



Assessing adaptation results

Aligning national M&E systems and global results frameworks

Neha Rai, Barry Smith and Nick Brooks

Issue Paper

May 2019

Climate change; Policy and planning

Keywords:

Climate change, monitoring and evaluation (M&E), climate funds, transparency, Paris Agreement, Adaptation

About the authors

Neha Rai is a Senior Researcher with the Climate Change Group at IIED. Based in the UK, she engages in IIED's work on climate finance and M&E. Her areas of technical expertise include in country work on Green Climate Fund, the political economy dynamics of international financing, and M&E of climate change adaptation.

Barry Smith is a Researcher with IIED. He currently works on M&E, climate finance, particularly Green Climate Fund and local finance research with IIED.

Nick Brooks is a consultant with IIED. He is also the director of private consulting company Garama 3c.

Corresponding author: Neha Rai, neha.raiiied.org

Produced by IIED's Climate Change Group

The Climate Change Group works with partners to help secure fair and equitable solutions to climate change by combining appropriate support for adaptation by the poor in low- and middle-income countries, with ambitious and practical mitigation targets.

The work of the Climate Change Group focuses on achieving the following objectives:

- Supporting public planning processes in delivering climate resilient development outcomes for the poorest
- Supporting climate change negotiators from poor and vulnerable countries for equitable, balanced and multilateral solutions to climate change
- Building capacity to act on the implications of changing ecology and economics for equitable and climate resilient development in the drylands.

Acknowledgments

This paper came out of the SPA programme implemented through GIZ. IIED would like to thank Andre Fabian (GIZ) and Mijako Nierenkoether (GIZ) for commissioning or reviewing the work. We are particularly grateful to our external reviewers, Christine Roehrer (Climate-Kic), Sehr Syed (DFID), Hugh King (BEIS), Zac Bull (BEIS), Elisa DiStefano (FAO) for their comments and advice.

As a service provider in the field of international cooperation for sustainable development and international education work, GIZ is dedicated to shaping a future worth living around the world. GIZ has over 50 years of experience in a wide variety of areas, including economic development and employment promotion, energy and the environment, and peace and security.

Published by IIED, May 2019

Rai, N, Smith, B and Brooks, N (2019) Assessing adaptation results: Aligning national M&E systems and global results frameworks. IIED Issue Paper. IIED, London.

<http://pubs.iied.org/10198IIED>

ISBN 978-1-78431-654-9

Cover design: IIED

Printed on recycled paper with vegetable-based inks.

International Institute for Environment and Development
80-86 Gray's Inn Road, London WC1X 8NH, UK
Tel: +44 (0)20 3463 7399
Fax: +44 (0)20 3514 9055
www.iied.org

 @iied

 www.facebook.com/theIIED

Download more publications at <http://pubs.iied.org>

IIED is a charity registered in England, Charity No.800066 and in Scotland, OSCR Reg No.SC039864 and a company limited by guarantee registered in England No.2188452.

The Paris Agreement provides a foundation for the most robust climate change transparency system to date, requesting countries to provide information on their progress to adaptation targets. Linking up country-led and global M&E systems can be mutually beneficial. It would help streamline workflows and reduce reporting burdens, minimise resource wastage and win ‘buy-in’ from the people responsible for making sure these systems work. This paper examines the M&E approaches of major climate funds and national frameworks to draw lessons for aligning country systems and fund-level results frameworks in order to assess adaptation success more effectively.

Contents

Acronyms	4	4 Examples of country-led M&E systems	29
Summary	5	4.1 M&E to assess adaptation targets in national strategies and plans	30
1 Introduction	8	4.2 Using a wide range of parameters to assess adaptation	33
2 Why harmonise global RMFs with national M&E systems?	10	4.3 Using existing data sources to reduce additional burden	36
2.1 Benefits of alignment	11	4.4 Institutionalising climate M&E in national development systems	36
2.2 Barriers to using country-led M&E systems	13	5 Linking up climate fund RMFs and country-led M&E systems	38
3 Overview of RMF approaches taken by climate funds	15	5.1 Aligning with established country systems	39
3.1 Pilot Programme for Climate Resilience	16	5.2 Supporting less established country M&E systems	41
3.2 Green Climate Fund	20	Endnotes	42
3.3 Global Environment Facility’s Least Developed Country Fund	24		
3.4 UK International Climate Finance (ICF) Key Performance Indicators (KPIs)	26		

Acronyms

BEEEI	In English: Environmental Impact Assessment Bureau (Niger)
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters (DFID)
CCCSP	Cambodia Climate Change Strategic Plan
CIF	Climate Investment Funds
ENAMMC	National Climate Change Adaptation and Mitigation Strategy (Mozambique)
GCF	Green Climate Fund
GEF	Global Environment Facility
ICF	International Climate Fund (UK)
KPI	key performance indicator
LDCF	Least Developed Countries Fund
LEG	Least Developed Countries Group
M&E	monitoring and evaluation
M&R	monitoring and reporting
MDB	multilateral development bank
MRV	monitoring, reporting and verification
MRV+	monitoring and verification plus
NAP	national adaptation plan
NDA	national designated authority
NPBMF	National Performance and Benefit Measurement Framework (Kenya)
PMF	performance measurement framework
PPCR	Pilot Programme for Climate Resilience
RBM	Results based management
RBMES	Results-Based Monitoring and Evaluation System (the Philippines)
RMF	results management frameworks
SDGs	Sustainable Development Goals
SDS	Strategy for the Development of Samoa
SIREDD	Regional Information System of Environment and Sustainable Development (Morocco)
SNMAMC	National Climate Change Monitoring and Evaluation System (Mozambique)
TAMD	Tracking Adaptation and Measuring Development
UMC	Climate Change Unit (Mozambique)

Summary

Aligning global results measurement frameworks (RMF) and national monitoring and evaluation (M&E) systems offers multiple benefits for global climate funds and developing countries. Despite considerable international attention for adaptation M&E, there is limited evidence that M&E systems are linking across levels. So they miss out on the efficiencies of using existing frameworks. An overemphasis on upward reporting to funders also risks neglecting downward accountability and adds layers to already complicated M&E requirements.

Global RMFs that are better integrated with national systems can help countries develop and entrench national climate change M&E systems, generating

country buy-in and integrating climate change M&E across government ministries to accurately report against their own priorities. But if developing countries lack sophisticated M&E systems, it is difficult for climate funds to justify linking up with national systems. To resolve this, we recommend funds invest in climate M&E or draw lessons from countries that have begun nurturing improved M&E systems. The paper examines the M&E approaches of major global RMFs and national frameworks to draw lessons for aligning country systems and fund-level results frameworks to measure adaptation success.

Diversity in global RMFs

We examine four global funds that are investing in their own RMFs to monitor and assess adaptation activities. The positives and gaps of each fund provide lessons to improve and align adaptation M&E approaches.

