

Assessing Barriers and Solutions to Financing Adaptation Projects in Africa

REPORT



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The views shared in this report are those of the authors and do not necessarily reflect the views of IDRC.

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Glossary

Adaptation market mechanism	A mechanism to allow the trading of quantifiable units for public and private entities to cost-effectively meet adaptation targets set under a regulatory framework.
Additionality	Value-added benefits of adaptation measures compared to the same situation without the adaptation intervention.
Bond	A formal contract to repay borrowed money with interest at fixed intervals.
Carbon tax	A direct tax on greenhouse gas emissions to encourage businesses and industries to reduce their emissions.
Concessional loans	Soft loans with lower interest rates and/or lenient servicing conditions.
Conventional loan programs	Normal loan programs of commercial banks or special energy-efficiency loan programs.
Credit lines to commercial finance institutions for senior and subordinated debt	In the event of high credit risks related to certain projects, limited or non-recourse credit lines may be applied so that the risk of the loan is shared by a development finance institution.
Debt finance	Issuing bonds, debentures or other debt securities to raise capital through borrowing.
Equity capital	An investment that provides the investor with a share of any profits in return.
ERPA loan	Emission Reduction Purchase Agreement (ERPA) loans allow advance payments on future emission reductions and their sale in the form of carbon credits.
Grant	A contribution or subsidy given by public organizations to eligible recipients for specific purposes. Grants are generally monetary, but can sometimes be in the form of goods or services.
Guarantee	A promise by a guarantor in a loan agreement to assume responsibility for the debt obligation of the borrower in the case of default (inability to repay the loan).
Incremental costs	The difference between full project costs with consideration for climate-change impacts and the baseline costs without such consideration.
Insurance	The equitable transfer of the risk of a loss, from one entity to another, in exchange for payment.
Polluter pays principle	The principle that the person or organization responsible for producing pollution should be the bearer of costs associated with its consequences and for the cost of avoiding it in future.
Private equity funds	Funds that may be invested in projects or companies, such as energy utilities, power producers, equipment providers, project developers and energy service companies.
Programming	A process that guides the formulation of strategies and plans, and the distribution and management of funding, nationally or regionally,

	in consultation with recipients.
Project loan facilities	Loan facilities created by governments or bilateral and multilateral development institutions. They are special vehicles designed to fund projects in the form of debt financing.
Soft loan programs	These provide debt finance at reduced interest rates and are usually offered by semi-public agencies.
Technology Mechanism	The Technology Mechanism aims to support environmentally sound technologies, expertise and practices. It does this by enhancing coordination among stakeholders and accelerating development, diffusion and transfer of knowledge to facilitate development of projects and programs. It consists of a Technology Executive Committee and a Climate Technology Centre and Network.
Venture capital funds	Public or private funds used to acquire equity stakes in small- and medium-sized enterprises or new businesses with growth potential.

Executive summary

An increasing number of funds and financial mechanisms are available for projects focusing on adaptation to climate change in Africa. However, there are many challenges limiting access to these funds. This study aims to:

- Analyze existing barriers underlying access to financing for adaptation projects in Africa.
- Conduct an evidence-based assessment of the experiences of African project developers in accessing adaptation finance.
- Offer recommendations and strategies for overcoming existing barriers.
- Identify areas for future research.

For this study, we reviewed the latest literature and other background material, and gathered first-hand data through interviews with African project developers, researchers and donors. A scientific advisory board of senior experts from the Victorian Centre for Climate Change Adaptation Research (VCCCAR) and Oxford Climate Policy provided guidance.

We faced two main research challenges. First, the limited availability of verified information limited our ability to build an overview of the funding flows to African adaptation projects. The data is scattered, incomplete and not presented in a unified manner. Second, it was challenging to arrange and remotely conduct interviews with some local African experts and stakeholders.

Most adaptation funding for African projects presently comes from bilateral sources, in many cases from Fast-Start Finance initiatives. In all five African regions, the Global Environment Facility plays an important role in channelling multilateral funding to adaptation projects. However, a growing number of other multilateral actors and funds are now also emerging.

The use of private equity for adaptation projects in Africa at scale is not yet evident. Publicly available, aggregated information and financial data about adaptation research projects and the engagements of non-profit and private-sector organizations is either unavailable or negligible.

Southern Africa has the most approved funding for adaptation from multilateral and bilateral funds and programs, followed by East and West Africa. There are far fewer adaptation activities and much lower funding levels in North and Central Africa. In all African regions, except Southern, funding requests for adaptation activities far exceed funding received. In most African countries, the funding received is less than the amount agreed. Many of the Least Developed Countries (LDCs) in Africa have yet to submit national plans for adaptation activities, and are poorly positioned to access funding for adaptation.

Major barriers limiting the development of good practice and sound adaptation projects in Africa include inadequate institutional and legal frameworks. In many countries, national climate change policies and strategies are absent or incomplete, and there are limited technical and financial management capacities within government organizations. These problems are often compounded by lack of basic infrastructure, political instability, and lack of cooperation across borders and with non-governmental actors.

Insufficient data availability and lack of expertise in many African countries lead to limitations in data analyses and good-practice project preparation. For example, difficulties in accessing accurate information on adaptation financing can be an obstacle to identifying appropriate funds and how to access them. Further, research results on adaptation do not often contribute to funding applications in Africa.

Access to the Global Environment Facility (GEF) and other important funding sources for adaptation in Africa is limited by the complex procedures required of potential recipients. These include difficult fund structures and application processes, opaque selection and

appraisal criteria, and the unpredictability of available funding. Some development finance institutions apply additional layers of appraisal procedures and investment criteria, adding further difficulties for project promoters seeking support.

Fundamental steps to improve access to and use of adaptation finance include improving data availability, adaptation policies, cross-border cooperation, knowledge-sharing and institutional and legal frameworks. For example, establishing national adaptation Investment Promotion Agencies (IPAs) could improve direct access to the GEF and other funds. Targeted capacity building within the relevant institutions should accompany this process. A regional Adaptation Financing Facility (AFF) for Africa would also help to promote more adaptation activities and channel more funding towards their implementation. Earlier involvement of non-governmental, civil society and other expert organizations in adaptation projects could also improve access to adaptation funding.

There are various potential approaches to mobilize financing beyond development aid and existing climate finance. These include mainstreaming adaptation into all relevant sectors, or exploring synergies with mitigation actions. More research is required on development of viable business propositions and the use of finance mechanisms other than grants. Encouraging and attracting private-sector engagement and investments will require best-practice information campaigns tailored to the private sector's interests and needs. This would be suitable for activities with potential for savings by avoided losses, and where saleable products and services can be generated. In addition, it will be necessary to identify appropriate investors for equity investments or providing seed finance for viable adaptation measures.

We offer two suggested areas for further research.

1. Improving access to and use of existing funds: improve effectiveness and efficiency as well as understanding of how multilateral and bilateral climate-specific and -related funds and programs are deployed, including the role of the United Nations Framework Convention on Climate Change (UNFCCC)'s Technology Mechanism in financing adaptation, and identify preconditions and project design models to increase the use of non-grant finance.
2. Increasing private-sector engagement: clarify the potential for using a market approach for adaptation, including investigating business propositions and defining appropriate investor profiles.

Summary recommendations

- Improve the use of existing data and analytical tools.
- Establish national finance coordination committees.
- Involve adaptation practitioners and experienced non-governmental actors in project design.
- Mainstream adaptation into national budgets and wider project development in all sectors.
- Explore links with mitigation finance and other types of finance other than grants.
- Identify and develop adaptation measures in which the private sector could invest.
- Identify private investors willing to invest in avoided losses or for small revenues.
- Share best practice through training and briefings.
- Use regional and local facilitation mechanisms to track finance flows and offer matchmaking and coordination services between projects and funding sources.
- Use Climate Innovation Centres to promote adaptation technologies.
- Strengthen the roles of regional organizations in Africa, to improve coordination among member states, in particular to develop regional and cross-border programs.

1 Introduction

1.1 Background

Africa is expected to be one of the continents most affected by climate change impacts (Boko et al. 2007), and therefore in great need of developing its adaptive capacity. There are no agreed estimates of how much money has been made available for climate change adaptation in Africa and elsewhere. According to Klein and Mueller (2009), the estimated investment needs for adaptation and the amount of funding available from current financial instruments do not match. The World Bank (IBRD/World Bank 2010), for example, estimates that the total cost of Southern Africa's adaptation to climate change will be between US\$13 and 18 billion a year by 2030. Despite recent up-scaling, experts consider the approved and disbursed adaptation funding for Sub-Saharan Africa between 2004 and 2011 (US\$328 and 132 million, respectively) far from fulfilling these needs (Schalatek et al. 2012). It is therefore all the more important that adaptation project developers in Africa can access and spend available funds effectively and efficiently.

An increasing number of multilateral and bilateral public funds are now available to support adaptation. The many adaptation initiatives in and for Africa, launched in recent years, are mainly funded with Official Development Assistance (ODA) from bilateral and multilateral funding agencies (McGray et al. 2007). There are also various research-oriented projects funded by research institutions from developed countries.

The main questions underlying the development and implementation of adaptation activities in Africa in terms of financing are the following:

1. What is needed to develop feasible and viable adaptation projects or programs in Africa?
2. What is needed to increase their attractiveness to adaptation funding sources and investors?

1.2 Objectives, study design and methodology

The International Development Research Centre (IDRC) and the Development Bank of Southern Africa (DBSA) commissioned this study. The main aim is to assess the barriers and solutions to bridging sources of finance with adaptation projects and research in Africa. The objectives of the study are to:

1. Provide an assessment of the main barriers and obstacles for existing adaptation projects and actions in Africa in terms of securing and spending finance.
2. Provide an evidence-based assessment of the experiences of African project developers in accessing adaptation finance, including identifying the context through which research projects can have viable business applications.
3. Develop an inventory of recommendations and outline strategy that would help to overcome the barriers and obstacles for adaptation project promoters and researchers. This would allow the preparation of more attractive and financially viable initiatives for development banks and other providers of adaptation finance.

This study seeks a better understanding of the underlying issues around financing adaptation projects in Africa. It intends to offer insights into problems and to generate ideas and suggestions for future research. In carrying out this study, we reviewed the latest literature

and other background material (including policy documents, reports and studies), gathered first-hand data through interviews (as detailed below and in Annex 3), and used our own expert knowledge and judgement. A scientific advisory board of senior experts from the Victorian Centre for Climate Change Adaptation Research (VCCCAR) and Oxford Climate Policy provided guidance and reviews.

We reviewed National Adaptation Programmes of Action (NAPAs) and National Communications (NCs) of African countries, using the United Nations Framework Convention on Climate Change (UNFCCC) database and similar overviews and analyses by other organizations. We compiled and analyzed articles, reports and studies from organizations and individuals known in the field of adaptation, particularly adaptation finance. The focus was on barriers, obstacles and potential approaches to improve the financing of adaptation activities in Africa. During interviews with project developers, we looked at selected and representative adaptation project/program proposals from African actors. This included analyzing the reasons for success or failure in gaining adaptation funding.

In identifying and analyzing adaptation-relevant finance mechanisms and sources, we used existing databases and gathered further data from relevant bilateral and multilateral sources and intermediaries. As well as traditional grant funding for adaptation projects, we looked at loan programs, risk-reduction and finance-enhancement mechanisms (guarantees and insurances), and public equity investments. We investigated these sources to establish whether they do or could play a role in financing adaptation projects. In addition, we considered the availability of domestic resources and private-sector engagement and investments.

For this study, we interviewed local adaptation experts and representatives of relevant organizations in selected African countries, international adaptation finance experts in relevant institutions, adaptation researchers and other experts. We conducted the interviews either in person or by telephone. Annex 3 lists the 26 interviewees. Most interviewees were adaptation project promoters, considering the focus of this study on the challenges and potential solutions in accessing and using adaptation finance for project development. We took smaller samples from two other relevant groups: researchers and donors. For donors, we used representative sampling to select two multilateral organizations, two bilateral donor agencies, and one national development finance institution. The interview results complement the background and literature research.

The inventory and the strategy outline offer guidance and recommendations for the three target groups of this study: project promoters, researchers and donors. The recommendations overall suggest how best to increase finance flows to adaptation projects in Africa. More specifically, some of the guidance and recommendations are most relevant for particular target groups:

- Improving access to adaptation finance is most relevant to project promoters.
- Conducting research supporting better access to adaptation finance is important to researchers.
- Increasing disbursement and/or making adaptation finance more accessible relates to the activities of funding organizations.

The 'Climate Change and Population Conference on Africa' in July 2012 in Accra, Ghana, was used for two purposes. First, the conference offered an opportunity to network, establish and develop contacts and initiate the compilation of first-hand data. Second, the meeting announced this study, and informed concerned stakeholders about the objectives, contents, and opportunities for engagement.

We faced two main problems during the research for the study. First, the difficulty of getting hold of verified information limited our ability to build an overview of the funding flows to African adaptation projects. The data is scattered, incomplete and not presented in a unified manner. Second, it was challenging to arrange and remotely conduct interviews (by telephone) with some local African experts and stakeholders.

1.3 Report structure

This report has four main chapters, following this introduction.

- Chapter 2 introduces the main adaptation funding sources, types of finance, and finance mechanisms potentially relevant to Africa.
- Chapter 3 analyzes adaptation funding in each of the five main African regions, and includes a performance analysis and overview.
- Chapter 4 presents the barriers to accessing and efficiently spending and managing funding for adaptation projects. It looks at barriers mentioned in the NAPAs or NCs, literature or expert interviews, complemented with our own observations.
- Chapter 5 is an inventory of potential approaches and ideas for improving the funding situation in Africa, resulting in a strategy outline. The inventory is a result of the analyses conducted in the previous three chapters. It compares the results against the funding opportunities and requirements presented in Chapter 2, combined with recommendations from the analysis of relevant literature or from interviewees.

2 Climate finance, mechanisms and funding

This chapter starts with a definition of climate finance and an overview of types of climate finance, finance mechanisms and their subgroups. We then look at the main actors, intermediaries and funding channels that provide or could potentially provide finance for adaptation activities.

