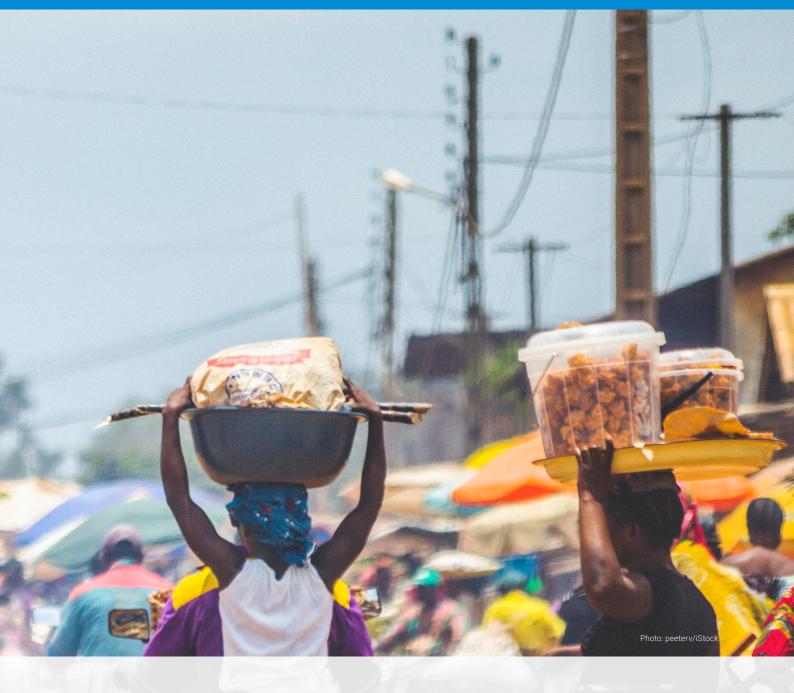


► KEY MESSAGES

- Adaptation is not a choice but a necessity for the private sector to manage worsening climate realities across Africa. This chapter reveals that while there is more private sector adaptation action on the continent than is currently recorded, it is still low compared to other regions of the world and is mostly focused on mitigation.
- Frontrunners among Africa-based businesses capitalize on resilience and adaptation action, which not only helps them to manage climate risks but also positively impacts their productivity and profitability. Almost all the
- large companies that were interviewed identified potential business opportunities in managing climate risks.
- Large companies have the capacity to generate information on climate impacts on their operations through risk assessments, while micro, small, and medium-sized enterprises (MSMEs) lack the capacity and therefore the **information.** Sharing climate data and adaptation knowledge with MSMEs, which are often an essential part of the value and supply chains, will benefit larger companies in the long term.



 Traditional project funding does not always work for private sector adaptation and resiliencebuilding efforts, because investments can sometimes lead to a short-term loss of income or require investments in new skills or technologies. Appropriate support and financing mechanisms are necessary to help MSMEs switch to climateresilient practices.



Climate action is a \$3 trillion investment opportunity in Africa by 2030 ... The Africa Adaptation Acceleration Program, and many other ambitious African initiatives, must be empowered to fully deliver on their goals."

António Guterres, Secretary-General of the United Nations Leader's Dialogue on the Africa Covid-Climate Emergency, April, 2021

INTRODUCTION

The private sector generates two-thirds of the investments, 75 percent of the economic output, and 90 percent of the employment in Africa, through a diverse range of companies that include large multinationals on the one hand, and many micro, small, and medium-sized enterprises (MSMEs) on the other.¹ Its importance is therefore hard to dispute. However, little is known about its role in climate adaptation and resilience-building efforts, or about how it can help to scale up and strengthen adaptation efforts across the continent.