Table 1. Highlights and gaps in four major climate funds

HIGHLIGHTS/POSITIVES		GAPS
Pilot Programme for Climate Resilience (PPCR)	<p>PPCR has developed a monitoring and reporting (M&R) framework to track progress towards climate resilient development at national and project level. Technical assistance for setting up M&E systems beyond project implementation allows countries to develop M&E systems or integrate the PPCR RMF into existing systems.</p> <p>Capacity support in M&R guides the implementation of RMFs through trainings and workshops.</p> <p>In some pilot countries, using national data systems ensures data sustainability and usage in the long run.</p>	<p>Sustaining and operationalising M&E beyond PPCR funding is weak.</p> <p>Has created parallel duplicate systems within countries.</p> <p>Simplification and output-focused indicators.</p> <p>No comprehensive picture of long-term outcomes or impacts.</p>
Green Climate Fund (GCF)	<p>Flexible, non-prescriptive and not burdensome.</p> <p>Tracking long-term impacts is integrated into the RMF design.</p> <p>Learning-based, evolving framework</p> <p>Its readiness programme offers support for establishing M&E systems but often depends on national designated authority's discretion or request.</p>	<p>May create perverse incentives to invest in GCF priorities rather than country priorities.</p> <p>Less programmatic. Non-explicit measurements of country or portfolio-level results.</p> <p>Disconnect with national M&E systems and country monitoring indicators.</p> <p>Lacks measurement approaches for assessing long-term impacts even though long-term impact tracking is integral to design.</p> <p>Lack of capacity development for M&E.</p>

HIGHLIGHTS/POSITIVES		GAPS
Global Environment Fund (GEF)	<p>Programmatic portfolio-level M&R framework with clear, consistent definitions of methodologies, concepts and definition.</p> <p>Simplified, but not over-simplified framework.</p> <p>Uses qualitative and quantitative mixed methods; consistent with other funds.</p>	<p>Output, not outcome-oriented: few indicators help track long-term impacts.</p> <p>Minimal role in evidence-based decision making and learning.</p>
UK's International Climate Fund (ICF)	<p>Flexible, context-specific and allows aggregation: key performance indicator (KPI) 4 does not suggest preformulated indicators or prescribe specific aspects of resilience indicators.</p> <p>Uses climate data alongside resilience outcomes and wellbeing impact indicators.</p> <p>Offers guidance for using climate data, measuring project impacts and linking outcome-level resilience indicators with impact-level wellbeing indicators.</p>	<p>Complex and resource-intensive definitions of improved resilience.</p>

National M&E frameworks: evolving and showing promise

Although many national M&E systems are in their infancy, some country M&E systems have strong operational elements, demonstrating that alignment is desirable. These countries use several approaches in M&E. For example, they are

1. Developing M&E systems to assess adaptation targets set out by national strategies and plans:

These include:

- National climate change strategies and action plans: Kenya, the Philippines and Cambodia have well elaborated M&E systems to monitor the implementation and results of national adaptation strategies, policies and action plans.
- National adaptation plans (NAPs): Peru, Kiribati and Ethiopia have set up M&E systems to measure progress against their NAPs.
- Climate funds investing in M&E systems: PPCR is making efforts to invest in establishing M&E in Mozambique, Samoa and Cambodia to help them assess adaptation progress.
- Sub-national to national M&E: Morocco and Kenya are using information from subnational M&E systems to inform national climate M&E and development planning.

Funders should take their cue from these nationally-owned documents when setting country priorities and designing RMFs in line with these priorities. This will incentivise project proposals that are more closely linked with country priorities, ensuring more buy-in and political support for assessing adaptation

2. Developing nationally determined indicators that provide parameters to assess adaptation success, particularly long-term outcomes and impacts:

Countries are developing a range of generic indicators – based on the climate risks they experience – to measure resilience, vulnerability and adaptive capacity. These suggest measurement parameters that countries can draw from to assess their adaptation goal:

- Process indicators to assess how institutions and governments are managing climate risks
- Outcome indicators to assess how their institutions and governments' actions influence the vulnerability, resilience and adaptive capacity of people and systems on the ground, and
- Long-term development impact indicators that measure the success of adaptation in terms of the extent to which it helps secure development goals. And
- Indicators that explain climate risks and shocks against which the former three categories can be interpreted.

3. Using existing data sources and national repositories:

Cambodia, Kenya and Morocco are doing this to reduce the reporting burden and quickly integrate indicators into existing frameworks.

4. Institutionalising climate M&E in national development planning systems beyond donor financing: In Uganda, Columbia and Mexico, this ensures more stable and sustained M&E processes.

Recommendations for aligning global funds and national systems

Drawing from our analysis of fund-level RMFs and country-level approaches, we see two broad routes for aligning M&E processes.

Route 1: Aligning with well established existing systems

Countries that have invested in national and sectoral strategies, action plans and other ways to assess adaptation progress have relatively developed and institutionalised M&E systems. Climate funds can align with these by:

- Funding interventions that draw their objectives from country-level results frameworks, plans and strategies
- Using indicators from existing country frameworks and data sources, and
- Providing clear mandates to country focal points for programmatic reporting.

To align with established systems, funds will have to improve their RMF design to harmonise with country-led results frameworks. They can do this by:

- Emphasising alignment with country priorities in their proposal development guidelines and criteria for assessing funding to generate buy-in from M&E implementers and support the integration of climate change M&E across ministries.
- Delegating greater M&E responsibility to country focal points rather than accredited international agencies, building capacity and guiding focal points to incentivise programmatic country-level analysis of results rather than projectised assessment of adaptation outputs.
- Emphasising downward accountability rather than short-term outputs and using results for better national planning and decision making to increase country government buy-in.

Funds can also harness existing M&E systems to assess fund-level results by using national climate M&E systems to inform their choice of RMF indicators and national repositories and data systems for sustained reporting.

Countries are developing a range of generic indicators – based on the climate risks they experience and climate-relevant national development indicators – to measure resilience, vulnerability and adaptive capacity. They are also investing in ways to assess Sustainable Development Goal (SDG) progress. Global RMF indicators can draw on these contextual indicators and country capacities to align results monitoring.

The UK ICF's KPI 4 offers a useful approach for measuring resilience which other RMFs could adopt. Niger and St Vincent are investing in online data portals and data sharing protocols, which can be harnessed for climate fund reporting. Several countries – including Cambodia, Kenya and Mozambique – are building on national data systems to develop local wellbeing or resilience indicators.

While national systems can inform fund-level assessment, funds may wish to invest in impact evaluations to understand specific project-level impacts that country-level results may not unravel. This would allow them to complement portfolio-level results assessed by country governments with project-level reporting, which would be the responsibility of project management units implementing the projects.