2.1 Types of climate finance and mechanisms

What is climate finance?

Climate finance cuts across a broad variety of types and sources of financial flows. These flows include both new instruments to address climate change, and shifts in core development aid and private investment finance towards mitigation and adaptation in developing countries (**Box 1**).

In this section, we look at the following types of finance and finance mechanisms: grants, equity, debt, climate and carbon finance, risk reduction and finance enhancement mechanisms (see also UNEP-SEFI 2008). **Figure 1** shows the range of finance types, and how these fit with stages of innovation and development.

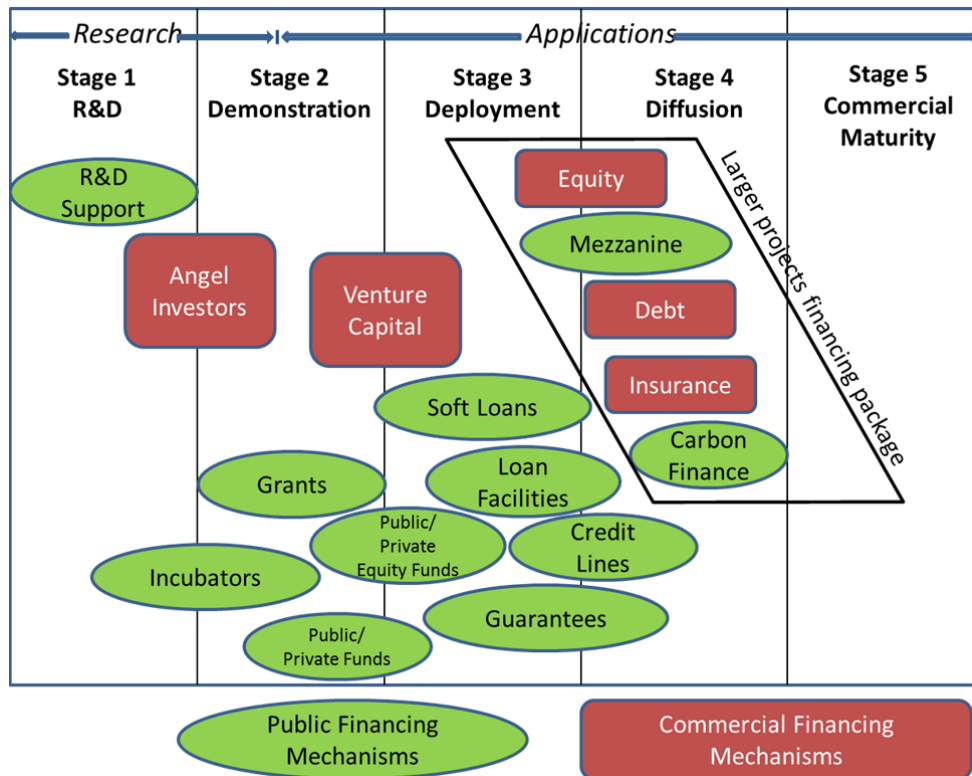


Figure 1: Finance mechanisms in relation to stages of technology development¹

¹ The main commercial mechanisms (equity and debt) apply during the later stages of the cycle (deployment and diffusion) when private investors are increasingly attracted by commercial prospects. Public mechanisms such as grants and different types of loans come in during the earlier phases of the cycle. This provides an indication of when, or what kind of, adaptation projects may attract private capital. Source: adapted from UNEP-SEFI 2008.

Grants

There are several main types of grant funding:

- Technical assistance;
- Project development (and implementation);
- Loan-softening programs; and
- Inducement prize contests.

Grants often support capacity building, to stimulate (early) action and activities in certain sectors. They can also help with project preparation, particularly in small-scale activities or where small developers lack seed funding. Supporting developments in new technology, with an associated risk of losing the investment, is another example of where grants are used. Inducement prize contests provide rather limited amounts of funding, but can stimulate certain technology developments and pilot programs.

Equity

Typically, private-sector actors make equity investments in other private companies, but public investors also provide equity finance. The difference between purely commercially oriented private operations and social entrepreneurs or the public sector is expectations about rates of return. The main types of equity investment are:

- Direct equity investments;
- Private equity funds; and
- Venture capital funds.

Debt

Development banks in particular have already used debt finance for funding adaptation projects. Public loans for adaptation (i.e. concessional loans) provided more than US\$2 billion in 2010, globally (Christiansen et al. 2012). This is more than grant finance. The main types of loan available are:

- Concessional loans;
- Project loan facilities;
- Soft loan programs;
- Credit lines to Commercial Finance Institutions (CFIs) for senior and subordinated debt;
- 'Conventional' loan programs by commercial banks;
- Bonds; and
- Emission Reduction Purchase Agreement (ERPA) loans.

Climate finance mechanisms

Some mechanisms of climate finance are fully established (e.g. the Clean Development Mechanism (CDM) or voluntary offsetting mechanisms), while others are still under discussion at national and international levels. There are several main categories of climate finance mechanisms:

- Trading and offsetting mechanisms (including the CDM, voluntary offsetting mechanisms, New Market Mechanisms such as credited Nationally Appropriate Mitigation Actions (NAMAs), sectoral trading or crediting and bilateral mechanisms);
- Other mitigation finance mechanisms (such as Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD), including

- conservation and sustainable management of forests and the enhancement of forest carbon stocks (REDD+) and supported/unilateral NAMAs);
- Technology Mechanism; and
- Adaptation market mechanisms.

Risk reduction and finance enhancement mechanisms

Risk reduction and finance enhancement mechanisms are already in action in adaptation pilot projects in Africa (see Chapter 5). There are two basic, relevant types:

- guarantees
- insurance

Box 1: Climate-specific and climate-relevant finance

Climate-specific finance refers to capital flows to activities that have greenhouse gas (GHG) mitigation and climate adaptation as key outcomes and/or objectives. This includes investments in renewable energy, energy efficiency and sustainable forestry or agriculture, for example.

Climate-relevant finance covers a much broader set of capital flows that will influence emissions and/or vulnerability to climate change. This includes flows supporting development and economic growth in key emitting sectors (e.g. power production and other energy supply, industry, agriculture and forestry, transport, water) or to sectors affecting vulnerability to climate change (e.g. water, health, energy, forestry and agriculture). Climate-relevant finance can influence climate-change outcomes positively or negatively. Positive effects require the funding to support low-emission or climate-resilient investment.

Source: Buchner, Brown and Corfee-Morlot 2011

2.2 Funding channels: actors, intermediaries and criteria

This section provides an overview of the main multilateral and bilateral funds and programs and other funders or intermediaries providing finance to climate change projects. They all do or could potentially finance adaptation projects in Africa. In addition to multilateral and bilateral funds and programs, we look also at Multilateral Development Banks (MDBs), conventional bilateral development aid channels, the private sector, non-governmental organizations (NGOs), foundations and social investors, and host-country governments. We assess the funds and programs and their criteria briefly against their application in the African context.

Multilateral funds

Several multilateral funds² aim to help finance adaptation to climate change. The following are the most important:

² Although the International Fund for Agricultural Development (IFAD) is not a climate-specific fund, IFAD is another important multilateral actor providing finance to adaptation projects in Africa.

- Adaptation Fund (AF);
- Global Climate Change Alliance (GCCA);
- Least Developed Countries Fund (LDCF);
- Millennium Development Goals Achievement Fund (MDG-F);
- Pilot Program for Climate Resilience (PPCR);
- Special Climate Change Fund (SCCF);
- Strategic Priority on Adaptation (SPA); and
- Green Climate Fund (GCF).

It can be complex to prove additionality of adaptation interventions, and to demonstrate incremental costs, as required by the GEF or the AF, for example. Further, the criteria for allocating funds are not always clear. Such aspects can be challenging for African project developers in accessing multilateral funds.

Multilateral Development Banks

MDBs provide funding to adaptation projects through their own lending programs and funding channels. Relevant major MDBs for African countries are the World Bank, the African Development Bank (AfDB) and the European Investment Bank (EIB).

Like all multilateral and bilateral actors, MDBs apply general adaptation project guidance and criteria based on outcomes of the UNFCCC negotiations. In addition, MDBs have their own criteria for project selection and investment. These criteria are not tailored towards supporting climate-change adaptation interventions in Least Developed Countries (LDCs) in Africa. Additionality of interventions or incremental costs do not, however, play a major role. MDBs seem to be less concerned about these aspects than do the budget-constrained multilateral funds described above.

Bilateral sources

Some key bilateral players have established dedicated climate initiatives to support the development and implementation of climate-change mitigation and adaptation activities internationally. Some, such as the French government, have integrated related sub-programs into existing dedicated climate or environmental initiatives. The following selection indicates the main bilateral climate initiatives and programs:

- International Climate Initiative (ICI), Germany;
- French Global Environment Facility (FGEF), France;
- International Climate Fund (ICF), United Kingdom; and
- Hatoyama Initiative/Fast-Start Financing (FSF), Japan.

These dedicated bilateral programs and funds are also less concerned about incremental costs or additionality of adaptation interventions (see above). They mostly apply specific, dedicated climate-change/environmental project selection and general investment criteria. These include co-funding and expertise, and management and financial capabilities of implementing organizations. These criteria combine with traditional ODA programming and budget allocation.

Bilateral climate initiatives fall between the strictly climate-change-focused, budget-constrained multilateral funds, and the bilateral ODA funding processes driven by bilateral

negotiations and broader agendas of donor and recipient countries. Budget allocations and decision-making processes within conventional bilateral development cooperation work differently from multilateral and bilateral public funding sources. Climate change is only one sector or focus among others. Support to host-country governments or projects and programs is less or not at all dependent on co-finance or proving additionality of adaptation measures. These funding processes rely more on policy decisions and government-to-government negotiations. Therefore, they may well suit projects promoted by governmental organizations in Africa.

Private sector

Portfolio investors, corporations and private banks make investments primarily in the form of either debt or equity. According to UNDP (Glemarec 2011), life insurance companies, pension funds, sovereign wealth funds and endowments are among potential sources of domestic and foreign private-sector climate finance.

The involvement of the private sector has been very limited to date. We found only one centralized platform for private-sector investment into climate-change adaptation: the Adaptation Private Sector Initiative (PSI). This aims to catalyze the involvement of the private sector in the wider adaptation community. Activities carried out by companies involved span a variety of businesses and sectors: insurance, consultancy, environmental management, infrastructure and transportation, water and the financial sector³.

There are some pilot projects with private-sector involvement in Africa (see Chapter 5). These are Public–Private Partnerships (PPPs), initiated and co-financed by multilateral or bilateral organizations such as the World Bank or the German Organization for International Cooperation (GIZ). International insurance companies are involved to a small degree in climate finance in Africa. Chapters 4 and 5 consider reasons for the low engagement of the private sector, and identify areas for more research.

Non-governmental, philanthropic and social investors⁴

Many national and international NGOs or civil society organizations, as well as foundations and other philanthropic organizations either apply for public adaptation funding or use resources they otherwise raised to finance adaptation projects. There are no publicly available, aggregated information sources, databases or reports providing information on the amounts or scale of financial flows distributed by these organizations.

The investment bank JP Morgan estimates that global social investing from funds, foundations and social investors could supply between US\$400 billion and US\$1 trillion to the housing, water, health, education, and financial services sectors from 2010 to 2020 (O’Donohoe et al. 2010). However, to date the coverage of sources and recipients of philanthropic investments is non-exhaustive (IBRD/World Bank 2010).

³ So far, 33 companies have joined Adaptation Private Sector Initiative (PSI). They include: Allianz, BASF, Caisse des Dépôts, Deutsche Bahn, Deutsche Bank, Deutsche Post, PricewaterhouseCoopers UK, Thames Water and Thomas Cook.

⁴ Classifying these actors as a unique or separate group is problematic as they receive their funding largely from the other groups, i.e. from the public or private sector. However, they do play a role in channelling funding to adaptation projects.

These funds are attractive for developing countries because, unlike traditional private finance, the investors may accept lower returns as a trade-off for delivering a social impact. Foundations and NGOs even provide, albeit in smaller amounts, grant funding without any expectations of returns on the investment. Some of these organizations have been instrumental in involving private-sector companies in pilot projects related to climate change. Examples include mitigation or biodiversity projects, combining public and private funding, or leveraging private finance. The current involvement of NGOs in the development and implementation of adaptation projects, or in distributing and managing funding in Africa, needs further assessment (see also Chapter 5).

National governments – unilateral sources

Local governments in Africa might finance adaptation and adaptation technologies, such as water supply to agricultural interventions, or building dams. These budgets are often not given or allocated specifically to adaptation but are within the wider government budget for the agricultural, biodiversity or forestry sectors. In a few countries, such as South Africa and Nigeria, dedicated climate-related budget lines exist, and programs to support action on climate change are partly funded through national budgets.

2.3 Key messages

From an African project developer's point of view, there are key differences between potential funders' project selection and investment criteria.

- Multilateral climate funds tend to be very rigid in requiring demonstrable adaptation impacts of measures they support. Allocation patterns for conventional ODA flows are less rigid, and less climate-specific.
- Dedicated bilateral climate funds and programs do seek climate relevance, but are usually less budget-constrained and less strict in their allocation criteria than multilateral funds. Dedicated bilateral initiatives are usually linked to flows of traditional development cooperation and ODA.
- MDBs seem often more concerned about underlying project and finance structures than about additionality and incremental costs. They tend to apply standard project selection and investment criteria.

There is not enough information to assess the extent of engagement in adaptation or related funding by private-sector companies, non-for-profit actors or social entrepreneurs in Africa.

Allocations to specific national budget lines for adaptation measures in African countries are also largely impossible to quantify. Either they are not made at all, or the information is not publicly available, or allocations are not separated from wider allocations. Middle-income countries with separate climate-related budgets, such as South Africa and Nigeria, seem to be exceptional.

