OPPORTUNITIES AND OPTIONS FOR ADAPTATION FINANCE, INCLUDING THE PRIVATE SECTOR

Technical paper by the UNFCCC secretariat

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Abbreviations and acronyms

COP	Conference of the Parties
CTCN	Climate Technology Centre and Network
DTU	Technical University of Denmark
GCF	Green Climate Fund
GEF	Global Environment Facility
IPCC	Intergovernmental Panel on Climate Change
LDCF	Least Developed Countries Fund
NAP	national adaptation plan
OECD	Organisation for Economic Co-operation and Development
SCCF	Special Climate Change Fund
TEM-A	technical expert meeting on adaptation
TEP-A	technical examination process on adaptation
UNEP	United Nations Environment Programme

Table of Contents

1 | Multilateral climate funds

In addition to providing finance, multilateral climate funds also help in building capacity and enhaning readiness for finance

National adaptation planning | 2

Developing and implementing robust and iterative national adaptation planning processes will enable countries to catalyse large-scale finance for adaptation

3 | Aligning domestic expenditure

Aligning domestic expenditure with climate change action needs is an effective way to catalyse domestic and international finance at the national and subnational level

Engaging local-level actors | 4

Civil society organizations and other local-level actors can help increase the transparency of adaptation finance and build trust. It is important to direct more finance to these actors

5 | Commercializing technologies

Ensuring that technology needs assessments and technology action plans are complete and up to date is an important first step towards commercializing adaptation technologies

Assessing results of finance | 6

In the light of the scarcity of adaptation finance flows relative to need, understanding how adaptation investments enhance adaptation action is crucial

7 | Boosting private finance

Policymakers can incentivize private sector financing of adaptation in various ways, or require the private sector to invest in adaptation efforts relevant to their businesses

Executive Summary

Finance is one of the key ingredients in the effort to adapt to climate change impacts and build a climate-resilient world. The 2019 TEP-A interrogated some of the central questions related to adaptation finance, including: What does the adaptation finance landscape currently look like? How can adaptation planning help maximize available finance? What is the role of the private sector and how can policymakers help private sector actors fulfill that role? And how can governments, donors, and practitioners better understand and assess the results of their adaptation finance? This paper presents a range of insights on these questions based on the discussions held as part of the 2019 TEP-A.

Key messages from the 2019 technical examination process on adaptation

1. Despite the enduring challenges related to accessing funding from multilateral climate funds, these funds play a crucial role in providing finance to developing countries, building capacity and enhancing readiness for finance, and promoting synergies and coherence in the fragmented adaptation finance landscape. However, the impact of international finance will be limited unless it is accompanied by additional public and private resources.

2. Developing and implementing robust and iterative national adaptation planning processes that engage the private sector and integrate gender considerations will enable countries to catalyse large-scale finance for adaptation that addresses the needs of the most vulnerable. The process of formulating and implementing NAPs in particular offers the opportunity to identify and make use of suitable sources of finance (including the GCF, which has been mandated by the COP to provide financing for NAPs), develop project proposals and create overarching financing strategies to support adaptation, among other things.

3. Aligning domestic expenditure with climate change action needs is an effective way to catalyse domestic and international finance at the national and subnational level. Supporting multilateral finance with domestic expenditure can help advance government priorities, enhance country ownership and ensure that there is consistent and predictable finance available to support the iterative adaptation process.

4. Civil society organizations and other local-level actors can help increase the transparency of adaptation finance and build trust among the communities to which the finance is directed. While building networks with these actors is a time-consuming and resource-intensive process, these networks can help deliver greater results with the limited finance available.

Given the importance of local-level actors and community-led initiatives in driving forward adaptation action, there is an enduring need to increase the amount of adaptation finance. Advancing policies that commit to directing a minimum percentage of adaptation finance to the local level and promoting access mechanisms that are directly available to community-led organizations or groups can help to achieve this objective.

5. Ensuring that technology needs assessments and technology action plans are complete and up to date is an important first step towards commercializing adaptation technologies. The private sector is already investing in adaptation technologies, but a combination of awareness-raising and new financing mechanisms can help to expand this market.

6. In the light of the scarcity of adaptation finance flows relative to need, understanding how adaptation investments enhance adaptation action is crucial. At the level of projects, programmes or portfolios, opportunities to enhance this understanding include investing in monitoring, evaluation and learning throughout the full project or programme life cycle and requiring projects to go beyond output indicators and move towards programmatic approaches to adaptation. At the national or international level, this includes developing useful national adaptation monitoring and evaluation systems and linking national monitoring of progress on adaptation with monitoring related to international frameworks.

7. Policymakers can incentivize private sector financing of adaptation action in various ways. The public sector can play an important role in unlocking and scaling up private sector investment in adaptation by de-risking these investments, increasing demand for adaptation products and services and supporting the suppliers of these products and services.

Policymakers can also impose requirements on the private sector to invest in adaptation efforts relevant to their businesses. This could include, for example, using laws and regulations to ensure that sectors within a country are obligated to invest in adaptation efforts for the ecosystems and communities on which their businesses depend.

INTRODUCTION

1

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Introduction

Accessible, adequate and predictable finance is fundamental to successfully adapting to the impacts of climate change. As countries, cities, communities, companies and other actors begin to plan and implement adaptation actions, finance is critical for maintaining the existing momentum for adaptation and unlocking additional opportunities to meet adaptation needs around the world.

These needs are becoming more and more dire as the impacts of climate change increase in frequency and intensity, threatening everything from ecosystems and economies to lives and livelihoods. According to the IPCC, anthropogenic greenhouse gas emissions released to date have already caused temperatures to rise by approximately 1.0 °C above pre-industrial levels, a trend set to persist for centuries or potentially even millennia to come.[1] As this warming trend continues, it will lead to additional long-term changes in the Earth's climate system, including sea level rise, heatwaves and other extreme and slow onset events. While efforts to adapt to these changes are already occurring, scaling up and accelerating both **incremental** and **transformational adaptation** will reduce future climate change related risks.

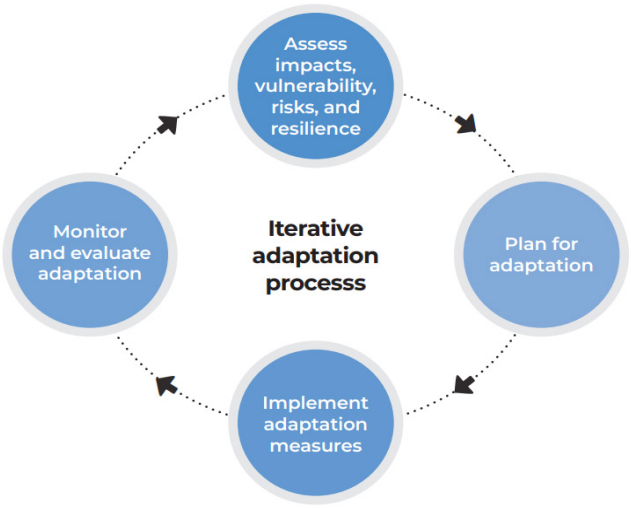
Finance is an essential component of all stages of the adaptation process, from conducting risk assessments and developing adaptation plans to implementing adaptation actions and finally monitoring and evaluating the effectiveness of actions undertaken. What is more, because adaptation to climate change is a dynamic and iterative process (**see Figure 1**), financial resources to support adaptation must be steady and predictable. Adaptation is not a one-time investment and the amount of finance, along with how it is allocated, must reflect this reality.

Definitions

Incremental adaptation
Adaptation that maintains the essence and integrity of a system or process at a given scale. In some cases, incremental adaptation can accrue to result in transformational adaptation.

Transformational adaptation
Adaptation that changes the fundamental attributes of a socioecological system in anticipation of climate change and its impacts.

Figure 1: The iterative adaptation process



Source: Adaptation Committee. 2019. *25 Years of Adaptation Under the UNFCCC.* Bonn: UNFCCC. Available at http://bit.ly/25YearsOfAdaptationReport

1. IPCC. 2018. Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related greenhouse gas emissions pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Geneva, Switzerland: IPCC. Available at http://ipcc.ch/report/sr15/

The technical examination process on adaptation and the technical expert meetings on adaptation

This technical paper is an output of the 2019 TEP-A, which focused on adaptation finance, including the private sector (see **Box 1** for more information on the TEP-A). Its content draws on the TEM-A that took place on 25 and 26 June 2019 in Bonn, Germany, and convened a wide range of experts and practitioners to exchange their experience and knowledge of various facets of adaptation finance. It also draws on the summary reports of the various regional TEM-As[2] held throughout 2019, also on the topic of adaptation finance, including in Tashkent, Uzbekistan, on 3 and 4 April; Songdo, Republic of Korea, on 11 April; Salvador, Brazil, on 23 August; and Bangkok, Thailand, on 6 September.

Box 1

The technical examination process on adaptation

In 2015, alongside the adoption of the Paris Agreement, Parties to the Convention decided to launch a TEP-A from 2016 to 2020 with the aim of identifying concrete opportunities for strengthening resilience, reducing vulnerabilities and increasing the understanding and implementation of adaptation actions. Each year, the TEP-A is jointly organized by the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice, conducted by the Adaptation Committee, and pursued by:

(a) Facilitating the sharing of good practices, experiences and lessons learned;
(b) Identifying actions that could significantly enhance the implementation of adaptation actions, including actions that could enhance economic diversification and have mitigation co-benefits;
(c) Promoting cooperative action on adaptation;
(d) Identifying opportunities to strengthen enabling environments and enhance the provision of support for adaptation in the context of specific policies, practices and actions.

Following a review of both the TEP-A and the technical examination process on mitigation in 2017, COP 23 invited volunteer expert organizations to lead the organization of the related technical expert meetings. COP 23 also urged the various bodies and actors leading the TEP-A to focus the process on specific policy options and opportunities for enhancing adaptation that are actionable in the short term, including those with sustainable development co-benefits. As a result of the review, COP 23 expanded the TEP-A by inviting Parties and non-Party stakeholders to host regional TEM-As to examine specific finance, technology and capacity-building resources necessary for scaling up actions in regional contexts.

Sources: (1) Decision 1/CP.21, (2) decision 13/CP.23.

2. For more information on the 2019 regional TEM-As, see http://tep-a.org/2019-regional-technical-expert-meetings-on-adaptation/

Scope and structure of the paper

This paper does not seek to provide a comprehensive overview of the state of global adaptation finance. Rather, it aims to distil some of the key features of the adaptation finance landscape, the role that various actors play within this landscape, the enduring challenges that interfere with efforts to finance adaptation action and some of the opportunities available to overcome these obstacles and deploy more finance in the service of resilience-building and adaptation across the world. Above all, the paper endeavours to extract the major themes and insights emerging from the 2019 TEP-A; it therefore includes subtopics under the umbrella of adaptation finance that featured in the discussions and reports of the TEM-As.

Chapter 2 offers an overview of the global adaptation finance landscape, shedding light on how adaptation finance is embedded in the Paris Agreement, the various sources of adaptation finance, and how adaptation finance flows compare with current and projected future adaptation needs. Chapter 3 explores how adaptation planning, in particular the process of formulating and implementing NAPs, can help governments understand the landscape of available sources of finance and facilitate the process of identifying initiatives eligible for external financing. Chapter 4 focuses on the ways in which the private sector can contribute to adaptation finance, and options for incentivizing private sector actors to engage in adaptation finance. Chapter 5 examines potential methods for assessing the impact of adaptation finance and evaluating whether investments in adaptation are yielding tangible, intended outcomes. Lastly, Chapter 6 concludes with general reflections on the topic of adaptation finance, including in relation to the private sector, and highlights a handful of the relevant insights that emerged from the 2019 TEP-A.

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OVERVIEW OF THE ADAPTATION FINANCE LANDSCAPE

2

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Overview of the adaptation finance landscape

Finance provisions under the Convention and the Paris Agreement

Since the inception of the Convention, finance has been recognized as integral to the capacity of developing countries to meet their obligations under the Convention. Under Article 4 of the Convention, developed country Parties agreed to provide new and additional financial resources to developing country Parties, taking into account the need for adequacy and predictability in the flow of funds.[3] Developing country Parties further committed to assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.[4] Article 11 of the Convention therefore established the Financial Mechanism to facilitate the provision of financial resources, including technology transfer, on a grant or concessional basis, noting that developed country Parties may also choose to channel financial resources to developing country Parties through bilateral, regional and other multilateral channels.[5]

With climate action becoming increasingly urgent, the issue of accelerating and scaling up climate finance for developing countries has grown in prominence in discussions under the Convention. In 2009, as part of the Copenhagen Accord, developed countries committed to the goal of jointly mobilizing USD 100 billion per year by 2020 from a wide variety of sources – including public and private, bilateral and multilateral, and alternative – to address the needs of developing countries.[6] With the adoption of the Paris Agreement in 2015, the COP highlighted the intention for developed countries to continue this existing collective mobilization goal through 2025, and a new collective goal from a floor of USD 100 billion per year would be set prior to 2025.[7]

The Paris Agreement makes explicit the need to increase finance directed to adaptation and resilience-building efforts, particularly for such efforts in developing countries. Article 2, which sets out the purpose of the Agreement,

Definitions

The Convention
The Convention refers to the United Nations Framework Convention on Climate Change, which entered into force on 21 March 1994. Today, it has near-universal membership, with 197 Parties having ratified it. Preventing "dangerous" human interference with the climate system is the ultimate aim of the UNFCCC.

The Paris Agreement
In 2015, Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future. The Paris Agreement builds upon the Convention. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change, and at making finance flows consistent with a low greenhouse gas emissions and climate-resilient pathway.

3. Article 4, para. 3, of the Convention.
4. Article 4, para. 4, of the Convention.
5. Article 11 of the Convention.
6. Decision 2/CP.15, annex, para. 8.
7. Decision 1/CP.21, para. 53.

highlights making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development as a core objective.[8] In addition, Article 9 of the Paris Agreement outlines several additional provisions related to finance, specifically that developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.[9] Notably, it then goes on to state that the provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation,[10] which signals the need to shift from the current climate finance landscape, wherein finance for mitigation continues to far outweigh finance allocated to adaptation (see Chapter 3 below).

