling access to credit when other coping mechanisms fail.



It supports **incremental adaptation**, such as homestead improvements and small livelihood shifts.



**Transformational adaptations** (e.g., international migration, aquaculture) require access to larger loans, typically from banks—not accessible to the poorest.



Microfinance can cause **maladaptation** when loans are used for non-income-generating activities, leading to over-indebtedness.



Nearly **20% of loans** were taken to repay existing debts—highlighting vulnerability traps.



Wealthier households benefit more from microfinance and bank credit, deepening adaptation inequalities.



Poorer households face **greater debt burdens** and fewer adaptation options.

# Rethinking locally-led adaptation - challenging the orthodoxy

## Current approach to LLA



Focuses on participation and local dialogue but treats actors uniformly, with limited differentiation in instruments or pathways.

## Proposed approach to LLA

### Three-tiered vertical structure:

Top Tier



Local Government Officials

Tool: Counties approach (FSD-K)

- Local infrastructure projects
- Financed via capital markets

Middle Tier



MSMEs/ Agriculture

Tool: MSC LLA Toolkit for IFSPs

- Use/benefit from infrastructure
- Require credit and financial services

Bottom Tier



Vulnerable Community Members

Tool: Core MSC Community LLA Toolkit

- Require loss & damage grants / social security
- Sometimes indirect employment via MSMEs or public works

# FSD Counties Climate Finance in Kenya



- The County Green Finance Assessment:
  - **Economic and fiscal assessment:** county **fiscal performance** (historical and projected), strengths, challenges, and ability to take on (additional) debt.
  - **Credit risk assessment:** the county government's relative **likelihood of defaulting** on its obligations from capital raising initiatives.
  - **Green asset and activity assessment:** availability of **green investment opportunities**.
  - **Green finance capability assessment:** the **skills and ability** to manage green financial instruments and related projects available in the county.
- 2025 launch of the Kenya County Green Investment Facility, supporting 10 counties in developing bankable green projects to mobilize over KES 100 billion (**USD770 million**) in investments.





# Four investable clusters being bought to market in Kenya

## Agriculture and food

- Climate-resilient agriculture
- Water resource management
- Green agro-processing facilities.

## ASAL ecosystems with high RE potential

- Solar and wind energy generation
- Water infrastructure development
- Ecosystem rehabilitation.

## Cities and urban centres

- Water and sewerage infrastructure
- Waste management
- Green low-cost housing
- Green urban transport infrastructure.

## Rapidly urbanising counties

- Climate-resilient agriculture
- Eco-tourism
- Green agro-processing
- Green low-cost housing
- Water and sewerage infrastructure.