Route 2: Supporting less established country M&E systems

Where national M&E systems are still in their infancy and less robust, global funds can play a pivotal role in nurturing them towards full operationalisation. In these cases, longer-term capacity support can help establish data systems and build up the capabilities of country institutions. Integrating adaptation M&E in existing development structures and processes can help build longevity. Funds can support countries by:

- Earmarking funds for technical assistance: To establish M&E frameworks and improve data availability, global funds can help partner countries develop their own results frameworks and include M&E capacity support as part of the country programming process.
- Improving countries' technical capacities to collect and maintain data to measure adaptation outcomes and impacts going beyond outputs and deploying readiness support to help scale up evaluation capacity.
- Integrating adaptation M&E within existing development planning systems and processes such as national budgetary systems or M&E for development to ensure they can sustain it beyond donor-funded assistance.

Introduction



There has been growing global momentum to assess whether adaptation actions are working well and what lessons can we draw from actions to improve adaptation. The Paris Agreement provides a foundation for the most robust climate change transparency system to date, requiring countries to provide information on their progress to adaptation targets. Alongside it, two other major, country-led reporting processes – the SDGs and the Sendai framework for disaster risk reduction – also tackle issues linked with climate adaptation. As global investments in adaptation actions increase, international climate funds have also established adaptation results frameworks to assess how their support is generating outcomes.

Together, these provisions represent an opportunity for the global community to monitor, report and learn from ways to deal with climate change; but they also pose risk. The opportunity comes as the international community invests in developing countries' M&E capacities. But countries face an unprecedented challenge in developing the necessary M&E systems: as many frameworks consider development and adaptation separately, there is a risk of widespread duplication of effort and double counting in reporting outcomes. The different layers of reporting burden can also consume large amounts of time and money.

Successful assessment of adaptation actions demands an improved approach that streamlines evaluation processes, nurturing M&E systems that align with each other and existing national systems. As well as reducing layers of M&E burden, aligning adaptation results frameworks is timely. Countries need to develop robust M&E approaches to assess adaptation targets. And, as they invest in revising their nationally determined contribution (NDCs) and national adaptation plans (NAPs), imposing generic results frameworks on them makes no sense. Adaptation priorities are context-specific, so it is difficult to define and monitor adaptation parameters using uniform indicator frameworks.

Several countries are designing and rolling out national-level M&E systems and frameworks that use national targets and goals to track progress towards their own adaptation goals rather than the performance of

projects funded by global partners. These country-led systems include:

- Frameworks for climate change
- Frameworks for adaptation
- Development M&E systems with integrated climate indicators
- Frameworks that assess adaptation action within the SDGs, and
- Frameworks that link sector and subnational M&E to national systems.

Approaches vary. There is diversity in contexts and a one-size-fits-all approach is neither practical nor desirable. These country-led systems can be instruments of greater effectiveness, helping to articulate national priorities while giving international funds the opportunity to align their results frameworks with them.

But multilateral climate finance channels' results management frameworks (RMFs) show limited confidence in country-defined indicators and data sources and local M&E systems.¹ Many pay little attention to downward accountability. Focusing on upward accountability and reporting, how money is spent and efficiency in project delivery, they rarely use results-based information to improve country-level decision making, ensure learning or meet countries priorities.

Country-led M&E frameworks are relatively nascent. While countries build robust systems, several capacity barriers remain to operationalising them and RMFs therefore often create new layers of reporting rather than harnessing existing less sophisticated ones.

This paper examines how four major climate funds are establishing RMFs for assessing adaptation, considering the extent to which they align, build or use national M&E systems. We also unpack how some countries are building national M&E systems and suggest how national and international frameworks can integrate and learn from each other.

Why harmonise global RMFs with national M&E systems?



Before digging deeper into approaches taken by national and global RMFs, we must first understand why we need to streamline or align M&E.

Various documents have emphasised the importance of investing in country-owned results frameworks. In 2011, countries and donors agreed to adopt “transparent, country-led and country-level results frameworks and platforms [...] as a common tool among all concerned actors to assess performance based on a manageable number of output and outcome indicators drawn from the development priorities and goals of the developing country.”¹ Donors also committed to “minimise their use of additional frameworks, refraining from requesting the introduction of performance that are not consistent with countries’ national development strategies.”³

The Paris Declaration (2005) sets out that harmonising M&E systems is a key principle for aid effectiveness. Others have acknowledged that a more coordinated approach between donor and recipient countries – through common indicator frameworks and M&E approaches – will help maximise the efficacy of aid.²

The Busan partnership for effective development cooperation in 2011³ and the Nairobi Outcome document in 2016 also emphasised the need to align with country-driven M&E systems that build on countries’ development priorities. The latter emphasised a “focus on results”, strengthening the need to “further develop, support and use country-level results frameworks and use national statistical systems to report on progress.”⁴

These international agendas provide the fundamental basis for investing in ways to align global RMFs with national climate or development M&E systems that are both country-led and country-owned. But current M&E approaches tend to show fund-level, rather than country-level results – understandable, given that that climate funds must account for how they spend donor money.

There has been notable – albeit slow – progress in national M&E system development in recent years. Several countries have invested in national evaluation systems that go beyond narrow, indicator-based methods and output-oriented techniques to measure national adaptation outcomes.^{1,5}

There is an opportunity for global RMFs to harmonise with and make use of these systems. But the successful alignment of global and national M&E systems will partly depend on the level of institutionalisation, maturity and sophistication of the national systems (as we discuss in Section 3).

2.1 Benefits of alignment

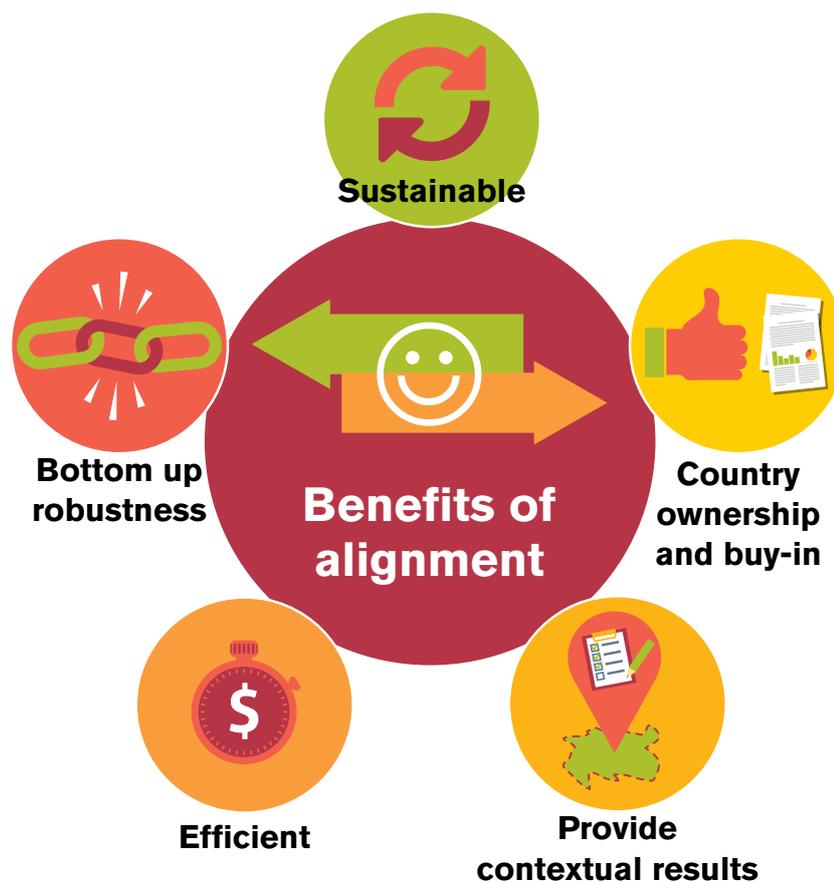
Aligning country-led and global M&E systems can be mutually beneficial. It would help streamline workflows and reduce reporting burdens, minimise resource wastage and win ‘buy-in’ from the people responsible for making sure these systems work. Donors or funds can use the apparatus of already-functioning national M&E systems to aid better and more accurate adaptation M&E. It would prevent the top-down creation of parallel and complex systems that require countries to report against myriad new indicators while also making adaptation M&E more context-specific, allowing global funds to track the impact of their investments more effectively.