The information that does exist indicates that there is currently limited private sector engagement in climate change in Africa compared to other regions of the world, and most of it is focused on mitigation rather than adaptation.2 It would also appear that governments are not always fully aware of how to engage the private sector on climate change, as only five countries in Africa have systematically integrated private sector involvement in their Nationally Determined Contributions (NDCs).3

This chapter seeks to provide further insights on the role of the private sector in adaptation in Africa. It is based on a GCA analysis of the CDP's Corporate Climate Change Disclosure Questionnaire 2020; a survey of MSMEs in Africa by the GCA; and interviews with representatives of companies that are either based in Africa or have assets or branches in Africa, conducted jointly with the World Business Council for Sustainable Development.4 It finds that while the private sector is doing more than is currently recorded, much more needs to be done to adapt and climate-proof operations, as delaying adaptation action will put the viability of entire businesses at risk.5

Following a brief overview of private sector action and reporting on climate change in the next section, the chapter highlights key drivers, barriers, and motivations to enable adaptation by the private sector in Africa-including the role of policies and institutions; data and information; collaboration and capacity building; infrastructure and supply chains;

and access to financial and economic instruments.6 Finally, it finds that adaptation and resilience efforts also present opportunities for the African private sector, for instance in the form of new products and services that become necessary.7

Private sector climate action and reporting in Africa

Around the world, climate action by large enterprises has increased rapidly over the last decade, with an unprecedented number of companies adopting climate targets despite the COVID-19 pandemic.8 Driven partly by a heightened demand from clients, investors, and shareholders, large businesses are increasingly committing to climate action, demonstrating that ambitious climate action can go hand-in-hand with market outperformance.9

Investors are more likely to provide capital to firms that disclose information on climate- and sustainability-related parameters, through various tools such as those provided by CDP, the Task Force on Climate-related Financial Disclosures, Businesses for Sustainability Reporting, and the Global Reporting Initiative. 10 As businesses reckon with the impact of climate change on their own activities, it is also not uncommon for business leaders to urge politicians to show greater climate ambition at climate summits and conferences.11 However, most private sector action is currently focused mainly on mitigation.



In our GCA analysis, we find that information disclosure on climate change by large businesses in Africa is still limited.¹² Of the 3000 companies that responded to CDP's Corporate Climate Change Disclosure Questionnaire 2020, only 17 percent (or 515 companies) disclosed data on climate activities in Africa.¹³ Of the 515 companies, 31 (approximately 6 percent) have their headquarters in Africa, while the rest are multinationals with operations in Africa. The disclosure of data is unequally distributed across Africa, with most reporting from South Africa, Algeria, Egypt, Morocco, Angola, Kenya, and Botswana. The most prominent sectors that disclose climate information in Africa include services, manufacturing, materials, food and beverages, agriculture, biotech, health care, pharma, infrastructure, retail, and hospitality.

An overwhelming majority of companies that disclose data on climate-related activities in Africa identified potential financial or strategic impacts due to climate risks (88 percent), as well as climaterelated business opportunities (94 percent). Almost all of them (97 percent) report that climate-related risks and opportunities have influenced their strategy and/or financial planning, and more than half (59 percent) have developed low-carbon transition plans.14 They identify adaptation and resilience as the fourth most important topic for corporate engagement with policymakers, behind clean energy generation, energy efficiency, and climate finance.

Many of these companies (65 percent) identify climate risks that could have significant strategic and financial implications. Possible negative financial impacts include decreased revenues due to reduced demand for products and services; decreased revenues due to reduced production capacity; increased direct costs; and increased capital expenditures. Approximately half the companies provided a specific figure for estimates of the financial impacts of climate risks, while others provide a range.

The climate risk assessments undertaken by these companies consider risks that relate to current regulations, emerging regulations, reputation, markets, physical infrastructure, and technology. The climate-related risks that are identified most often are categorized under operational risks, policy and legal risks, credit risks, market risks, and reputational risks (Figure 1). The climate-related opportunities for business expansion identified most often, meanwhile, relate to products and services and resource efficiency.