In the decision adopting the Paris Agreement, the COP requested that the GCF expedite support for the **least developed countries** and other developing country Parties for the formulation of **NAPs** and for the subsequent implementation of policies, projects and programmes identified by them.[11] This request underscores that the process to formulate and implement NAPs is a cornerstone of countries' adaptation efforts and highlights the importance of directing finance towards it.

These commitments and provisions lay the groundwork for a dramatic increase in the amount of resources flowing towards adaptation in the coming decades, along with a surge of activity from the local to the regional level in order to prepare communities, governments, businesses and other organizations so that they can secure and take advantage of these resources.

Definitions

Least developed countries
Least developed countries (LDCs) are low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets. As at April 2020, there are 47 countries on the list of LDCs.

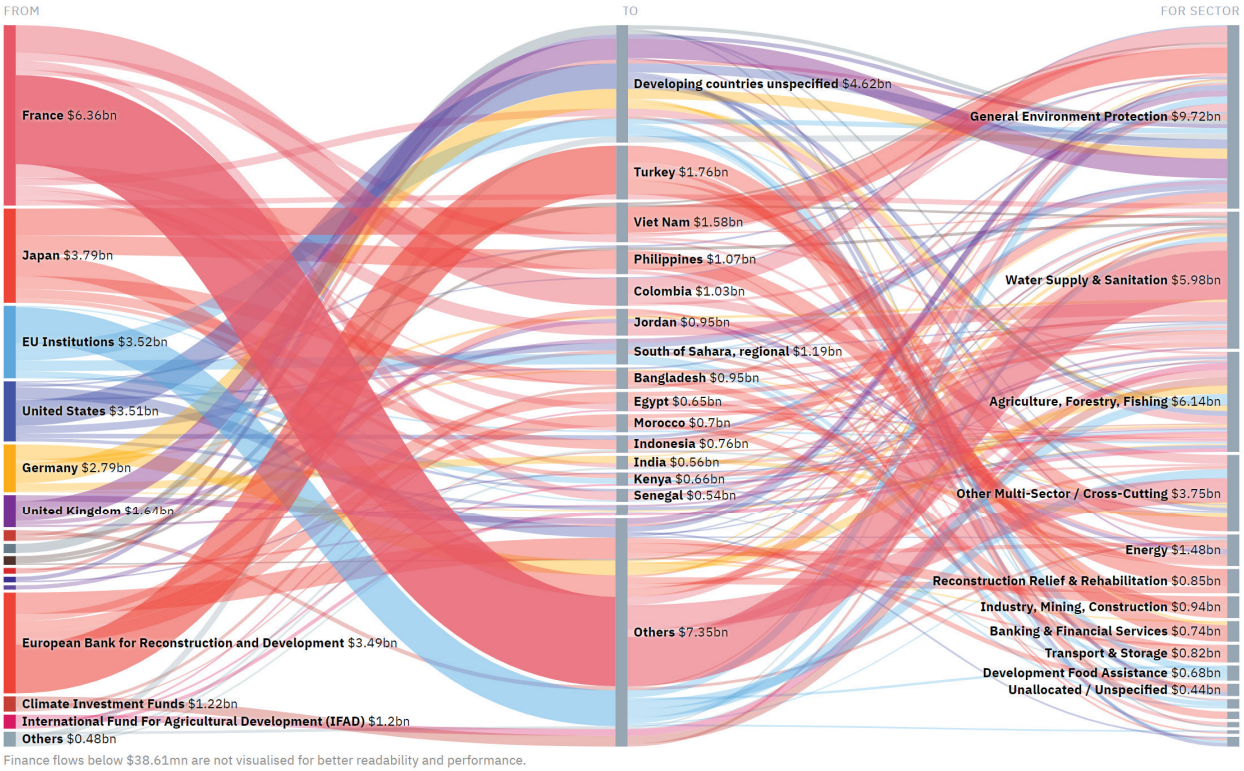
National adaptation plan (NAP)
The process of formulating and implementing NAPs is a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach.

Adaptation finance flows and the adaptation finance gap

Tracking global adaptation finance flows can show whether sufficient finance is available to cover current and projected costs and whether finance is used efficiently and is reaching the areas and communities that need it the most. It is difficult to paint a complete and accurate picture of global adaptation finance flows owing to a persistent lack of data and transparency, which partly results from the fragmentation of the climate finance architecture, which is made up of multiple sources of finance, multiple financial institutions, multiple instruments and implementing entities, and so on. At the broadest level, there are four general sources of adaptation finance: domestic, international, public and private.

8. Article 2, para. 1(c), of the Paris Agreement.
9. Article 9, para. 1, of the Paris Agreement.
10. Article 9, para. 4, of the Paris Agreement.
11. Decision 1/CP.21, para. 46.

Figure 2: Aid Atlas visualization of all donors to all recipients for climate adaptation during 2002–2017



Source: https://aid-atlas.org/

Box 2

Aid Atlas: a new tool to tackle the transparency challenge

Recognizing the need to increase transparency in adaptation finance, and climate and development finance more broadly, the Stockholm Environment Institute has developed a new open-access information system and online platform called Aid Atlas that will enable users to interrogate available data according to the dimensions and questions they are most interested in. Targeted at policymakers and other decision makers, the tool will include a state-of-the-art data visualization platform that will help to analyse available policy and finance options and provide strategic recommendations. Launched in October 2019 at aid-atlas.org, the tool also features: global flow diagrams that show where funding is coming from and include the option to filter for adaptation finance flows in overall official development assistance flows; interactive sectoral flow analyses; and dedicated country profile pages and profile pages for objectives such as adaptation or gender.

Sources: (1) Presentation by a representative of the Stockholm Environment Institute during the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-1-overview-of-evolving-and-emerging-sources-of-adaptation-finance/, (2) https://www.sei.org/publications/aid-atlas-visualize-development-finance-flows/

Some sources of finance are particularly difficult to track (see **Box 2** and **Figure 2** for an example of an initiative that aims to confront this challenge). For example, because data on domestic climate expenditure are not collected consistently using a standard methodology within or across countries, comprehensive data on this source of adaptation finance are not easily accessible.[12] Private sector adaptation finance is also particularly difficult to estimate, especially when such finance is not channelled through multilateral or bilateral institutions.[13]

While a precise quantification of the total finance available for adaptation, or of how that figure changes from year to year, is unavailable, there have nonetheless been various efforts to shed light on the global figures and general trends. According to the 2018 biennial assessment and overview of climate finance flows of the Standing Committee on Finance, in the 2015–2016 period the amount allocated to mitigation remained greater than the amount devoted to adaptation for all sources of finance, with bilateral finance providers allocating 29 per cent of climate finance to adaptation, multilateral climate funds allocating 25 per cent, and multilateral development banks allocating 21 per cent.[14] The biennial assessment also found, however, that evaluating progress towards increasing adaptation finance is complicated by an increase in climate finance flows from bilateral and multilateral sources that contribute simultaneously to mitigation and adaptation. Estimates of private sector climate finance are fewer in number and much less comprehensive: the assessment of the limited fraction of this finance that could be tracked suggests that private sector finance is similarly skewed towards mitigation, with less than 10 per cent of climate finance directed towards adaptation.[15]

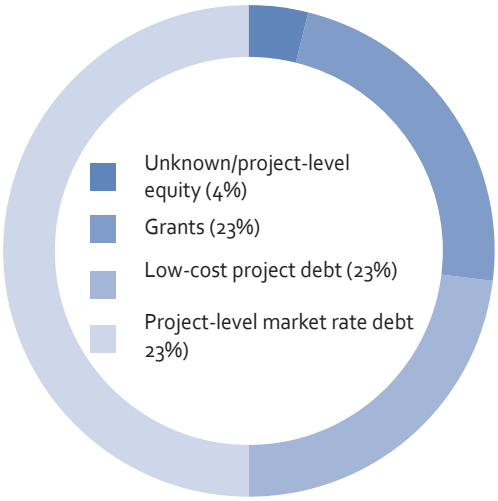
With respect to the financing instruments used for adaptation finance, on average, in 2015–2016, 50 per cent of finance was in the form of project-level market rate debt, 23 per cent was in the form of low-cost project debt, 23 per cent was in the form of grants and 4 per cent was unknown or project-level equity (see **Figure 3**).[16] The composition of financing instruments varies according to the source of finance, however; during this period, while the majority of adaptation finance flowing through bilateral channels and multilateral climate funds was grant-based, grants accounted for less than 10 per cent of finance flowing through multilateral development banks.[17]

Definitions

Biennial assessment and overview of climate finance flows
A report produced every two years which details climate finance flows from provider to beneficiary countries, available information on domestic climate finance and cooperation among developing countries, and the other climate-related flows that constitute global total climate finance flows. The reports also consider aspects such as the implications of these flows and their relevance to international efforts to address climate change, emerging insights into their effectiveness, finance access, and ownership and alignment of climate finance with beneficiary country needs and priorities related to climate change.

12. UNFCCC. 2018. 2018 Biennial Assessment and Overview of Climate Finance Flows. Technical Report. Bonn: UNFCCC. Available at https://bit.ly/2KGSqs4
13. As footnote 12 above.
14. As footnote 12 above.
15. Puig D, Olhoff A, Bee S, et al. (eds.). 2016. The Adaptation Finance Gap Report. Nairobi: UNEP.
16. Presentation by a representative of the UNEP DTU Partnership at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-1-overview-of-evolving-and-emerging-sources-of-adaptation-finance/
17. As footnote 12 above.

Figure 3: Instruments used for international public adaptation finance flows (2015–2016)



Source: Presentation by a representative of the UNEP DTU Partnership at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-1-overview-of-evolving-and-emerging-sources-of-adaptation-finance/

Definitions

Green bond
Green bonds are fixed-income financial instruments that are issued to fund projects with environmental benefits. Climate bonds are a subset of green bonds. Sovereign green bonds are issued by national governments.

The green bond market, including climate bonds, is growing and could serve as an increasingly important source of adaptation finance in the future. The total issuance of green bonds in 2018 was USD 168.5 billion across 44 countries.[18] Only a small percentage of the proceeds from these bonds is currently used for adaptation, however. Of all the finance raised through green bonds globally up to June 2019, adaptation received only two per cent.[19] Adaptation makes up a larger share (10 per cent) of the use of proceeds from sovereign green bonds, possibly because governments have a more explicit mandate to invest in adaptation.[20] A sovereign green bond enables countries to demonstrate national leadership in green finance, providing exposure to a new investor base and cementing their commitment to meet obligations under the Paris Agreement. Fiji, for example, issued a sovereign green bond of USD 50 million in 2017 to support adaptation and mitigation efforts throughout the country.[21]

Current estimates also suggest that adaptation costs will significantly exceed the USD 100 billion per year States have committed to mobilize for climate action, especially considering that approximately half of this amount is intended to fund mitigation efforts. The 2016 UNEP Adaptation Finance Gap Report indicates that, by 2030, adaptation costs are likely to range from USD 140 to 300 billion per annum and that, by 2050, these costs could rise to between USD 280 and 500 billion per annum.[22] Using the current levels of adaptation finance as a yardstick, the report suggests that adaptation costs could give rise to a dramatic

18. Presentation by a representative of the Climate Bonds Initiative at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-7-financial-instruments-to-mobilize-private-sector-engagement-in-climate-resilience/
19. As footnote 18 above.
20. As footnote 18 above.
21. See https://cop23.com.fj/fiji-green-bond/
22. As footnote 15 above.

increase in the adaptation finance gap, which already presents a significant challenge for developing countries today. To bridge the gap going forward, adaptation finance will have to be approximately 6 to 13 times greater than the current flows of international public finance by 2030, and 12 to 22 times greater by 2050.[23]

Definitions

Multilateral climate fund
Multilateral climate funds, such as the Green Climate Fund, combine money from multiple donors and disburse it to developing country recipients to support climate change-related projects. These funds use a variety of financial instruments, such as loans, grants, and equity, and seek to crowd in financing from other public or private sources.

Multilateral climate funds supporting adaptation

Several multilateral climate funds allocate finance to adaptation. Many operate under the UNFCCC process (see **Box 3** for an overview). There are also climate funds that operate outside of the Convention. For example, the Climate Investment Funds have a funding window focused on adaptation and resilience-building titled the "Pilot Program for Climate Resilience". This is a fund of USD 1.2 billion that assists countries in integrating adaptation and resilience into development planning and piloting innovative solutions to climate change related risks.[24]

Despite their dominance in discussions of climate finance, in reality, multilateral climate funds currently supply only a small percentage of total climate finance flows. In 2015–2016, 3 per cent of international public adaptation finance flows was supplied by multilateral climate funds, while 84 per cent came from development finance institutions and 13 per cent from other government sources (see **Figure 4**).[25] The multilateral climate fund share has likely already grown as there has been an increase in GCF funding for adaptation in the past year that is not reflected in these percentages.

Nonetheless, climate funds play an important role in the international climate finance landscape. Multilateral climate funds are at the centre of efforts to collect resources from multiple countries and other donors and subsequently channel these funds to vulnerable countries to help them fulfil their international obligations and deliver on their domestic plans. Those funds that operate within the Convention continue to evolve alongside developments under the Convention, and their mandates and practices shift to directly respond to the changing needs and priorities of countries with respect to financing adaptation action. In addition, these funds are instrumental in promoting synergies and piloting new ideas.[26] Synergies in this sense can take many forms, including blended projects, projects that build on one another consecutively and projects taking place in parallel that are funded through different mechanisms or agencies.[27] To take advantage of these synergies, country ownership remains essential.

23. As footnote 15 above.
24. See https://www.climateinvestmentfunds.org/sites/cif_enc/files/ppcr_factsheet_web.pdf
25. As footnote 16 above.
26. Report on the 2019 regional TEM-A held in Songdo. Available at https://bit.ly/2SePQh7
27. See footnote 26 above.