# Rethinking locally-led adaptation - challenging the orthodoxy

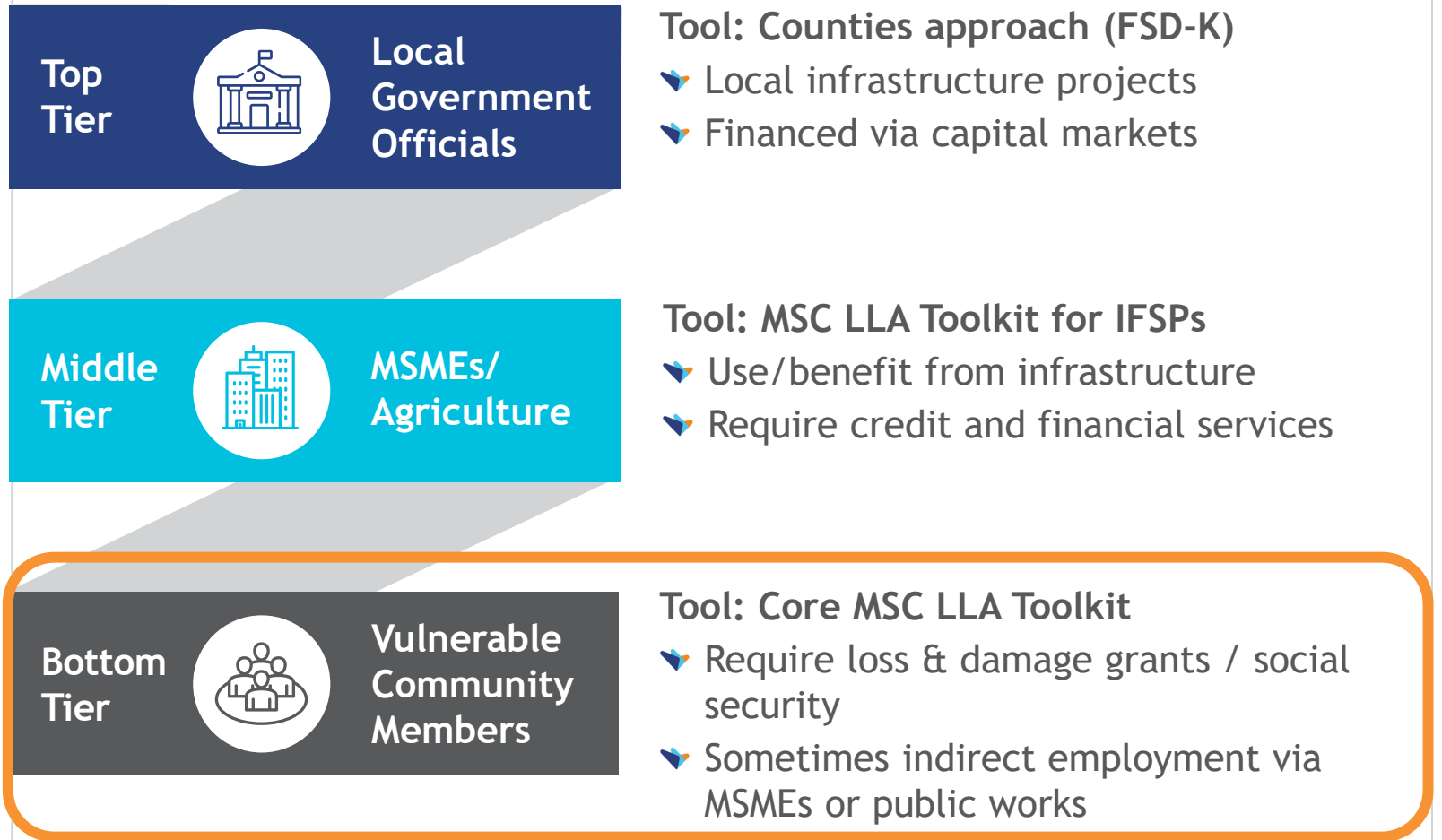
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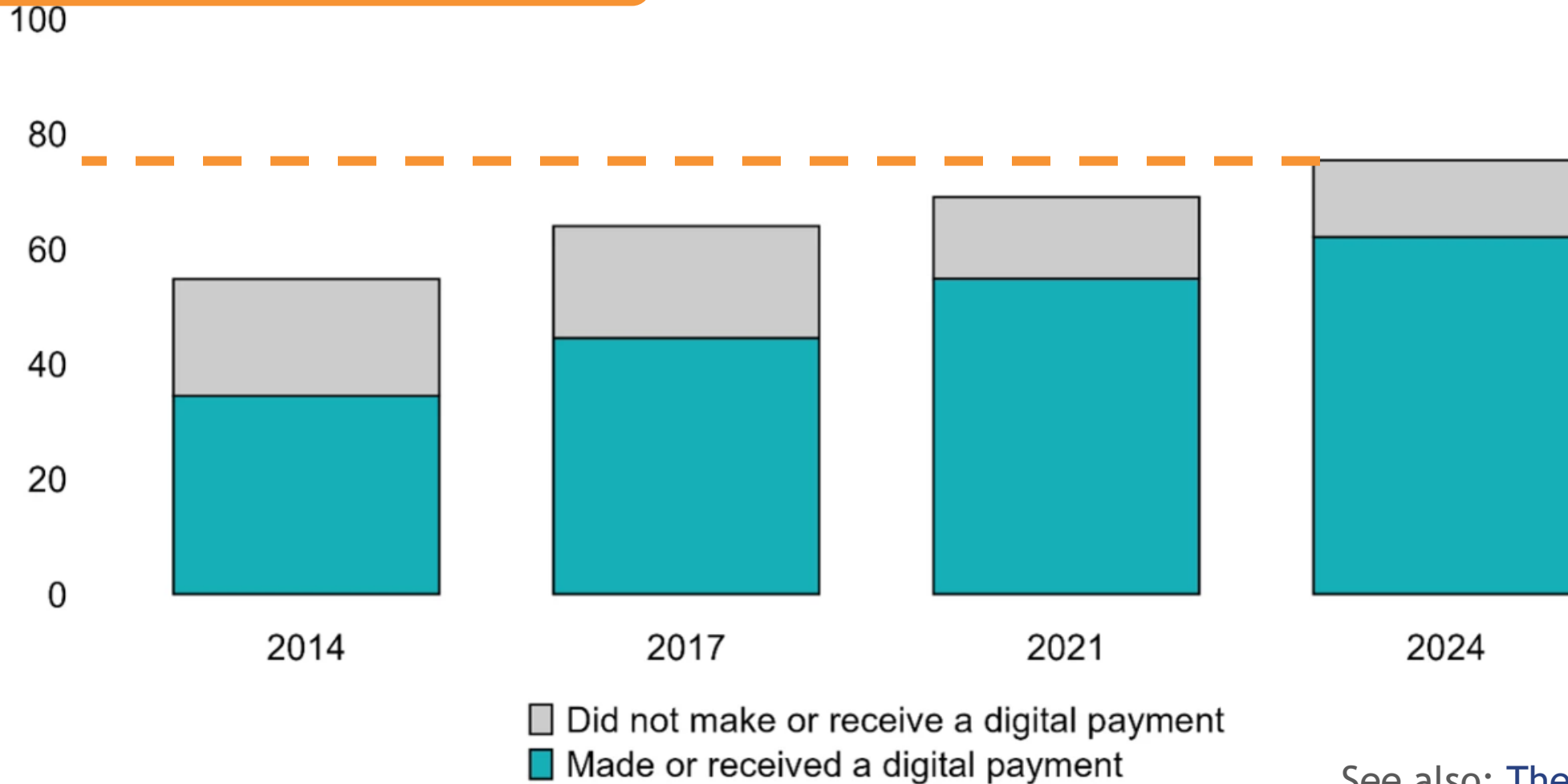
## Proposed approach to LLA