Using a range of climate scenarios to conduct climate risks assessments, the companies identify droughts and flooding as the most urgent climate risks, followed by extreme weather events.15 Water scarcity is also of particular concern. South Africa has the largest number of businesses reporting detrimental water-related impacts globally, while

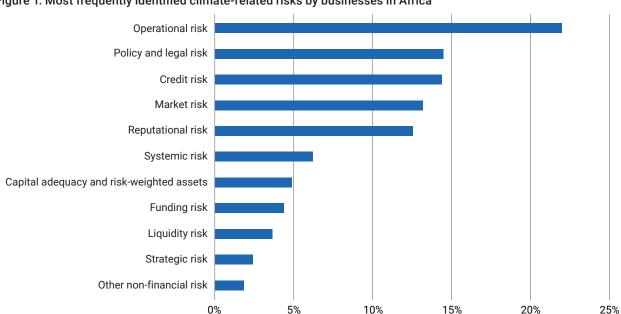


Figure 1: Most frequently identified climate-related risks by businesses in Africa

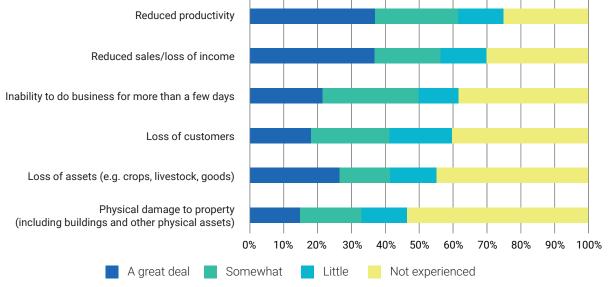
Source: Based on CDP's Corporate Climate Change Disclosure Questionnaire 2020

businesses in Zambia, Malawi, Benin, Mozambique, and Kenya are also frequently affected. Stricter regulations and statutory water withdrawal limits are also cited as water-related impacts by companies in some countries.

The private sector in Africa already feels the impact of climate change, including droughts, floods, extreme heat, and extreme rainfall, whether directly or indirectly, throughout their supply chains. In the interviews, the representatives of large corporations were more likely to be able to point to future climate risks and indirect impacts on their operations due to the instability of supply chains. By contrast, the MSMEs participating in the survey said they had

less access to information on future impacts and were more likely to focus on current or recently experienced direct impacts of extreme climate events. Some of these impacts include reduced productivity (75 percent); reduced sales and income (71 percent); loss of customers due, for instance, to displacement, resulting in loss of income (62 percent); and physical damage to property (47 percent) (Figure 2). The climate risks experienced by MSMEs did not vary across regions. In west Africa, 67 percent of companies were directly affected by climate change impacts, while in east Africa and southern Africa, 70 percent were directly affected.

Figure 2: Direct impacts of extreme weather events on MSMEs in Africa



Source: authors

ENABLING ADAPTATION AND RESILIENCE ACTION BY THE PRIVATE SECTOR

In the recent survey and interviews conducted by GCA and the World Business Council for Sustainable Development that inform this chapter, private sector representatives identify several elements that can foster adaptation action and resilience building within the private sector in Africa. These elements can also encourage a constructive role for the private sector in supporting adaptation efforts by governments and non-government actors.

These include:

- Policies and regulations to incentivize innovation.¹⁶
- Information and data to reduce uncertainty, and to guide planning and decision-making by businesses.
- Collaboration and capacity building to support those within the private sector with limited capacities, and to coordinate responses, arrange partnerships, encourage formal and informal networks, and formulate strategies.¹⁷
- Accessible financial and economic instruments, such as insurance schemes to enable adaptation and resilience building, particularly for MSMEs.

- Resilient infrastructure for essential services such as water, electricity, transportation, and access to markets, along with resilient supply chains.18
- The identification of potential business opportunities, including the promotion of local entrepreneurship, through which the private sector can play a constructive role.

While referring to climate risks, private sector actors often employ different terminologies such as "volatility management," "risk response," or "resilience building". For instance, Rabobank, a Netherlands-based cooperative bank with a strong focus on the food and agriculture sector, finds it more effective to refer to risks that could affect the businesses of its clients instead of "climate change adaptation." Similarly, IBM Research, the research and development division of multinational technology corporation IBM, employs terminology that relates to the risk management processes of firms, such as supply chain disruption, agricultural production losses, water scarcity, maintenance disruptions, and civil infrastructure damages.

