BRACED aims to build the resilience of more than 5 million vulnerable people against climate extremes and disasters. It does so through 15 NGO-consortia working across 13 countries in East Africa, the Sahel and Asia.

FINANCIAL SERVICES INCLUSION helps build climate resilience and non-traditional financial services are better able to reach the most vulnerable, but action is needed on the demand and the supply side.

A MORE TRANSPARENT regulatory framework for these services can help promote inclusion and growth in the sector (and so competition and flexibility), alongside protection for users and improved physical access for the most vulnerable.

SUPPORT TO SERVICE providers is needed to build capacity, financial literacy and trust of vulnerable and disadvantaged groups in the banking system.

Financial inclusion is therefore a key policy area for building resilience and should focus on increasing access to saving and money transaction services for vulnerable groups as well as the provision of credit and insurance at an affordable cost (Zwendu, 2014).

LINKS BETWEEN FINANCIAL INCLUSION AND CLIMATE RESILIENCE

Financial inclusion is often seen as critical to development and would make sense even without climate change (World Bank, 2016). It may also help vulnerable groups in developing countries become more resilient to climate extremes and global warming. The poorest and most marginalised in society are most affected by climate-related shocks because they often live in hazardous places and typically have fewer resources and access to social safety nets (Wilkinson and Peters, 2015).

‘Resilience’ has many meanings, but the climate change and disasters literature commonly draws on definitions from socio-ecological systems theory, which refers to the properties of a system that allow it to deal with shocks and stresses, to persist and to continue to function ‘well’ (in the sense of providing stability, predictable rules, security and other benefits to its members). Resilience is derived from various capacities that are interlinked: absorptive, anticipatory and adaptive capacities. A social system with these capacities is less likely to be undermined by shocks and stresses, so well-being can be ensured and human development can continue to progress in locations exposed to climate extremes and disasters (Bahadur et al., 2015).

Saving and borrowing can strengthen some of these capacities, helping people to plan ahead, adapt to changes, and absorb shocks when they happen, but these services are not always accessible to the most vulnerable in society.

THE RISE OF ‘NON-TRADITIONAL’ FINANCIAL SERVICES

Most people in developing countries are unbanked (see Table 1 for an overview of coverage in Ethiopia, Mali and Myanmar). Traditional financial services are unaffordable for many, and fail to appropriately target rural inhabitants and people living outside the most populated areas. There are many reasons why this is the case but in Ethiopia, Mali and Myanmar the most commonly cited barriers to financial inclusion are: a lack of regulatory frameworks, limited commercial interest to expand activities, poor financial literacy and low levels of trust among potential users.

TACKLING CLIMATE VULNERABILITY AND FINANCIAL EXCLUSION

Both microfinance institutions (MFIs) and village savings and loans associations (VSLAs) allow communities to diversify their livelihoods and/or invest additional resources in current productive activities to increase efficiency, productivity and profitability while improving resilience.

MFIs are now spread all over the world (including in developed countries). They...
Table 1: Financial services inclusion in Ethiopia, Mali and Myanmar

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia</th>
<th>Mali</th>
<th>Myanmar</th>
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<tbody>
<tr>
<td>Adults with a deposit account (%)</td>
<td>23% of men/21% of women (2014)</td>
<td>26% of men/19% of women (2014)</td>
<td>29% of men/17% of women (2014)</td>
</tr>
<tr>
<td>Adult population unbanked (%)</td>
<td>79%</td>
<td>81%</td>
<td>78%</td>
</tr>
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Source: http://datatopics.worldbank.org/financialinclusion/

Microfinance includes financial literacy courses for villagers and supplementary management training as well. However, it needs to be accompanied by appropriate legislation to address the potential economic implications for the traditional banking sector (e.g. loss in commission received by commercial banks (Thomas, 2014), and also to protect the rights of mobile users against potential malpractices of informal unregistered companies.

Insurance can provide businesses, farmers and affected households with rapid access to post-disaster liquidity, offering protection to livelihoods. This may be one of the key determining factors in enabling rapid reconstruction and economic recovery after extreme weather events (World Bank, 2012). In the absence of formal insurance mechanisms for disasters, the poor are forced to self-insure, often depleting their savings when disaster strikes (Lopez, 2009; Fernandez, 2009). Weather index insurance presents a promising alternative to traditional agricultural insurance for many lower-income countries.

However, these schemes are not without challenges. In some cases, when weather data infrastructure is underdeveloped and information on climate risks is sparse, a suitable index cannot be found. This makes it difficult for insurance companies to price the risk and set a premium. In addition, if severe risk occurs too frequently, investments in other risk management strategies are likely to yield higher returns (Collier et al., 2009). Experience with weather index insurance markets shows developing these markets involves high start-up costs (Pierro and Desai, 2011). Not only do stakeholders have to design and market products, but also education and capacity-building among local insurance staff, delivery agents, government officials and consumers are needed. Finally, in order for the insurance scheme to work, the climate risk should be spread among a large number of individuals in order to transfer individual risk to a homogenous group of individuals (Llewellyn and Chaix, 2007).

These schemes alone are unlikely to lift group members out of poverty and address crucial issues such as lack of telecoms infrastructure. A more diversified choice of products and larger loans will be necessary.

With the rapid global expansion of mobile technology, mobile banking is helping vast numbers of previously excluded people access financial services. It has the potential to reach a far larger number of people, at a lower cost, and with greater convenience than traditional ‘bricks and mortar’ banking services that rely on fixed branches. Mobile banking, through reductions in transaction costs (transport, time, convenience, etc.), allows clients to save and invest money in income-generating activities more easily and quickly, which makes them more resilient to climate-related shocks. As with all new technology, mobile banking creates new challenges, however. It needs to be accompanied by appropriate legislation to address the potential economic implications for the traditional banking sector (e.g. loss in commission received by commercial banks (Thomas, 2014), and also to protect the rights of mobile users against potential malpractices of informal unregistered companies.