It is not only about linking global to national systems. Countries will also benefit from linking across scales, depending on the robustness of M&E approaches. For example, those that strongly invest in assessing SDG progress may align their results monitoring with the SDGs; some global funds’ RMFs may also offer lessons for better alignment with country objectives.

1. More efficient M&E and reporting: Harmonised donor and government M&E systems maximise the collective efficacy of the finance flowing into developing countries.³ Aligning global RMFs with systems that are already in place can provide a logical entry point for adaptation M&E, gathering data from existing systems instead of starting from scratch. This can create financial and human resource efficiencies for national governments, leaving money to invest in other priorities, such as longer-term capability building. It would also ensure more rapid operationalisation of M&E as countries invest less time and effort in establishing new systems to ensure compliance with global RMFs.⁶

Having parallel donor and national M&E systems hinders the development of in-country institutions and arrests development of in-country M&E capacity.⁷ A lack of harmonisation between donor and national M&E frameworks overburdens government ministries with multiple data collection and reporting requirements.⁸ Linking climate adaptation M&E with existing systems and taking account of national capacities leads to more efficient results management, less resource wastage and ultimately nurtures countries’ longer-term abilities to monitor the progress of their climate commitments.

Figure 1: Benefits of aligning international results frameworks with national systems



2. Sustainability of M&E systems: Developing countries' M&E efforts are often funded through technical assistance and support and can become unsustainable once funding cycles are complete. If donors harness existing national M&E systems by drawing on indicators from country-led frameworks, using well-entrenched and operational institutions, processes and existing data sources, they can help make M&E sustainable. Investing in national systems rather than projectised M&E and seeking to nurture data collection tools and develop joint metrics can buttress national M&E systems to build longer-term capabilities and systems. This will eventually allow for the use of existing databases to assess adaptation progress across a range of reporting requirements.

3. Country ownership ensures buy-in: The extent to which development partners use country-led results frameworks when designing new interventions is a fundamental aspect of country ownership. The same is true for using countries' own results frameworks and M&E systems to track progress on results, as this minimises the use of other frameworks. Using results information helps national governments improve policies and budgets and enhances downward and upward accountability. Using this information effectively would enable countries to see a clear buy-in of M&E and results.

4. Bottom-up robustness: National to global vertical integration for M&E systems can be beneficial from a methodological perspective. Aligning global to national could also encourage vertical integration with subnational levels. Linking systems on a national and subnational level would generate and exchange information between national and subnational institutions, allowing for high resolution in M&E.^{6,9} National systems could then feed data upwards to the global level, where new adaptation indicators could be developed at aggregated levels.

5. Contextual results: Aligning global and national frameworks can allow flexible indicators that can be contextualised to country-specific reporting needs. National systems, which are better suited to national circumstances, can help global systems address contextualisation challenges. Global RMFs that have the flexibility to be aligned and better integrated with national systems can help countries develop their national climate change M&E systems and support the development of national frameworks by integrating M&E across different government ministries.¹⁰

2.2 Barriers to using country-led M&E systems

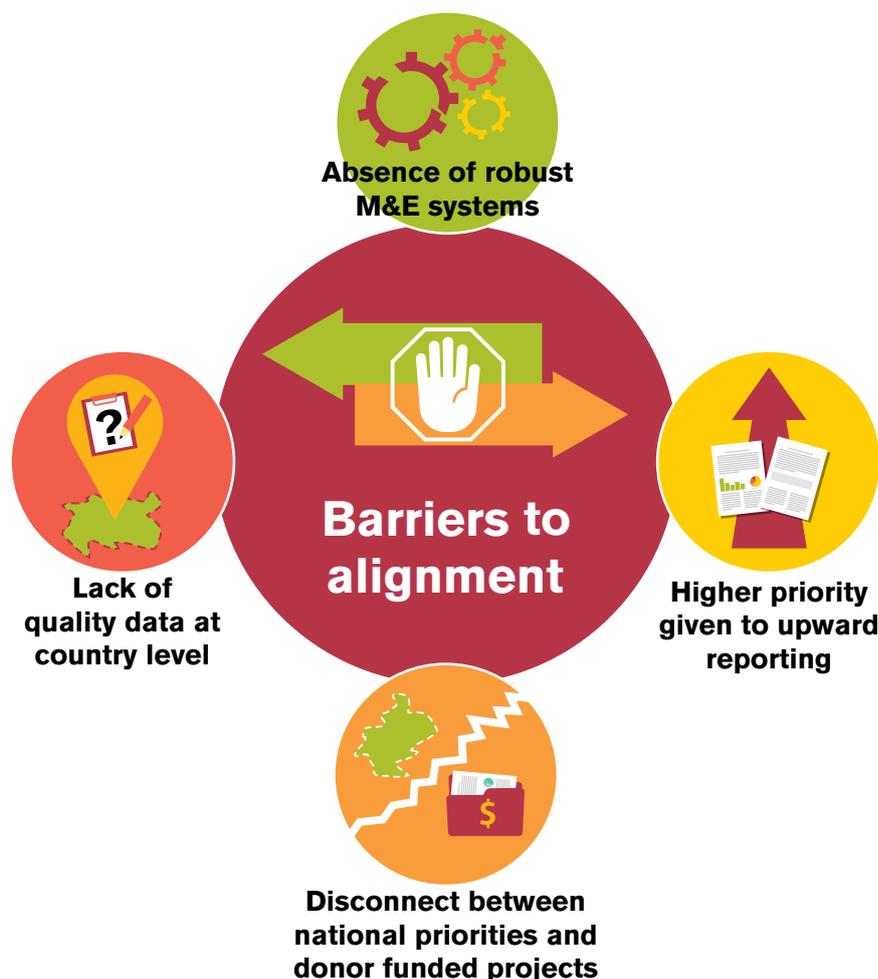
Using country-led M&E systems builds on available country priorities, data sources and statistical systems. But there is limited evidence that this is taking place.¹ There are several barriers to alignment that encourage funders to focus on their own RMFs.