Box 3

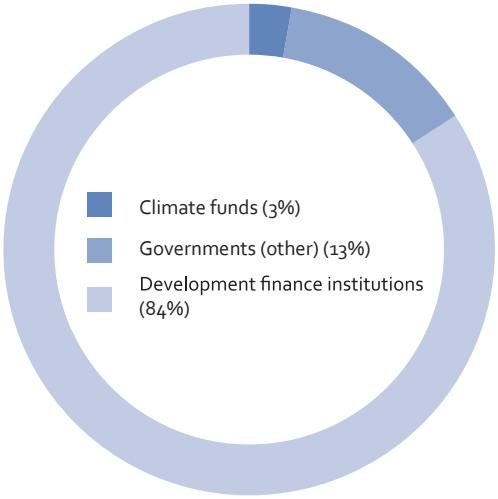
Adaptation finance provided by multilateral climate funds under the UNFCCC process

The Adaptation Fund, established under the Kyoto Protocol, finances concrete adaptation projects and programmes in developing countries, that is, activities that seek to address climate change risks and adverse impacts. It has a funding cap of USD 10 million per country. Under the GEF, an operating entity of the Financial Mechanism, both the LDCF and the SCCF have finance available for adaptation. The LDCF supports the least developed countries in preparing and implementing their national adaptation programmes of action and supports the formulation of NAPs. By contrast, SCCF funding is available to all vulnerable developing countries. The SCCF prioritizes adaptation and technology transfer in key sectors, such as water resource management, agriculture, infrastructure and health. In addition, the SCCF funds the first steps of the NAP process in countries outside of the least developed countries category. Another operating entity of the Financial Mechanism, the GCF, seeks to allocate 50 per cent of its portfolio to adaptation, with at least 50 per cent of this adaptation funding directed towards the least developed countries, small island developing States and African States. The GCF has the flexibility to support a range of adaptation efforts, including allocating up to USD 3 million in grants for the formulation of NAPs and other adaptation planning processes.

Sources: (1) https://www.adaptation-fund.org/about/; (2) https://www.thegef.org/topics/least-developed-countries-fund-ldcf; (3) https://www.thegef.org/topics/special-climate-change-fund-sccf; (4) https://www.greenclimate.fund/sites/default/files/document/gcf-brief-adaptation-planning_0.pdf

Photo by Joshua Brown on Unsplash

Figure 4: Sources of international public adaptation finance flows (2015–2016)



Source: Presentation by a representative of the UNEP DTU Partnership at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-1-overview-of-evolving-and-emerging-sources-of-adaptation-finance/

Various countries, however, continue to face challenges in accessing adaptation finance, and climate finance more broadly, from the climate funds. These challenges arise in part from the requirements imposed on national authorities associated with accessing these funds and navigating the climate finance architecture more broadly, including a broad and deep understanding of various intersecting topics such as finance, policy and economic sectors; effective coordination mechanisms and governance structures; familiarity with the processes under the Convention, climate policy, the role of civil society, the international and domestic private sector, and bilateral and multilateral actors; and the capacity to use all such knowledge to prioritize issues and sectors, taking into account political, technical, and administrative levels.[28]

The boards and staff of the climate funds are well aware of these challenges and recognize that they have an important role in helping to alleviate them by working together to ensure that there is effective complementarity and coherence between the funds.[29] In 2016, the GCF Board decided to prepare an operational framework to strengthen complementarity and coherence across climate finance institutions. The resulting framework has four pillars: Board-level decisions on fund-to-fund arrangements; enhanced complementarity at the activity level; promotion of coherence at the national programming level; and complementarity at the level of the delivery of climate finance through an established dialogue.[30]

28. Presentation by representatives of the GCF and the Adaptation Fund at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-2-maximizing-synergies-in-the-climate-finance-architecture-lessons-learned-opportunities-and-challenges/
29. As footnote 28 above.
30. See https://www.greenclimate.fund/document/gcf-b20-05

One area in which the GCF, the GEF, and the Adaptation Fund have been collaborating is coordinating programming and identifying or developing financing priorities.[31] This includes examining opportunities for learning, scaling up or replicating successful initiatives, and co-financing projects (see **Box 4**).

Box 4

Complementarity and coherence among climate funds in Senegal

Approved in 2017, the GCF project titled "Building the climate resilience of food-insecure smallholder farmers through integrated management of climate risks" will implement a range of risk reduction measures in vulnerable households in Senegal, including water and soil conservation measures, livelihood diversification, and training on climate-resilient practices. The project, which is being implemented by the World Food Programme and funded by a USD 10 million grant from the GCF and contributions from the Government of Senegal, will build upon a previous project funded by the GEF. Specifically, it will incorporate the strategies, technologies and best practices from the LDCF project titled "Mainstreaming ecosystem-based approaches to climate-resilient rural livelihoods in vulnerable rural areas through the farmer field school methodology". This project, funded by a GEF project grant of over USD 6 million, along with over USD 24 million in co-financing, served to enhance the capacity of the agropastoral sector in Senegal to mainstream integrated adaptation strategies into development policies and programmes and develop more climate-resilient production systems.

There have also been complementary efforts undertaken by the Adaptation Fund in Senegal. In particular, the "Adaptation to coastal erosion in vulnerable areas" project, which received a grant of about USD 8.6 million, supported disaster risk management and adaptation efforts through activities such as assisting local communities in better understanding adaptation to climate change in coastal zones and developing appropriate regulations that support adaptation. In addition, this was the first direct access project in Senegal, and it increased the capacity to access climate finance and undertake coastal zone management of the national implementing entity, the Ecological Monitoring Centre, which in turn contributed to its fast track accreditation to the GCF. Further, the lessons learned from the Adaptation Fund project were built upon in a coastal management GCF project titled "Increasing resilience of ecosystems and communities through restoration of the productive bases of salinized lands". The project aims to scale up evidence-based adaptation practices related to the management of salinized lands and will also be implemented by the Ecological Monitoring Centre.

Sources: (1) https://www.greenclimate.fund/projects/fp049; (2) https://www.thegef.org/project/mainstreaming-ecosystem-based-approaches-climate-resilient-rural-livelihoods-vulnerable; (3) https://www.adaptation-fund.org/project/adaptation-to-coastal-erosion-in-vulnerable-areas/; (4) https://www.greenclimate.fund/projects/fp003

31. As footnote 28 above.

In many cases, Adaptation Fund projects are the first pilot actions on the ground in vulnerable locations, and the GCF then builds on those efforts to help foster transformational impacts in communities.

The GEF, particularly through the SCCF and the LDCF, and the GCF are intensifying their cooperation by regularly exchanging project lists to ensure that duplication is avoided and by collaborating on implementation by co-financing complementary projects.[32] Various funds are also working with one another to fast track the accreditation of entities that are already accredited by other funds.[33] Recognizing the need to strengthen country engagement, the Adaptation Fund and the GCF are also working together to foster a community of practice of direct access entities, which will bolster the capacity of the community's members to learn from one another and access, receive and use direct access funding from both funds.[34]

The direct access modality available through some multilateral climate funds has been an important development in the effort to improve countries' ability to access climate finance through the funds. Direct access enables an institution to receive finance directly from a climate fund, rather than through an international intermediary like an intergovernmental organization or development bank. The direct access modality was established to offer developing countries various advantages over the alternative methods available through the climate funds. Through this modality, projects funded are directly managed and led by countries, which helps improve intergovernmental cooperation, build national adaptive capacity, foster transparency and sustain institutional knowledge.

Direct access entities are deeply embedded within the national context, are well placed to unlock integrated responses to climate change within a country and have so far been hugely advantageous in helping countries to bring climate finance to the local level. While becoming accredited as a direct access entity involves a rigorous vetting process, institutions frequently find "that the scrutiny has helped strengthen their ability to perform effectively".[35] As at April 2020, the Adaptation Fund had accredited a total of 31 national implementing entities under its direct access modality, with almost half (48 per cent) based in the least developed countries or small island developing States. As at April 2020,

32. Statement by a representative of the GEF at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/adaptation-planning-for-focussing-action-and-increasing-adaptation-finance/
33. As footnote 30 above.
34. See https://www.greenclimate.fund/news/adaptation-fund-green-climate-fund-convene-first-community-of-practice-meeting-of-direct-access-entities-to-climate-finan-1
35. Masullo I, Larsen G, Brown L, et al. 2015. "Direct Access" to Climate Finance: Lessons Learned by National Institutions. Washington, D.C.: World Resources Institute. Available at https://www.wri.org/publication/direct-access

the GCF had accredited a total of 43 national direct access entities.[36]

To fully capitalize on the advantages that direct access entities offer, however, it is important to better invest in these institutions and offer comprehensive long-term support beyond accreditation. While there is often a perception that accreditation itself is the final step towards accessing a robust and fast-paced inflow of finance for adaptation, the process of getting projects approved and implemented is lengthy even when it is channelled through a direct access entity. Furthermore, the investment in the time and resources it takes for the entity to build institutional capacity and get the necessary accreditation does not guarantee funding; this can render this investment riskier and less sensible for some countries.

Other types of accredited entities also play important roles in bridging the planning process with securing finance for adaptation. Regional implementing entities, for example, assist countries in their regions in better understanding the adaptation finance landscape –including the different climate finance mechanisms and their access requirements, the finance available from development partners and other donors, and opportunities for clustering related adaptation initiatives and blending financial resources–and accessing the resources that best suit their needs.

Government representatives, implementing entities and other actors involved in adaptation finance have noted, however, that such efforts have not yet sufficed to remove the obstacles to accessing finance, and have suggested some potential areas of improvement. Some have noted, for example, that it is difficult to evaluate and prioritize multiple similar projects proposed by international entities.[37] Similarly, efforts to blend resources are hampered by the differing timelines used by multilateral climate funds to approve projects and disburse funding, which can slow down or undermine the implementation of a project on the ground.[38] Taking steps to harmonize these timelines could reduce the uncertainty associated with financing adaptation initiatives and thus help speed up the process of implementing adaptation actions.

Other common challenges cited relate to the lengthy timeline of the process, from the submission of a proposal to the disbursement of funding, and the lack of finance that trickles down to the local level (see Chapter 3 below for more information). There are also enduring concerns related to the absorptive capacity or readiness of developing countries in relation to climate finance, broadly referring to the existence of a robust institutional and policy framework and relevant skills within a country allowing it

36. Statement by a representative of the Secretariat of Environment Programme at the TEM A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-2-maximizing-synergies-in-the-climate-finance-architecture-lessons-learned-opportunities-and-challenges/
37. As footnote 26 above.
38. Statement by a representative of the Secretariat of Environment Programme at the TEM A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-2-maximizing-synergies-in-the-climate-finance-architecture-lessons-learned-opportunities-and-challenges/

to effectively plan for, access, use and monitor climate finance. In response, funds such as the GCF and the Adaptation Fund are offering readiness funding to prepare developing countries for adaptation planning or accreditation efforts. These preparatory efforts are increasingly important as developed countries begin implementing their commitments to drastically scale up adaptation finance starting from 2020.

Moreover, the continued emphasis on the role of multilateral climate funds in financing adaptation action often translates into an enduring project-based approach that carries with it a number of challenges for countries. This is a long-standing default approach that is not specific to the area of climate change adaptation. Indeed, in the years following the 1972 United Nations Conference on the Human Environment, which marked the introduction of environmental concerns in the international agenda, environmental initiatives were undertaken "mostly following a project-based approach from which it has been difficult to escape".[39] While the project-based approach offers some advantages, there is a growing recognition of the need to better support more holistic, programme-based approaches.[40]

Mobilizing domestic finance for adaptation

A common thread running through the 2019 TEM-As was the crucial importance of mobilizing national resources for adaptation, including by mainstreaming adaptation throughout budgeting processes. Because adaptation to climate change is a long-term, iterative process, incorporating adaptation into domestic budgets in a systematic manner offers consistent and predictable financing that can help sustain the process over time. It can also yield a variety of other benefits, including allocating finance for adaptation to subnational governments or other actors, enhancing national ownership and giving the government the flexibility to allocate finance to different sectors or jurisdictions according to its priorities.

Moreover, aligning domestic expenditure with climate change action has proven to be effective in catalysing additional finance from both domestic and international sources.[41] In part, this is because mobilizing domestic funds and systematically incorporating adaptation into budgets can demonstrate a government's commitment to adaptation, along with country ownership of adaptation

39. Gomez-Scheverri L and Muller B. 2009. The Financial Mechanism of the UNFCCC: A Brief History. Oxford, United Kingdom: European Capacity Building Initiative. Available at https://ecbi.org/publications/financial-mechanism-unfccc-brief-history
40. Report on the 2019 regional TEM-A held in Salvador. Available at https://unfccc.int/sites/default/files/resource/LACW%20_2019_reg_tema.pdf
41. Report on the 2019 regional TEM-A held in Bangkok. Available at https://unfccc.int/sites/default/files/resource/APCW%20_2019_reg_tema.pdf


Photo by Bervan Incei on Unsplash

efforts and the availability of counterpart funding.[42] For example, the National Adaptation Fund of Colombia, which began as a temporary, ad hoc fund to provide adaptation assistance to those impacted by La Niña between 2010 and 2011,[43] has continued to operate, going beyond its initial purpose, and is now an executing entity for a GCF project to scale up climate-resilient water management practices for vulnerable communities.[44] In addition, this fund has a modality that enables it to be replenished through international cooperation.[45] With respect to mobilizing private sector financing, domestic public financing can help to de-risk investments and lower the barrier to entry for private companies seeking to invest in adaptation (see Chapter 4 below).

Governments have a variety of fiscal instruments at their disposal to incentivize domestic adaptation efforts. For example, to generate new revenue, governments can introduce new taxes, levies or fees on goods or services; issue bonds for purchase by investors; or negotiate debt conversion schemes with their creditors, whereby some portion of their debt is cancelled and funds are then released for use in a specific initiative.[46] An example of debt conversion is debt-for-nature swaps, through which a government is granted debt relief in exchange for investments in the environment.[47] In addition, governments can deploy fiscal instruments, such as subsidies or subsidy reform, that distribute new, or redistribute existing, government revenue.[48]

42. Price-Kelly H and Hammill A. 2016. sNAPshot: Domestic public finance for implementation of NAPs. Winnipeg, Canada: International Institute for Sustainable Development. Available at http://napglobalnetwork.org/wp-content/uploads/2016/10/napgn-en-2016-snapshot-domestic-public-finance-for-implementation-of-naps.pdf
43. Jaramillo M. 2014. The coordination of climate finance in Colombia. London, United Kingdom: Overseas Development Institute. Available at https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9326.pdf.
44. See https://www.greenclimate.fund/projects/fp056
45. As footnote 40 above.
46. Parry J-E, Dazé A, Dekens J, et al. 2017. Financing National Adaptation Plan (NAP) Processes: Contributing to the achievement of nationally determined contribution (NDC) adaptation goals. Winnipeg, Canada: International Institute for Sustainable Development. Available at https://www4.unfccc.int/sites/NAPC/Documents/Supplements/napgn-en-2017-financing-nap-processes.pdf
47. United Nations Department of Economic and Social Affairs. 2012. World Economic and Social Survey 2012: In Search of New Development Finance. New York: United Nations Department of Economic and Social Affairs. Available at https://www.un.org/en/development/desa/policy/wess/wess_current/2012wess_overview_en.pdf
48. As footnote 47 above.