Three-tiered vertical structure:



# The number of people using digital payments continue to grow

Adults with an account (%), 2014-24



Source: Global Findex Database 2025

See also: [The path to resilience](#)  
[- Adaptive Social Protection](#)

# Rethinking locally-led adaptation - challenging the orthodoxy

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# Findex data highlight need for & potential of inclusive financial services

- ⚡ 1 in 3 adults in low-income countries faced a climate shock in the last 3 years.
- ⚠️ The poorest 40% are 1/3 more likely to be hit.
- 💰 2 in 3 lose income or assets—often both.
- 🏠 But 75% already have financial accounts.
- 🌐 This is our chance: Use blended finance to mobilize the **\$1.5 trillion in private capital** available with inclusive financial service providers and make every climate dollar go further.



The Global Findex Database 2025

# MSC's LLA toolkit for Inclusive Financial Service Providers helps them respond



The toolkit is based on a participatory methodology that enables local leadership and solutions



Combines secondary information with context-specific insights



1

Supply-side assessment from IFSPs' perspectives (forthcoming loan portfolio impact analysis toolkit)

2

Mapping of climate hazards and exposure

3

An assessment of vulnerability with the use of DFID's five capitals framework

4

The identification of climate-related direct and indirect impacts

5

The identification of adaptation and risk reduction options (ACTA framework)

6

Assessment and prioritization of adaptation options

7

The development of an MSME/ farmer adaptation plan & product concepts for the IFSP

## The toolkit offers many benefits and use cases for each stakeholder.



Enable MSMEs to climate-proof their businesses



Help IFSPs manage portfolio risk and design financial products for MSMEs' climate-specific needs



Identify best practices for adaptation strategies and create ideal plans



Support local actors—governments, trade unions, and other enablers—in making informed MSME resilience decisions

# Climate events disproportionately affect women



 **Health impacts:** illness and infections (fevers, uterine infections, skin diseases, vector born diseases); food insecurity; higher mortality among women, children, and older adults

 **Unpaid care load:** more time collecting water and cooking; intensified caregiving

 **Mobility and safety:** restricted movement (patriarchal norms); risks in shelters; clothing can hinder movement

 **Gender-based violence:** increased GBV; forced and child marriage

 **Decision-making:** limited participation in adaptation/disaster risk planning; few women leaders

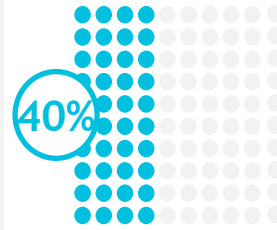




# Poor households adopt a range of strategies to anticipate, absorb, and adapt to impacts of climate change-related shocks and stresses (discussion with BURO customers).