1. Absence of robust, country-led M&E systems and capacities: Many countries have developed strategies, goals, targets and plans for climate and development. But not all have invested in operationalising the M&E systems illustrated in their plans and many do not prioritise setting up such systems. Reasons include set-up costs, the skills needed to measure adaptation progress and the short-lived nature of support for implementing M&E. When countries do not focus on institutionalisation, weak M&E capacity, frequent turnover, a lack of cost-effective data collection methods and low participation will hinder the sustainability of M&E systems. In the absence of robust national M&E systems, global funds tend to nurture their own reliable frameworks.

2. Greater emphasis on upward reporting and short term outputs: Because climate funds have to demonstrate upward accountability to their donors, project implementers tend to develop project-specific indicator frameworks that focus on demonstrating how well donor money is spent (short-term outputs) rather than longer-term benefits that the country and its people will experience as a result of climate investment. National-level outcome indicators cannot always provide a comprehensive picture of results achieved throughout a project cycle, especially during the early stages. But it is important to strike a balance: emphasising spending over impacts may limit the use of country-led systems for measuring fund-level impacts and can reduce granularity when assessing long-term outcomes.

3. Disconnect between national climate change priorities and donor-funded projects: Project implementers may see greater incentive in aligning their priorities with funders' strategic priorities rather than those of the countries where the investments are being made. In the absence of connections between fund-level projects and country-level climate change priorities, it can be difficult to use national targets and M&E systems for measuring fund-level results.

Figure 2: Barriers to alignment



4. Lack of quality national-level data: In the absence of sophisticated data collection methods and systems within countries, it might be difficult for climate funds to justify using national data systems. There is the associated risk that reliance on weaker and emerging national M&E systems cannot yield the quality of data required to effectively track the impact of their interventions. Development partners may also require reporting on specific indicators that are not part of national frameworks and may need information on resources spent or short-term outputs rather than long-term outcomes. A lack or shortage of data in national systems often leads development partners to rely on their own data, establishing additional layers of reporting.¹¹

5. Challenge of comparability across fund's portfolio: Evaluating climate action progress at the global fund level inevitably places an emphasis on measurable and quantifiable metrics that can be compared across portfolios and countries. The highly context-specific nature of adaptation actions, results and metrics makes such comparability extremely challenging. While using national systems allows for the contextualisation of results, it could also risk a lack of comparability across the portfolio.

6. Weak transitional capacities: There will need to be a period of transitional adjustment to shift to using national systems and frameworks when funders have to support and shore up national M&E systems. During this transition period, the national M&E systems may not be fully operational, information required for M&E of donor projects and programmes will be lost, and transaction costs will rise. To align with national systems, global funds will have to adjust their own systems and staffing, both in-country and at headquarters, to ensure that national systems are fit for purpose. Improving capacity in M&E, investing in data systems and more focus on learning and knowledge management will increase the costs of managing donor investments for the interim period.¹²

Although there are several benefits to a closer alignment of global RMFs and national M&E systems, countries and project implementers will need to make significant commitments and efforts to integrate indicators into current systems. Development partners and funds should bear these barriers and risks in mind when designing RMFs. Fund design can also play an important role in investing in long-term M&E capabilities early on to address some of these issues constraining alignment between national and international frameworks.

Overview of RMF approaches taken by climate funds

3

Global climate funds have invested considerable resources in developing their own results frameworks for M&E of adaptation activities. Here, we review those of four major climate funds.

3.1 Pilot Programme for Climate Resilience

PPCR is the adaptation window of the Climate Investment Funds (CIF), administered by the World Bank, which also serves as trustee. Using a programmatic approach to help developing countries integrate climate changes risks into their national planning framework, PPCR is implemented in 28 countries and two regions (Caribbean and South Pacific). Its results framework is an M&R framework based on four principles: country ownership, stakeholder engagement, using quantitative and qualitative methods and ensuring learning by doing.¹³

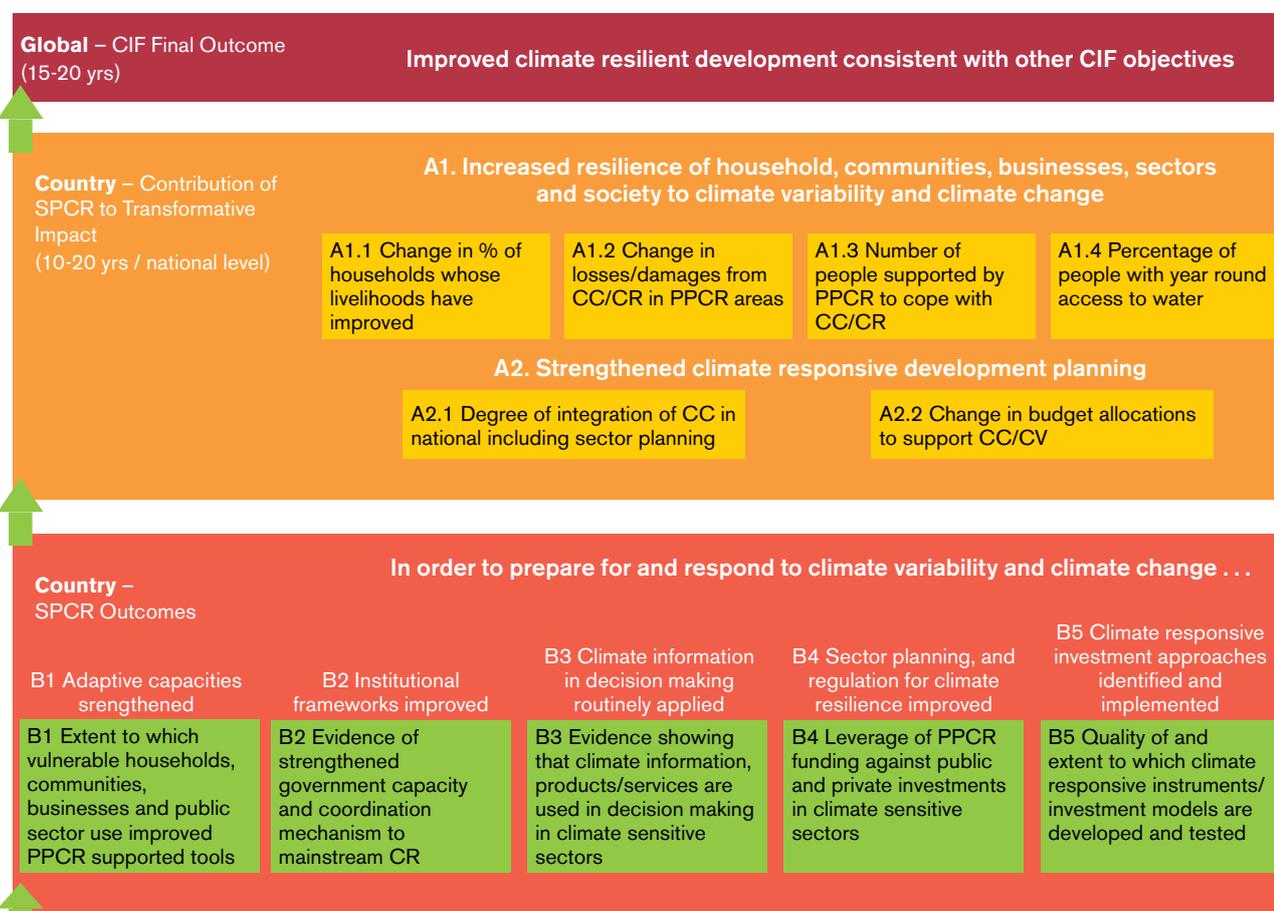
The framework features 11 indicators, five of which are core indicators. A logical framework underpins these results areas and indicators (see Figure 3), setting out

the chain of results from inputs and activities through to project outputs, programme outcomes and national/international impacts.