Related to the issue of terminology and definitions, companies sometimes struggle to indicate progress in adaptation and resilience efforts which, unlike mitigation, lack straightforward measures of progress. This subsequently complicates measuring, pricing, and reporting adaptation action, with businesses having to stitch together a range of benefits to make a business case for adaptation, such as livelihood benefits, job creation, and farm productivity.

Policies and regulations

Appropriate policies and regulations at the national and local levels can create an enabling environment for adaptation and provide positive incentives for the private sector to innovate. Conversely, poorly designed regulations can inhibit innovation. For example, Holcim, a Swiss-based global building materials and aggregates producer with assets in Africa, developed a "green concrete" called ECOPact+ by upcycling construction and demolition materials, to encourage circularity and resource efficiency. While the use of such innovative products could



be scaled up if governments introduce supportive regulations, a representative from Holcim notes that norms currently do not evolve at the speed of innovation.

Norms can be designed to benefit both communities and companies, notes a representative from Enel, a multinational energy producer with a presence in South Africa. For instance, South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) supports renewable energy producers, and at the same time requires power producers to support local enterprises and participate in socioeconomic development activities.¹⁹

Climate information and data

Information and data on potential climate risks, and the possible adaptation measures that can be taken to mitigate these risks, is a fundamental requirement for the private sector to act. But while large companies like Holcim and Enel have in-house capacity, or the capacity to engage experts, to generate data and information through risk assessments that use multiple climate models, others, particularly MSMEs, lack the capacity and therefore the information. Even the risk assessments conducted by large multinationals do not always include assessments for their limited Africa-based assets.

The assessments conducted by large companies inform decisions on locations, production, and climate-proofing efforts. Companies also recognize that the resilience of entire value chains, not only of their own operations, is important. DSM, for instance, recognizes the importance of stable incomes and sustainable business operations among its suppliers, while noting that the risk of suppliers in the value chain becoming financially unsustainable is still higher in Africa than in most other parts of the world. Improving the resilience of MSMEs along the value chain is therefore beneficial for all businesses, from multinational to micro. Sharing information from value chain risk analyses, often conducted by large companies, can help MSMEs understand and quantify their risks, and to inform their decisions on elements such as insurance and infrastructure. This will benefit large companies in the long term.

More information may not, however, always mean more adaptation action. When risks are high, banks may either choose not to invest at all; or to invest along with adaptation measures.

Climate data was cited as an important constraint to adaptation action by MSMEs that responded to the survey. In the survey, 29 percent of the MSMEs indicated that they lack climate data, and 17 percent said they lack knowledge of climate impacts. Survey respondents said they need more technical support (31 percent) and knowledge (19 percent) to respond to climate change impacts, access solutions, use weather forecasts, and exchange information. Most MSMEs learn about climate measures through online research (10 percent), or through knowledge sharing, for instance with clients, business partners, and universities. Some also attended online courses, conferences, and workshops.

"

The danger which is already at our doorstep shows that we need to take strong, integrated and sustained adaptation measures. The climate won't wait until we have ended the Covid pandemic"

H.E. President Faure Gnassingbe of Togo Leader's Dialogue on the Africa Covid-Climate Emergency, April, 2021

Awareness of government policies that could support private sector adaptation is also low among MSMEs. Only 12 percent indicate that they received (mainly technical) support from national governments, while 10 percent indicate that they received support from local governments. MSMEs identified the following policy-related areas that pose barriers to their operations and subsequent adaptation actions: access to finance (93 percent); transportation costs and time (83 percent); high tax rates that impede action or additional investments in adaptation and resilience (69 percent); restrictive business operations licensing (60 percent); and lack of education or training (67 percent) (Figure 3).