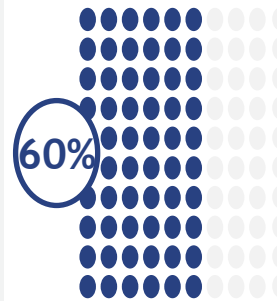
The BRACED program's 3As framework defines three core resilience capacities for managing climate-related shocks, each addressing distinct phases of risk management:

1. **Anticipatory capacity:** The ability of social systems to anticipate and reduce the impact of climate extremes before they occur.
2. **Adaptive capacity:** The ability to adjust actions or characteristics to moderate long-term climate risks or exploit new opportunities.
3. **Absorptive capacity:** The ability to cope with and recover from immediate impacts during or after a shock, using tangible assets (e.g., savings, food stocks) and intangible resources (e.g., social networks).



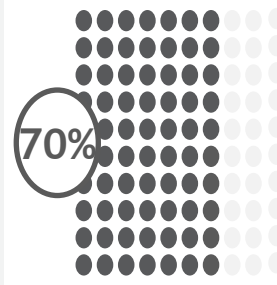
## Anticipatory strategies

- Harvest rainwater for livestock use
- Use climate-resilient livestock breeds
- Establish fodder banks and improve storage practices
- Shift sowing and harvesting times based on climate patterns



## Adaptive strategies

- Practice agroforestry
- Use crop varieties resistant to flood, drought, and salinity
- Diversify crops and use intercropping techniques
- Adopt Direct Seeded Rice (DSR) and Alternate Wetting and Drying (AWD) methods
- Implement rotational grazing and better pasture management
- Use biofertilizers and vermicompost
- Follow sustainable livestock feed practices
- Strengthen disease prevention and management system



## Absorptive strategies

- Take loans from informal sources
- Shift occupation or livelihood
- Rely on community support
- Access loans from NGOs/MFIs
- Sell productive assets and reduce food consumption
- Use personal savings
- Organize community-based livestock health camps
- Migrate for work or safety

Percentage of respondents adopting these strategies

# To successfully implement these strategies, BURO customers require access to adequate financial resources (survey of BURO customers).

## Anticipatory financial needs

### 1. Credit for home reinforcement to finance:

- Reinforcement of walls and roofs
- Installation of flood barriers and water diversion systems
- Stormproof

### 2. Microinsurance for climate shock preparedness including:

- Livelihood protection
- Health and emergency

## Adaptive financial needs

### 1. Financial support to adopt sustainable farming practices:

- Finance for CSA infrastructure: drip and/or solar irrigation systems, rainwater harvesting etc.
- Working capital: purchase flood/drought tolerant seeds

