



# ADAPTING FROM THE GROUND UP

*Enabling Small Businesses in Developing  
Countries to Adapt to Climate Change*

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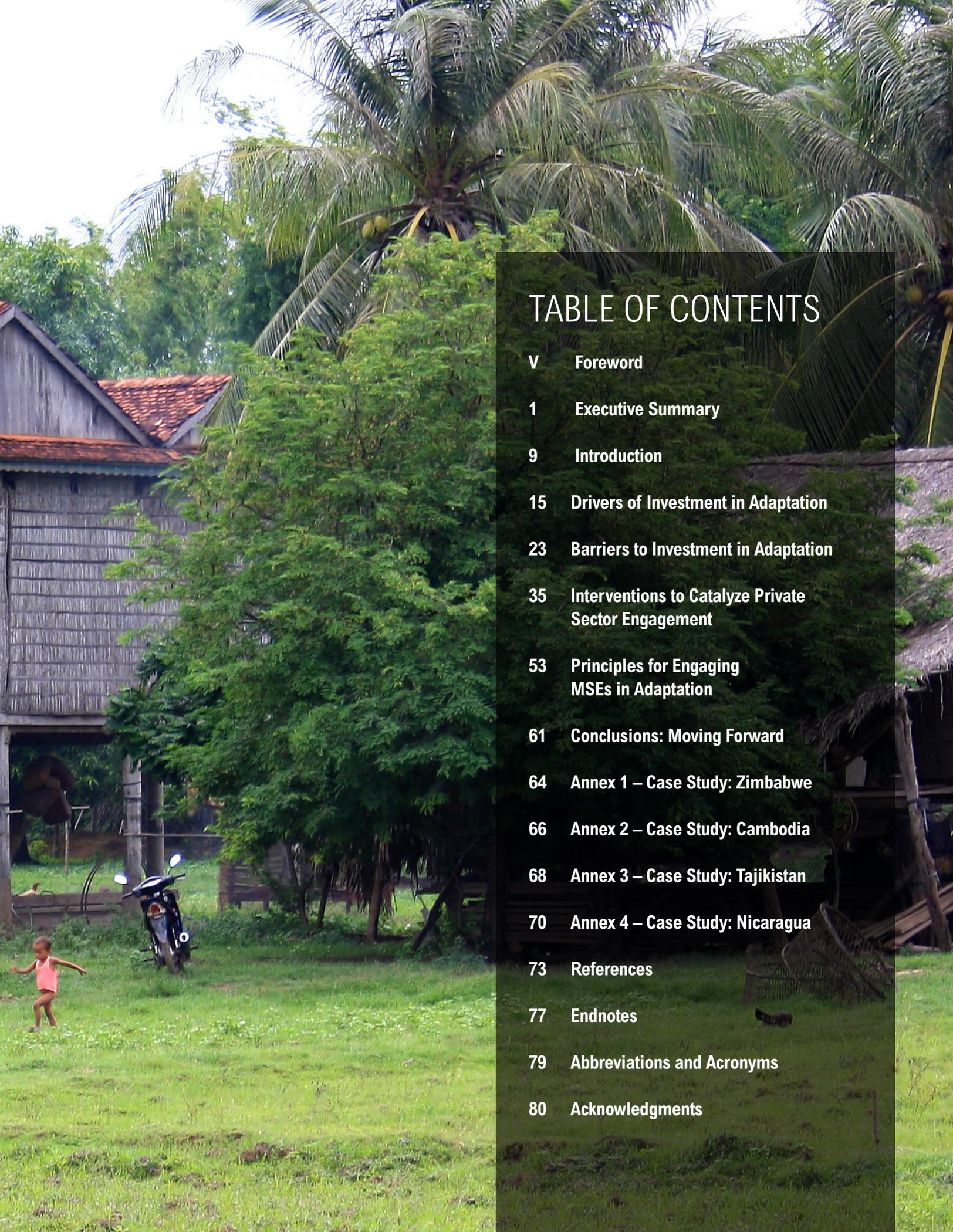


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A photograph of a rural tropical setting. In the foreground, a young child in a pink shirt is running on a grassy area. A motorcycle is parked nearby. In the background, there is a wooden house with a thatched roof and several tall palm trees. The scene is lush and green.