ADAPTATION PLANNING TO MAXIMIZE FINANCE

3

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Adaptation planning to maximize finance

Adaptation planning is fundamental to identifying, securing and effectively making use of finance for adaptation. Systematic and inclusive adaptation planning processes, in particular the process to formulate and implement NAPs, enable countries to identify the climate risks that they face along with the associated adaptation needs that must be met; explore adaptation solutions that can respond to these needs; and subsequently prioritize the adaptation actions they will then take in the short, medium and long term. This process thus provides a natural entry point for assessing the adaptation finance landscape and crafting a blueprint for how best to navigate this landscape in order to accomplish the objectives delineated through the planning process.

Definitions

Fiduciary risk management
Fiduciary risks refer to risks that funds are not used for their intended purposes, that they are not accurately accounted for, and/or they do not provide value for money. Fidcuiary risk management therefore includes taking measures to evaluate, avoid, and/or minimize such risks.

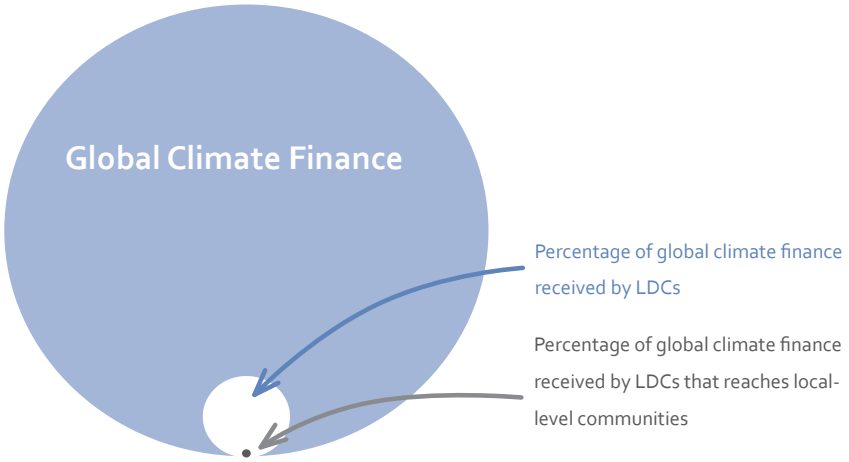
Adaptation planning and finance across levels

To mount an effective, holistic response to climate change impacts, it is crucial that adaptation planning and finance explicitly connect and mobilize actors at different levels, including at the local, subnational, national and regional level. This helps to ensure that efforts are not duplicated and do not undermine each other, and that no one gets left behind with respect to adaptation efforts.

However, while it is widely recognized that stakeholders at all levels must be engaged in adaptation planning and action, the capacity for these various actors to access finance for these purposes vastly differs. Most finance currently available for adaptation does not trickle down to the local level. For example, only one tenth of the 18 per cent of global climate finance received by the least developed countries (1.8 per cent of the total in other words), reaches local-level communities, which are often the most vulnerable to the impacts of climate change (see **Figure 5**).[49] Funding from the multilateral climate funds is predominantly channelled in a top-down manner through national-level governments and institutions. This approach arises from well-grounded requirements that recipients exercise strong fiduciary risk management, ensure

49. Presentation by a representative of the LDC Initiative for Effective Adaptation and Resilience at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-5-adaptation-planning-and-financing-at-different-scales-regional-subnational-and-community-level/

Figure 5: Percentage of global climate finance received by local communities in LDCs



Source: Presentation by a representative of the LDC Initiative for Effective Adaptation and Resilience at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-5-adaptation-planning-and-financing-at-different-scales-regional-subnational-and-community-level/.

transparency in delivering adaptation finance and lower transaction costs. However, this approach generates various bottlenecks that impede the flow of resources and reduces the amount that eventually reaches the local level,[50] rendering the funding process unresponsive to the widespread acknowledgement that adaptation actions predominantly occur at the local level. Promoting decentralized climate finance that is accessible to local-level actors will help ensure that finance reaches, and responds to the needs of, the most vulnerable communities.[51]

Some access mechanisms offered by climate funds have partially alleviated this challenge. The GEF Small Grants Programme, for example, provides financial and technical support for community-led initiatives through small grants of up to USD 50,000.[52] In addition to being the most accommodating mechanism under the GEF for applications made by community-level organizations and groups, the GEF Small Grants Programme has generated other benefits, such as facilitating the replication of community-led adaptation actions at the local level and mainstreaming these actions into projects or programmes supported by other funds or donors.[53] The direct access modality offered by some of the climate funds also offers an improvement compared with traditional access mechanisms with respect to strengthening community-level decision-making.

National governments can also proactively take steps to ensure that more adaptation finance reaches the local level. The Government of Nepal's commitment under its

50. Fenton A, Gallagher D, Wright H, et al. 2014. Up-scaling finance for community-based adaptation. Climate and Development. 6(4): pp.388–397.
51. As footnote 41 above.
52. See https://www.thegef.org/topics/gefsgp
53. As footnote 50 above.

national adaptation programme of action to channel at least 80 per cent of funds for climate change to the local level has been cited as one example with the potential of being replicated by other countries seeking to empower local-level actors to undertake community-led adaptation initiatives.[54] Alongside its national adaptation programme of action, the Government of Nepal endorsed a local adaptation plan for action framework to mainstream local adaptation into the country's development planning. The local adaptation plan for action was designed to support decision makers at all levels to accomplish a set of related objectives ranging from identifying the most vulnerable villages and prioritizing adaptation options according to local priorities to identifying channels for funding implementation and providing cost-effective ways to scale up local-to-national planning.[55]

Beyond implementing adaptation actions, local-level actors, such as civil society organizations and community-led organizations, can help increase the transparency of adaptation finance and build trust within the communities to which finance is directed.[56] While building networks with these actors is a time-consuming and resource-intensive process within the context of financing and implementing adaptation action, these networks can help deliver a greater impact and better results with the limited finance available.

More broadly, vertical mainstreaming of adaptation within a country offers an array of benefits. Vertical mainstreaming refers to coordinating and integrating adaptation planning and implementation from the national level down to the community level. This is in contrast to horizontal integration, which refers to coordinating and integrating adaptation efforts across sectors. For example, vertical mainstreaming can play a catalytic role in relation to adaptation planning and finance, such as when India's national government requested all states and union territories to develop a state action plan on climate change to complement the national plan. That placed additional pressure on states to focus on adaptation and enabled them to intentionally direct some of their funding towards climate resilience when they had not felt empowered to do so before.[57] In this case, in addition to political leadership, administrative leadership proved

54. As footnote 50 above.
55. Peniston B. 2013. A Review of Nepal's Local Adaptation Plans of Action. Washington D.C.: United States Agency for International Development. Available at https://www.climatelinks.org/sites/default/files/asset/document/NepalLAPAs_Stocktaking_TMI-Peniston-FINAL.pdf
56. Statement by a representative of the Fundecooperacion for Sustainable Development at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-2-maximizing-synergies-in-the-climate-finance-architecture-lessons-learned-opportunities-and-challenges/
57. Presentation by a representative of the World Resources Institute at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-5-adaptation-planning-and-financing-at-different-scales-regional-subnational-and-community-level/

to be important in changing the way states budget and organize their work internally to actively address adaptation, such as integrating budgets from different departments to support on-the-ground adaptation action. Vertical mainstreaming can also help ensure that domestic funding is directed towards areas relevant to adaptation that are not under the jurisdiction of the national government.

While adaptation plans tend to identify risks and vulnerabilities and the corresponding adaptation options within national borders, the risks and impacts of climate change, along with the effects of implemented adaptation measures, will inevitably transcend those borders. Transboundary climate change risk assessments and adaptation are essential components of effective adaptation action that is too often neglected by existing approaches to planning and financing adaptation. The idea of a cross-border approach to adaptation is itself not new; indeed, the Convention itself explicitly recognizes this approach, stating that Parties shall formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to facilitate adequate adaptation to climate change.[58]
The addition of transboundary risks further complicates the already significant challenge of formulating and implementing NAPs and other plans faced by adaptation planners and practitioners. Moreover, much of the existing finance for adaptation, including finance that has been traditionally channelled towards development and more recent climate-specific streams, is "predominantly structured for single-country financing" and does not "envisage financing projects that cross international borders,"[59] which poses additional challenges when pursuing transboundary approaches.

Discussions at the TEM-As identified various short-term steps that can be taken to begin tackling these challenges and ensure that the adaptation finance architecture is better equipped to support transboundary approaches. As a starting point, it is important that donors become more familiar with transboundary climate risks and their implications,[60] and that both donors and project proponents are persistent in finding solutions to overcome the existing barriers to addressing such risks.[61] In a similar vein, capacity-building efforts are necessary to help relevant actors identify transboundary climate risks, including through vehicles

58. Article 4, para. 1(b), of the Convention.
59. World Bank. 2019. Financing Climate Change Adaptation in Transboundary Basins: Preparing Bankable Projects. Washington, D.C.: World Bank. Available at https://bit.ly/2W6CxjD
60. Presentation by a representative of the Overseas Development Institute at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-5-adaptation-planning-and-financing-at-different-scales-regional-subnational-and-community-level/
61. As footnote 59 above.

such as the GCF Readiness and Preparatory Support Programme and NAP support.[62] An objective of such capacity-building efforts could be to enhance the understanding of what makes a trans boundary adaptation project or approach bankable.[63] Multilateral climate funds and other donors can support countries' efforts to pursue transboundary approaches by developing proposal calls that invite multiple countries to cooperate on joint projects that address transboundary risks of mutual concern, ranging from risks affecting shared water basins or other natural resources to those impacting international value and supply chains.[64] Lastly, support should also be provided to private sector actors looking to build resilience along their supply chains, which would help catalyse investment in adaptation. Private sector actors are integral to managing transboundary climate risks given the increasing exposure they face from climate risks and the increasingly multinational nature of their supply chains. For example, 90 per cent of the losses from the 2011 floods in Thailand were borne by the private sector,[65] including electronics and manufacturing companies in Malaysia, Indonesia and Viet Nam.[66] (For more information on the role of the private sector in adaptation finance, see Chapter 4 below).

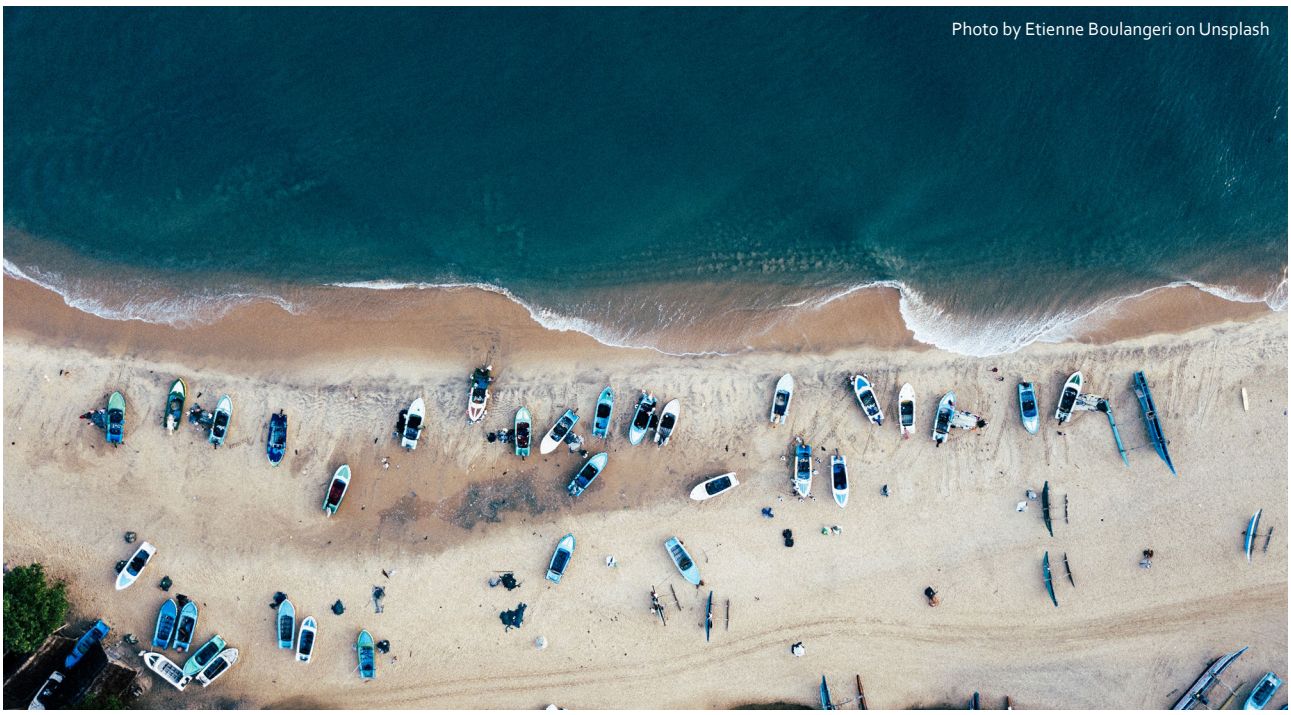


Photo by Etienne Boulangeri on Unsplash

62. As footnote 60 above.
63. As footnote 49 above.
64. As footnote 60 above.
65. Ministry of Finance, Royal Thai Government and World Bank. 2012. Thailand Flooding 2554: Rapid Assessment for Resilient Recovery and Reconstruction Planning. Available at https://www.undp.org/content/dam/thailand/docs/UNDP_RRR_THFloods.pdf
66. As footnote 60 above.

Some existing initiatives that apply a transboundary approach to adaptation can offer additional lessons on how such approaches can be governed and financed. See **Box 5** for an example of such an initiative.