### 2. Financial support for income diversification (for example):

- Small-scale poultry farming
- Fisheries

### 3. Flexible loan structures customized to income patterns and adjusted interest rates

## Absorptive financial needs

### 1. Early-Action Financing for efficient disaster management:

Preemptive financing, based on early warning systems

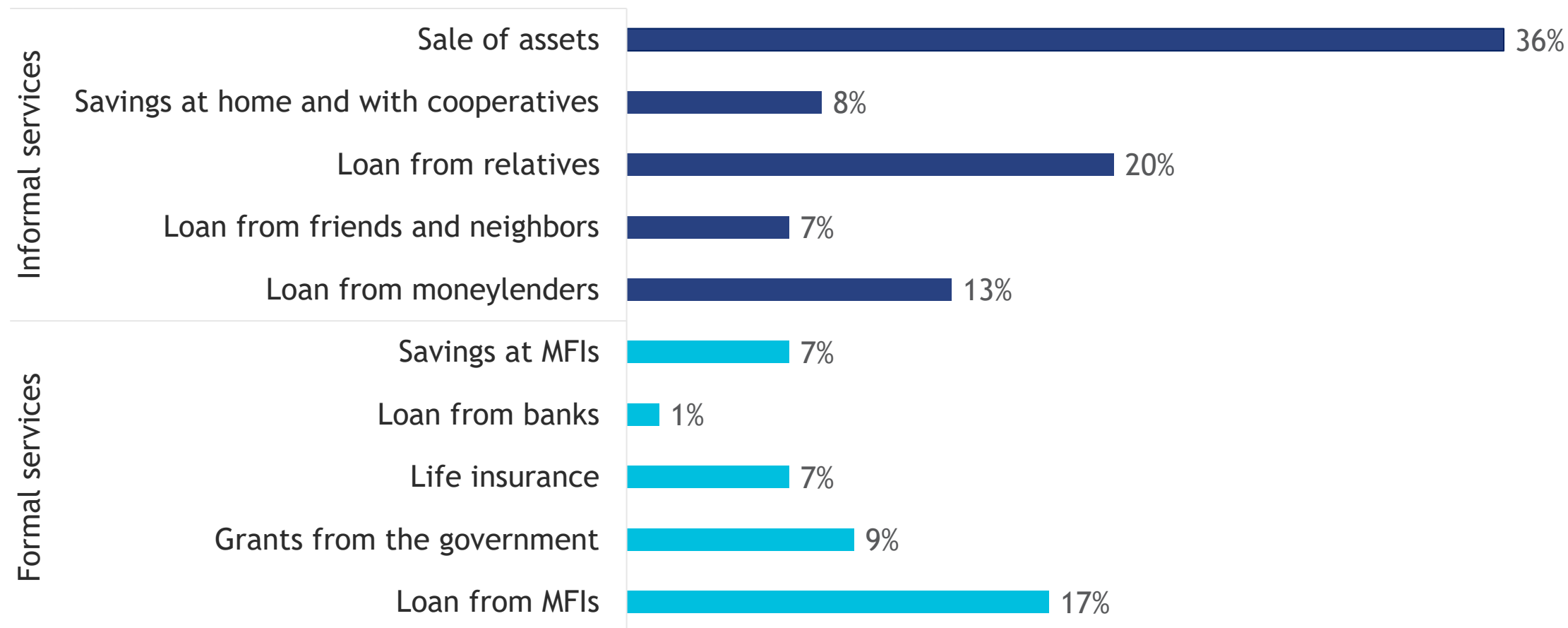
### 2. Contingency funds for quick recovery:

Flexible, unrestricted savings accounts that allow quick withdrawals during emergencies.