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# FOREWORD

Adaptation to climate change is not optional, but an essential element in the pursuit of prosperity in the long term. In the face of a changing climate, vulnerable communities benefit by being more resilient to extreme weather; businesses thrive when they better manage risk and harness new opportunities; and governments succeed when they lead resilient and strong economies. As climate patterns shift and weather events become more severe, the cost of adaptation will increase. The latest findings of the United Nations suggest that adaptation will cost between US \$200 billion and US \$500 billion per year even if climate negotiators strike a deal to avoid crossing the critical threshold of a 2°C of temperature rise above pre-industrial levels. If they fail, the cost will be exponentially higher.

Developing countries need significant financing to adapt to climate change. Governments and development partners have an important role to play in safeguarding vulnerable communities and helping to develop the capacities to manage risks. Existing public funds and likely future funding from global agreements and compacts, however, are nowhere near sufficient for the task.

All forms of finance—public and private, domestic and international—are essential for the transition to inclusive, low-emission, and climate-resilient development. As public finance is limited, a critical challenge is to ensure that it is used in the best possible ways with the aim of catalyzing finance from other sources.

*Adapting from the Ground Up* highlights the business case for why governments should focus on creating an enabling environment which will

encourage micro and small enterprises (MSEs) in developing countries to invest in adaptation. In most countries, the private sector accounts for more than 60% of GDP, and MSEs in developing countries provide around 60% of all employment, supporting the livelihoods of billions globally.

Policymakers need to engage with MSEs in a targeted way. Policies which direct and redirect investments toward appropriate products and services will support, facilitate, and advance adaptation at scale. For businesses, it is in their best interests to invest in adaptation because they must ensure business continuity and profitability in a changing climate. WRI's and UNDP's analysis, based on numerous case studies, shows that there are many opportunities for the public sector, with assistance from development partners, NGOs, and others, to create the conditions in which MSEs can re-orient their investments in ways which more effectively safeguard their current assets against climate change risks. The public sector should send the right signals, and create the right incentives, for the promotion of new economic opportunities which are resilient. The products and services which private entities provide will also be critical for supporting the resilience of the wider community. Through this type of engagement, the public and private sectors can become more active agents of change in advancing resilience in the post-2015 development process.

The unmet financing needs for adaptation reveal an urgent need for new approaches to catalyze the changes required to support transformative adjustments. This report unpacks what it means to engage the private sector from the micro level up as an agent of change. We hope the evidence and the ideas presented in this report will spur further thinking and action in countries around the world on different ways in which resilience to climate change can be promoted.



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# EXECUTIVE SUMMARY

Global estimates show that the costs of climate change adaptation in developing countries will far exceed the public sector's financial resources.<sup>1</sup> In order to build climate-resilient societies, both public and private stakeholders need to contribute. To maintain the development pathways of developing countries, urgent action is needed from the public sector to form sound policies that address climate challenges and focus especially on the private sector, which more directly supports the livelihoods of the majority of people living in vulnerable communities. Although leveraging finance from donors is important for adaptation efforts, it will be fundamental to encourage the private sector to invest in adaptation and, in so doing, also minimize business risks and strengthen the resilience of vulnerable communities.

Engaging the private sector in adaptation to build resilient societies must necessarily start from the ground up, from micro and small enterprises (MSEs), which constitute the bedrock of economies where most vulnerable communities exist.

*Adapting from the Ground Up* seeks to enhance private sector engagement in adaptation by identifying drivers of and barriers to MSE action in this area, and by outlining a set of interventions that public actors can adapt to create an enabling environment in which MSEs not only become more climate resilient but also contribute toward the resilience of others (Figure ES-1). The report aims to influence policymakers, development partners, and climate funds to support and design policy interventions that unlock, catalyze and/or direct investments by and for MSEs to take into account current and impending climate change risks and opportunities. It provides guidance for policymakers to design interventions to incorporate into their national adaptation plans (NAPs) and long-term development planning.