Box 5

Applying a transboundary approach to adaptation: Mekong Climate Change Adaptation Strategy and Action Plan

Established in 1995, the Mekong River Commission is an intergovernmental organization that works with the governments of Thailand, Viet Nam, the Lao People's Democratic Republic and Thailand to manage the shared water resources of the Mekong River. In 2018, the Commission published its Mekong Climate Change Adaptation Strategy and Action Plan, which aims to address climate change risks and bolster basin-wide resilience.

The Mekong Climate Change Adaptation Strategy and Action Plan has seven strategic priorities:

1. Mainstream climate change into regional and national policies, programmes and plans;
2. Enhance regional and international cooperation and partnerships on adaptation;
3. Enable the preparation of gender-sensitive transboundary adaptation options;
4. Support access to adaptation finance;
5. Enhance monitoring, data collection and sharing;
6. Strengthen the capacity and development of climate change adaptation strategies and plans;
7. Improve the outreach of Commission products relating to climate change and adaptation.

To finance the Adaptation Strategy and Action Plan, under the fourth strategic priority, the Commission will identify approaches and mechanisms for member countries and the Commission to access adaptation finance and identify ways the Commission can facilitate access to climate finance. Related activities will include providing regional training on existing mechanisms and keeping member countries informed about the latest developments in finance at both the national and the regional level. The Mekong River Commission is funded by its member countries and various bilateral and multilateral development partners.

Sources: (1) Mekong Climate Change Adaptation Strategy and Action Plan, available at http://www.mrcmekong.org/assets/Publications/MASAP-book-28-Aug18.pdf; (2) http://www.mrcmekong.org/about-mrc/

Financing the formulation and implementation of national adaptation plans

The process of formulating and implementing NAPs is one of the most valuable opportunities available to developing countries to both outline a long-term adaptation road map and enable the flow of financial resources towards its implementation. This process is the only adaptation planning process that the GCF is mandated to support with funding; the GCF provides up to USD 3 million per developing country for this process. See **Box 6** for the status of GCF support for NAPs.

Currently, there is a limited number of financial sources explicitly focused on the NAP process and, of these, the finance is largely directed towards the formulation of a NAP rather than its implementation. However, it is expected that more diverse forms of funding could be available from domestic, international, public and private sources to support the process of implementing NAPs.[67]

Regardless of where the support for the process of formulating and implementing a NAP is derived from, the process itself can yield adaptation project ideas that can then be translated into funding proposals. For example, through the process of developing a NAP, Saint Lucia produced dozens of project concept notes, which are being transformed into funding

Box 6

Status of Green Climate Fund support for national adaptation plans

As at November 2019, the GCF had received 81 proposals for funding for NAP formulation. Of these, 35 had been approved and 13 were in the final stages of approval, with a total of 48 proposals with a combined value of USD 116 million This represents a substantial increase compared with the previous year; in January 2018, out of 40 submitted proposals only 3 had been approved and 5 endorsed. The GCF Secretariat has set a target for 2020 of approving 18 additional NAP proposals. In February 2020, the GCF reported that as at 31 December 2019, 46 per cent of the total Readiness Programme value (USD 104 million of USD 126 million) had been allocated to NAP-related activities of 42 projects. GCF support can assist countries in generating projects that address the priorities defined in their NAPs.

Sources: (1) Presentation by a representative of the GCF at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/adaptation-planning-for-focussing-action-and-increasing-adaptation-finance/; (2) Report on the 2019 regional TEM-A held in Songdo. Available at https://unfccc.int/sites/default/files/resource/20190411_songdo.pdf (3) Status of the GCF portfolio: approved projects and fulfillment of conditions. Available at https://bit.ly/2xWEKX9; (4) Report of the twenty-fourth meeting of the Board, 12 – 14 November 2019. Available at https://www.greenclimate.fund/sites/default/files/document/gcf-b24-18.pdf; (5) GCF in Brief: Adaptation Planning. Available at https://www.greenclimate.fund/sites/default/files/document/gcf-brief-adaptation-planning_0.pdf

67. As footnote 46 above.

proposals. The GCF has dubbed the NAP process and the related adaptation planning processes a "golden opportunity" precisely because of the various corollary benefits that are embedded in them.[68] Besides leading governments to design project concepts and prioritize project ideas, such benefits include building or bolstering the evidence base for developing the **climate rationale** of given adaptation solutions, engaging the private sector and other stakeholders, and monitoring the impact of interventions.

To ensure that the NAP process yields such benefits in the area of adaptation finance, however, it is important that countries develop a dedicated financing strategy alongside the NAP. The NAP Global Network suggests that such a financing strategy can be constructed on the basis of three primary building blocks:[69]

(a) Identifying the financing gap by comparing the estimated costs of the process of formulating and implementing a NAP against existing available sources;

(b) Determining financing options by identifying potential financial sources and suitable instruments, while taking into account key factors such as national circumstances and capacities;

(c) Identifying operational next steps that can increase the chances of accessing the financial sources identified, including by building capacity or preparing funding proposals.

Definitions

Climate Rationale
A climate rationale helps provide the scientific underpinning for evidence-based climate change mitigation and adaptation action by grounding linkages between climate science, action, and societal benefits in the best available science.

Breaking down barriers: adaptation planning and sustainable development

In many cases, adaptation planning and financing are inextricably linked to financing sustainable development efforts. This is because the twin goals of sustainable development and adaptation are themselves fundamentally connected for developing countries. On the one hand, climate change impacts threaten ongoing poverty eradication efforts and can erase decades of hard-won development gains, dragging vulnerable people into, or back into, poverty.[70] On the other hand, the development decisions taken by developing countries will

68. See https://unfccc.int/sites/default/files/resource/GCF%20NAP%20Lifeng.pdf
69. As footnote 46 above.
70. Hallegatte S, Bangalore M, Bonzanigo L, et al. 2016. Shock Waves: Managing the Impacts of Climate Change on Poverty. Washington, D.C.: World Bank. Available at https://openknowledge.worldbank.org/bitstream/handle/10986/22787/9781464806735.pdf

influence the future climate risks they face.[71]

The relationship between adaptation and development is so strong that, some researchers contend, "in most practical cases it is not possible to ascertain where development interventions end and adaptation to climate change begins", given that factors such as education, access to credit, sanitation and strong institutions are at the heart of both development and the capacity to cope with climate change impacts.[72] These connections lead many practitioners and experts to emphasize the importance of eliminating the false dichotomy and artificial institutional boundaries separating adaptation from development in both planning and finance.[73]

Since 2015, policymakers and practitioners have been increasingly looking to relevant international frameworks in order to shape their pursuits of adaptation action and sustainable development in a harmonious and complementary manner. This includes, for example, growing recognition that robust policy integration between the Paris Agreement, the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030 – three landmark agreements adopted in 2015 – offers significant potential benefits by enhancing coherence, efficiency and effectiveness.[74]

Yet another agreement adopted in 2015, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, explicitly recognizes the relationship in the area of finance between climate change and development.[75] Specifically, the Addis Ababa Action Agenda acknowledges that "climate change impacts are seriously affecting coastal areas and low-lying coastal countries including many least developed countries and small island developing States, while extreme climate events endanger the lives and livelihoods of millions" and, as a result, countries are "commit[ted] to enhanced support to the most vulnerable in addressing and adapting to these critical challenges".[76]

Development banks, according to the OECD, are critical if developing

71. Fankhauser S. 2016. Adaptation to Climate Change. London, United Kingdom: Grantham Research Institute on Climate Change and the Environment. Available at http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2016/11/Working-Paper-255-Fankhauser-1.pdf

72. Fankhauser S and McDermott T. 2016. Climate-resilient development: an introduction. In S Fankhauser and T McDermott (eds.). The economics of climate-resilient development. Cheltenham, United Kingdom and Northampton, Massachusetts: Edward Elgar Publishing, pp.1–14.

73. Intervention by a representative of the Government of South Africa at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/session-2-maximizing-synergies-in-the-climate-finance-architecture-lessons-learned-opportunities-and-challenges/

74. UNFCCC. 2017. Opportunities and options for integrating climate change adaptation with the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction 2015–2030. Bonn: UNFCCC. Available at https://bit.ly/2W3UIXn

75. See https://sustainabledevelopment.un.org/content/documents/2051AAAA_Outcome.pdf

76. See https://sustainabledevelopment.un.org/content/documents/2051AAAA_Outcome.pdf, para. 65.

countries are to transition towards climate-compatible development pathways.[77] Whether they operate at the national, regional, bilateral or multilateral level, development banks provide several benefits that are relevant to the development–climate adaptation nexus. First, these banks offer both concessional and non-concessional finance for infrastructure and other initiatives in developing countries, which can provide proof of concepts for investments, business models and technologies in new markets. Second, development banks play an important role in mobilizing finance for climate action from a variety of actors owing to their ability to attract commercial investment to projects by removing barriers to investment, improving risk-adjusted returns on investments and blending finance to scale up commercial investments. Third and finally, development banks help countries reform their climate and investment policies, which can help further remove barriers to investment and stimulate new markets for climate action. This function also includes supporting governments to plan their infrastructure and develop bankable project pipelines, including by shaping and directing public investments. To further equip development banks to support resilience-building activities, and climate action more broadly, the OECD recommends three key changes driven by the banks' shareholder governments and other stakeholders, namely:

(a) Strengthening the mandates and incentives for development banks to deliver transformative climate action;

(b) Creating new climate markets by attracting new investors and sources of finance to investments;

(c) Enabling development banks to drive this transformational climate-resilient development by using concessional finance.

Adaptation finance is intended, however, to be supplied in addition to traditional development aid. To ensure that new and additional funds are mobilized to bridge the adaptation finance gap and strengthen resilience to climate change, this must be taken into account when allocating finance for and pursuing climate-resilient development.

77. OECD/World Bank/UNEP. 2018. Financing Climate Futures: Rethinking Infrastructure. Paris, France: OECD Publishing. Available at https://read.oecd-ilibrary.org/environment/financing-climate-futures_9789264308114-en#page3

INCENTIVIZING PRIVATE SECTOR INVESTMENT IN ADAPTATION

4

Photo by Ilmi Amali on Unsplash

Incentivizing private sector investment in adaptation

Countries, subnational governments and other stakeholders are increasingly looking to the private sector to play an important role in filling the adaptation finance gap and accelerating the implementation of adaptation efforts. Currently, private sector finance flows directed towards adaptation are very difficult to track,[78] and they therefore tend to be largely excluded from global estimates of adaptation finance.

While there are countless references to the potential held by the private sector in the area of adaptation finance, it is critical to recognize from the outset that the "private sector" label encompasses a heterogeneous assembly of entities that includes, among others, smallholder farmers, small and medium-sized enterprises, multinational corporations, insurers and reinsurers, and banks and other private financiers. The role that these various types of private sector entities are best suited to, and their capacity to fulfil that role, will differ according to their type and size, the sector in which they participate and other factors.

Moreover, a subset of economic sectors or types of adaptation projects may be viewed, overall, as more attractive in the context of private sector financing than others. The IPCC noted in its fifth assessment report, for example, that while public financing is generally needed for infrastructure sectors where returns on investment tend not to attract private investment, fisheries and agriculture sectors in developing countries often attract comparatively high proportions of private finance, much of which is domestic.[79] Discussions at the regional TEM-A held in Songdo identified agriculture, water, forestry and buildings as key sectors that possess particularly high potential for private investment.[80]

78. As footnote 16 above.
79. IPCC. 2014. Adaptation planning and implementing. In: CB Field, VR Barros, DJ Dokken, et al. (eds.). Climate Change 2014: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press. Available at http://www.ipcc.ch/report/ar5/wg2
80. As footnote 26 above.

Benefits of and barriers to private sector investment in adaptation

There are clear benefits arising from private sector investment in adaptation. While governments and the public will benefit from private sector actors shouldering some of the rising costs of adaptation action, these investments are also in the interests of the private sector actors themselves. Indeed, private sector adaptation initiatives generate business benefits that can be grouped into at least four broad categories:

(a) Improving operations and competitiveness by increasing efficiency and thereby reducing operational costs, and by supporting business continuity and risk management, thereby contributing to long-term business viability;

(b) Protecting the value chain against the threats climate change poses to natural resource-based commodities or valuable **ecosystem services**;

(c) Building the corporate brand by demonstrating a commitment to social welfare and sustainability;

(d) Leveraging new business opportunities by offering new products and services, and driving innovation and technology development, in response to emerging needs and markets.[81]

While there are thus clear reasons for the private sector to increase its involvement in adaptation finance, there are also a number of challenges that may impede its ability to do so. This is the case even when companies acknowledge that climate change poses financial risks to their business: a 2018 report published by CDP and the Climate Disclosure Standards Board found that, while 83 per cent of the 1,681 companies studied acknowledged physical climate change risk, there was still a disconnect between this recognition and action.[82] Only 12 per cent of the companies analysed incentivized their board members to manage climate change matters.

Similarly, another study examining CDP disclosure data on physical climate change risks concluded that the private sector continues to operate with significant blind spots in both their assessment of impacts and their development of strategies to manage these impacts.[83] These blind spots relate to the magnitude and costs of physical climate risks, the cost of adaptation action, the

Definitions

Ecosystem services
Ecosystem services refer to the various benefits that people derive from ecosystems. These include provisioning services, such as providing food or other raw materials, regulating services such as crop pollination, and cultural services, such as recreation.

81. United Nations Global Compact, UNFCCC and UNEP. 2015. The Business Case for Responsible Corporate Adaptation: Strengthening Private Sector and Community Resilience. Available at https://www.unglobalcompact.org/docs/issues_doc/Environment/climate/Adaptation-2015.pdf
82. Climate Disclosure Standards Board and CDP. 2017. Ready or not: Are companies prepared for the TCFD recommendations? London, United Kingdom: Climate Disclosure Standards Board and CDP. Available at https://www.cdsb.net/sites/default/files/tcfd_preparedness_report_final.pdf
83. Goldstein A, Turner WR, Gladstone J, et al. 2018. The private sector's climate change risk and adaptation blind spots. Nature Climate Change. 9: pp.18–25.

potential for **ecosystem-based adaptation** to reduce physical climate risks to business, non-linear climate risks and the need for radical changes rather than incremental adaptation, among other things.