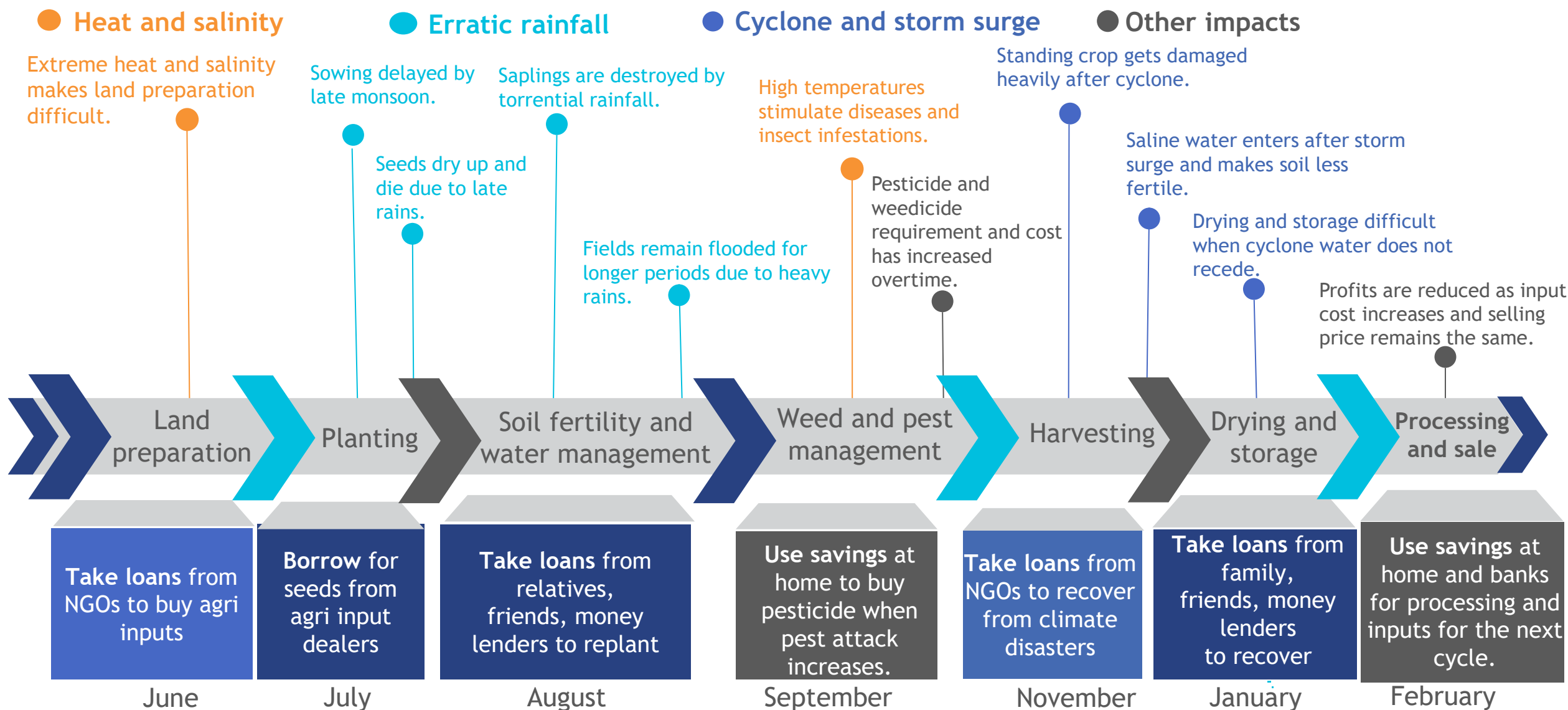


These financing needs are primarily met through informal channels such as personal savings and community lending, often at a significant cost ([survey of BURO customers](#)).

### Percentage of respondents (%) reporting preferred source of funds to cope with climate change



# Use of financial services during *Aman* rice cultivation cycle - Khulna District



# The level of adoption of climate adaptation strategies varies by gender... (from CAR in Nigeria & Bangladesh).

|                    | Least adopted                                                                                                                                                                                                     | Regularly adopted                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formal financial   | <ul style="list-style-type: none"> <li>➤ Credit from aggregators</li> <li>➤ Loan from banks</li> <li>➤ Savings in banks</li> <li>➤ Life insurance with endowment benefits</li> <li>➤ Takaful insurance</li> </ul> | <ul style="list-style-type: none"> <li>➤ Grants from the government</li> <li>➤ Savings with MFIs (but mostly women)</li> <li>➤ Borrowing from MFIs (but mostly women)</li> </ul>                                                                                                                                                                                                                                   |
| Informal financial | <ul style="list-style-type: none"> <li>➤ Credit (loan) from money lenders</li> </ul>                                                                                                                              | <ul style="list-style-type: none"> <li>➤ Savings at home and with cooperatives</li> <li>➤ Loan from friends and neighbors</li> <li>➤ Loan from relatives</li> </ul>                                                                                                                                                                                                                                                |
| Non financial      | <ul style="list-style-type: none"> <li>➤ Training and skill development for homestead gardening and livestock rearing provided by MFIs.</li> <li>➤ Combined farming of rice and fish.</li> </ul>                  | <ul style="list-style-type: none"> <li>➤ Seasonal migration for income during non-cropping and hazard-struck seasons.</li> <li>➤ Livestock rearing.</li> <li>➤ Building houses and toilets raised on plinths.</li> <li>➤ Rainwater harvesting to ensure safe drinking water during hazards.</li> <li>➤ Using salinity-tolerant crop species.</li> <li>➤ Homestead gardening - sometimes on raised land.</li> </ul> |