3 Adaptation funding in Africa

This Chapter surveys funding for adaptation to climate change in Africa in five regions: North, West, Central, East and Southern. It looks at which countries receive how much funding, for how many projects, and from which sources. Clarifying the finance flows in this way is necessary to reach a better understanding of why some types of finance and sources of finance play a role in funding adaptation in Africa, or in some countries in Africa, and others do not. Section 3.6 then offers an overview of the five African regions and how they are positioned for attracting, accessing and processing adaptation finance.

3.1 North Africa

The North Africa region consists of six countries⁵, of which only Mauritania is classified as a Least Developed Country (LDC). The following assessment relies mainly on the National Communications (NCs) to the UNFCCC⁶ and the National Adaptation Programme of Action (NAPA) submitted by Mauritania to the UNFCCC. For Libya, no official information about adaptation activities is available. **Table 1** summarizes the numbers of projects proposed and funded⁷ in each country.

Planned and funded projects

For three of the six North African countries (Algeria, Libya and Morocco), there is no information available about the number of adaptation projects planned or amounts budgeted in NAPAs or NCs. In the region overall, 30 projects (plus 3 regional projects not included in **Table 1**) have been approved to receive a total of US\$67 million from multilateral or bilateral donors.

Table 1: Adaptation projects and funding in the North Africa region⁸

Country	Number of adaptation activities proposed in NAPA/NC	Number of projects with approved funding	Funding required as per NAPA/NC (total volume in US\$ million)	Funding approved (total volume in US\$ million)
Algeria	n/a	2	n/a	0.3
Egypt	11	4	57	11
Libya	n/a	1	n/a	0.3
Mauretania	28	4	20	13.7
Morocco	n/a	13	n/a	13.7
Tunisia	49	6	808	28.1
Total region	88	30⁹	885	67.1

⁵ Based on the classification of the African Development Bank (AfDB) (2012) the following countries belong to the North Africa sub-region: Algeria, Egypt, Libya, Mauritania, Morocco and Tunisia.

⁶ Apart from Tunisia, all other non-LDCs in the region have submitted their 2nd NCs.

⁷ Some 70% of the GEF-funded projects where information is available have already been implemented or are currently being implemented. The other 30% started in 2012 or later, the status varying between projects.

⁸ Sources: GEF 2012, Climate Funds Update 2012, Fast-Start Finance 2012, AfricaAdapt 2012, UNDP 2012, IDRC 2012, UNFCCC 2012a,b. NCs: People's Democratic Republic of Algeria (2010), Arab Republic of Egypt (2010), Kingdom of Morocco (2010), Tunisian Republic (2001). NAPA: Islamic Republic of Mauritania (2004).

⁹ There are three further regional projects in which countries in North Africa participate. Because they cannot exclusively be allocated to specific countries in the region, they have been excluded from Table 1.

Funding sources

More than one-third (US\$24 million) of the adaptation funding for the region comes from the AF and the GEF's SCCF, with two projects each. The most active funders of financed projects in the region are the GEF and the Climate Change Adaptation in Africa (CCAA) initiative of Canada's International Development Research Centre (IDRC) and the United Kingdom (UK) Department for International Development (DFID).

3.2 West Africa

The West Africa region includes 15 countries¹⁰, with one of the highest concentrations of LDCs in the world¹¹. Only four countries are not classified as LDCs. All West African countries have completed their NCs and, where applicable, their NAPAs. **Table 2** summarizes available funding information.

Planned and funded projects

Of the priority actions in the region identified by NAPAs and NCs, 24% have received funding. Of the total costs of the proposed actions, 46% are being funded by the various multilateral and bilateral sources, through 42 identified adaptation projects.

Funding sources

The GEF is an important multilateral funding source for the projects in the region. One-third of the projects receive the majority of their funding from the GEF, mostly through the LDCF (about US\$207 million), providing funding or co-funding for 29 of the 42 identified projects. Total co-financing for all GEF projects from various other multilateral and bilateral sources, as well as unilateral contributions (in-kind), is about US\$444 million.

Of the identified projects, 60% are (co-)financed from bilateral sources, either directly through bilateral channels, including the various bilateral climate-specific funds and programs or fast-start financing initiatives, or via multilateral channels with the original bilateral source known. The most prominent donor countries providing funding are Japan (14 projects), the UK (7 projects) and Germany (4 projects). In addition, countries finance projects directly through their bilateral ODA channels, for instance the United States (US) government supported four projects in Mali in agriculture and water conservation via the United States Agency for International Development (USAID).

Regional or cross-border projects which focus on research, capacity building or knowledge communication are funded by Germany (University of Bonn), the GEF (Trust Fund), Japan (Africa Adaptation Program (AAP)), the European Union (EU) (Global Climate Change Alliance), the UK (DFID) and Canada (IDRC). To date, only Benin and Senegal have accessed the AF.

Adaptation projects not listed in the NAPAs are mostly funded by bilateral sources, often with significant amounts. NGOs such as Wetlands International, Cooperative for Assistance and Relief Everywhere (CARE) and Environmental Development Action in the Third World (ENDA) support a few of these adaptation projects.

¹⁰ The following countries belong to the West Africa sub-region according to the AfDB classification (2012): Benin, Burkina Faso, Cap Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. Sao Tome and Principe has been included in the West rather than Southern Africa region as per the AfDB classification.

¹¹ LDCs in the region: Burkina Faso, The Gambia, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, Benin, Guinea, Liberia, Sierra Leone and Togo; non-LDCs in the region: Cap Verde, Côte d'Ivoire, Ghana and Nigeria.

Table 2: Adaptation projects and funding in the West Africa region¹²

Country	Number of adaptation activities proposed in NAPA or NC	Funding request (total cost as per NAPA/NC, in US\$ million)	Number of projects with approved funding	Funding approved (total volume in US\$ million)	Percentage of requested funding received
Benin	5	15.8	3	15.8	100
Burkina Faso	12	6.1	4	17.7	290
Cap Verde	3	16.9	2	7.0	41
Côte d'Ivoire ¹³	0	15.9	0	n/a	n/a
The Gambia	10	15.3	3	9.8	64
Ghana	9	6.8	4	11.9	174.5
Guinea	25	8.4	3	6.7	78
Guinea-Bissau	14	7.4	1	4.0	54
Liberia	3	68.2	3	12.0	18
Mali	18	49.5	2	5.1	10
Niger	15	n/a	7	14.0	n/a
Nigeria	7	n/a	0	n/a	n/a
Sao Tome and Principe	23	12.5	3	9.1	73
Senegal	4	59.4	3	13.6	23
Sierra Leone	24	30.1	3	9.6	32
Togo	7	19.3	1	7.3	38
Total region	179	331.6	42	143.6	43.5

3.3 Central Africa

Of the seven countries¹⁴ in the Central Africa region, four are classified as LDCs. All LDCs have submitted NAPAs to the UNFCCC, with the non-LDCs submitting their initial NCs at least, with the exception of Equatorial Guinea. **Table 3** summarizes climate-change funding in Central Africa.

¹² Sources: GEF 2012, Climate Funds Update 2012, Fast-Start Finance 2012, AfricaAdapt 2012, World Bank 2012a, IDRC 2012, Global Climate Change Alliance 2012, WeAdapt 2012, International Climate Initiative 2012, World Bank 2012b, UNFCCC 2012a,b. NAPAs: Republic of Benin (2008), Government of Burkina Faso (2007), Republic of Cap Verde (2007), Government of the Gambia (2007), Republic of Guinea (2007), Republic of Guinea-Bissau (2006), Republic of Liberia (2008), Republic of Mali (2007), Republic of Niger (2006), Republic of Senegal (2006), Republic of Sierra Leone (2007), Republic of Togo (2009), Democratic Republic of Sao Tome and Principe. NCs: Republic of Cote d'Ivoire (2010), Republic of Ghana (2011), Federal Republic of Nigeria (2003).

¹³ Côte d'Ivoire proposed only mitigation activities in its NC.

¹⁴ Countries belonging to the Central Africa sub-region according to the AfDB classification (2012): Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Congo, Equatorial Guinea, Gabon, and Madagascar (Madagascar has been included in the Southern Africa sub-region for this study, see Table 5). LDCs in the region: Chad, Central African Republic, Democratic Republic of the Congo, and Equatorial Guinea.

Planned and funded projects

We have identified more than 60 adaptation or related projects with approved funding in the region. This is projects being currently implemented or planned, and includes REDD projects with adaptation components¹⁵. This is almost 30% more projects than the number listed in NAPAs or NCs. However, the lack of accurate data precludes a comparison of the budgeted costs and the approved funding.

Funding sources

- Multilateral funding sources include the GEF, the Climate Change Program of the Food and Agriculture Organization (FAO) and the EU (Global Climate Change Alliance).
- Bilateral funding is provided by Germany, France, the UK and the US. More than two-thirds of the funding is provided through bilateral channels.
- All countries in the region are also involved in regional or cross-border initiatives. The most prominent regional program, providing funding for adaptation and the preservation of the Congo Basin Forest, is the Congo Basin Forest Fund (CBFF).
- Funding for REDD amounts to more than twice that spent on pure adaptation for the Central Africa region.

Table 3: Adaptation projects and funding in the Central Africa region, including REDD¹⁶

Country	Number of adaptation activities proposed in NAPA or NC	Funding request (total cost as per NAPA/NC, in US\$ million)	Number of projects with approved funding, incl. REDD	Funding approved, incl. REDD (total volume in US\$ million)	Percentage of requested funding received
Cameroon	13	29	10	16.2	56
Central African Republic	10	3	8	24.0	800 ¹⁷
Chad	10	14	4	0.4	0.3
Democratic Republic of the Congo	10	264	33	97.0	37
Equatorial Guinea	n/a	n/a	1	0.7	n/a
Gabon	n/a	n/a	4	12.0	n/a
Republic of the Congo	n/a	n/a	3	19.0	n/a
Total region	43	310	63	169.3	55

¹⁵ Projects classified as biodiversity projects with clearly expressed adaptation impacts are not included in the analysis. E.g.: For example: Preservation and development of Lake Chad (EUR 800,000); Interaction between cattle breeding and local fauna (EUR 770,000); Six-year "Lake Chad Sustainable Development Support Program", a five-country effort including Cameroon and CAR (US\$95 million).

¹⁶ Sources: GEF 2012, Climate Funds Update 2012, Fast-Start Finance 2012, IDRC 2012, Global Climate Change Alliance 2012, UNFCCC 2012a,b. NAPAs: Central African Republic (2008), Republic of Chad (2010), Democratic Republic of Congo (2006). NCs: Republic of Cameroon (2005), Republic of Congo (2009), Gabonese Republic (2011).

¹⁷ The (financial) needs for adaptation must have been grossly underestimated in CAR, while the country belongs to the leading beneficiaries of REDD funding in the region.

3.4 East Africa

The East Africa region consists of 10 mainland countries¹⁸. All East African countries except Kenya are classified as LDCs, which means that they submit NAPAs to the UNFCCC¹⁹.

Table 4 summarizes the climate-funding situation in East Africa²⁰.

Planned and funded projects

There is a disparity between the number of adaptation activities proposed and those approved. The same applies to the amount of funding requested, approved and disbursed. Of the projects listed in Table 4 and submitted for funding, 80% are projects with approved funding with 19% of the total funding requested being approved to date

Table 4: Adaptation projects and funding in the East Africa region²¹

Country	Number of adaptation activities proposed in NAPA or NC	Number of projects with approved funding	Funding requested (total cost as per NAPA/ NC, in US\$ million)	Funding approved (total volume in US\$ million)	Funding received/ disbursed (total volume in US\$ million)
Burundi	12	2	7.3	3.3	0.2
Djibouti	8	3	7.4	6.9	2.2
Eritrea	5	2	33.2	6.7	1.1
Ethiopia	11	9	769	56.2	4.8
Kenya	n/a	6	n/a	14.3	6.5
Rwanda	7	5	8.1	12.7	6.5
Somalia	n/a	1	n/a	8.2	n/a
Sudan	5	3	15	17.1	3.2
Tanzania	6	10	17.2	21.1	9.9
Uganda	9	8	39.8	23.1	0.2
Total region	63	49	897	169.6	34.6

¹⁸ Mainland countries belonging to the East Africa region according to the AfDB classification (2012): Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda. The Comoros and the Seychelles Islands have not been included in the analysis.

¹⁹ Somalia, despite classifying as a LDC, has to date not submitted a NAPA to the UNFCCC.

²⁰ There are 78 adaptation projects identified in the region, including projects for which no consolidated data is available; they have not been included in **Table 4**.

²¹ Sources: UNFCCC 2012a/b, GEF 2012, Climate Funds Update 2012, Fast-Start Finance 2012, IDRC 2012. NAPAs: Republic of Burundi (2007), Republic of Djibouti (2008), State of Eritrea (2007), Federal Democratic Republic of Ethiopia (2007), Republic of Rwanda (2006), Republic of Sudan (2007), United Republic of Tanzania (2007), Republic of Uganda. 2007. NC: Republic of Kenya (2002).

Funding sources

Most projects are primarily supported and funded by bilateral sources, although many also received funds from multilateral donors. The multilateral funds provided US\$64.8 million, with more than twice this amount (US\$143.4 million) in additional co-finance, assuming this co-finance is mostly provided by bilateral sources. More than half of the multilateral funding was provided by the LDCF (17 projects), followed by the AF (3 projects) with 26%, and the SCCF (3 projects) with 13% of the funding. The GEF Trust Fund, the SPA and the MDG-F support one project each.

The UK government has been very active in the region, funding 10 projects via its International Climate Fund (ICF) and another 11 projects together with Canada's IDRC through the joint Climate Change Adaptation in Africa (CCAA) initiative. Other donor governments active in the region are Germany (10 projects), Japan (6 projects), followed by Denmark and the Netherlands (2 projects each), and Sweden and Switzerland (1 project each).

Private foundations including the Rockefeller Foundation (2 projects) and Howard Buffet Foundation (1 project), as well as NGOs such as the Alliance for a Green Revolution in Africa (AGRA) (1 project), support adaptation measures in the region. We have also identified regional adaptation projects (7), as well as Africa-wide projects that involve East African countries (22). Bilateral sources fund these almost exclusively.