Access to finance Transportation costs and time Tax rate Lack of education/training Distance from markets/lack of nearby market Licensing & permit Acess to reliable water supply Access to eletricity Labor regulations 0% 20% 30% 40% 50% 60% 70% 80% 90% 10% 100% Very severe barrier Major barrier Moderarate barrier Minor barrier No barrier

Figure 3: Climate adaptation barriers for MSMEs in Africa

Source: authors

Collaboration and capacity building

Companies large and small highlight the importance of collaboration, cooperation, and partnerships among stakeholders to advance adaptation. Collaborations and linkages between institutions can significantly increase the ability of businesses to adapt, and, with networks, provide mutual support and access to capital, markets, and technologies that cannot be accessed by individual MSMEs.20

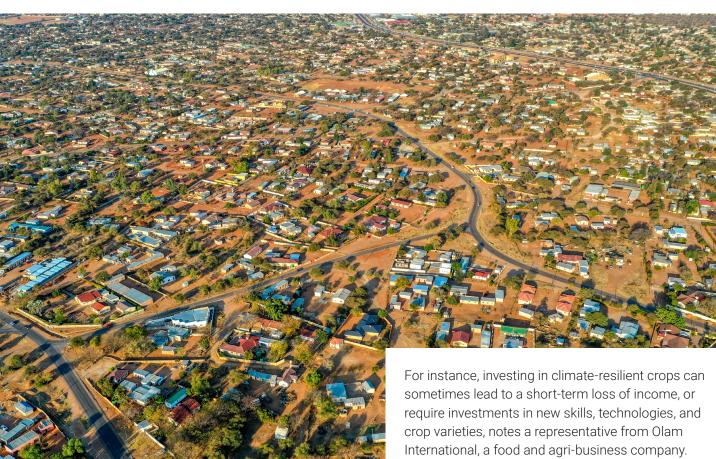
Larger corporations often forge information and knowledge networks with academia, scientists, and government research institutions. For instance, OCP Group, a global fertilizer producer based in Morocco, has partnered with the Mohammed VI Polytechnic University, the International Center of Biosaline Agriculture, and the International Development Research Centre in Rehamna province in Morocco to introduce high-yielding quinoa varieties to farmers, and contribute to food and nutrition security. Similarly, 24 percent of the MSMEs surveyed report collaboration with others to broaden their knowledge and skill sets, raise awareness, share guidelines, disseminate information on disasters, participate in capacity building programs, and coordinate cooperation with other private sector actors.

Our analysis indicates that large companies with substantial operations in Africa often engage in capacity building to support the adaptation efforts of their clients and of other stakeholders.

For instance, the OCP Group provides farmers with training on sustainable farming practices, resulting in improved land management, and increased yields and incomes. The power company Enel provides risk forecasts and assessments prepared by in-house experts to adapt its activities to heatwaves, floods, sea level rise, and strong winds, all of which present risks to its assets and operations across Africa. With the non-profit Res4Africa Foundation, Enel has also created the Microgrid Academy in Nairobi to train young Africans to plan, manage, and maintain mini-electric grids, and support stable access to renewable energy for rural communities.

Sharing climate and weather data through innovative technologies such as cloud computing is another means of collaboration. For instance, IBM's Environmental Intelligence Suite provides generic accelerators for environmental and climate impact modeling at scale via its Climate Impact Modelling Framework (CIMF). CIMF provides analytics-ready data and pre-build models for climate-related extremes such as floods, wildfires, and droughts, and a library of Artificial Intelligence algorithms for better calibration, quantification, and predictions.

Business networks can also play a vital role in building capacity and raising awareness, particularly among MSMEs. For instance, NBI, a group of national and multinational companies in South Africa



cooperating on sustainable development efforts, provides MSMEs with resources on adaptation and climate finance.

Accessible financial and economic instruments

Short-term investments in adaptation, even when they are high, can ensure long-term benefits for both companies and their clients, and the continued sustainability of business operations. Although some MSMEs receive financial support to respond to climate impacts from international initiatives (10 percent) or family and friends (14 percent), finance remains a key barrier for adaptation action for almost all the companies surveyed.

Traditional project funding does not always work for private sector adaptation and resilience-building efforts, because the uncertainty around climate risks makes a difficult case for investments, and adaptation benefits are insufficiently understood.