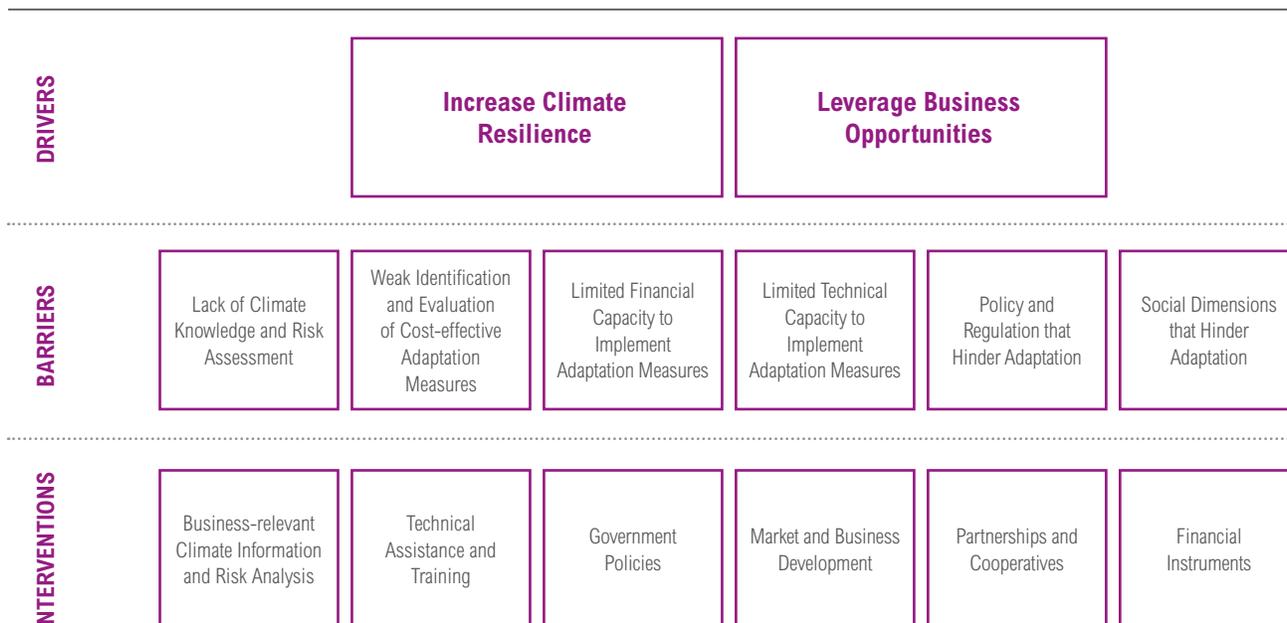
*Adapting from the Ground Up* draws upon a growing body of research and projects on private sector adaptation. It shares examples from case studies<sup>2</sup> of interventions in Cambodia, Nicaragua, Tajikistan, and Zimbabwe, which successfully catalyzed

MSE investment in climate adaptation measures in the agriculture sector. The report also presents a number of shorter case studies from projects and initiatives in Benin, Cook Islands, Ethiopia, Honduras, India, Namibia, Rwanda, and Tanzania. Our conclusions are necessarily preliminary. Most adaptation projects that target the private sector are still under development, or in the process of being implemented, making results difficult to assess or predict. Therefore, there are only a few completed cases from which we can draw lessons at this time.

### Micro and Small Enterprises (MSEs): The Engines of Growth and Livelihoods in Developing Countries

MSEs play a vital role in community livelihoods and resilience but they tend to have fewer resources to adapt to climate change than do larger enterprises. They have limited capacity to assess risks and take advantage of opportunities associated with climate change. Given these challenges, there is considerable scope to increase the contribution that MSEs can make to adaptation. With public sector assistance, MSEs could be incentivized to catalyze investment in risk management and resilience, and thereby become the most direct means of supporting vulnerable communities as they adapt to climate impacts. *Adapting from the Ground Up* describes

Figure ES-1 | **Overview of Drivers, Barriers, and Interventions to Catalyze MSE Investment in Resilience**





the different elements that policymakers need to take into account when designing policies and interventions to catalyze MSE investment in adaptation.

#### What Drives MSEs to Invest in Adaptation?

To effectively engage businesses, whether MSEs or large corporations, a fundamental consideration (regardless of climate change) is the risk-reward profile associated with a prospective business opportunity. If the return expected is too low, or the risk too high, private investments are unlikely to be made. Policymakers need to have an understanding of what drives (or constrains) businesses to invest, as they try to determine ways in which to catalyze investment in risk management and products and services that support, facilitate, and advance climate change adaptation at scale.

Generally, businesses will make investments in adaptation for two reasons:

- **TO INCREASE THE CLIMATE RESILIENCE OF THEIR BUSINESS.** Businesses need to increase their climate resilience to limit negative impacts on the quality and availability of the goods and services they produce which, in turn, affect their bottom line and long-term viability.

- **TO HARNESS NEW OPPORTUNITIES ARISING FROM A CHANGING CLIMATE.** Climate change could present opportunities for businesses, as demand for risk-management-orientated technologies, products, and services increases, and as new markets open up.