3.5 Southern Africa

The Southern Africa region consists of 12 countries²². Six of these are classified as LDCs. Therefore the NAPAs submitted to the UNFCCC were used for the following assessment. Main references for the non-LDCs were NCs submitted to the UNFCCC. **Table 5** summarizes the funding situation in this region.

Planned and funded projects

The total approved adaptation funding for the entire region is US\$268.8 million, which is US\$80 million more than the indicated, required funding derived from the NAPAs and NCs. Of the 114 identified adaptation projects with approved funding in the region (105 were proposed or listed in the NAPAs and NCs), 88 are on-the-ground applications and 26 are research projects such as vulnerability assessments.

Funding sources

Multilateral and bilateral funds contribute nearly equal shares of the identified climate funding in Southern Africa (47% and 53%, respectively). Almost one-third (US\$85 million) of the approved funding in the region comes from bilateral Fast-Start Financing (FSF). Most of the funding has, however, not yet been disbursed. The second-largest funding sources are the multilateral funders under the UNFCCC, including the GEF funds and the AF, which together contribute US\$77.5 million to adaptation in Southern Africa. Bilateral government programs follow with around US\$55 million, while other multilateral funds of international organizations contribute roughly US\$49 million.

²² Based on the classification of the AfDB (2012): Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. LDCs in the region: Angola, Lesotho, Madagascar, Malawi, Mozambique, and Zambia. Madagascar has been included in the Southern Africa region whereas Sao Tome and Principe has been included in the analysis of the West Africa region.

The majority of the projects mainly funded by multilateral sources are receive their funding through the GEF's LDCF (US\$41.5 million for 16 projects), followed by the AF (US\$14 million for 2 projects), the SCCF (US\$11 million for 5 projects) and the GEF-4²³/SPA Fund (US\$3.6 million for 3 projects). Other multilateral adaptation donors in the region include the United Nations Environment Programme (UNEP) Community-based Adaptation Fund, the MDG Achievement Fund, and the FAO's Climate Change Programme with one or two projects each.

The World Bank's Pilot Program for Climate Resilience (PPCR) is the single largest donor to adaptation measures in Southern Africa, with US\$44.8 million approved. So far, however, it has mainly disbursed finance for administrative fees and project grant preparation. A further US\$47million is pending approval.

Table 5: Adaptation projects and funding in the Southern Africa region²⁴

Country	Number of adaptation activities proposed in NAPA or NC ²⁵	Funding request (total cost as per NAPA/NC, in US\$ million)	Number of projects with approved funding	Funding approved (total volume in US\$ million)	Percentage of requested funding received
Angola	29	107.5	2	0.6	0.6
Botswana	n/a	n/a	2	n/a	n/a
Lesotho	11	13.1	6	13.4	102
Madagascar	15	3.9	7	29.8	760
Malawi	5	22.9	12	23.8	104
Mauritius	3	18.0	6	17.7	98
Mozambique	4	9.2	28	88.8	965
Namibia	28	n/a	11	39.8	n/a
South Africa	n/a	n/a	11	14.5	n/a
Swaziland	n/a	n/a	2	8.5	n/a
Zambia	10	14.7	14	15.1	103
Zimbabwe	n/a	n/a	6	6.6	n/a
Regional projects	n/a	n/a	7	10.2	n/a
Total region	105	189.3	114	268.8	142.5

The projects mainly financed from bilateral sources receive funding from the FSF initiatives of the US (12 projects), Germany (7 projects), Japan (6 projects), Switzerland (3 projects), Finland (2 projects), and Sweden, France and the UK with one project each. In addition,

²³ GEF-4 refers to the 4th replenishment or funding period of the GEF which started in November 2006 and funded projects until end of June 2010.

²⁴ Sources: UNFCCC 2012a/b, GEF 2012, Climate Funds Update 2012, Fast-Start Finance 2012, IDRC 2012, World Bank 2012b, UNDP 2012. NAPAs: Government of Angola (2011), Republic of Botswana (2011), Government of Lesotho (2007), Republic of Madagascar (2006), Republic of Malawi (2006), Republic of Mozambique (2007), Republic of Zambia (2007). NCs: Republic of Mauritius (2010), Republic of Namibia (2011), Republic of South Africa (2011), Kingdom of Swaziland (2011), Republic of Zimbabwe (1998).

²⁵ Botswana, South Africa and Swaziland have either a mitigation focus or rather proposed only mitigation measures in their NCs.

Japan's Africa Adaptation Programme (AAP) supports 6 projects in the region (US\$18 million), while other adaptation activities are funded by the EU's GCCA (US\$18 million for 2 projects), and the French GEF, the French Development Agency (AFD) and USAID with one project each.

All 16 identified adaptation research projects have been financed by the CCAA initiative of DFID/IDRC; 3 projects have also been funded by the AIACC program (Assessments of Impacts and Adaptations to Climate Change), 2 by the Global Facility for Disaster Reduction and Recovery (GFDRR), one by the Dutch Netherlands Climate Assistance Programme (NCAP) and 4 by other, unspecified sources.

3.6 Performance overview and analysis

Figure 2 shows the results of comparing received or approved funding and the number of approved and planned adaptation projects for each analyzed country in Africa. These results are based on the analyses in Sections 3.1 to 3.5. In addition, we assessed each country against two sets of criteria where they differ most, based on the research conducted in the five regions and expert opinion. These can be summarized in two main categories:

1. National framework conditions and readiness to access and absorb adaptation finance; and
2. Overall availability of data and expertise and knowledge/information sharing.

A simple scoring system and expert judgement were applied to assess the performance of countries against the above criteria and analysis. Not all countries were included in the scoring, because in some cases the available data and/or knowledge was inadequate for any further assessment beyond the overview in **Figure 2**. This method should be followed by in-depth national studies to confirm and verify the situation in individual countries. However, the current analysis does generate an indicative overview and categorization of countries into three groups:

1. Successful countries

The following countries within each region are better positioned to receive and attract adaptation finance:

- East Africa: Ethiopia, Tanzania, Uganda and Kenya
- North Africa: Tunisia
- Southern Africa: Zambia, Mozambique and Malawi
- West Africa: Ghana, Niger, Senegal, Burkina Faso, and Benin
- Central Africa: Cameroon and Gabon

2. Less successful countries

The following countries within each region are less well positioned to receive and attract adaptation finance:

- East Africa: Rwanda
- North Africa: Morocco, Egypt, and Algeria
- Southern Africa: Angola, Zimbabwe and Lesotho
- West Africa: Mali, the Gambia, Sao Tome and Principe, and Sierra Leone

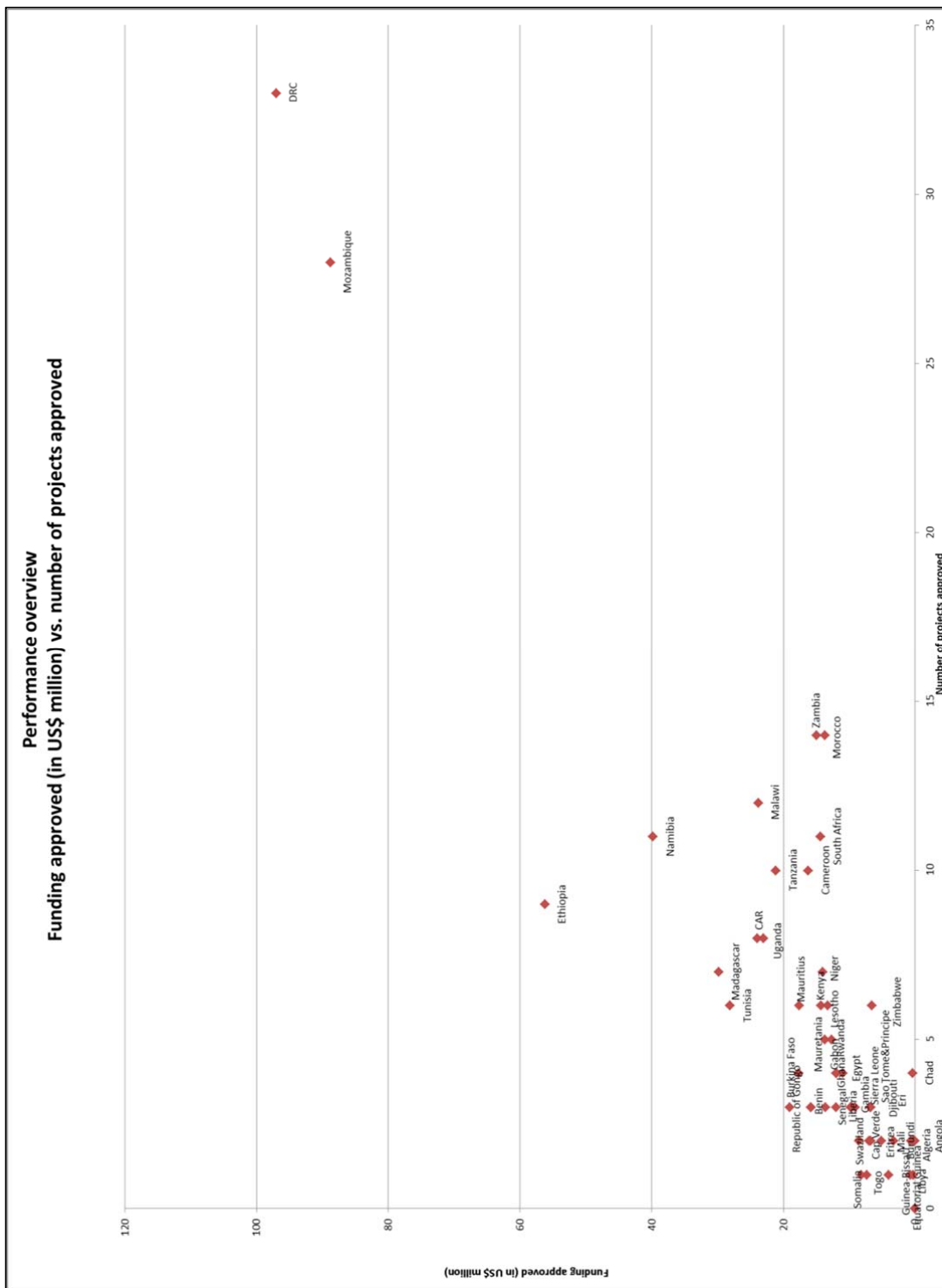


Figure 2: Performance overview of African countries: approved funding and number of projects approved²⁶

²⁶ The DRC has estimated its adaptation funding needs to be only US\$3 million, as per its NAPA. Although the DRC benefits from large amounts of donor funding (almost US\$100 million), this funding is almost completely related to REDD activities in the country with adaptation addressed as collateral. Mozambique benefits greatly from the World Bank's PPCR funding with US\$44.8 million approved and another US\$47 million pending funding, largely allocated to Mozambique. The PPCR has 12 projects in the region: 8 in Mozambique and 4 in Zambia. Figure 2 was generated using the author's analysis of aggregated data.

Unsuccessful countries

The following countries within each region are not well positioned to receive or attract adaptation finance:

- East Africa: Burundi, Djibouti, Eritrea and Somalia
- North Africa: Mauretania and Libya
- Southern Africa: Namibia, Swaziland and Botswana
- West Africa: Guinea, Guinea-Bissau, Cap Verde and Côte D'Ivoire
- Central Africa: Chad, Central African Republic (CAR), Equatorial Guinea and the Democratic Republic of the Congo (DRC²⁷)

3.7 Key messages

- Most adaptation funding for the five African regions comes from bilateral sources, in many cases from FSF initiatives.
- In all five regions the GEF plays an important role, channelling multilateral funding to adaptation projects.
- However, a growing number of other multilateral actors and funds are emerging, and providing significantly larger amounts of funding than the GEF in individual cases.
- The 'typical' financial structure of adaptation projects in Africa relies on grant funding from donors, either multilateral or bilateral, or a mix of the two.
- Publicly available, aggregated information and financial data on the engagements on not-for-profit and private-sector organizations is not available or is negligible.
- Funding information about research projects in Africa is difficult to come by.
- The use of (private) equity for adaptation projects in Africa at scale is not yet demonstrable.
- Aggregated data about loans from public institutions for dedicated adaptation measures in Africa is not available at present.
- Southern Africa is the leading region in terms of adaptation projects with approved funding from multilateral and bilateral funds and programs, followed by East and West Africa, with far fewer adaptation activities and much lower funding levels in North and Central Africa.

²⁷ See **Figure 2** and the following footnote on REDD funding received by the DRC and associated adaptation collateral.

4 Barriers to financing adaptation in Africa

This chapter builds on the analysis of the five African regions outlined in Chapter 3. We consider barriers mentioned in the NAPAs or NCs, relevant literature, expert interviews and observations of the project team. We identify six types of barriers to financing adaptation projects in Africa. These barriers apply to the majority of countries or to specific regions. In some cases, we discuss individual countries but this high-level study focuses mainly on the broader regional or continent-wide picture.

4.1 Insufficient national framework conditions

The following main factors lead to a lack of readiness to access and absorb adaptation finance in many countries in Africa (see **Box 2** for specific examples):

- Inadequate institutional and legal frameworks
- National climate-change policies and strategies are absent or incomplete
- Weak technical and financial management capacities within government organizations
- Political instability, governance issues and lack of cooperation across borders and with non-governmental actors
- Lack of basic infrastructure.

Inadequate institutional and legal frameworks

There are two main problems concerning national framework conditions for developing adaptation projects in many African countries. The first constraint is limited institutional adaptation planning infrastructure. The second problem is unclear administration and management of funding at national and sub-national levels. In some countries, there are just one or two government officials in charge of coordinating climate-change issues nationally. In other countries, there are multiple institutions working on the topic because of the cross-sectoral nature of climate change, but, in many cases, without any kind of coordination. We found a notable lack of inter-agency coordination in many countries. This results in missed opportunities for collaboration, the duplication of skills and unclear roles and responsibilities – often leading to counterproductive outcomes.