Farmers need support and financing mechanisms to make these choices and switch to climate-smart practices, as private sector operators cannot bridge this gap at scale.

Initiatives like NBI are looking for alternative and experimental ways to fund private sector adaptation, such as alternative currencies, ecosystem services payments, and blended financing. Rabobank collaborated with Mastercard to create a digital platform to connect small-holder farmers with buyers, payment tools, and digital transaction records. Such services are also increasingly sought by clients, according to international banking group BNP Paribas, which is responding to the rise in demand by developing blended finance and alternate financing mechanisms to address adaptation needs.

Large companies have a significant role to play in supporting suppliers and smaller companies deal with climate impacts, including by managing value chains and providing risk data to reduce uncertainties. Better risk data can help lower the cost of insurance premiums for smaller companies, by lowering uncertainty and providing insight into residual risk exposure.

"Funding mitigation is easier because it fits into a generally understood model of how finance works... For adaptation, you're essentially funding deferred costs, which does not always sit well with traditional project financing."

Representative of NBI

Infrastructure and supply chains

Efforts to improve the resilience of infrastructure can benefit local communities in addition to company operations. For example, the OCP Group has collaborated with public authorities in Morocco to invest in desalination stations and wastewater recycling plants to reduce water pollution and address water stress. Enel has installed water storage and filtration systems in football fields in South Africa, where each system can filter up to 17 million liters of clean drinking water annually to supply neighboring households. NBI seeks to engage businesses and policy makers to identify opportunities for adaptation projects and to address possible barriers.

Large companies are aware that climate extremes can result in volatility of supply chains and create a sub-optimal investment climate that could obstruct business expansion. Some companies, such as the OCP Group, indicate that their operations in Africa are more vertically integrated than elsewhere to manage supply and logistics chains. A pro-adaptation regulatory environment could protect smallholder suppliers in such contexts. Others, like Royal DSM and Holcim, ensure that they can alternate suppliers and producers when certain locations are affected by extreme events, to ensure operational continuity in the short term.

Such alternative arrangements may not be possible for MSMEs when they are affected by transport, energy, and connectivity issues caused by climate extremes.

Almost all the large companies that were interviewed for this chapter identified potential business opportunities in managing climate risks. Many

have introduced new climate-resilient products to cope with climate challenges such as increasing temperatures, water scarcity, and deteriorating coastal reefs. DSM, for instance, has introduced enzymes for the food and beverage industry that can potentially reduce water consumption. It has adjusted their own production methods for omega fatty acids in response to changing fish migration patterns and biodiversity concerns.

Occasionally, climate catastrophes result in innovations. In the aftermath of Cyclone Idai, 14Trees, a joint venture between Holcim and the UK's development finance institution CDC, built the world's first 3D-printed school in Malawi within 18 hours.

MSMEs also see opportunities for business expansion while managing climate risks (95 percent). New products were identified by 81 percent of MSMEs, while 22 percent found new markets for existing products, and 60 percent identified opportunities for new markets. MicroInsurance Services, for instance, is an MSME in Malawi that capitalized on the demand for information on adverse climate impacts, and now provides weather-related information in addition to risk insurance. Other MSMEs have found opportunities for expansion into new products such as organic fertilizers and renewable energy powered farm-machines.