Hallmeyer and Tonkonogy identify three categories of barriers to private sector investment in adaptation: context barriers, business model barriers and internal capacity barriers.[84] Context barriers relate primarily to the policy environment, institutional environment, market environment, and value chains and human capital in a given market. Adaptation-specific barriers could include, in the case of the policy environment, a lack of clarity on climate change legislation from the government, or in the case of the market environment, a lack of capital supply to companies. Business model barriers, by contrast, include challenges related to uncertainty in the added value of an adaptation service or technology, high up-front and maintenance costs and a lack of technical capacity. Lastly, internal capacity barriers relate to the internal management and operational capabilities of a given company.

In 2018, the GCF conducted a survey to assess barriers to private sector adaptation investment, which found that the top three hurdles identified by respondents relate to awareness of business opportunities, the capacity of local financial institutions, and business opportunities and market conditions.[85]

An open survey conducted by the Adaptation Committee in 2017, which had a total of 208 respondents from various regions and sectors, produced similar results. It found that the most commonly cited challenges faced by companies with respect to adaptation included a lack of awareness or knowledge concerning climate change impacts and risks, limited financial capacity to address risks, policies and regulations that hinder adaptation, and difficulty demonstrating the return on investment of adaptation actions.[86]

There are indications that these trends are beginning to shift, however. Organizations that work with corporations in the area of climate change adaptation report that, whereas there was almost no awareness of climate risks and associated adaptation options around five years

Definitions

Ecosystem-based adaptation
Ecosystem-based adaptation refers to the use of biodiversity and ecosystem services as part of an overall strategy to help people adapt to the adverse effects of climate change.

84. Hallmeyer K and Tonkonogy B. 2018. Designing Technical Assistance Activities for Adaptation and Resilience Companies. London, United Kingdom: Climate Policy Initiative. Available at https://climatepolicyinitiative.org/wp-content/uploads/2018/05/Designing-Technical-Assistance-Activities-for-Adaptation-and-Resilience-Companies.pdf
85. Presentation by a representative of the GCF at the TEM-A on 25 June 2019. Webcast available at http://tep-a.org/sessions/adaptation-planning-for-focussing-action-and-increasing-adaptation-finance/
86. UNFCCC. 2017. Advancing the engagement of the private sector in adaptation: Results of the survey of private sector organizations. Bonn: UNFCCC. Available at https://bit.ly/3bLOX7k

ago, there is now a relatively widespread acknowledgement of the imperative of adaptation for ensuring business continuity and success.[87]

In addition, there is a growing understanding of the importance of investing not only in adaptation actions in areas such as logistics, transportation and infrastructure, but also in adaptation efforts targeted at communities that are integral to the success of the business, including suppliers, customers and employees (see **Box 7**).[88] In this regard, the non-governmental organization Business for Social Responsibility actively works with companies across the world to transform their business models so that they can rise to the challenges of climate change impacts by analysing climate change related risks and opportunities and helps corporations to integrate climate solutions into their supply chain, sourcing and procurement, and the communities in which they work.[89] In doing so, Business for Social Responsibility also assists companies in developing gender responsive climate solutions that avoid maladaptation.

Box 7

Cocoa Life: investing in business success by investing in community resilience

The Cocoa Life programme was launched in 2012 to help cocoa farmers and their communities face environmental, productivity, social and financial challenges, including climate change, limited knowledge of farming techniques, gender inequality and lack of access to finance. Cocoa Life is an initiative of Mondelēz International, a multinational snack food company that owns brands such as Cadbury, Chips Ahoy, Milka, Oreo, Ritz, Philadelphia, Toblerone, Wheat Thins and many more. The Cocoa Life programme is investing USD 400 million through 2022 to transform its supply chain by targeting the farmers at its heart through activities that bolster their knowledge and skills, thus improving their livelihoods and strengthening their surrounding communities.

Regarding climate change, Cocoa Life invests in training farmers and facilitating the uptake of good practices to stop deforestation, maintain healthy cocoa ecosystems and protect land and forests. At the close of 2018, the programme had resulted in the training of more than 140,000 farmers on good agricultural practices, the distribution of more than 8.4 million cocoa seedlings to increase productivity, and the planting of over 1.1 million non-cocoa trees in Ghana, over 40,000 in Côte d'Ivoire and over 50,000 in Indonesia.

Sources: (1) https://www.cocoalife.org; (2) https://www.cocoalife.org/the-program/climate-change

87. Intervention by a representative of Business for Social Responsibility at the TEM-A, 25 June 2019. Webcast available at http://tep-a.org/sessions/session-1-overview-of-evolving-and-emerging-sources-of-adaptation-finance/
88. As footnote 26 above.
89. As footnote 87 above.

Incentivizing private sector engagement in adaptation

Governments can take various steps to support and incentivize the private sector to overcome the barriers to supplying and accessing adaptation finance and fulfil their potential in this area. For example, adaptation planning can communicate climate information and the associated risks and costs, catalyse project development and help governments at all levels to create an enabling policy environment and build capacity.[90] More specifically, the public sector can deploy a range of public policy and public finance mechanisms to increase investment in adaptation, which broadly fall into three categories, as set out in the next three paragraphs.[91]

First, the public sector can take actions to increase the demand for adaptation products and services. Such approaches include creating rules and regulations related to evaluating, disclosing and managing climate risk; undertaking or funding market studies outlining climate risks specific to local areas to help the private sector better understand the risks affecting different enterprises; and using technical assistance or other funding to support adaptation product demonstrations and thereby spread awareness of the benefits specific products offer to sectors and businesses. The public sector can also use laws and regulations to ensure that sectors within a country are obligated to invest in adaptation efforts targeting the ecosystems and communities on which their businesses depend.

Second, governments can pursue approaches that aim to sustain suppliers of adaptation-related products and services. Examples of such approaches range from supplying weather, risk exposure and other data to the public and offering technical assistance funding for capacity-building efforts among technology suppliers seeking to enter new markets to creating data and technology standards that facilitate smooth interactions among diverse actors in the climate risk market.

Third, de-risking adaptation investment is an important function of the public sector. De-risking involves activities such as directly investing in adaptation initiatives, supplying early-stage funding for emerging adaptation technologies to help bring them to market and providing concessional loans for climate-resilient infrastructure projects.

Through its Private Sector Facility and other efforts to involve private sector entities in funding adaptation action, the GCF is also offering resources that can galvanize

90. As footnote 26 above.
91. Micale V, Tonkonogy B, Mazza F. 2018. Understanding and Increasing Finance for Climate Adaptation in Developing Countries. London, United Kingdom: Climate Policy Initiative. Available at https://climatepolicyinitiative.org/wp-content/uploads/2018/12/Understanding-and-Increasing-Finance-for-Climate-Adaptation-in-Developing-Countries-1.pdf

private sector engagement and investment in adaptation at all levels (see **Box 8**).

Governments and climate funds are not the only entities that can incentivize private sector investment in adaptation. Some private sector actors, particularly banks and other financial institutions, also have tools they can deploy to encourage adaptation investment. For example, banks are increasingly introducing various sustainability criteria into loan documentation through the use of climate change or sustainability-related **key performance indicators.**[92] Lenders can then adjust interest rates on the basis of a company's performance against these indicators, lowering rates in cases where these targets are met and raising rates in cases where they are not. In the area of adaptation, key performance indicators can relate to the disclosure and management of climate change related risks to business.

Definitions

Key performance indicator
A performance measurement that evaluates the success of an activity or organization.

Box 8

Launching the CAMBio II project through the GCF

In June 2019, the GCF and the Central American Bank for Economic Integration agreed to launch the CAMBio II project, which will help micro, small and medium-sized businesses in Central America build their resilience to climate change. In particular, the project will help address climate change related risks and hazards in the agriculture, livestock and forestry sectors by offering concessional loans, technical assistance and incentive schemes. It will operate in seven countries: Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama. CAMBio II is being financed through a partnership between the GCF and the Central American Bank for Economic Integration, with the GCF investing USD 15.5 million, of which USD 3.0 million is a grant and the remainder is a loan, and the Bank investing USD 12.5 million.

Sources: (1) https://www.greenclimate.fund/news/gcf-agreement-with-cabei-to-unlock-finance-for-climate-adaptation-in-central-america; (2) https://www.greenclimate.fund/projects/fp097

Commercializing adaptation technologies

Beyond broadly supporting and incentivizing private sector investment in adaptation, efforts to facilitate the commercialization of adaptation technology solutions warrant special attention. Technologies have long been recognized as a fundamental element

92. Statement by a representative of Rabobank at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session-7-financial-instruments-to-mobilize-private-sector-engagement-in-climate-resilience/

of adapting to climate change.[93] The process of transitioning from the research and development phase to the commercialization phase for adaptation technologies, however, continues to face a number of roadblocks, such as a poor understanding of adaptation markets, weak policy frameworks and few suitable financial mechanisms that are able to effectively blend public and private finance, reduce investment risk and shorten the time needed for a return on investment.

The CTCN is at the forefront of helping countries to tackle these challenges and bringing the private sector into the adaptation technology space. As the operational arm of the **Technology Mechanism**, the CTCN offers countries adaptation and mitigation technology solutions, capacity-building opportunities and advice on developing policy, legal and regulatory frameworks conducive to the promotion of climate technology solutions tailored to the circumstances and needs of individual countries.[94] While requests for technical assistance from the CTCN must be submitted by a country's **national designated entity**, project proposals can be submitted to national designated entities from the private sector, civil society, local communities or other actors.[95] In this way, national designated entities function as gatekeepers to ensure that project proposals are aligned with a country's national circumstances and priorities relating to climate change related technology needs.[96]

During its first five years in operation, approximately 32 per cent of CTCN technical assistance requests related to adaptation, while 14 per cent related to both adaptation and mitigation and 54 per cent to mitigation. During this same five-year period, around 30 per cent of the assistance provided by the CTCN related to decision-making tools and/or other information provision, around 22 per cent to the feasibility of technology options, around 16 per cent to technology identification and prioritization and the remaining 32 per cent to other categories, including piloting and deploying technologies in local conditions, offering recommendations for policy and regulations, and assisting with private sector engagement and market creation.[97] In some cases, CTCN projects touch on several of these elements simultaneously and can also help give rise to new financing mechanisms to support the development and commercialization of adaptation technology solutions (see **Box 9**).

Definitions

Technology Mechanism
Within the UNFCCC process, countries have confirmed the importance of enhancing technology development and transfer to developing countries. To facilitate this, in 2010 the COP established the Technology Mechanism. The Technology Mechanism consists of two bodies: the Technology Executive Committee and the Climate Technology Centre and Network (CTCN).

National designated entity
A national designated entity (NDE) is the organization, institution, or other entity assigned by a Party to the UNFCCC to manage requests made of the CTCN. Establishment of an NDE is necessary before a Party to the UNFCCC can participate in the CTCN Technical Assistance process.

93. See, for example: UNFCCC. 2006. Technologies for Adaptation to Climate Change. Bonn: UNFCCC. Available at https://unfccc.int/resource/docs/publications/tech_for_adaptation_06.pdf
94. See https://www.ctc-n.org
95. Presentation by a representative of the CTCN at the TEM-A on 26 June 2019. Webcast available at http://tep-a.org/sessions/session.6-financing-commercialization-of-adaptation-technology-solutions/
96. See https://www.ctc-n.org/about-ctcn/national-designated-entities
97. CTCN. 2018. 2018 Progress Report. Copenhagen, Denmark: CTCN. Available at https://www.ctc-n.org/resources/2018-ctcn-progress-report

Box 9

Climate Technology Centre and Network technical assistance: supporting climate technology deployment in micro, small and medium-sized enterprises in Chile

The CTCN delivered technical assistance in Chile focused on evaluating the primary obstacles to investing in climate technologies faced by micro, small and medium-sized enterprises in the agrifood sector. The project, which addressed both adaptation and mitigation, had a wide range of objectives which included:

1. Analysing the main barriers to investment and potential interventions that could assist such enterprises in overcoming them;
2. Identifying opportunities to increase the resilience of selected agrifood chains using clean technologies;
3. Analysing the effectiveness of various financial instruments, both national and international, that could help promote the uptake of climate technologies in such enterprises;
4. Building local capacity to increase the understanding of relevant challenges and associated opportunities and replicate lessons learned in other agrifood chains or sectors within the country;
5. Engaging with private sector entities to better understand the local context, validate findings and share project results.

The project revealed a number of key insights related to the commercialization of adaptation technology. First, it demonstrated how preparatory work in the form of market and sectoral assessments is essential for paving the way to financing the commercialization of appropriate adaptation technologies. Second, the project results suggested that, in some cases, combining adaptation and mitigation priorities can help adaptation appear as a more attractive investment. Third, to ensure the long-term usage and benefit of climate technologies, micro, small and medium-sized enterprises require support in maintaining equipment to ensure it continues to function and operate efficiently.

Recommendations arising from this project are informing the establishment of a green investment bank in Chile, which will aim to design specific financial tools for the agrifood sector on the basis of the analysis applied through the CTCN technical assistance. The process of establishing this bank began during the field work conducted during the project, wherein micro, small and medium-sized enterprises offered recommendations and described their needs with respect to finance for climate technologies.

Sources: (1) Presentation by a representative from the CTCN during the TEM-A on 26 June 2019. Audio available at: http://tep-a.org/technical-expert-meetings-on-adaptation/2019-2/agenda-technical-expert-meeting-on-adaptation-2019/; (2) https://www.ctc-n.org/technical-assistance/projects/incubating-climate-technologies-small-and-medium-enterprises-chile


Photo by Ivan Bandura on Unsplash

Ensuring that technology needs assessments and technology action plans are complete and up to date is an important first step towards commercializing adaptation technologies. As part of the technology needs assessment process, countries outline their long-term development priorities and identify technologies that can assist in fulfilling these priorities while also reducing emissions and bolstering climate resilience.[98] One key outcome of that process is a technology action plan, which is a concrete strategy delineating paths towards the uptake and transfer of the technologies prioritized through the technology needs assessment.

Beyond completing technology needs assessments and technology access plans and taking steps to develop policy, legal, and regulatory frameworks conducive to the commercialization of adaptation technologies, building partnerships with industry associations can also help accelerate the development and deployment of adaptation technology solutions.