## Legends



## However, some of BURO's existing products help address financing needs.(1/2)

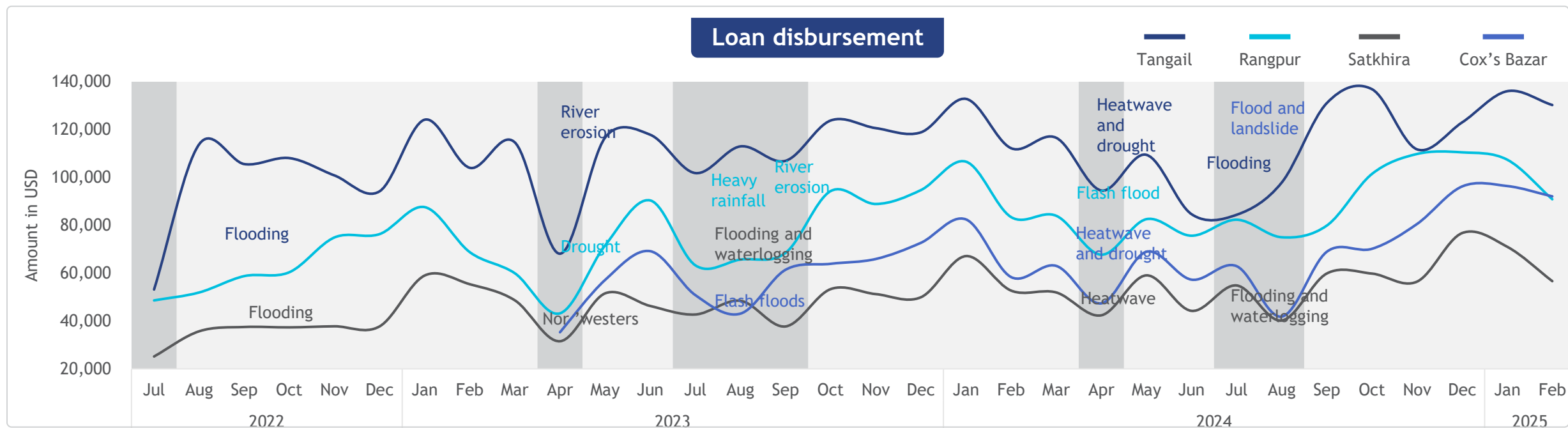
| Existing products                | Purpose                                                                                                                                 | Anticipatory                        | Adaptive                            | Absorptive                          |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <b>General loan</b>              | Helps finance economic activities and build capital providing by working capital to disadvantaged households.                           | <input checked="" type="checkbox"/> |                                     |                                     |
| <b>Microenterprise loan</b>      | These individual loans are assessed based on household cash flow, business projections, and the borrower's reputation in the community. |                                     | <input checked="" type="checkbox"/> |                                     |
| <b>Agriculture loan</b>          | Supports agricultural activities and is given to landless and marginal farmers in organized groups.                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <b>Hand /emergency loan</b>      | Helps protect household economies and assets, financing festivals, marriages, healthcare, and education.                                |                                     |                                     | <input checked="" type="checkbox"/> |
| <b>Disaster loan</b>             | The disaster loan provides immediate cash to help households recover from natural disasters and protect assets.                         |                                     |                                     | <input checked="" type="checkbox"/> |
| <b>Water and sanitation loan</b> | The tube-well loan provides access to safe water, while the sanitary loan helps fund bathroom installation.                             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |



## However, some of BURO's existing products help address financing needs.(2/2)

| Existing products   | Purpose                                                                                                                                                                                                                                                                               | Anticipatory                        | Adaptive                            | Absorptive                          |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| General savings     | The general savings account is like a current account, where customers can save or withdraw on demand.                                                                                                                                                                                | <input checked="" type="checkbox"/> |                                     | <input checked="" type="checkbox"/> |
| Contractual savings | This is a financial tool for customers to use in investments or to fulfill social obligations, such as weddings, funerals, or children's education. BURO offers competitive interest rates, which give customers control over deposits and withdrawal terms for financial flexibility |                                     | <input checked="" type="checkbox"/> |                                     |
| Voluntary savings   | These savings are considered as customer deposits and accrue interest based on the declared rates.                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

# Clients relying on credit for recovery and resilience rather than growth. Post events savings withdrawals and loan uptake increase.



## BURO reduces its loan disbursement which is a typical response of all MFIs:

- Proactive liquidity responsiveness (savings first)
- Prudent disbursement to prevent over-indebtedness
- Repayment deferrals resulting in financial strain
- Operational disruptions – access, mobility, and field realities
- Data sharing to manage a surge in post-disaster credit demand

## Increase in loan uptake post-disaster:

- Recovery and rehabilitation needs
- Investment in adaptation

# BURO's intentional strategy to enhance customer climate resilience integrating product innovation, risk-based underwriting, and institutional capacity building.