ADAPTATION AS A WIN-WIN FOR THE PRIVATE SECTOR

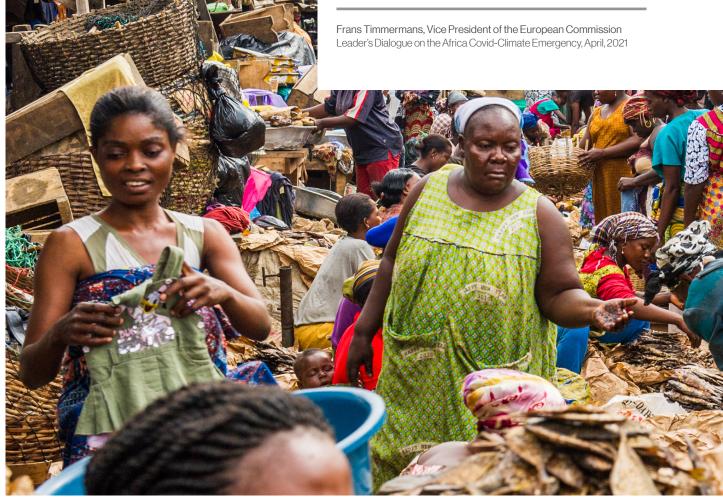
Adaptation is not a choice, but a requirement for the private sector to face worsening climate realities across Africa. Yet the African private sector remains underrepresented in discussions and in action due to a combination of factors, including lack of awareness, inadequate tracking mechanisms, and limited resources.²¹ Greater efforts to enhance awareness, mobilize private sector actors, and to provide visibility for their activities, along with accessible financial instruments, are therefore necessary.

At the same time, government policies and enabling environments at all levels (including procurement policies and product standards) are key to incentivize both MSMEs and large enterprises, and to promote innovation. Collaborations and partnerships within the private sector, and with other stakeholders, can not only help build private sector resilience, but can also generate adaptation and resilience benefits for the communities that they operate in.

Finally, it is important to dislodge the notion that adaptation and resilience efforts are all costs without benefits.



"Stronger international partnerships are a key part of the EU's new climate adaptation strategy, and as our sister continent, Africa is a clear priority. We want a partnership of equals, based on African needs and necessities."



"It is a misconception to view the implementation of sustainability project interventions and actions only as a cost... Being sustainable is a win-win approach and is positive not only for the local population or for the environment, but for the investment itself."

Representative of Enel





Cooperative initiatives — collaborations between state, non-state, and sub-national actors have emerged as an important vehicle to engage businesses and investors in adaptation around the world.

Examples include 4 per 1000, an initiative with voluntary public and private sector stakeholders working on land and soil management; the InsuResilience Global Partnership, which facilitates dissemination of market-oriented and poverty-and gender-sensitive solutions for climate risk insurance in developing countries; the Business Alliance for Water and Climate, which works to improve water security and resilience; and the Value Chain Risk to Resilience initiative, which works with businesses to increase their ability to diagnose and understand physical climate risks, and to adopt and implement climate resilience measures.

According to the Climate Cooperative Initiatives Database (C-CID), a database of 300 international cooperative initiatives, approximately 27 percent of the adaptation initiatives are active in Africa - mostly in west Africa, with fewer initiatives in east Africa (Figure 1).22

While relatively few Africa-based private sector actors take part in these adaptation initiatives, many non-Africa-based private sector actors are involved in activities in Africa, fulfilling different roles as funders, participants, or lead partners (Figure 2).

Figure 1: Cooperative adaptation initiatives in Africa

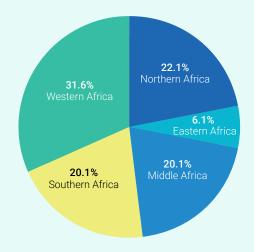
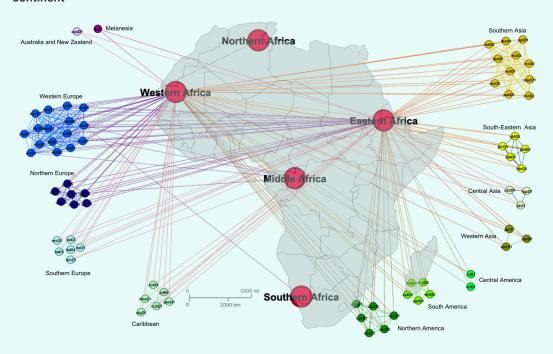


Figure 2: Businesses and investors based outside Africa that participate in resilience and adaptation initiatives on the continent



Action areas in Africa

A closer look at cooperative initiatives that primarily implement in Africa (with at least 50 percent of the countries they are implemented in based in Africa) shows that they most often focus on agriculture and food security, followed by water, biodiversity and finance (Figure 3). There is less focus on resilient cities and infrastructure. Water and nature-based solutions feature as crosscutting themes across multiple action areas – for instance, many youth-oriented initiatives address water issues, and nature-based solutions feature in initiatives on resilient cities, infrastructure, youth, biodiversity, and finance.