The PPCR M&R system is one of the first of its type for assessing adaptation finance at an aggregated level.¹⁵ Fostering a programmatic approach to climate action planning, PPCR uses its M&R systems to assess adaptation progress and ensure learning and accountability. The results framework is tracked on an annual basis from project to country level. The five core indicators include parameters that measure climate-resilient development planning, adaptive capacity, decision making and an innovative investment approach to show how far PPCR countries are taking transformational pathways (see Table 2).

There are two streams of reporting and data collection at country and MDB level.¹⁶ Each country's PPCR focal point provides country-level information, collected through stakeholder dialogues and scoring workshops, to the CIF administrative unit annually. MDBs report directly to the CIF administrative unit, providing more detailed information on project-level results.

Figure 3: Revised logical model of PPCR



Source: CIF (2016)¹⁴

Table 2: Indicator framework of PPCR

CORE INDICATORS	DATA COLLECTION TOOLS	DATA TYPE
Result area: Country level: PPCR contribution to transformative impact		
Indicator 1: Degree of integration of climate change into national, including sector, planning	National and sectoral-level scorecards	Qualitative
Indicator 5: Number of people supported by PPCR to cope with the effects of climate change	Project/programme-level data tables	Quantitative
Result area: Country Level: SPCR outcomes		
Indicator 2: Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience	National-level scorecards	Qualitative
Indicator 3: Quality and extent to which climate-responsive instruments/investment models are developed and tested	Project/programme-level scorecards	Qualitative
Indicator 4: Extent to which vulnerable households, communities, businesses and public sector services use improved PPCR-supported tools, instruments, strategies and activities to respond to climate variability and climate change	Project/programme-level data tables	Quantitative

Highlights/positives of the PPCR approach

We further unpacked the positives of the PPCR RMF to assess the extent to which it is aligning with national systems and effectively assessing adaptation results.

PPCR technical assistance allows countries to develop M&E systems or integrate the PPCR RMF into their existing systems:

CIFs are designed to support countries to develop their national systems. The PPCR results framework offers technical assistance to guide the MDBs and partner countries to develop their own results frameworks and includes M&R capacity support as part of the country programming process. This ensures that countries integrate PPCR-relevant indicators into their national M&E systems. The system is designed to operate within existing systems and avoid parallel structures. In-country support is available for countries with less advanced monitoring capacities for implementing M&R practices.

Institutionalising M&R approach within country systems:

The PPCR M&R framework uses a more learning-based approach, placing emphasis on

institutionalising M&E within country systems. As well as seeking results, M&R systems focus on nurturing monitoring mechanisms through stakeholder capacity building and learning. For example, the Nepal Climate Change Programme's RMF uses the five PPCR core indicators to track progress on PPCR and non-PPCR national adaptation projects at programme level. Samoa has also integrated the PPCR core indicators into its national planning framework for development, while Mozambique has developed a national climate change M&E system financed by the PPCR (see Box 1).

Capacity support in M&R: Unlike other funds, PPCR has historically placed some emphasis on building capacity for M&R, as well as latterly through its capacity building and training initiative, introduced in FY18.¹⁷ These include trainings, stakeholder workshops, scoring workshops and measures that support the implementation of the M&R system.

Use of national data systems in some pilot countries: Many PPCR countries are aligning with MDBs' results framework to leverage the data MDBs are reporting. But some countries are also leveraging national data sources for PPCR reporting (see Box 2).¹³

BOX 1: INSTITUTIONALISING M&E IN MOZAMBIQUE AND SAMOA

Country: Mozambique

Project Description: PPCR and DFID Support for developing National Climate Change Adaptation and Mitigation Strategy (2012) (ENAMMC)

ENAMMC has three key pillars: adaptation and climate risk reduction; mitigation and low-carbon development; and cross-sectoral issues, with a focus on developing policy and institutional response to climate change. The Climate Change Technical Assistance Project helped establish the Climate Change Unit (UMC), which developed the National Climate Change Monitoring and Evaluation System (SNMAMC). The system is fully integrated with government planning and budget systems and several government sectors use the framework to report on progress and the impacts of climate resilience-building interventions. The SNMAMC was designed for reporting both to the (national) Council of Ministers and against international requirements.

Several national indicators under SNMAMC are clearly aligned with the PPCR core indicators. For example, the indicators used to measure ENAMMC's Pillar 3 include 'stage of development of policies, strategies and action plans developed to respond to climate change'. This speaks directly to PPCR Core Indicator 1, which measures how and to what degree climate resilience considerations (risks, opportunities) are being mainstreamed. Similarly, the ENAMMC indicator 'availability of assessments of climate vulnerability and risk that supports the development of policies and planning' and is used to report against PPCR Core Indicator 2, which seeks to assess institutional capacity. ENAMMC's adoption of the scorecard approach for capturing the information shows further evidence of alignment.

The SNMAMC will also produce reports on the impacts of climate change funding, which will help coordinate reporting on PPCR progress. From the outset, the strategy envisaged integrating climate change indicators into national statistic systems and mainstreaming climate change across sectors and within district, provincial and national planning.

Mozambique's experience shows that, while international-level technical support can be instrumental for establishing national M&E, a well-considered national system from the outset will allow for dual reporting at both national and international levels by aligning the RMFs.

Country: Samoa

Funding: PPCR and The World Bank's Pacific Resilience Programme (PREP)

Description: Increased investments in disaster risk management and climate change activities in Samoa.

Samoa has fully integrated the PPCR core indicators into its national framework. In recent years, Samoa has improved its institutional framework, aligning its M&E framework with the most recent Strategy for the Development of Samoa (2016/17–2019/20) (SDS) with support from PREP and PPCR. The SDS includes a priority area on environment, which features a key outcome on climate change and development. This sets out to improve climate and disaster resilience and responsive planning by requiring all sector plans and ministry and implementing agency corporate plans to include climate and disaster resilience. The goal is 100% compliance among ministries and implementing agencies with climate and disaster resilience plans.