Multilateral and intergovernmental institutions are important to most African countries for accessing multilateral climate funds. Many national organizations applying for National Implementing Entity (NIE) status, for instance, do not fulfil key requirements such as robust fiduciary capacities, including self-investigative powers. In some countries, the implementation of the NAPA is seen as a matter for the national agency that coordinated the NAPA development process, often the Environment Ministry. This can then lead to a lack of (shared) ownership in follow-up activities implementing the NAPA, in which line ministries of the relevant sectors need to be involved.

Absent or incomplete national climate-change policies and strategies

Some countries focus more on mitigation activities than adaptation measures, with the NCs clearly focusing on mitigation. There is a clear and expressed focus on mitigation in some countries in Southern Africa, for example. In other cases, NAPAs and related strategies have not yet been prepared, or only very recently. In West and Central African countries, policies and strategies to use climate finance effectively are often absent, incomplete or out of date.

Existing strategic documents are mostly inconsistent, lacking in detail or incomplete, and are missing budgets or have unclear monitoring approaches.

In North Africa to date, responses to the impacts of climate change have been mostly reactive. These responses do not always lead to any adaptation strategies at all. Where there are adaptation strategies, these are often only short-term, or are not followed through with adequate planning and funding.

NAPAs are plans for adaptation, but also instruments for informing donors and relevant stakeholders about adaptation needs. In some West African countries, for example, NAPAs are not up to date, and approved LDCF projects are not based on the NAPAs. Indeed, many approved or implemented projects in West Africa cannot be found in the NAPAs or NCs. Without clear adaptation strategies in up-to-date NAPAs and related action plans, donors are less inclined to provide funding in several phases over longer periods.

Weak technical and financial management within government organizations

Across all regions and in most countries, national government organizations and officials manage most adaptation project development and implementation, including financial management. The GEF (Ministry of Foreign Affairs of Denmark 2009) concludes that the low level of human resource capacity among ministries and line agencies, and the lack of technical backgrounds, are important constraints in developing and implementing adaptation planning.

Christiansen et al. (2012) highlight the importance of sound financial assessment, including information about what will happen to requested funds over time and when divided into different budget positions. In addition, many countries have found it difficult to assess the additional costs of adaptation (Ministry of Foreign Affairs of Denmark 2009). This is one reason why financial assessments in project applications are often incomplete. The lack of capacities to measure, report and verify financial expenditures, as well as associated results and impacts, is a problem throughout project implementation and reporting. In West and East African countries in particular, government capacities and resources to manage larger sums of adaptation funding seem limited.

Political instability, governance issues and lack of cooperation

Many LDCs in Africa needing to adapt to climate change are politically unstable countries with governance issues, civil wars or high levels of corruption. This does not create an investment climate conducive to developing adaptation projects and attracting large amounts of public funding. Nor does it help to establish an investment climate for FDI by international corporates that may provide more climate-relevant or even climate-specific finance next to local investments. In Central Africa for example, these challenging conditions seem to hamper the development and implementation of adaptation actions in many countries.

While many countries in most African regions are involved in regional, cross-border adaptation projects, this is not so in Central Africa. The NAPAs here do not refer to any regional projects or actions. This is an obstacle to accessing funds earmarked for regional adaptation measures.

Box 2: Lack of readiness to access and absorb adaptation finance

Burundi, Djibouti, Eritrea and Somalia have not yet ratified institutional and legal climate-policy frameworks (IISD 2011), and Libya has not managed to prepare a National Communication. In some countries, such as Algeria, there are no clear and concrete adaptation strategies at all at the national level. Other countries have developed such strategies only very recently. For example, Mali developed its climate strategy in 2011. In Egypt, funding proposals still aim for the support of policies and programs rather than concrete adaptation projects.

Countries such as South Africa, Namibia, Swaziland and Botswana focus on mitigation in their NCs, and mention adaptation only on the sidelines. They are not LDCs and thus do not prepare NAPAs. Angola submitted its NAPA only in December 2011, and seems also to see adaptation as less of a priority. CAR and Equatorial Guinea seem to show a generally limited awareness of the problem.

There are weak technical and financial management skills and only a few climate-change experts in countries such as Burundi, Djibouti, Eritrea and Somalia. Some African governments emphasize their own limited capacities to analyze the threats and potential impacts of climate change, develop viable adaptation solutions, and translate strategies into action. They cite inadequate technical expertise and capacity (Republic of Malawi 2006, Kingdom of Swaziland 2011, Republic of Zambia 2007, Climate Investment Funds 2011).

Angola, Zimbabwe and Lesotho are examples in Southern Africa where constrained human, institutional and financial resources seem to hamper access to funding (Christensen et al. 2012). Other countries such as Ethiopia explicitly point out in their NAPAs that they have struggled to access the limited sources of financing available (Federal Democratic Republic of Ethiopia 2007). Some countries have difficulties providing sound cost estimates (Republic of Namibia 2011) or cannot provide detailed information on the planned use of funding, or detailed budgets (e.g. Government of Lesotho 2007, Government of Angola 2011).

Countries such as Chad, Equatorial Guinea, and the DRC are experiencing major internal struggles and civil wars. The very small number of projects and amount of financing received by countries such as Guinea and Guinea-Bissau, for instance, is probably related to unstable political situations in those countries. The NAPA of the DRC, for example, describes poverty being made worse by constant conflict, the existence of armed groups in remote zones, and the wide spread of diseases such as malaria or the combination of HIV/AIDS and tuberculosis. Furthermore, in vast countries such as the DRC and Chad, wars have affected infrastructure. This adds to the obstacles and the lack of framework conditions conducive to attracting and absorbing adaptation finance, next to different priorities being higher on the development agenda.

In Chad, for instance, the UNFCCC focal point did not know any members of civil society who were involved in the area of adaptation (Mahamat 2012). Participation in few or no regional or global preparatory or capacity-building programs seems also to be related to being unsuccessful in receiving adaptation funding (e.g. Guinea, Guinea-Bissau and Cap Verde).

Across all African regions, local civil society, regional experts, or organizations that are part of international groups with relevant experience are often involved only on request by local governments. However, these actors seem marginalized when it comes to fundraising and

management at the larger, national scale. Some of these actors could contribute competence in fundraising and management for adaptation projects and programs.

Lack of basic infrastructure

A number of countries in the Congo basin, for example, have very poor, basic infrastructure or road networks. This lack of infrastructure slows adaptation or any other action to a point where it discourages investments.

4.2 Insufficient data availability and expertise

Insufficient data availability and lack of expertise lead to: i) limitations in data analyses and good-practice project preparation; ii) difficulties in accessing accurate information on adaptation financing, policies and actions; and iii) obstacles to identifying the appropriate funds and how to access them. **Box 3** provides specific examples of these barriers.

Limitations in data analyses and project preparation

At the national level, African climate-change experts are very rare and the few available have mostly gained their experience on the job. Using IPCC models, adapting them to local realities for vulnerability assessments, and developing vulnerability scenarios are all challenging tasks. The GEF (2011) identified the limited availability of local climatic data, and the inability to analyze this data, as significant barriers in designing adaptation activities as part of an evaluation of the SCCF.

Developing adaptation projects consistent with the requirements of funding organizations is complex, slow and expensive. Christiansen et al. (2012) state that adaptation funding proposals in general are often unsuccessful due to lack of:

- Long-term outlook on benefits and sustainability of the planned activity;
- Proper planning of project implementation, including reasons why one particular donor is approached and not another; and
- Clear description of outputs, results and impacts of the proposed measures.

Aside from missing data, there is a lack of information within the different socio-economic sectors on designing projects according to donor requirements. This is common to local administrations, research organizations and NGOs. More importantly, communities and smallholders do not have the capabilities or financial means to develop good practice and attractive propositions with support from paid experts.

Difficulty accessing accurate information on adaptation

Information currently available in the public domain is inconsistent and incomplete, and is distributed over several different platforms and databases. There is no reliable information platform and database providing up-to-date overviews of adaptation project development, implementation and funding in Africa at country level. Without this, and a set of agreed standards and best practices, comparison and accurate data analyses are not possible. Even international NGOs such as CARE, that are quite active in support of adaptation activities in Africa, admit to difficulties in identifying funding sources due to an overall lack of information about appropriate sources (Basilio 2012).

Box 3: Insufficient data and expertise to prepare good adaptation proposals

The Governments of Angola (2011) and Namibia (Republic of Namibia 2011) identify poor general data availability as a barrier. The Government of Lesotho (2007) cites limited data-collection capacity. Mauretania refers to insufficient local data to prepare and present its projects according to donor requirements. Often, countries do not address adaptation in their funding proposals to bilateral donor agencies at all. The agencies are then inclined to incorporate such elements by themselves, as noted by the French AFD (Rossin 2012). In other cases, the quality of proposals or other strategic documents prepared at country level is often so poor that the funding organization rejects them entirely (Doolan 2012).

The NC of Côte d'Ivoire, for example, uses different currencies (US\$, € and FCFA) for the cost estimates of different actions or items. The requirement to present the 'additional costs' of adapting to climate change impacts and meeting countries' immediate adaptation needs under both the LDCF and SCCF, is difficult to meet without specialized expertise. 'Additional or incremental costs' are the difference between the full project costs with climate change impacts factored in, and the baseline costs without.

According to a survey carried out by the Center for International Forestry Research (CIFOR) in 2009 in Burkina Faso and Mali, many decision-makers at the sub-national and local levels did not even know about the NAPAs and their contents in their own countries. At a NAPA project site in Burkina Faso, two relevant technical agencies did not know about this strategic document or anything about vulnerability assessments (Brockhaus et al. 2012).

Some governments state that great variation in types and conditionality of funds complicates the design and structuring of proposals (e.g. Government of Namibia 2011). The identification and accessing of funds is complex even if a clear project concept is available, as stressed by an expert in Rwanda (Mutabazu 2012). Some interviewees in French-speaking countries noted language barriers as an important constraint on accessing funding. Many proposals have to be submitted in English and all guidelines are in English.

It is difficult or impossible to single out financing for adaptation projects or adaptation components of predominantly development-oriented projects, funding provided or channelled through NGOs, or to identify any private-sector finance or resources from local governments. Current private-sector finance may be negligible, yet local government (in-kind) contributions can be identified for most GEF-funded projects.

Obstacles to identifying and accessing appropriate funds

There are many funding institutions and channels for adaptation measures. The diversity and complexity of procedures, requirements and reporting can make it difficult for recipient countries to identify the appropriate funds and how to access them. It is difficult to track flows of climate finance at global level. Similarly, it is difficult or impossible to trace financial flows to adaptation projects in Africa, because there is often no way to distinguish clearly between ODA and new and additional climate finance for adaptation. Almost all bilateral funding streams for adaptation, including funding for multilateral programs and dedicated bilateral climate funds and programs, are declared or accounted for as ODA.

4.3 Dependence on bilateral and multilateral grant funding

There are four main factors limiting the current funding base of adaptation projects in Africa. We look at these in this section. **Box 4** highlights specific issues related to donor funding for adaptation in Africa.

Reliance on bilateral and multilateral grant funding

To date, most adaptation interventions remain largely a public responsibility, and therefore rely on public funding from international and national sources, apart from some minor philanthropic investments. Grants from bilateral and multilateral sources for project development and implementation are usually the only type of finance currently available for adaptation projects in Africa.

As most bilateral donors declare funding for adaptation as part of fulfilling their ODA commitments, Value-for-Money approaches apply to adaptation funding. The dependence upon or closeness to ODA funding processes has resulted in similar funding patterns becoming apparent: short-term project cycles with phased approaches.

Problems with attracting private funding

The main challenge is the identification of profitable projects or projects that avoid or minimize financial losses due to the impacts of climate change. This applies to adaptation in general, not only in Africa. Worldwide, most adaptation projects cannot be designed to meet private-sector investment criteria: there are no significant markets for their products or services, and they do not usually fit with private-sector demands for commercial profit.

Adaptation projects, or projects relevant to adaptation, can involve high costs, sometimes huge amounts, such as for some infrastructure projects. The benefits or returns of these projects may be environmental and social rather than financial, and so do not usually appeal to conventional profit-seeking investors. Loan-softening (providing loans at reduced cost) is potentially a helpful instrument for attracting private capital. However, the lack of commercial components of most adaptation projects in Africa means that soft loans are hardly used.

Private enterprises have very few incentives to finance adaptation-related measures, not only but particularly in Africa. This is largely due to the high risks and lack of financial return. However, regulatory constraints are another barrier, as reflected in country ratings, for example, which guide investments by foreign investors. It may be that the private sector does not invest also because of a lack of awareness and lack of guidance on how to engage in and develop adaptation measures in Africa. Furthermore, sharing the costs of adapting public infrastructure and leveraging private funds for adaptation is challenging for African governments (see also Christiansen et al. 2012 and CTI-PFAN 2012).

Transaction costs for small-scale activities

The high transaction costs of the small-scale projects often required in the poorest areas can be another barrier to investment. It is difficult to design and implement such programs in ways that are financially viable and that can be scaled up and replicated. Traditional development cooperation may allow such projects to be developed and two or three phases funded over two or three funding rounds. However, such an approach is no long-term solution. In times of constrained public resources and reduced direct project funding, fewer

small-scale activities may be able to attract donor funding. This is the case in countries in East Africa, for instance, but is also likely across the continent.

Box 4: Donor funding for adaptation in Africa: increasing quality requirements

The Value-for-Money approach, as introduced by the UK government, leads to increased scrutiny of proposals from promoters or recipient-country governments. Funding has been withheld due to poor quality of proposals received from West Africa, for example (Doolan 2012).

The European Investment Bank (EIB) provides adaptation finance in the form of loans, but does not finance a single project in Africa (Zoellner 2012). Nevertheless, it does provide larger (concessional) loans to adaptation or adaptation-related projects elsewhere*. The same applies to the International Fund for Agricultural Development (IFAD), which provides only grant funding but no loans to African adaptation project promoters (Telahigue 2012).