VSLAs represent an interesting approach by providing simple savings and loan facilities in remote rural communities that do not have easy access to traditional financial services (Agrawala and Carraro, 2010) or microfinance. Of particular interest are the important intangible assets VSLAs provide by strengthening social networks, which in turn help communities cope with intensive shocks and maintain levels of well-being (Levine et al., 2011). Anecdotal evidence in Mali, however, has shown that internal conflicts between tontine members can put in danger the financial sustainability of these informal groups (Tikjan, 2015). To help overcome these problems, complementary management training as well as financial literacy courses for villagers are being offered through programmes like Saving for Change (SfC), carried out by CARE, Plan International and World Vision.

VSLAs cannot yet provide larger loans and offer a very limited range of financial services (loans, savings and micro-insurance). These schemes alone are unlikely to lift group members out of poverty and address crucial issues such as lack of telecoms infrastructure. A more diversified choice of products and larger loans will be necessary. One solution to the issue of scale has been found in electronical monetary exchanges. These can help facilitate loan upsaling by pooling resources from several VSLAs, and have been piloted successfully in Mali through the concept of e-tontine.

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UNLOCKING THE POTENTIAL OF FINANCIAL SERVICES

Across Ethiopia, Mali and Myanmar, use of non-traditional financial services varies significantly (see Figure 1). Microfinance is relatively well developed across the three countries, although Myanmar lags behind. This is primarily a supply-side problem rather than reflecting a lack of demand. MFIs in Myanmar focus predominately on commercial objectives and therefore are not socially driven. Insurance provision is higher in Ethiopia and Mali than in Myanmar because the latter has only recently opened up to commercial markets and regulation is still lacking. VSLAs are relatively active across the three countries, although, again, Ethiopia and Mali have a longer history of these informal associations, known as saving and credit cooperatives in Ethiopia and tontines in Mali.

Mobile banking is most developed in Mali, owing to the country’s conducive regulatory environment and the competitive nature of its market. In Ethiopia, the telecoms sector is publically owned, restricting growth. Poor infrastructure is also a constraint in Ethiopia and Myanmar.

A number of factors constrain the use of non-traditional financial services to help build resilience. While these vary between countries, a number of common barriers were detected in Ethiopia, Mali and Myanmar:

- Financial literacy of beneficiaries and lack of previous experience using the products;
- Technological and infrastructure-based issues, for example related to the coverage and sophistication of weather and agricultural datasets, for use in weather index insurance;
- Financial factors, particularly levels of dependence on international donor funds to support the delivery of products and services, compared with more widely available credit through commercial, market-oriented mechanisms;
- Policy and regulatory environment issues, for instance lack of competition within sectors owing to nationalisation or privatisation; and
- Capacity constraints among financial service providers, for example in terms of trained and skilled professionals.

The role of such services in building climate resilience is dependent on the removal of barriers to create a more conducive enabling environment. In some cases, the barriers may be so significant that, without considerable structural changes in the regulatory and institutional environment or improvements in physical infrastructure, the growth of non-traditional financial services will stall. This will limit their potential to meet the needs of the most vulnerable. There is also a need to develop alternative solutions suitable for different social and religious contexts, including those where VSLAs will not work well because of acute trust issues within communities.

Governments will need to improve regulatory and legal frameworks to make them more transparent and predictable, reducing costs and simplifying rules to enter the market

RECOMMENDATIONS

Governments and international development agencies can take a variety of actions to support the development of financial services in a way that promotes climate-resilient development. A comprehensive set of measures is required, on both the supply and the demand side of the financial system.

One key measure relates to strengthening the enabling environment for improvements in financial inclusion and depth. Governments will need to improve regulatory and legal frameworks to make them more transparent and predictable, reducing costs and simplifying rules to enter the market. On the demand side, greater protection for users is needed, as well as improved physical access for the most vulnerable. All of this will improve competition and flexibility in the market and trust in the banking system. In addition, international development agencies and donors can offer financial, legal and technical support to financial service providers in order to help them expand and scale up the offer of services at an affordable cost, as well as provide products that promote a risk management ethic in

Figure 1: Relative use of non-traditional financial services in Ethiopia, Mali and Myanmar

<table>
<thead>
<tr>
<th>Service</th>
<th>Myanmar</th>
<th>Mali</th>
<th>Ethiopia</th>
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<tbody>
<tr>
<td>Microfinance</td>
<td></td>
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<tr>
<td>Insurance</td>
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<td>VSLAs</td>
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<td></td>
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<tr>
<td>Mobile banking</td>
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</tbody>
</table>

Source: Based on literature review (insights gained through interviews with in-country stakeholders and expert judgement)
decision-making. All this will need to be focussed on building the climate resilience of the most vulnerable.

The formal private sector offers a unique competitiveness in the provision of financial services, and this should be exploited. For example, it can develop new financial and communications technology services, such as mobile banking applications tailored to specific user needs that could help to expand mobile/telecoms network coverage.

Governments and donors need to collaborate with non-governmental organisations and service providers to build the capacity, financial literacy and trust of vulnerable and disadvantaged groups in the banking system. This includes providing training on disaster risk reduction, preparedness and business skills linked to the delivery of financial services, so that these products can be used effectively by vulnerable groups to build their resilience. Training initiatives could usefully build on the experiences of existing programmes, such as the SfC could usefully build on the experiences of existing programmes, such as the SfC programme carried out by CARE, Plan International and World Vision.

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