Alongside the SDS, the country has developed the Samoa Monitoring Evaluation Reporting Framework to help streamline sector and other coordinating groups' M&R on sector progress and generate evidence on progress towards SDS priorities. This framework reflects SDS priorities in climate change and has indicators to measure public agencies, sectors, villages and private businesses' capacity in:

- Preparedness and disaster and climate resilience
- Levels of climate and DRR investment
- Awareness levels around climate and disaster planning, and
- Compliance with climate and PRR policies and plan.

The framework also mainstreams climate resilience for other sectors and at different levels of governance. For example, it has indicators to measure levels of compliance in with climate, disaster policies in the agriculture, fisheries and infrastructure sectors and the compliance of village plans with climate and disaster resilience requirements.

BOX 2: LEVERAGING NATIONAL DATA FOR REPORTING

Niger: Stakeholders responsible for M&R have identified government institutions for specific data – for example, the National Institute of Statistics for socioeconomic data, the National Centre for Environmental and Ecological Oversight for ecological and environmental data and the Office of Environmental Assessment and Impact Studies (BEEI) for information on environmental and social safeguards. National data managers are expected to cooperate to provide data for reporting purposes. MDBs are involved in providing strategic guidance for coordinating this data cooperation

Saint Vincent and the Grenadines: Using an innovative online portal, adapted from the Caribbean Community Climate Change Centre, for M&R data collection has helped the country institutionalise data collection processes which were previously outsourced to externally funded M&R consultants. This will ensure sustainability and usage in the long run. Now individual projects can submit their reporting responses electronically and the M&R focal point can bring information from the online portal to the scoring workshops.

Source: PPCR (2017)¹³

Gaps in the PPCR approach

Sustaining and operationalising M&E: Although PPCR is an exemplar case in introducing financial assistance and measures to help countries implement the PPCR M&R system, it does not assure sustainability of the system beyond CIF funding. Countries must specifically seek financial assistance to establish an M&R system or integrate the PPCR system into their existing M&E practices. Some PPCR countries – such as Mozambique, Samoa and Nepal – have done this, asking for additional funding for technical assistance to nurture their systems. Those that do not ask for technical assistance only get support for implementing the results framework, which may not be sustainable.

Standalone PPCR RMFs can create parallel systems within countries: PPCR aims to build on national systems and align with country-led results frameworks. But in some countries, the department that hosts PPCR projects differs from the departments responsible for managing climate change M&E. In such situations, PPCR might encourage parallel RMF systems that are not aligned with each other.

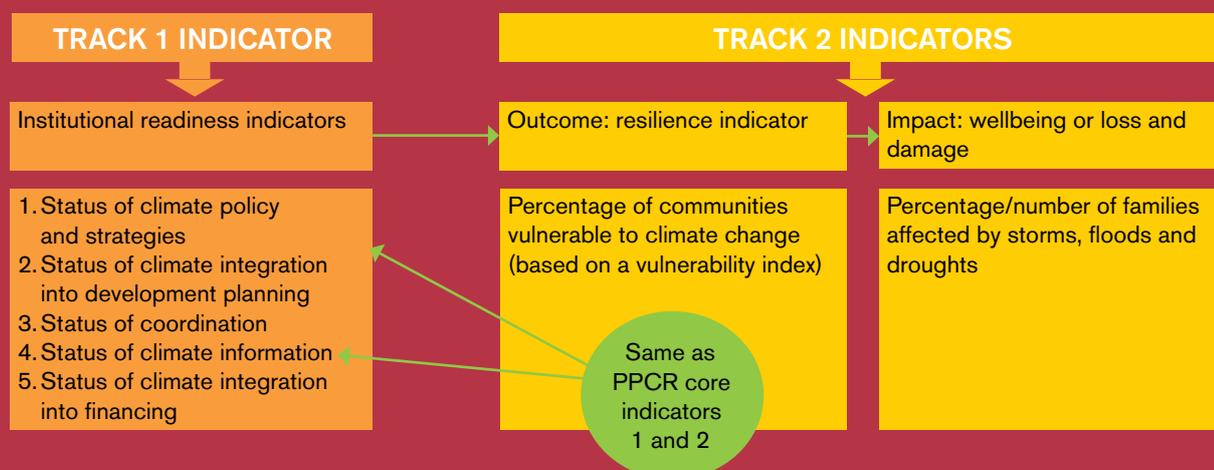
For example, **Cambodia** has developed a robust national M&E framework for climate change to monitor and evaluate the outcomes of its National Climate Change Strategic Plan and its sectoral action plans, coordinated through the Ministry of Environment's Climate Change Department. The framework uses a similar scoring approach to assess institutional readiness of the government to manage climate risks building on the Tracking Adaptation and Measuring Development Framework (TAMD) developed by IIED.¹⁸ The TAMD approach evaluates the success of climate change responses by combining how widely

and how well countries or institutions manage climate risks (Track 1) with how successful adaptation actions are in reducing climate vulnerability and encouraging development (Track 2).

To date, the government has piloted the framework in its ministries for agriculture, health and public works and transport, which are also receiving support from PPCR. But rather than build on the existing M&E framework, PPCR's technical assistance is enhancing the institutional capacities of the Ministry of Planning, National Institute of Statistics and the key sector ministries in parallel. This has led to duplication of efforts, with two separate entities scoring the same processes and coordinating the same data. Although it makes sense to invest in the capacities of these two ministries, as both have high convening authority to measure, report and coordinate data collection, there is already an established M&E unit in the Climate Change Department. It might have been preferable to align with this mechanism, which already measures a set of core indicators to assess adaptation effectiveness (see Box 3).¹

Output, not impact-oriented: PPCR core indicators include parameters that provide quantitative figures for number of people supported and number of tools used as a result of PPCR investments. Although the PPCR considers them outcome indicators, most of these are output-oriented, not outcome-focused. While they are useful for providing a comprehensive picture of results achieved, they do not give much information on the number of beneficiaries with improved resilience or reduced vulnerability. PPCR does not have any resilience-type indicators that represent outcomes involving improvements in people's or system's ability to manage and accommodate climate change hazards.

BOX 3: CAMBODIA'S NATIONAL M&E FRAMEWORK FOR CLIMATE CHANGE AND PPCRS RMF IN CAMBODIA



Source: Rai et al. (2015)¹⁹

Risk of simplification: The evolution of PPCR's RMF experience shows that many complex indicators can overtax the capacity of national M&E systems. This has led to the simplification of its RMF from a comprehensive M&E frameworks to M&R framework that pay less attention to assessing long-term results. In practice, streamlining the number of indicators can be advisable to avoid needless complexity and overburdening of countries. However, there remains a risk of simplification. To avoid this, funds should include impact indicators alongside suggestive methodologies for measurement and indicative data sources that can draw proxies from national systems.²⁰ To encourage building longer-term evaluation capability, particularly around tracking outcomes and impacts,²¹ they could make this an explicit component of the investment. In some countries – such as Cambodia, Mozambique and Nepal – the PPCR's technical assistance has attempted to build local M&E capacities, while other global initiatives such as the CLEAR initiative²¹ have attempted to build in-country evaluative capacities.