According to the national coordinator of an adaptation project in Mali, a major difficulty is agreeing with funding organizations the composition of the management team and how to allocate and spend funds: 'It's like if we were being cast in the mold, there is not a real partnership.' In the worst cases, misunderstandings, conflict and disagreements between recipient countries and funding organizations in fund delivery can even lead to the cancellation of the project (Ba 2012).

* It is not clear whether these loans are specifically for the (additional) adaptation component, or underlying base investments.

Ownership issues between donors and recipients

During the implementation of bilaterally funded projects, many funders require management by an international project manager. This is sometimes a concern in recipient countries in Africa, especially when the administrative costs exceed the funding planned for activities on the ground. This situation has negative impacts on a project's ownership, sustainability and the willingness of potential recipients to apply for new projects.

4.4 Difficulties in accessing multilateral funds

Funds from the Global Environment Facility (GEF), particularly the LDCF but also the SCCF, are important for African adaptation projects (as noted in Chapter 3). However, there are notable problems here for funding adaptation in Africa (see also **Box 5**):

- Difficult fund structures and application processes;
- Selection and appraisal processes that are not always transparent; and
- Unpredictability of available funding.

Difficult fund structures and application processes

Stakeholders have voiced general frustration about the LDCF in terms of the complexity and slowness of the processes to obtain funds for adaptation priority actions (Ministry of Foreign

Affairs of Denmark 2009). A recent evaluation specifies difficulties with the SCCF, describing several inconsistencies (GEF 2011).

Box 5: The LDCF and SCCF: mandate and reality

Funding pledges to the Least Developed Countries Fund (LDCF) represent a substantial amount at US\$415 million to date, whereas pledges to the Special Climate Change Fund (SCCF) had reached only US\$180 million by June 2011 (GEF 2011). The quality of project proposals is of only secondary importance for receiving SCCF funding, as resource limitations seriously restrict the SCCF's overall operations. Other than the Adaptation Fund (AF), only recently introduced, the SCCF is the only adaptation-specific fund accessible to all Non-Annex 1 countries, as the LDCF is limited to Least Developed Countries. This causes a large discrepancy between the SCCF operation, in contrast to its mandate of addressing 'urgent and immediate adaptation needs'. Fulfilling this mandate would in fact require a fast-track process for funding delivery (Ministry of Foreign Affairs of Denmark 2009).

Evaluators highlight the weakness of indicators used in SCCF project documents, which are often vaguely formulated and not measurable. In some cases, there was confusion around the meaning of some indicators. All this makes it difficult for project developers to understand the documents. One key requirement of the GEF funds is proving additionality of adaptation interventions and demonstrating incremental costs, which is complex.

Unclear selection and appraisal processes

Selection processes for awarding funds can be complex and difficult to anticipate. For instance, the SCCF has added an additional step to the project cycle due to the limited funding it received (GEF 2011). In this case, the SCCF made an informal pre-selection of projects to match the number of projects entering the formal project cycle with the available funds. The precise criteria used for pre-selection are not formally determined or published. While pre-selection is a pragmatic solution in the face of managing limited funds, complementing the official procedures with informal additions jeopardizes the transparency of selection processes. This limits project developers' 'ability to develop targeted projects that fit the requirements of the SCCF portfolio and have a chance of entering the formal project cycle' (GEF 2011).

Unpredictability of available funding

The evaluations of both the LDCF (Ministry of Foreign Affairs of Denmark 2009) and SCCF (GEF 2011) identify the unpredictability of available funding as an important limitation to effective support of measures to address identified adaptation needs in Africa and elsewhere. Both funds rely exclusively on voluntary contributions. This makes the overall funding situation dependent on donor willingness, and therefore unpredictable. The unpredictability of available funding for existing, key multilateral funds such as the SCCF or the LDCF can lead to politically motivated and sometimes less-than-transparent selection processes. The newer Adaptation Fund (AF) uses an innovative approach by receiving revenues from a mitigation market mechanism (the CDM). However, the AF may face the

same problem of reduced resources with low prices and a lack of demand for Certified Emission Reductions (CERs).

4.5 Complex procedures and requirements of DFIs

Development Finance Institutions (DFIs) and development banks have their own criteria for project selection and investment. These can be problematic for African promoters. Several studies have identified two key barriers to accessing funds.

1. **The complexity of adaptation-specific project cycles** is a major barrier, particularly for project financing. For the GEF and other multilateral funders, project developers need to enter a pre-defined project cycle and follow its guidelines²⁸. This has been a particular problem with accessing GEF funding. The necessary process has a complex project cycle and high transaction costs, even for small amounts of money (Wilks, 2010).
2. **Complexity of monitoring and reporting requirements.** Financial Institutions (FIs) have no internationally agreed metrics for adaptation, and usually require specific monitoring and reporting from recipients. However, monitoring and evaluation (especially when quantitative rather than qualitative) requires technical expertise. Not many people, especially in developing countries, have expertise in both climate change and monitoring and evaluation (Anderson, 2011).

4.6 Research and research results disconnected from practical applications

There are two main problems related to the contributions of the adaptation research community to applied adaptation projects in Africa.

1. **Disconnection from climate finance or ODA flows.** The research community seems disconnected from the established, prevailing climate finance or ODA flows to adaptation projects in Africa. There is not enough focus on the transition from research to actual application. Researchers do not know how to design and present projects according to the eligibility criteria of existing funds and programs for adaptation applications.
2. **Research results do not lead to practical application.** Research findings often remain within the field of 'research', and do not often lead to actual applications. The development community continues to repackage and reclaim conventional development projects as adaptation projects. Dedicated efforts like those of the IDRC and the UK government do not seem to have changed this pattern yet.

²⁸ For example, project selection and investment criteria (e.g. costs are clear and cost schedule demonstrated, financial statements, financial viability demonstrated, standard financial indicators available, applicant status defined according to internal bank rating, business plan in place) applied to adaptation projects by MDBs such as the EIB may explain why the EIB has not provided any loans to adaptation projects in Africa to date.

4.7 Key messages

Many of the barriers limiting the development of good practice and sound adaptation projects in Africa are common to other policy fields.

- Major barriers include: incomplete climate policies and strategies, inadequate regulatory frameworks, governance issues or an absence of expertise and information.
- Funding for adaptation in Africa is almost entirely from overseas public grant funding, both bilateral and multilateral. There is no identifiable other source or type of finance at significant scale.
- The Global Environment Facility (GEF) is an important funding source for adaptation in Africa. However, this is limited both by limited resources to the Fund, and by the complex procedures required of potential recipients.
- Some Development Finance Institutions such as MDBs apply additional layers of appraisal procedures and standard investment criteria, adding further difficulties for project promoters seeking support.
- Research results on adaptation do not often contribute to funding applications in Africa.

5 Improving access to and use of adaptation finance

This final chapter presents suggestions for how to increase access to, and improve the use of adaptation funding in Africa (Sections 5.1 to 5.8). We draw on the analysis in previous chapters and on recommendations from literature, interviews and expert judgement. **Table 6** summarizes suggested strategic objectives and key interventions. Section 5.9 is a summary of key recommendations.

5.1 Improving data availability and adaptation policies

There are tools and best-practice NAPA examples available to project developers that can help to overcome data limitations and support the development of fully fledged NAPAs. The use of existing data and related analytical tools and the expansion of best-practice NAPA development could be supported at national and project level.

Use of existing data and tools, and investments in generating data

- It is important to use any available meta-analyses of any relevant, existing materials, and available data on climate change and variability, supplemented by sector-specific data related to the project. Qualitative assessments, any relevant data and expert judgement may have to suffice – given that detailed local climatic and other relevant data may not be available.
- It may be helpful to use a tiered approach. Tier 1 assessments could rely on qualitative assessments, regional data and expert judgment, for example. Tier 2 assessments could make use of quantitative information based on local data.
- Investment in developing down-scaled climate models could help to address the data limitations common in many African countries.
- Make the best possible use of existing knowledge as the basis for adaptation planning.

Expansion of best-practice NAPA development and implementation to other countries

- Well-developed, up-to-date NAPAs and the accompanying processes are a good basis for presenting project portfolios and adaptation-relevant background data.
- NAPAs can also be a reference when preparing individual project proposals and making the case for well-prepared and sound adaptation measures. These should address country needs nationally and locally (see Mauretania's NAPA (Islamic Republic of Mauretania 2004), for example).
- Non-LDCs could benefit from the development and implementation of adaptation plans and strategies as outlined in well-prepared NAPAs, combined with an underlying NAPA development process. Non-LDCs are often left with NCs to describe climate-change impacts and proposed adaptation measures. NAPAs and the processes developing them are much better suited to presenting adaptation project portfolios and related background data. They can then contribute to the preparation of funding proposals for individual projects based on the NAPA.
- NAPA development and implementation processes should also improve links between climate change and national poverty reduction. In countries in Central African in particular, there could be better integration of adaptation initiatives into national development policies. In some countries, such as CAR, the DRC and Chad,

for example, this will require significant improvements in governance capacities (IISD 2011).

5.2 Improving institutional and legal frameworks

National coordination committees are one way to overcome absent or malfunctioning regulatory frameworks. Establishing national adaptation Investment Promotion Agencies (IPAs) could improve direct access to the GEF, the AF and other funds. Targeted capacity building within the relevant institutions should accompany this process.

Establishment of climate finance coordination committees or mechanisms

Coordination among government departments and agencies could be improved in many countries. One way to do this is through the creation of inter-agency or inter-departmental climate-finance coordination committees or mechanisms.

- Such committees could be advised and supported by external experts, especially in countries with weak governance. The committees would bring together all relevant ministries and agencies to lead on and coordinate the issues related to climate-change actions. This would include financing and monitoring of implementation.
- Some countries already have related structures and committees, which may be able to integrate climate-finance committees. For example, the National Treasury or finance departments could house a climate-finance coordination mechanism, as currently discussed in South Africa. This could ensure that incoming international resources for climate finance are allocated to the respective departments in need. These departments have budget-allocation functions and insight into national financing needs.

Processes to establish new mechanisms need to integrate the development of new laws, or the implementation of existing legislation, to support these developments. This also requires further strategy and action plans in parallel to engage the private sector in financing adaptation projects.

Improving identification, analysis and presentation of adaptation priorities

National capacities and skills to identify, analyze and present adaptation priorities need to be improved. This includes investments in institutional and operational capacities.

- Consider annual calls by national governments to collect and evaluate adaptation priorities at sector level, and establishing an institutional adaptation planning cycle (Ministry of Foreign Affairs of Denmark 2009).
- Structures to absorb financial resources are required in several countries, to ensure the effective national use of investments (Christiansen et al. 2012).
- Such capacity-development measures could benefit from South–South exchange within regions and across Africa.
- Concrete adaptation strategy programs should combine with training on the job. This can lead to detailed, best-practice project portfolios ready for accessing finance.
- We suggest the development of national accounting and monitoring capacities for the Measurement, Reporting and Verification (MRV) of climate finance flows.

Establishment of Investment Promotion Agencies and national entities

Establishing Investment Promotion Agencies (IPAs) as focal points could help to provide centralized, one-stop solutions for local project developers. This approach succeeded with

the establishment of Designated National Authorities (DNAs) for the Clean Development Mechanism (CDM).

- IPAs should integrate experts trained in the development of adaptation projects with knowledge and experience of accessing the various existing funds. They would be responsible for preparing and updating relevant parts of the NAPAs and NCs.
- This government service should assist, guide and support local project developers in accessing adaptation finance. The service would support government and non-government agencies, and those from civil society or the private sector.
- IPAs should have the resources to contract technical support during the preparation of investment plans.

A larger number of qualified and accredited national entities will be required to work closely with the inter-agency climate finance committees or coordination mechanism. Some existing national institutions or national funds could fulfil this role. Examples in Africa include the South African National Green Fund, and the National Environment Fund in Benin (an accredited National Implementing Entity of the AF). There are also examples outside Africa, such as the Bangladeshi Climate Change Resilience Fund, which may be worth investigating in this context.

5.3 Improving stakeholder engagement for better funding access

Earlier involvement and integration of non-governmental, civil society and other expert organizations in adaptation projects could improve access to adaptation funding.

- Certain NGOs or expert organizations have experience that could benefit adaptation project development and implementation in Africa. This includes experience in fundraising and fund management, as well as related accounting and monitoring procedures. In addition, these organizations are closer to adaptation projects and local communities and stakeholders.
- In some countries, such as South Africa, these capacities are available locally. In other countries, there may be a case for international support or collaborations with accompanying targeted capacity development.
- Such a strategy would require: (a) improved access to adaptation funding sources (e.g. through special funding windows – see below), especially multilateral sources; and (b) the willingness of African governments to share responsibilities for designing and implementing adaptation measures.

5.4 Financing beyond development aid and existing climate finance

There are various potential approaches to mobilize financing beyond development aid and existing climate finance. These include mainstreaming adaptation into all relevant sectors, or exploring synergies with mitigation actions. More research is required on development of viable business propositions and the use of finance mechanisms other than grants.

Mainstreaming adaptation into all development projects

Agriculture, water, forestry, coastal development, health and public works are the sectors most affected by climate change. Therefore, adaptation is especially important in these sectors. It is essential for project design to involve and address adaptation and its dynamics systematically. This includes considering potential long-term financing implications. However,

it can be challenging to measure adaptation co-benefits, especially when adaptation is not the primary objective of a project.

Climate-change units in all relevant ministries could supervise adaptation projects in their sectors, and jointly prepare and present them to donors together with the IPAs of the environment departments or similar bodies (see above). It would be helpful to develop targeted capacity-building programs for each of the sectors mentioned above.

Establishing the national funding base for adaptation projects

Expenditure related to climate change or adaptation needs integration into the development and execution of national budgets. In Asia, the Climate Public Expenditure and Institutional Review (CPEIR) program, led by the UNDP and the World Bank, has successfully introduced this.