# Sectors we work in

## Providing impact-oriented business consulting services



Banking, financial services, and insurance (BFSI)



Water, sanitation, and hygiene (WASH)



Government and regulators



Micro, small, and medium enterprise (MSME)



Social payments and refugees



Youth



Gender equality and social inclusion (GESI)



Education and skills



Digital and FinTech



Agriculture and food systems



Climate change and sustainability



Health and nutrition

# Multi-faceted expertise

## Advisory that helps you succeed in a rapidly evolving market



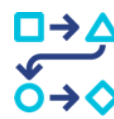
Policy and strategy



Products and channels



Research, evaluation, and analytics



Organizational transformation



Digital technology and channels



Catalytic finance



Design thinking and innovation



Marketing and communication



Training



Government regulations and policy



Data Insight



Customer protection and engagement for responsible finance

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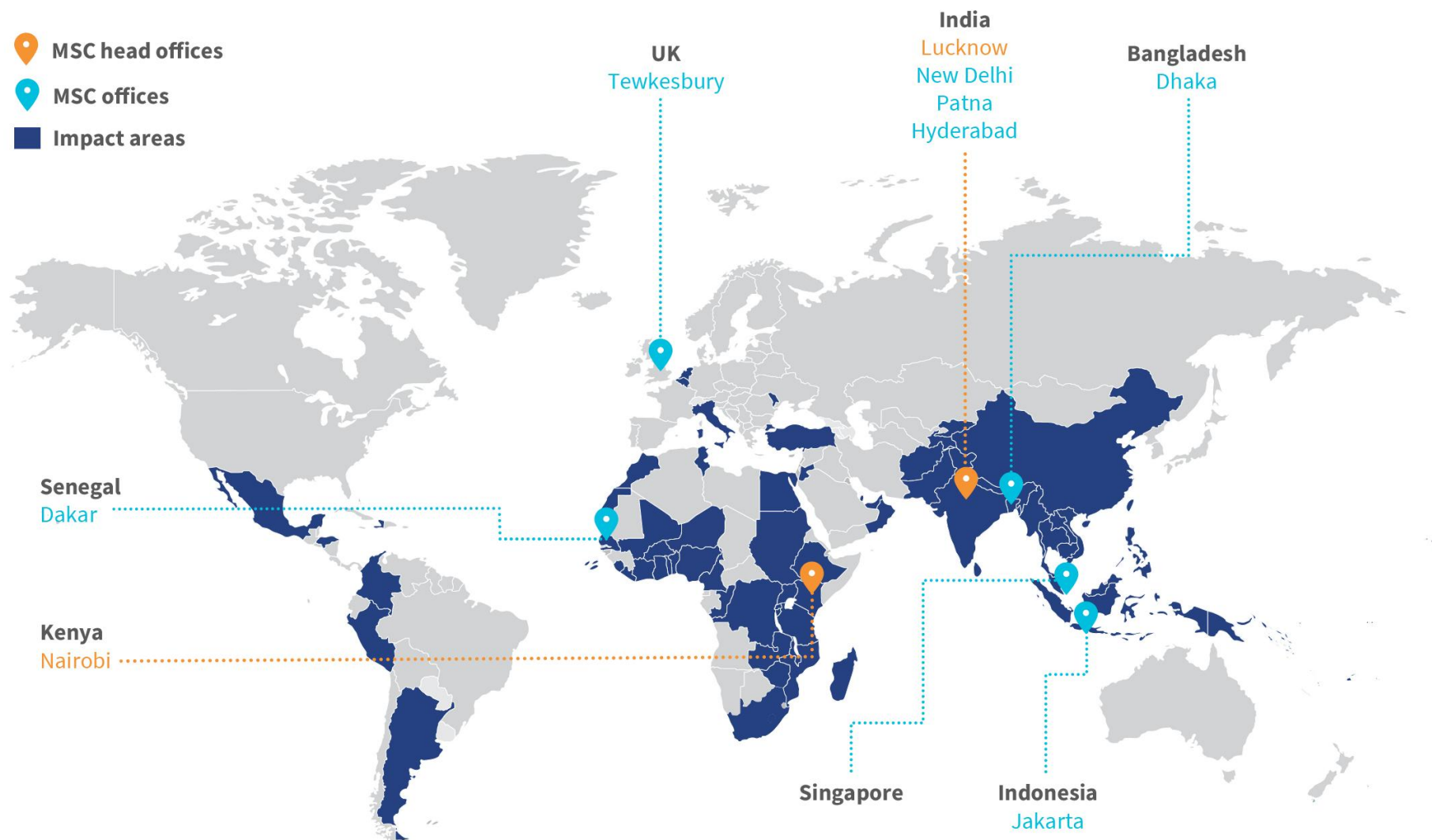
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-  **MSC head offices**
-  **MSC offices**
-  **Impact areas**



MSC corporate brochure | Email: [info@microsave.net](mailto:info@microsave.net) | Website: [www.microsave.net](http://www.microsave.net)

### Asia head office

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