98. See https://www.ctc-n.org/technologies/technology-needs-assessments

UNDERSTANDING AND ASSESSING THE RESULTS OF ADAPTATION FINANCE

5

Photo by NASA on Unsplash

Understanding and assessing the results of adaptation finance

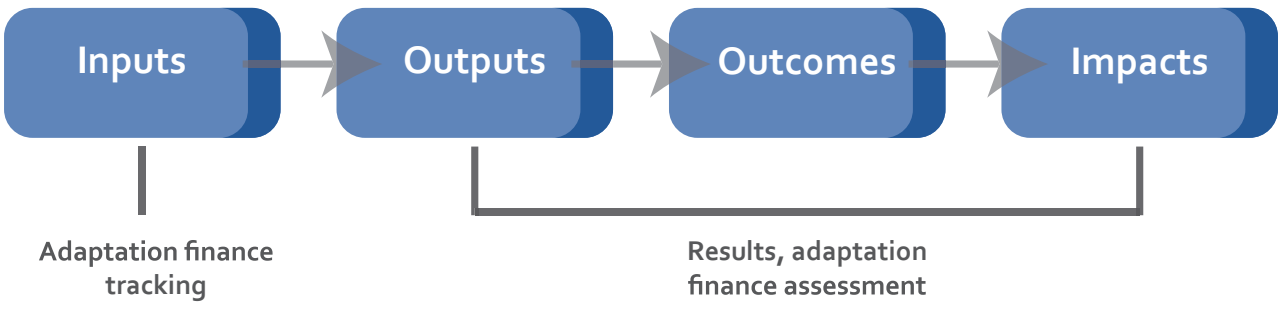
Introduction and terminology

Given the need to progressively enhance adaptation finance flows, it is important to understand how adaptation finance investments enhance adaptation action and contribute to the goals of the Paris Agreement. For example, it is important to know whether adaptation finance is reaching the most vulnerable people and whether that finance is truly reducing vulnerability and building resilience. Another aspect is whether these investments are supporting transformation with a view to reducing the primary sources of vulnerability. In order to address these questions effectively, additional terminology is needed to distinguish between related, but fundamentally distinct, types of evaluation.

The first critical set of distinctions in the evaluation landscape is the differentiation between inputs, outputs, outcomes, impacts and results. According to the OECD glossary of key terms in evaluation and results-based management, inputs are the financial, human and material resources used in an intervention.[99] Outputs are the products, capital goods or services that are produced during an intervention. Outcomes refer to the short- and medium-term effects of the intervention, while impacts are the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. Together, the outputs, outcomes and impacts of an intervention are referred to as the results (see also **Figure 6**).

This differentiation is central to evaluation work. A great deal of

Figure 6: Critical distinctions in the adaptation evaluation landscape



99. OECD. 2002. Glossary of Key Terms in Evaluation and Results Based Management, Paris: OECD Publishing. Available at http://www.oecd.org/dac/evaluation/2754804.pdf

work in the field of adaptation finance evaluation has focused on tracking with the aim of understanding the volume of climate finance flowing to adaptation activities, including the actors involved, the form of financial transfer and for what purpose that finance is intended. In this way, the evaluation of inputs is the central concern of adaptation finance tracking.

In contrast, a separate body of work exists with the aim of assessing the results of adaptation finance. The theoretical approaches and methodological tools used in this context are distinct from those used in adaptation finance tracking and will be the primary focus of this chapter.

The second critical set of distinctions in the adaptation finance evaluation landscape is between project appraisal, ex ante assessment and ex post assessment. Project appraisal is the process by which climate change adaptation projects are deemed fit to proceed to implementation. Project appraisal techniques and approaches can vary significantly and may take into account a number of factors, such the appropriateness of the inputs, the expected project results and other elements like efficiency or characteristics of the beneficiary community. Ex ante assessment, by contrast, occurs before project implementation with the intention of estimating results. Ex ante assessment may therefore form part of a project appraisal in some contexts. Finally, ex post assessment occurs during implementation and after an intervention has been completed in an effort to measure and assess the actual results of the work.

Each of these three types of evaluation provides important insights into adaptation interventions and is central to ensuring that adaptation finance meets the needs of vulnerable communities. At the same time, evaluation is an important tool for facilitating learning within the adaptation finance community in order to benefit from the experience of others, identify and scale up best practices, and learn from failures.

Developing impactful projects: project appraisal and ex ante assessment

Project appraisal is a central concern for adaptation practitioners, including those developing projects they hope to have financed and funders aiming to allocate their limited resources in an effective and impactful manner. The project appraisal process is therefore a crucial step towards pursuing adaptation action. It aims to ensure high quality and a good fit between project proposals and the scope or mandate of the potential funder. In an increasingly complex climate finance landscape, actors endeavour to

focus their resources on filling a particular gap or need.[100]

Projects need to meet quality criteria and standards, including on gender, social and environmental safeguards, community engagement, alignment with NAPs and other national plans and priorities, and stakeholder consultation and buy-in. Projects proposed also need to be explicit and comprehensive when describing how they intend to contribute to adaptation. For example, the causal pathway could be outlined using a theory of change. Robust project implementation approaches and monitoring and evaluation frameworks greatly support project appraisal and ex ante and ex post assessments.[101] Developing impactful and meaningful projects is essential for achieving reductions in climate risks.

Finally, in addition to the basic concerns of fit and quality, projects are also appraised on the basis of anticipated results and effectiveness. Ex ante assessment aims to determine the anticipated results of a project before its implementation. A results framework or theory of change of a project could serve as a basis for estimating the benefits. A **cost-effectiveness analysis** or **cost–benefit analysis** can be used to compare multiple investment options.[102] However, some impacts are difficult to quantify or not suitable for setting against specific monetary values, which limits the applicability of a cost–benefit analysis to adaptation.

Definitions

Cost-effectiveness analysis
Cost-effectiveness analysis is used to find the least costly adaptation option or options for meeting selected targets. This type of analysis is applied in assessing adaptation options in areas where adaptation benefits are difficult to express in monetary terms, including human health, freshwater systems, extreme weather events, and biodiversity and ecosystem services; but where costs can be quantified.

Cost-benefit analysis
Cost-benefit analysis involves calculating and comparing all of the costs and benefits of a given programme or intervention, which are expressed in monetary terms. The comparison of expected costs and benefits can help inform decision makers about the likely efficiency of an adaptation investment.

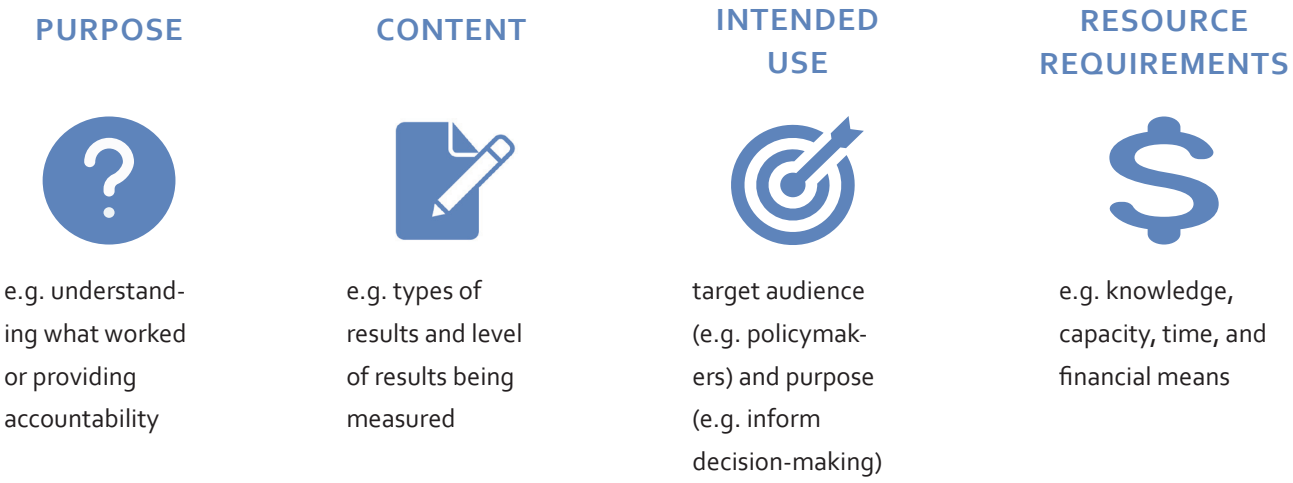
Delivering and understanding results: ex post assessment

Key considerations for the assessment of adaptation results

Climate change adaptation can take a variety of forms, occurring from the most local level to the global level and in an almost infinite number of specific contexts. Owing to the variable nature of adaptation there is no universally applicable global metric for adaptation.[103] As a result, there is no one-size-fits-all approach to assessing adaptation progress. The following four key considerations

100. Amerasinghe NM, Thwaites J, Larsem GI et al. 2017. Future of the Funds: Exploring the Architecture of Multilateral Climate Finance. Washington, D.C.: World Resources Institute. Available at https://www.wri.org/publication/future-of-the-funds
101. At the same time, it is worth recognizing that predetermined schedules can reduce flexibility in dynamic environments where quarterly planning for long periods of time is not realistic.
102. For details, see Noleppa S, Leiter T, and Bünner N. (2013). Economic approaches for assessing climate change adaptation options under uncertainty. Bonn: German Agency for International Cooperation. Available at https://www.adaptationcommunity.net/?wpfb_dl=144
103. Leiter T and Pringle P. 2018. Pitfalls and potential of measuring climate change adaptation through adaptation metrics. In: L Christiansen, G Martinez, and P Naswa (eds.). Adaptation metrics: Perspectives on measuring, aggregating and comparing adaptation results. Copenhagen, Denmark: UNEP-DTU Partnership. pp.29–49. Available at https://orbit.dtu.dk/ws/files/175846716/UDP_Perspectives_Adaptation_Metrics_WEB.pdf

Figure 7: Key considerations for developing an adaptation monitoring and evaluation system



(see **Figure 7**) should be taken into account, however, when developing an adaptation monitoring and evaluation system:[104]

(a) **Purposes of adaptation assessments**: assessments of adaptation progress have different purposes. The most common ones are tracking implementation, understanding what worked and why (e.g. to inform management and adjust actions), and providing accountability (both upward and downward accountability). In addition to these generic purposes there are more specific purposes, such as monitoring the performance of an adaptation portfolio or evaluating the impacts of an adaptation plan.[105]

(b) **Content of adaptation assessments**: a significant proportion of adaptation actions undertaken so far have focused on creating conditions for adaptation actions to take place rather than directly reducing climate risks (e.g. by building capacities and mainstreaming adaptation into planning and budgeting). It is therefore useful to distinguish between the different categories of results (outputs, outcomes and impacts) as discussed above. These categories can be seen as different stages of a change process and are also referred to as a results chain. Adaptation assessments should specify which level of results they are measuring in order to situate them within the ultimate aims of adaptation.

104. Based on Leiter T. 2016. Key considerations for monitoring and evaluation of community-based adaptation to climate change: lessons from experience. In A Joanes, S Huq, C Ochieng et al. (eds.). Enhancing Adaptation to Climate Change in Developing Countries through Community-based Adaptation. Nairobi, Kenya: African Centre for Technology Studies Press. Available at http://www.adaptationcommunity.net/?wpfb_dl=381

105. See Leiter T. 2017. The Adaptation M&E Navigator. A decision support tool for the selection of suitable approaches to monitor and evaluate adaptation to climate change. In: J Uitto, J Puri, and RD van den Berg. (eds.). Evaluating Climate Change Action for Sustainable Development. Cham: Springer International Publishing. pp.327–341. Available at https://link.springer.com/book/10.1007%2F978-3-319-43702-6

(c) **Intended use of findings**: monitoring and evaluation assessments are not done for their own sake, but rather to obtain information for practical use. Addressing essential questions like who the information is for[106] and what its intended use is[107] from the outset helps to ensure that monitoring and evaluation do not just produce reports for the shelf, but provide useful information to the intended target audiences. Adaptation assessments should also be directly linked to decision-making processes. For example, in the United Kingdom of Great Britain and Northern Ireland, the annual adaptation progress reports of the Adaptation Subcommittee are submitted to the responsible ministry, and the Parliament is then required to respond to the Subcommittee's recommendations.[108]

(d) **Resource requirements**: undertaking adaptation progress assessments requires resources (e.g. knowledge, capacity, time and financial means). Resource requirements range from minor additional costs (e.g. if a project monitors data that are being generated by its own project activities) to high resource needs (e.g. for data-intensive assessments or comprehensive evaluations). Adaptation progress assessments do not necessarily need to be expansive. For example, simple surveys of stakeholders on their work on adaptation can already provide an overview. Nevertheless, the resource requirements of monitoring and evaluation systems should be determined at the design stage to ensure that there is a realistic chance to begin operationalization and sustain it over time.

Assessing adaptation results at different scales

Since adaptation actions can take place at any geographical or administrative level, the scope of adaptation assessments varies, too. It is common to distinguish between adaptation progress assessments of:

(a) Individual interventions, such as adaptation at the community level or individual interventions and projects;

(b) Multiple interventions:

(i) Programmes, strategies or plans consisting of or leading to multiple adaptation measures;

(ii) Portfolios of adaptation projects, for example climate funds;

106. Faulkner L, Ayers J, and Huq S. 2015. Meaningful measurement for community-based adaptation. In: D Bours, C McGinn, and P Pringle (eds.). Monitoring and evaluation of climate change adaptation: a review of the landscape. New Directions for Evaluation. 147: pp.89–104.
107. As footnote 103 above.
108. United Kingdom Committee on Climate Change. 2019. Progress in preparing for climate change – 2019 Progress Report to Parliament. London, United Kingdom: United Kingdom Committee on Climate Change. Available at https://www.theccc.org.uk/publication/progress-in-preparing-for-climate-change-2019-progress-report-to-parliament/

(c) Higher-level progress or trends, that is, adaptation progress at the national, international or global scale.

This distinction is useful because adaptation assessments have different characteristics at each level. For example, assessing the results of adaptation portfolios requires applicable metrics across projects, whereas a learning-oriented assessment of a community-based adaptation requires context-specific indicators combined with a qualitative enquiry.[109] The following points outline adaptation progress assessments at different levels.