These action areas are addressed through a wide range of activities that include knowledge dissemination, enhancing participation (to get more peers to support a standard or to make individual commitments), and institutional capacity building (building new institutions or partnerships, or expanding existing organizational capacity). There is less of a focus on lobbying activities, and product and service development (Figure 4).

Figure 3: Adaptation-related action areas of international cooperative initiatives in Africa

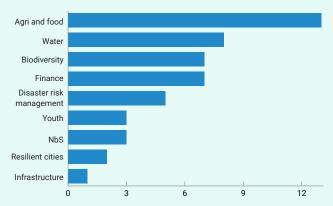
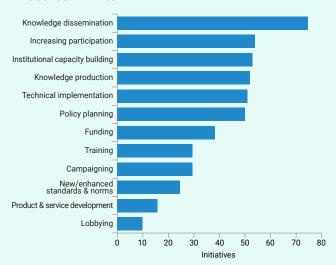


Figure 4: Activities under cooperative adaptation initiatives in Africa



Africa-based private sector participation

Although African private sector actors make up a relatively small proportion of overall participants. there are still 275 Africa-based businesses and investors that participate in one or more cooperative initiatives. They are mostly very large companies (with more than 1000 employees) or large companies (100-999 employees). Small and micro enterprises (SMEs, with 1-9 employees) are much less engaged (Figure 5), despite their importance to productivity and employment across Africa. This could be due, in part, to the international attention on initiatives that involve large enterprises.

Moreover, SMEs are typically not publicly listed and do not experience the same demands for transparency on environmental and social governance (ESG) as publicly listed companies do. Many of the private companies that participate in cooperative adaptation initiatives, for instance, do not have published ESG plans (Figure 6).

Africa-based businesses and investors engage mostly in the finance and insurance sector. Other sectors that are particularly exposed to climate change impacts, such as agriculture, forestry, and fishing, are under-represented.



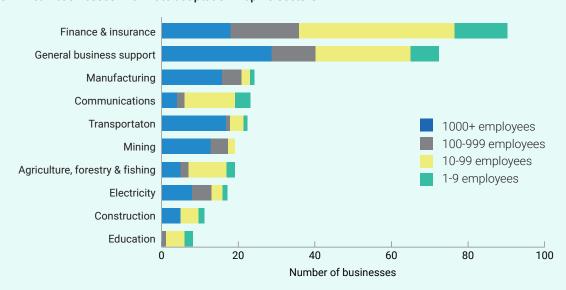
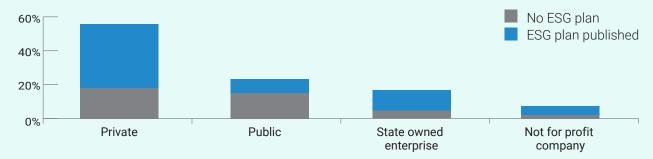


Figure 6: Africa-based businesses participating in cooperative adaptation initiatives, with ESG plans



International cooperative initiatives can therefore make important contributions to adaptation and resilience-building in Africa, but the number of Africabased businesses and investors participating in such initiatives remain relatively low. Efforts to engage private sector actors across Africa, particularly SMEs which make up a large part of employment and economic output across Africa, are necessary. The invisibility of SMEs could be due to the international focus on larger businesses and investors, and due

to fewer incentives - and possibly capacity - for SMEs to report on ESG policies.²³ Fortunately, recent years have seen growing efforts to stimulate national and regional action – for instance, Kenya, Uganda, Tanzania, and Rwanda have launched the East African Climate Change Technical Working Group to foster cooperation and engage non-state actors; and Africa Climate Week is organized annually to bring together private and public stakeholders.