In some African countries, a carbon tax could generate revenues for adaptation. It would be worth assessing the possibilities for this, or other taxes or levies linked to the environmental performance of entities (according to the 'polluter pays' principle). This is being considered in South Africa. Many LDCs in Africa have low emissions of greenhouse gases (GHGs), however.

Piggybacking on mitigation finance

Compliance or voluntary offsetting projects in adaptation-relevant sectors may allow adaptation projects to benefit from related funding. This could include upfront payments against future delivery of carbon credits – Emission Reduction Purchase Agreement (ERPA) loans – as well as other related financial mechanisms applicable to offsetting projects²⁹. Voluntary projects may support only smaller-scale activities, therefore not mobilizing large amounts of finance.

It would be helpful to assess and identify which CDM Programme of Activities (PoAs), NAMAs, REDD+ or voluntary projects would lend themselves to the incorporation of adaptation components. This could enable project finance (equity and debt), upfront carbon payments or ERPA loans to benefit adaptation measures as well. Co-benefits of certain offset projects, including REDD projects (see also Chapter 3), clearly indicate linkages to adaptation which could be more fully explored.

Adaptation, mitigation based on land-use and forestry, and biodiversity actions are particularly interconnected. The potential for shared benefits between these sectors should lead to cooperation and collaborative projects so that donors do not have to choose between them. For example, bundling adaptation with a viable mitigation action can produce carbon revenues or emission reduction payments or rewards. This provides a tested investment framework, potentially including or attracting private finance, therefore benefiting adaptation components. This approach deserves further exploration, possibly starting in Central Africa where numerous REDD projects have an adaptation angle³⁰.

²⁹ This makes sense only when the market price for carbon credits is high enough.

³⁰ Examples of large funds, programs and individual projects dedicated to forestry-based mitigation and biodiversity conservation in Central Africa are: the Congo Basin Forestry Fund (CBFF); Central African Biodiversity Program with Climate

Developing viable adaptation business propositions

- It is important to identify countries that provide a supporting investment environment. This requires political and economic framework conditions suitable for developing and implementing viable and bankable adaptation measures. It should also allow for the use of local and/or international debt and equity finance.
- Next, it is important to identify the sectors and project types best suited for developing adaptation business propositions in these countries.
- Project structures need to achieve adaptation objectives while also attracting various kinds of finance through blending. This already happens in the field of mitigation and carbon projects.

Using existing types of finance other than grants

In addition to grants, there are other existing finance mechanisms that could support adaptation efforts. Project developers or researchers should investigate these, to determine how projects could best make use of them. These other types of finance include:

- Conservation concessions, in particular for private-sector engagement;
- Concessional/soft loans for adaptation measures (more widely used in other world regions)³¹;
- Microfinance schemes to go beyond the first pilot experiences, such as the Adaptation for Smallholders to Climate Change (AdapCC) or Horn of Africa Risk Transfer for Adaptation (HARITA) projects in Kenya and Ethiopia (Cafédirect/GTZ 2011, Oxfam America 2009, 2011);
- Insurance against losses caused by climate change (being tested as part of the HARITA project); and
- Bonds for adaptation projects, although this market is at a very early stage of development.³²

Investigating a market approach for adaptation

Could a market mechanism based on targets and measurable units support the development of viable adaptation projects in Africa? An assessment of this should also investigate whether such an approach would help to attract more private-sector investments. A phased approach could be appropriate, in which some basic rules and procedures are developed and tested and a limited, artificial demand is created. Actors such as the World Bank have assisted in this way with developing markets and mechanisms for mitigation.

Investigating potential for the Technology Mechanism in financing adaptation

The UNFCCC Technology Mechanism is still being designed, and so its overall direct financial impact on climate-change adaptation activities remains uncertain. However, this should be further investigated as the mechanism develops.

Change Benefits and Mitigation of Deforestation and Promotion of Sustainable Landscapes, both funded by the Fast-Start Finance Program of the US Department of State; Communal Management of Biodiversity of the Lomako Forest in Congo financed by USAID and FGEF; REDD projects in the DRC funded by the World Bank's Forest Investment Program (FIP) under its Strategic Climate Fund (SCF).

³¹ The World Bank is working with concessional loans in addition to or in combination with grant funding as part of the PPCR, but the process has just begun so it is too early to draw any conclusions (World Bank 2012b).

³² The above initiative by the World Bank's PPCR pilots loan schemes in Africa and looks at the use of bonds in this context.

5.5 Opening up private-sector finance for adaptation

Encouraging and attracting private-sector engagement and investments will require best-practice information campaigns tailored to the private sector's interests and needs. This would be suitable for activities where savings can be made by avoided losses, and where saleable products and services can be generated (**Box 6**). In addition, adequate investor profiles or the 'right' investors are required for equity investments or providing seed finance for viable adaptation measures.

Developing and disseminating best practice

Best practice in developing response measures and adaptation projects includes providing information about climate-change risks in different socio-economic sectors and related funding or co-financing opportunities. This information should be shared with private-sector actors pursuing business activities in Africa.

Private-sector investment criteria need to be addressed by related capacity-development activities. Collaborations and partnerships with other relevant stakeholders should be promoted at the same time. The dissemination of best practice could be done in a combination of two ways:

1. Development and dissemination of briefings for each relevant sector (e.g. agriculture, coastal management, forestry, water resources), indicating project types and available funding opportunities.
2. Training to understand and practise the successful development of adaptation projects tailored to the private sector and other stakeholders (e.g. administrators/policymakers, experts/consultants, NGOs and local civil society organizations). This should promote collaborations between stakeholders, focusing particularly on the community level.

Box 6: Climate risks of smallholders: innovative insurance products

In 2007, Oxfam America (2009) joined forces with the Relief Society of Tigray, the International Research Institute for Climate and Society (IRI), two insurance companies (Nyala Insurance and international reinsurer Swiss Re) and other organizations to develop and implement the Horn of Africa Risk Transfer for Adaptation (HARITA) project. The project combined risk reduction, drought insurance and credit-risk management for farmers in the village of Adi Ha in the state of Tigray, Ethiopia.

This project demonstrated that technical product design barriers can be overcome through engaging clients in product development and 'creating a scalable in-kind premium payment model whereby farmers obtain insurance through their labour' (Oxfam America 2009). This approach developed under the HARITA project will be expanded from Ethiopia to Senegal from 2011 until 2016, with the help of the World Food Programme and Oxfam America, and with funding and technical support from USAID and Swiss Re. Some 13,000 households in 43 villages in Ethiopia signed up to the scheme in 2011.

Looking at sectors and activities with the potential for savings and revenues

Projects concerning agriculture, forestry or food could provide entry points for private-sector engagement. Here, adaptation actions can preserve raw materials crucial to the value chain against climate change impacts. Further sectors of interest include water and sanitation, energy and energy access, and tourism (CTI-PFAN 2012). Long-term investment horizons, such as those in the life-insurance sector, should fit well with adaptation project-planning horizons (Christiansen et al. 2012).

Initial pilot experiences seem to indicate that there is potential to attract private capital for agricultural businesses in Africa. Key features for the creation of viable business propositions are (CTI-PFAN 2012):

- Assets that can be used as security for financing;
- Market demand for the services provided; and
- Generation of revenue to service the investment.

Some of the sectors mentioned above have experience of private-sector participation in the field of climate-change mitigation, other environmental services or philanthropic investments. Attractive project ideas and public seed funding would be required as a starting point (**Box 7**).

Box 7: Supporting African smallholder coffee and tea farmers

Adaptation for Smallholders to Climate Change (AdapCC) is a Public–Private Partnership (PPP) developed and supported by the German Organisation for International Cooperation (GIZ) and UK fairtrade company Cafédirect. Both partners contributed their financial and technical resources and their worldwide networks to the project. The AdapCC pilot initiative worked with coffee and tea farmers in East Africa (Kenya, Tanzania, and Uganda) and Latin America from 2007 over a period of three years to assist them in managing production uncertainties related to climate change.

The project involved creating a database on climate impacts and risks for the production of coffee and tea, as well as participatory tools for the identification of adaptation measures and exemplary adaptation strategies. A network of public and private organizations concerned on regional and international levels was also created. Follow-up activities included the generation of carbon credits to create additional income streams (Cafédirect/GIZ 2012).

Identifying the appropriate investor profile

Are there venture capitalists, business angels or social entrepreneurs locally or internationally who have invested in environmental projects and would take a risk and invest in adaptation projects? This has happened in the forestry carbon market, for example.

Venturing into adaptation would probably mean accepting lower returns on investments in exchange for environmental and social returns, longer payback periods or avoided losses. Seed funding might lead to debt finance, including from local commercial banks. The following aspects need consideration in the context of mobilizing private sector finance:

- Measurement of adaptation impacts according to agreed standards;
- Design of payment systems and units for adaptation measures;
- Suitable project structures and different consortia or partnerships, depending on sector and project type; and
- Chances of developing and offering saleable products and services for local or international markets.

5.6 A regional Adaptation Finance Facility and knowledge-sharing mechanisms

A regional Adaptation Financing Facility (AFF) for Africa and national IPAs would help to promote more adaptation activities and channel more funding towards their implementation. These platforms would assist with matchmaking and coordination between projects and funders and should be able to provide funding to adaptation project developers.

Developing an Adaptation Financing Facility (AFF)

- An AFF could provide consistent tracking of the financial flows towards adaptation projects, including from non-profit organizations³³. This could run from the initial stages through to completion, based on aggregated data and best-practice standards.
- This platform should support the development of investment-friendly portfolios and projects at national and local levels. This would include the provision of information related to matching projects and funding sources (see below).
- An AFF could provide pipeline and individual project overviews, as well as showcase examples by project type and sector. Example projects could demonstrate aspects of design, financing or structure.
- The platform should be bilingual (English and French), to allow equal opportunities for Anglophone and Francophone parts of Africa.³⁴
- Existing initiatives such as Climate for Development in Africa (ClimDev Africa) could be the right platform to host such a facility in Africa.

Matchmaking and coordination between projects and funding sources

- Adaptation IPAs at national or sub-regional level could provide hands-on expertise and assistance to organizations and adaptation project developers (see above).
- Such assistance could be particularly useful for designing adaptation projects and matching projects with relevant funding sources – blending public and private resources where possible (**Box 8**).
- Such support mechanisms should assist with using existing, successful relations and partnerships at national level, including with donors. They should explore how partnerships could be built upon and expanded towards using further financial mechanisms and types of finance from public and private sources.

³³ In addition, an initiative on voluntary reporting of adaptation funding flows from not-for-profits could be considered.

³⁴ The platform could start with Africa but could be expanded to Asia, Latin America and other regions.

Box 8: Blending public and private resources

The World Bank's Pilot Program for Climate Resilience (PPCR) aims to blend public and private sources (Climate Investment Funds 2011). In most cases, proposed investments are designed to blend with existing or pipeline investments of the World Bank and AfDB. This enables PPCR funds to 'mainstream' climate change into larger investment projects, thus achieving impacts at scale.

Blending also helps to reduce overall transaction costs during processing and implementation. This helps to ensure that investments deliver real value for money at the implementation level. To achieve these objectives, the PPCR includes a blend of technical assistance, investment support and policy lending through a Development Policy Operation (DPO).

Providing funding to adaptation project developers and relevant intermediaries

- Project-preparation funding should be provided for identifying and designing best-practice adaptation projects that have high chances of receiving funding. Such funding could be channelled through an AFF and IPAs.
- This funding could buy in technical expertise to assist government officials and other promoters in the identification and initial development processes.
- National funding mechanisms should be established to be complemented by or sourced from global funds, as in the case of the national HIV/AIDS funds in Africa (Unganai 2012).
- The Development Bank of South Africa (DBSA) manages two national funds in South Africa – the Green Fund and a Dryland Fund. These provide grants and loans for adaptation projects (Rollin 2012).

Facilitating the promotion and deployment of adaptation technologies

- Supporting access to and use of adaptation technologies should be an integral part of any package of facilitation measures, in particular with a view to engaging the private sector and attracting private finance. This will require looking into the economics of adaptation-relevant sectors in the African context.
- Such support should concern spreading knowledge and technologies through South–South exchange, within Africa and also from other regions to Africa, and through North–South exchange.
- International public funding could be used to educate and inform stakeholders about adaptation technologies and subsidy market penetration. It could also support Small and Medium-sized Enterprises (SMEs) and the establishment of SMEs that develop, import and sell these technologies. Support to large enterprises should also be considered, in particular when it helps to leverage capital from private banks and other investors.
- The establishment of Climate Innovation Centres (CICs) is a positive step. These are supported by the World Bank in several African countries such as South Africa, Kenya, Ethiopia and Morocco.
- The UNFCCC's Technology Mechanism and its Climate Technology Centre and Network (CTCN) should be considered and integrated into these facilitation

measures. The CTCN would benefit from private-sector involvement, alongside other stakeholders, right from the beginning, rather than remaining purely UN-led.

Establishing national/regional networks

Establishing national or regional networks could assimilate expertise in project financing and structuring for adaptation. This could help to counteract the lack of trained national experts for the development of adaptation projects and the preparation and financing of related proposals. These experts should be national experts, if possible; otherwise they would need to come from neighbouring countries, countries in other African regions, and/or from outside Africa.

5.7 Improving effectiveness in spending adaptation finance

Further investigation is required to see how development aid could maximize its impact on adaptation measures. More competitive tenders should be considered for civil society organizations, NGOs or other expert organizations. This is in addition to generally more transparent access to funding, in particular concerning multilateral funds and programs.

Maximizing impact of development aid

African recipients seem to have better access to bilateral funding from developed countries than from dedicated multilateral climate funds and programs under the UNFCCC. Further analyses should look into the different selection and appraisal processes of multilateral and bilateral climate funds and programs. A related question is how conventional bilateral development aid could support improved, more efficient funding strategies for project promoters in Africa.

Such research should look into whether more cost-efficiency with higher impacts can be achieved when better coordinating the use of bilateral and multilateral funding. This would imply looking into complementarity and assessing which donor or program is best suited to support which kind of activity in which country. This is already happening in development cooperation and among related ministries and agencies.