(a) **Individual interventions**: The design of an adaptation-related intervention should specify explicitly how the intervention is expected to contribute to adaptation and for whom. It is important to make explicit the assumptions that underpin the linkages between activities and results so that claims regarding the contributions of an intervention to adaptation can be examined by researchers and other third parties. It is also important to explain how adaptation is understood in a particular context in relation to sustainable development, resilience and other related concepts, considering not just climate change but other socioeconomic and environmental changes too.[110]

(b) **Multiple interventions**: Adaptation programmes or portfolios typically have an overarching results framework or theory of change, which is then specified at the level of individual interventions. A particular challenge is aggregating the results of a diverse range of adaptation actions into common figures. Climate funds have so far been using a combination of standardized portfolio-level indicators and context-specific project indicators. In a recent background paper for the Global Commission on Adaptation, Leiter et al. reviewed the indicators of climate funds[111] and found that most portfolio indicators only address the level of outputs (e.g. number of beneficiaries) and on their own cannot specify the actual outcomes of the portfolios. In case of the GCF, "forty per cent of its investments (equivalent to USD 1,363 million) so far do not have indicators that report on impacts".[112] These findings are concerning given the amount of

109. Leiter T, Olhodd A, Al Azar R, et al. 2019. Adaptation metrics: Current landscape and evolving practices. Background paper for the Global Commission on Adaptation. Rotterdam, the Netherlands and Washington D.C.: Global Commission on Adaptation. Available at https://gca.org/global-commission-on-adaptation/report/papers
110. Nightingale AJ, Eriksen S, Taylor M et al. 2019. Beyond technical fixes: climate solutions and the great derangement. Climate and Development. Available at https://tandfonline.com/doi/full/10.1080/17565529.2019.1624495
111. See footnote 103 above.
112. GCF Independent Evaluation Unit. 2018. The IEU's independent review of the GCF's results management framework: a summary. Incheon, Republic of Korea: GCF Independent Evaluation Unit. Available at https://bit.ly/2xiKryc

investment involved. To counter the weaknesses of indicators, several funds have earmarked additional resources that fund recipients can apply for to support learning. The aim is to complement indicator-based monitoring with evidence-based learning.[113]

(c) **Progress at the national level**: The Paris Agreement encourages countries to engage in adaptation planning, including monitoring, evaluation and learning.[114] More than 120 developing countries have initiated the process of formulating NAPs.[115] Accordingly, it is highly relevant for countries to assess their own progress in adapting to their respective climate risks. In that regard, more than 50 countries have begun developing country-specific national adaptation monitoring and evaluation systems, though very few of them are yet operational.[116] Examples include progress reports from Brazil[117] and the United Kingdom.[118] The latter report not only tracks progress, but also provides recommendations for improvements to be used when updating NAPs. This illustrates how national adaptation monitoring and evaluation systems can provide domestic benefits while also supporting information-sharing at the international level.[119]

(d) **Progress at the global level**: At the global level, several other international agendas, such as the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030, have set up global progress monitoring frameworks that are partially relevant to adaptation. National adaptation monitoring and evaluation systems should explore linkages and synergies between these agendas and the Paris Agreement while taking into account the differences, in particular the larger scope and breadth of NAPs under the Paris Agreement.[120] The global stocktake is also intended to assess the collective progress

113. Röhrer C and Kouadio KE. 2015. Monitoring, Reporting, and Evidence-Based Learning in the Climate Investment Funds' Pilot Program for Climate Resilience. In: D Bours, C McGinn, and P Pringle (eds.). Monitoring and evaluation of climate change adaptation: a review of the landscape. New Directions for Evaluation. 147: pp.129–145.
114. Article 7, para. 9(d), of the Paris Agreement.
115. See document FCCC/SBI/2019/INF.15.
116. Leiter T. 2017. Country-specific assessments of adaptation progress. In: The Adaptation Gap Report 2017. Nairobi, Kenya: UNEP. Available at https://bit.ly/3bNJyfS
117. Federative Republic of Brazil. 2017. National Adaptation Plan – Brazil. 1st Monitoring and Evaluation Report 2016-2017. Brasilia, Brazil: Ministry of the Environment of Brazil. Available at https://www.mma.gov.br/images/arquivo/80182/GTTm/MonitoringReport.pdf
118. As footnote 108 above.
119. As footnote 116 above.
120. Leiter T and Olivier J. 2017. Synergies in monitoring the implementation of the Paris Agreement, the SDGs and the Sendai Framework. Bonn: German Agency for International Cooperation. Available at https://bit.ly/3cVuXz0

made towards the goals of the Paris Agreement, including reviewing the adequacy and effectiveness of adaptation and support provided for adaptation[121] and will require inputs from countries and other stakeholders. The methodologies for undertaking this review are still under development.

Practical guidance for understanding the results of adaptation finance

Building on the general discussion above, this chapter offers practical guidelines for assessing the results of adaptation finance to practitioners preparing adaptation projects and project proposals and organizations and entities funding those projects.

Project, programme or portfolio level

While it is important to begin moving beyond a project-based approach towards a more programmatic approach to adaptation, it is nonetheless important to understand how funds, donors, countries and other stakeholders can better understand the impact of finance dedicated to adaptation projects. This is because projects remain the dominant approach to funding adaptation through multilateral channels and because efforts to better understand the impacts of project-based finance can facilitate a better understanding of the impacts of individual adaptation interventions more broadly.

» Develop impactful adaptation projects

Developing high-quality project proposals that specify how, for whom and under which assumptions adaptation will take place is key to achieving adaptation results and enabling independent assessments of progress. Both preparers of projects or programmes and adaptation finance contributors should keep ex post assessments in mind as interventions are being developed and not only when work has concluded. Measures to facilitate this include:

(a) A robust approach to monitoring and evaluation may be included as a specific part of a project appraisal. Adaptation actions prepared with monitoring and evaluation in mind should go beyond descriptions of vulnerability and clearly explain how the intervention in question will contribute to adaptation. Strong projects and programmes

121. Article 7, para. 14(c), of the Paris Agreement.

specify a robust theory of change, clarify assumptions and provide a framework for how progress will be monitored over time. Project and programme templates provided by multilateral climate funds or other contributor countries should facilitate these efforts and provide clear guidance to preparers.

(b) Invest in monitoring, evaluation and learning throughout the full project or programme life cycle. Invest in collecting the right data, building capacity among the project team and developing incentive structures to report on failures or unexpected results, positive or negative, and adapt accordingly. These investments should occur throughout the entire project, in order to learn and adjust, rather than simply when the project nears completion. Current examples of good practice include climate funds which have resources dedicated to supporting learning and knowledge-sharing (e.g. the "Pilot Program for Climate Resilience" and the Adaptation Fund).

» Improve the results frameworks and focus project monitoring and evaluation on outcomes rather than short-term outputs

The GCF Independent Evaluation Unit has found that 40 per cent of GCF projects do not have indicators that report on impacts.[122] These findings emphasize the strong need to improve the way project achievements are being monitored and evaluated. Measures that can be taken to improve this monitoring and evaluation include:

(a) Require projects to go beyond simple output indicators to at least the level of use of outputs, while specifying how outcomes can be evaluated during or after the project lifetime.

(b) Facilitate learning and qualitative assessments to complement number-driven monitoring and reporting. Generated knowledge should be appropriately shared and used for future project development. Respective resources need to be budgeted for or provided via special learning funds.

» Look beyond individual interventions in project appraisals

Evaluations can be useful not only for understanding the results of adaptation interventions individually, but also for assessing broader collections of work, such as programmes and portfolios, or sectoral, regional or country planning. Evaluation approaches can improve the understanding of how adaptation interventions and actors can build on one another's

122. As footnote 112 above.

progress and efforts to enhance adaptation action. Examples of steps to improve project appraisals include:

(a) Move towards programmatic approaches to adaptation and systematic project pipeline development. Individual interventions are usually not sufficient for addressing or remedying the root causes of vulnerability. Instead, multiple interventions may be needed that work in concert to build resilience in the context of sustainable development. In crafting and appraising projects, robust theories of change could support more programmatic approaches to adaptation action. Likewise, in a sectoral, regional or country context, theories of change can support project pipeline development and strategic planning in line with adaptation needs and the root causes of vulnerability.

(b) Focus on value addition at the portfolio level. In the complex adaptation finance landscape different actors have different strengths and opportunities. Project appraisal presents an opportunity to identify the ways in which a particular project or programme leverages the key strengths of an actor to add value and facilitate impact. Actors like multilateral climate funds and other contributors could craft a theory of change for their full portfolio in order to leverage strengths and consider their institutional theory of change when appraising potential investments.

» Aggregation beyond adding up simple numbers

Currently, most portfolio indicators of climate funds focus on aspects that are easy to measure and aggregate, but that do not report much about adaptation results.[123] While these indicators may be useful for upward accountability purposes, they are not sufficient for understanding whether adaptation helps to reduce climate risks and the underlying root causes of vulnerability. Climate funds and other entities that wish to adopt aggregation methodologies which better reflect adaptation results can:

(a) Provide a menu of standard indicators for adaptation that projects can choose to report, as a complement to context-specific indicators (some funds are doing this already). Do not base ex ante assessment on just one or a few very simplistic indicators like the number of beneficiaries.

(b) For aggregation, in addition to adding up a few key numbers derived from standard indicators, use a qualitative synthesis of results based on information from projects. Provide narratives to explain the numbers and highlight lessons that reoccur across projects.

123. As footnote 109 above.

National or global level

» Establish country-driven adaptation progress assessments

Most countries are ill equipped to assess the level and effectiveness of adaptation progress, leaving them with critical information gaps in their planning and adaptive management. To improve their adaptation progress assessments, governments can:

(a) Develop useful national adaptation monitoring and evaluation systems;

(b) Decide with key stakeholders on the purpose, information needs, scope and target audience for assessing adaptation progress;

(c) Compile an inventory of relevant existing data and gaps;

(d) Design a national adaptation monitoring and evaluation system;

(e) Engage stakeholders and ensure buy-in to create a useful monitoring and evaluation system rather than just a box-ticking exercise.

» Move towards substantive assessments of progress on adaptation

Making assessments of the progress of adaptation more substantive at all levels is important for ensuring that adaptation investments actually deliver adaptation actions to those most in need.[124] Actions that can be taken by funds, governments, and other relevant actors to move towards substantive assessments of adaptation progress include:

(a) Make use of findings from the project/programme and national adaptation monitoring and evaluation systems to inform planning, portfolio management and domestic policy and budgeting decisions. Use applicable information for international reporting, for example as an input to adaptation communications or biennial transparency reports to facilitate peer-to-peer learning and attract adaptation finance.

(b) Link national monitoring of progress in the implementation of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030 with adaptation progress reporting while ensuring that the full scope of adaptation is being monitored in a country-driven approach.

124. Adams KM and Falzon D (eds.). 2017. Toward Implementation: The 2017 AdaptationWatch Report. Stockholm, Sweden: Stockholm Environment Institute. Available at https://mediamanager.sei.org/documents/Publications/SEI-2017-AdaptationWatch-toward-implementation.pdf

CONCLUSION

6

Photo by Jeremy Bishop on Unsplash

Conclusion

The global adaptation finance landscape is complex: it is constantly shifting and is difficult to fully quantify. Nonetheless, certain key insights and core recommendations can be extracted to inform policymakers, businesses, practitioners and others looking to seek and provide finance for adaptation. These insights cover subtopics ranging from the broad composition of the global adaptation finance landscape to understanding the impact of adaptation finance to improving engagement with subnational governments and private sector actors when financing adaptation action.

Adaptation financing needs are projected to significantly increase over time. This signals that adaptation finance must be mobilized through all sources – domestic, international, public and private.

Multilateral climate funds will continue to play an important role in channelling finance from developed to developing countries and promoting synergies and coherence in the adaptation finance landscape. Finance mobilized through these funds remains, however, a small fraction of total adaptation finance. Ensuring sustainable support for adaptation therefore requires aligning domestic expenditure with climate change action needs so as to mobilize additional domestic and international resources complemented by finance from multilateral funds.

Financing an effective response to climate change will require a multi-pronged approach that incorporates actors from all economic sectors and segments of society. At present, international public adaptation finance flows tend to be tailored to the needs and capacities of national governments, which makes it difficult for local communities, subnational governments, private sector actors and other stakeholders to access finance for adaptation. National governments have at their disposal a range of legislative, fiscal, regulatory and other tools to redirect finance towards these actors. These efforts can be supported by donors, funds and other actors involved in the adaptation finance arena. Governments can, for example, put in place policies that direct a percentage of adaptation finance directly to the local level, while funds can put in place mechanisms that enable community-led organizations to directly access finance. Greater involvement of civil society and local-level actors will also pay dividends in terms of increasing the transparency of adaptation finance and helping to build trust among communities receiving finance.

The private sector is widely recognized as being fundamental to closing the adaptation finance gap and supplying the technologies necessary to support adaptation efforts. For the private sector, the benefits of investing in adaptation are clear, but so, too, are the barriers that continue to obstruct the path towards engaging in adaptation finance and action. Governments, climate funds, financial institutions and other stakeholders can use the tools available to them to incentivize the private sector to become more engaged in this area. Governments can, for example, de-risk investments in adaptation action or impose requirements on the private sector to invest in adaptation actions that affect businesses. Governments completing technology needs assessments and technology action plans can facilitate the commercialization of adaptation technologies by the private sector.

The limited finance currently available to support adaptation must be used wisely and efforts must be undertaken to maximize its impact. It is therefore crucial to better understand its impact by putting in place systems to evaluate and assess the outputs, outcomes and impacts of adaptation finance. While the methodologies to do so continue to develop, there are an array of good practices that can be applied at the project, programme or portfolio level, or at the national or international level, to significantly improve how adaptation finance is assessed. This could include for example, requiring projects to go beyond output indicators at the project level or developing national monitoring and evaluation systems at the national or international level.

In conclusion, the various sources, instruments, suppliers and recipients of adaptation finance are woven together in a complex tapestry that is yet to be equipped to handle the rising costs and increasing needs related to adaptation. The 2019 TEP-A threw into sharp relief both the global imperative of dramatically scaling up finance for adaptation and the existing opportunities to do so. The opportunities highlighted in this paper offer some concrete steps different actors can take towards this important goal.