Such investments will benefit from clear and coordinated policy actions and regulations. Governments can stimulate markets through incentives for innovation (for example, in the fields of climate-resilient technology research and commercialization) and provision of financial support. Financial support can take the form of various policy and financial instruments that reduce risks, transfer risks, or compensate for risks (UNDP 2013). Governments can thus affect the risk-reward profile of private investments in adaptation through a variety of policy approaches and instruments.

#### What Barriers Discourage MSEs from Investing in Adaptation?

MSEs in many parts of the world face multiple barriers to investment in adaptation. The report discusses some of the key barriers that need to be addressed to strengthen the resilience of MSEs and their communities in developing countries. Based

on the findings from case studies and literature review, the barriers that prevent businesses from engaging in adaptation can be grouped into six categories:

- 1. CLIMATE KNOWLEDGE AND RISK ASSESSMENT.** Information about the risks and uncertainties that are relevant (by geography and sector) to the planning and decision-making processes of MSEs is sometimes unavailable or inaccessible.
- 2. IDENTIFICATION AND EVALUATION OF COST-EFFECTIVE ADAPTATION MEASURES.** Adaptation does not yet have a standard “menu” of actions from which enterprises can choose; they must develop their own location- and time-specific adaptation measures. Few tools are available to help small enterprises develop such measures, or to assess their feasibility and cost-effectiveness. Moreover, adaptation options must be competitive with non-adaptation options in terms of product price, operating cost, or sustainability of production. Many enterprises therefore struggle to identify and choose adaptation options.
- 3. FINANCIAL CAPACITY TO IMPLEMENT ADAPTATION MEASURES.** In many cases, adaptation requires new investment. Some investments can have large upfront costs, relatively long payback times, and uncertainties related to future climate impacts. Banks and

other financial intermediaries, recognizing unfavorable risk-return profiles, might hesitate to invest in adaptation, making it difficult for MSEs to obtain financing. Knowledge of alternative types of financial instruments that can adjust the risk-reward profile might be limited and/or beyond the capacity of MSEs to access, for a variety of reasons.

- 4. TECHNICAL CAPACITY TO IMPLEMENT ADAPTATION MEASURES.** Adopting new business processes, developing new products or services, and implementing new technologies for increased resilience often require technical skills and expertise, which might themselves require upfront investment. This may not always be possible given tight margins in the context of their ongoing business ventures.
- 5. POLICIES AND REGULATIONS.** Government institutions can play an important role by removing policy obstacles to the adoption and diffusion of adaptation practices and creating an enabling environment. Investments can be incentivized through a variety of financial instruments at policymakers’ disposal, and information and knowledge can be communicated to local businesses. In many developing countries, however, national and local government institutions themselves suffer from capacity constraints that limit these approaches.



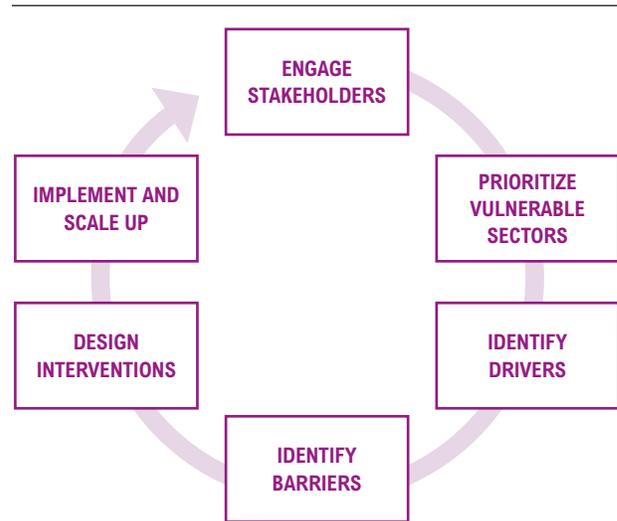
**6. SOCIAL DIMENSIONS OF ADAPTATION.** Class, gender, and culture play a large role when deciding among adaptation options. Although often overlooked, the social context can be a significant barrier to the adoption of new technologies and production methods. Because people's decisions are influenced by cultural and demographic factors, the adaptive capacity of individuals varies across regions and countries.