A national climate finance coordination mechanism or committee could assist in this regard (see also below on COMIFAC's role in sub-regional coordination process). Another idea is to develop or integrate climate-finance indicators into the OECD Development Assistance Committee (DAC) Creditor Reporting System (CRS). This is linked to the discussion of mainstreaming climate and adaptation finance into tracking public funding flows and maximizing the impact of development aid and climate finance (see also Varma et al. 2012).

Topping up development projects with adaptation components

- It seems worthwhile to investigate how the approach and process of topping up development projects with adaptation components can continue and develop. This could help to leverage more public as well as private finance, making better use of scarce public grant funding.
- Wider understanding is needed of using public seed funding to open the door to public and private loan programs and equity investments. This would involve making

use of guarantees and other risk-management mechanisms where possible in selected sectors and for relevant project types.

Limited time windows for competitive tenders and for civil society organizations

- Multilateral funds, in particular, face limited voluntary pledges by donor countries. They could open limited time windows for project proposals on a competitive basis, rating projects according to a precise set of criteria. These criteria could include, for example, concrete benefits to be achieved and potential for replication and scaling-up.
- Targeted funding windows within the adaptation funds should be considered for civil-society groups only. This could support the delivery of climate-change adaptation according to NAPA priorities by NGOs, community-based organizations (CBOs) and local expert organizations (Ministry of Foreign Affairs of Denmark 2009).

Simplifying and better communicating processes and assessment criteria

- Coherence in the adaptation funding architecture should be ensured. Existing adaptation funding sources should be designed and managed to allow for the sequencing and fitting of different funds' objectives, targets and duration.
- In this context, difficulties in the structures and requirements of funds can be overcome by simplifying, streamlining and better communicating processes and assessment criteria. This creates more transparent access to funding structures (Ministry of Foreign Affairs of Denmark 2009).
- Countries that would access the funds could consult on developing their operational guidelines. This would help to relate fund requirements to national capacities and requirements (Ministry of Foreign Affairs of Denmark 2009).

5.8 Implementation approaches and resources

The required interventions can be divided into two groups: direct promotion and support of adaptation projects, and establishment of improved framework conditions. Certain technical resources and expertise are required to achieve the outlined strategic goals (**Table 6**).

Direct promotion and support of adaptation projects

Establishment of AFF, IPAs and adaptation finance networks

A global Adaptation Financing Facility (AFF) and information platform should be developed, starting with Africa. Alternatively, a mechanism specifically for Africa could be designed. A dedicated private-sector arm or window should look at mobilizing private-sector finance. This could also provide information on private-sector adaptation interests and needs as well as supporting the joint financing of mutually beneficial projects by public and private finance.

Project promoters (adaptation specialists, communities, NGOs, the private sector and other stakeholders developing projects) will receive information and direct support in finding finance for projects. This would include:

- Requirements to receive funding;
- Which fund, program or other funding opportunity for what kind of project;
- Direct matchmaking between promoters and investors;
- Knowledge transfer by presenting concrete showcases of successful projects in

- different sectors (small- and large-scale); and
- Tracking adaptation finance flows from the source to the recipient as a service to both developed- and developing-country stakeholders.

At the national or sub-regional level, the establishment of Investment Promotion Agencies (IPAs) should be considered. This could start in selected countries or regions where champions providing conducive framework conditions have been identified – complementing the AFF. Regional or national adaptation finance networks to share expertise and information could further link, complement and integrate these mechanisms.

Development of pilot projects with improved and innovative funding bases

A number of pilots with improved and innovative funding bases need to be developed in each of the five main regions in Africa. The development of the pilot projects should be supported by the AFF and related mechanisms and linked to a Network for Adaptation Finance in Africa (NAFA) (see below).

Establishment and promotion of Public–Private Partnerships with multiple stakeholders

Public seed finance needs to be used to establish PPPs with multiple stakeholders in selected key sectors, working with local and international adaptation finance experts, NGOs and the private sector. The local communities or organizations representing them will need to be at the centre of such consortia where adaptation projects directly concern them. Champions and leaders from the private sector and NGOs at the local and international level have to be identified, and could ideally contribute financially. Relevant tools and approaches will be required to show private-sector players in particular how they can avoid financial losses due to engaging in cost-effective adaptation measures (see Box 7).

Building partnerships between research, practice and policy

Practitioners who could act as ‘knowledge brokers’ need to be involved. They can translate research knowledge (including climate information) into forms that would be useful for local or organizational decision-making. They should drive the research agenda, taking ownership of the outcomes. Furthermore, they should take the relevant outcomes and embed them into new applied project structures ready for funding from established public sources, while simultaneously trying to bring in private-sector investments.

Promotion of increased uptake of African adaptation projects by funding organizations

Key multilateral and bilateral adaptation funds and programs could look at why so many African countries benefit so little from their funds. Funders could start by considering how their project selection and investment criteria and related guidelines could be amended and improved with regard to current constraints in many African countries.

Establishment of improved framework conditions

Development of methodological and analytical tools and approaches

The development of value-added adaptation propositions needs support to attract more funding, particularly private finance. This requires an understanding of the preconditions and framework conditions that determine the degree of less access to finance and attractiveness for investments. The elaboration of improved resource-mobilization approaches and strategies needs initiation and dissemination through relevant mechanisms, platforms and networks.

Networking and knowledge dissemination

As a first step, existing experts and consultants would need to be identified to establish a NAFA, for example. An annual 'Adaptation Finance in Africa' (AFA) forum could be an opportunity to showcase and exchange experiences in this field and to provide the opportunity for direct contact between funders and promoters. Incorporating a stream for researchers into such a forum to present research results and new research projects looking for funding could improve exchange between researchers and practitioners (Sagna 2012).

Promotion of adaptation technologies

Launching a new 'Adaptation Technologies Africa' (ATA) initiative could help in seeking to identify adaptation technologies suitable for the African context and with the potential for major impact in Africa. Such an initiative would provide training opportunities around these technologies and financial mechanisms to facilitate their deployment. Research and training opportunities should be particularly tailored to support local SMEs.

Improvement of local foundations for research, education and training

The elaboration of postgraduate training in adaptation finance, working with at least one major Anglophone and one major Francophone university in Africa, would be a good starting point.

Improved regional coordination

Regional organizations such as the Economic Community of West African States (ECOWAS), the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC) or the Central African Forests Commission (COMIFAC) could help to improve regional coordination among their member states. COMIFAC, for example, provides a platform in the context of coordinating REDD activities and related donor funding streams to the Congo Basin. COMESA has established a climate initiative on the back of donor funding from Norway and others. ECOWAS has been investigating the role it could play some years now.

Resources and expertise

The following technical resources, experts and collaboration partners are required:

- Facilitation to access finance: international and local expert organizations and consultancies on climate/adaptation finance, development and commercial financial institutions, national and international NGOs active in the field of adaptation with fundraising and financial management skills.
- Priority sectors and project types: local and international private-sector players with a vested interest in adaptation, national and bilateral/multilateral development agencies, national and international NGOs active in the field of adaptation with fundraising and financial management skills.
- National framework conditions: local and international adaptation experts/consultants.
- Capacity building and awareness raising: local and international adaptation experts/consultants.
- Deploying adaptation technologies: local and international technology providers, development agencies.

Table 6: Overview of interventions and strategic objectives³⁵

Intervention	Strategic objective
Facilitation to access finance	Establish an adaptation financing facility
	Top up adaptation components of development projects
	Match projects with funding sources
	Provide funding for promoters to develop adaptation projects according to requirements of funding organizations
	Piggyback adaptation on mitigation finance
	Increase the amount of adaptation components added to development projects
	Increase transparency and coherence in funding architectures through simplification, streamlining and better communication
	More competitive tenders and funding windows for civil society and non-governmental actors
	Develop operational guidelines together with recipient countries
Priority sectors and project types	Analyze sectors and activities with the potential for savings and revenues
National framework conditions	Establish clear institutional and legal frameworks and related responsibilities
	Improve technical and financial management capacities and skills in government departments and organizations
	Improve involvement of civil society, non-governmental and other expert organizations in the design, implementation and management of adaptation projects and programs
	Develop clear adaptation policies and strategies, and expand best-practice NAPA development and implementation processes to less successful LDCs and non-LDCs
	Establish a national funding base for adaptation
	Use existing data and tools more effectively
Capacity building and awareness raising	Improve national institutional capacities through targeted capacity-building measures
	Disseminate best-practice response measures among private-sector actors and other stakeholders
	Establish national/regional expert network(s) for adaptation project financing and structuring
	Build research–practice–policy partnerships
Deploying adaptation technologies	Facilitate promotion and deployment of adaptation technologies
Further research	Improve use of bilateral climate finance and ODA for financing adaptation needs
	Improve understanding of decision-making processes, budget allocations and programming of multilateral and bilateral climate funds and programs, and establish bilateral development aid for adaptation projects to inform funding strategies
	Develop viable adaptation business propositions
	Define appropriate investor profiles
	Identify preconditions and project design models to increase use of existing, non-grant finance instruments
	Clarify potential for developing and using a market approach for adaptation
	Clarify the role of the UNFCCC's Technology Mechanism in financing adaptation

³⁵ Table 6 was generated based on the author's analysis of aggregated data.

5.9 Key recommendations

In summary, we offer the following key recommendations with a view to improving access to and use of adaptation finance in Africa:

- Improve the use of existing data and analytical tools in conjunction with applying best-practice NAPA development and implementation processes to more African countries, including non-LDCs. This will enable improved adaptation project preparations and presentations.
- Establish national finance coordination committees or mechanisms alongside Investment Promotion Agencies, and additional qualified National Entities for improved direct access. This will create better investment frameworks at national level.
- Share responsibilities with experienced non-governmental actors early in the process of project design and development. This should add to improved funding access and management.
- Better integrate adaptation into the development and execution of national budgets and mainstream adaptation into project development in all relevant economic sectors.
- Explore links with mitigation finance and other types of finance and finance instruments other than grants.
- Identify and develop viable and bankable adaptation measures, and assess whether a market approach for adaptation can create private-sector incentives and unlock private capital.
- Share best practice through training and briefings, to help to integrate the private sector and other stakeholders.
- Identify the right private investors, who are willing to invest in sectors with potential for savings through avoided losses or small revenues.
- Use regional and local facilitation mechanisms to track finance flows, provide funding information in support of project development, and offer matchmaking and coordination services between projects and funding sources.
- Use Climate Innovation Centres and other measures to promote and further the deployment of adaptation technologies. Networks could assist with training national experts for the development of projects and preparation and financing of related proposals.
- Development Finance Institutions and recipients should work together to seek ways in which to capitalize more fully on development cooperation and related aid flows.
- Consider competitive tenders and more dedicated funding windows for non-governmental actors. This may help budget-constrained multilateral funds to achieve more transparency and broader participation beyond governmental organizations.

(continued on next page)

- Consider how simplification, streamlining and improved communication processes may contribute to increased efficiencies in spending and accessing multilateral and bilateral funding.
- Involve adaptation practitioners early on in research projects, to assist with the generation of tangible outcomes and products, which could be embedded into applications prepared for funding from public and private sources.
- Strengthen the roles of regional organizations in Africa, to improve coordination among their member states, in particular to develop regional and cross-border programs.

Annex 1: Acronyms and abbreviations

AAP	Africa Adaptation Programme
AAU	Assigned Amount Unit
AF	Adaptation Fund
AFD	Agence Française de Développement (French Development Agency)
AfDB	African Development Bank
AFF	Adaptation Financing Facility
AGRA	Alliance for a Green Revolution in Africa
AIACC	Assessments of Impacts and Adaptations to Climate Change
CARE	Cooperative for Assistance and Relief Everywhere
CBFF	Congo Basin Forest Fund
CBO	Community-based organization
CCAA	Climate Change Adaptation for Africa
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CFI	Commercial Financial Institution
CIC	Climate Innovation Centre
CIF	Climate Investment Fund
CIFOR	Center for International Forestry Research
COMESA	Common Market for Eastern and Southern Africa
COMIFAC	Commission des Forêts D’Afrique Centrale (Central African Forests Commission)
COP	Conference of the Parties
CPEIR	Climate Public Expenditure and Institutional Review
CTCN	Climate Technology Centre and Network
DBSA	Development Bank of South Africa
DFI	Development Finance Institution
DFID	Department for International Development
EIB	European Investment Bank
ENDA	Environmental Development Action in the Third World
ERPA	Emission Reduction Purchase Agreement
EU	European Union
FAO	Food and Agriculture Organization
FGEF	French Global Environment Facility
FI	Financial Institution
FIP	Forest Investment Program
GCCA	Global Climate Change Alliance
GCF	Green Climate Fund
GEF	Global Environment Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
GHG	Greenhouse gas
GIZ	German Organization for International Cooperation
HARITA	Horn of Africa Risk Transfer for Adaptation Project
ICF	International Climate Fund
ICI	International Climate Initiative

IEA	International Energy Agency
IFA	International Fund for Agricultural Development
INC	Initial National Communication
IPA	Investment Promotion Agency
IPCC	Intergovernmental Panel on Climate Change
JICA	Japan International Cooperation Agency
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
MDB	Multilateral Development Bank
MDG-F	Millennium Development Goals Achievement Fund
MDTF	Multi-Donor Trust Fund
MIE	Multilateral Implementing Entity
MRV	Measurement, Reporting and Verification
NAFA	Network for Adaptation Finance in Africa
NAMA	Nationally Appropriate Mitigation Action
NAPA	National Adaptation Programme of Action
NC	National Communication
NIE	National Implementing Entity
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PoA	Program of Activities
PPCR	Pilot Program for Climate Resilience
PPP	Public–Private Partnership
PSI	Private Sector Initiative
RBM	Results-Based Management
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, including conservation and sustainable management of forests and the enhancement of forest carbon stocks
SADC	Southern African Development Community
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund
SEA	Strategic Environmental Assessment
SME	Small and Medium-sized Enterprises
SPA	Strategic Priority on Adaptation
SPCR	Strategic Program for Climate Resilience
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development

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