### Interventions to Catalyze MSE Investment in Adaptation

The public sector has a central role to play in helping society adapt to the effects of climate change, while promoting economic development (Cimato and Mullan 2010). Public interventions should be used when markets are not functioning in a way that encourages the private sector to become more resilient. Although many governments do not have the capacity to provide sufficient public support (especially finance) to enable all businesses to invest in adaptation, they do have the influence and capacity to work with non-governmental organizations (NGOs), financial institutions, and international organizations to cooperate in smoothing the path for MSEs trying to develop risk management options.

The report highlights a number of categories of government interventions. They include the provision of business-relevant climate information and risk analysis; technical assistance and training;

Figure ES-2 | **Principles for Designing Interventions to Catalyze MSE Investment in Adaptation**



policy development that enables investments in adaptation; market and business development; encouragement of partnerships and cooperatives; and deployment of financial instruments.

### Framework for Engaging MSEs in Adaptation

Figure ES-2 illustrates a set of six principles that the public sector can use in designing interventions to better promote adaptation by MSEs:

- Engage stakeholders
- Prioritize vulnerable sectors





- Identify drivers of investment in adaptation
- Identify barriers preventing investment in adaptation
- Design interventions to catalyze MSE investment in adaptation
- Implement and scale up

These principles enable policymakers to tailor their interventions to circumstances specific to a particular country or region. For example, strengthening MSE engagement in adaptation could be a stand-alone policy objective or a part of a larger adaptation policy process, such as the formulation of a national adaptation plan. It could also be an element in efforts to address a specific climate-resilient development objective, such as providing water services or building local seed banks.

### Moving Forward

MSEs need to become more resilient, if developing countries—and particularly their most vulnerable populations—are to become resilient to climate change. Part of this change has to come through public support. Policymakers, development part-

ners, and climate funds need to expand their current focus on leveraging private sector finance to include adaptation incentives that support MSEs. Engaging MSEs in adaptation will create an environment that catalyzes sustainable development within a climate-resilient environment.

### Recommendations for Developing Country Governments

Policymakers should develop policies that stimulate MSEs to invest in adaptation. This can be achieved through instruments such as national and sector-specific adaptation plans and long-term economic development planning strategies and frameworks. Developing country governments should actively engage with other actors who can assist them in implementing these interventions. Actors include multinational corporations, financial institutions, and investors; all of whom can help to ensure that a variety of financial instruments are brought to bear to support MSEs as they invest in risk reduction/management initiatives. Decentralized approaches to identifying key policy and financial barriers to investing in risk management by MSEs should also be promoted. Public officials can have more direct and effective contact with MSEs at the municipal

Policymakers, development partners, and climate funds need to expand their current focus on leveraging private sector finance to include adaptation incentives that support MSEs.

and district levels. Civil society organizations can be used to reach local community groups who might be hesitant to engage with large and unfamiliar institutions.

#### Recommendations for Multilateral and Bilateral Partners

Providing financial and technical support for national activities is the most direct way that multilateral and bilateral partners can support the process. This support must, however, be targeted at the risk-reward profiles of investments that MSEs might be considering in the context of managing climate risks, but are hesitant to make because of unfavorable terms. Support might involve removing policy barriers, transferring risk, and/or compensating for risks using a variety of financial instruments. Donor institutions can also act as knowledge banks and facilitate the transfer of information about successful business practices, initiatives, and pilots. Equally, bilateral partners can support the

process of catalyzing engagement in adaptation by ensuring market access for products developed by MSEs in developing countries.

#### Recommendations for Climate Funds

Climate funds, such as the Green Climate Fund, can play a catalytic role by ensuring that they support two kinds of projects and programs: those that create the enabling conditions for MSEs to make investments in building up their own resilience to climate impacts, and those that promote products and services that support, facilitate, or advance adaptation at scale. In developing countries, this specifically includes the use of grants—financial instruments that change the risk-reward profile of investments that have adaptation benefits. Climate funds can also act as matchmaker and clearing-house for private sector adaptation ideas. Climate funds can support and complement national efforts by creating regional or national networks to help MSEs develop product ideas into bankable projects, supporting capacity development for implementation, and linking businesses to possible investors.

#### Recommendations for Large Private Sector Companies

Large private sector actors (multinationals that are reliant on supply chains involving multiple MSEs) can contribute to building resilient MSEs in developing countries, while benefitting from a more resilient supply chain. Companies and investors can support MSEs by providing finance and technical assistance, or by forming partnerships. Financial institutions can also contribute by providing better access to finance for adaptation efforts by MSEs in low-income countries.