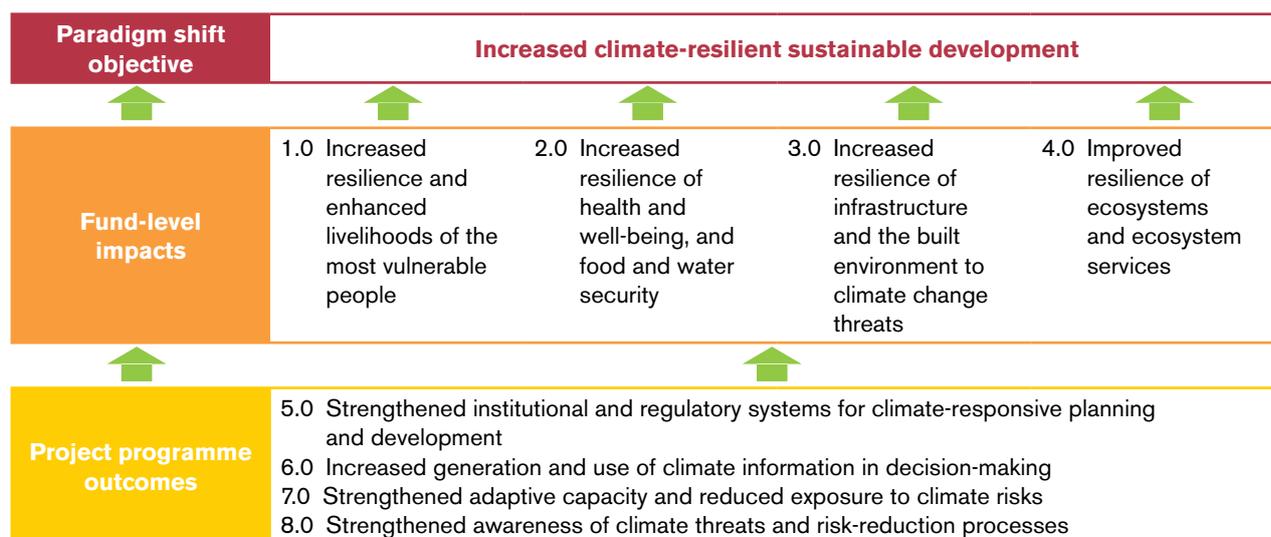
3.2 Green Climate Fund

The GCF was set up to promote a paradigm shift to low-emission and climate-resilient development in developing nations. The fund's RMF therefore seeks to ensure it contributes to this long-term objective. The fund's design also incentivises how projects are selected or shaped at country level.

The GCF's RMF aims to enable effective M&E of the outputs, outcomes and impacts of its investments and portfolio as well as its organisational and operational effectiveness.²² Lessons learned from the RMF should feed back into the design, funding criteria and implementation of GCF activities.

There are 43 indicators, 17 of which measure adaptation. All are based on the logic model (see Figure 4), reflecting how GCF activities contribute to project or programme-level outcomes that lead to fund level impact and finally a paradigm shift in that area. Results are associated with indicators which are specified in the fund's performance management framework (PMF).

Figure 4: The Green Climate Fund's adaptation logic model



Source: GCF/B.07/04/ Annexes II-III and GCF/B.07/11/ Decision B.07/04

Like PPCR, GCF's RMF does not mention specific indicators for activities – these will vary by project, developed by the accredited entities implementing the project. The GCF's RMF is also aligned with other GCF frameworks – including its investment, monitoring and accountability and risk management frameworks – that support projects' preparation and approval process, so countries align with all these documents while developing proposals.²³

PMF core and impact indicators (see Table 3) inform the investment criteria – such as the fund's impact potential – which in turn guide project design. The GCF's monitoring and accountability framework guides RMF implementers with tools, responsibilities and ways to report against the results framework. It also stipulates the responsibilities of accredited entities, which include an annual performance report aligned with results indicators providing a narrative on implementation progress, an interim evaluation report and a final country evaluation report.

Highlights of the GCF approach

The GCF's results framework is still in its infancy, but we can draw some positives from its design and future applicability.

Flexible and not burdensome: GCF entities can report on a flexible range of indicators that correspond to the fund's results areas. Project implementers are expected to report against a maximum of ten indicators.²² With no prescribed output indicators, stakeholders can choose the output indicators they report against on a project basis.

Tracking long-term impacts is integrated into the RMF design:

In the longer term, the success of adaptation will be measured in terms of the extent to which it helps secure development goals and maintain and improve human and ecological wellbeing in the face of climate change. The GCF's RMF includes indicators that track aspects of human and ecological wellbeing, such as number of people killed or affected by climate hazards; economic losses from climate hazards; and number of people with adequate food security and access to reliable and safe water.

A learning-based, evolving framework: GCF regularly updates the framework using a trial-and-error approach. In its current form, it has drawn from a wide range of other mature climate funds' results frameworks, giving an opportunity to learn from and avoid past mistakes.

Support for countries to establish adaptation M&E framework or system:

Under the GCF's Readiness and Preparatory Support Programme, countries are eligible to request support via their national designated authority (NDA) for establishing a framework or system to measure adaptation planning and effectiveness and develop metrics, indicators and methods for monitoring the adaptation planning process and/or adaptation outcomes defined.²⁵ However, these requests often rely on the discretion of the NDA, who may not prioritise M&E as the country's most urgent readiness need.

Table 3: The Green Climate Fund's Adaptation Performance Measurement Framework

EXPECTED RESULT	INDICATOR	DATA COLLECTION	DATA TYPE
Result area: Paradigm shift			
Increased climate-resilient sustainable development	Indicator 1: Degree to which the fund is achieving a climate-resilient sustainable development impact	Information gathered from projects/programmes documentation	Qualitative and quantitative
Result area: Fund-level impacts			
	Total number of direct and indirect beneficiaries; number of beneficiaries relative to total population	Recent data from national systems (if available) Data from project-specific surveys	Quantitative
1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions	1.1 Change in expected losses of lives and economic assets (US\$) due to the impacts of extreme climate-related disasters in the geographic area of the GCF intervention 1.2 Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.) 1.3 Number of GCF-funded projects/programmes that support effective adaptation to fish stock migration and depletion due to climate change	Household survey of men and women	Quantitative
2.0 Increased resilience of health, wellbeing, food and water security	2.1 Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases 2.2 Number of food-secure households (in areas/periods at risk of climate change impacts) 2.3 Number of males and females with year-round access to reliable and safe water supply despite climate shocks	Household survey of men and women	Quantitative
3.0 Increased resilience of infrastructure and the built environment	3.1 Number and value of physical assets made more resilient to climate variability and change, considering human benefits	Household survey of men and women	Quantitative
4.0 Improved resilience of ecosystems and ecosystem services	4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change 4.2 Value (US\$) of ecosystem services generated or protected in response to climate change	Household survey of men and women	Quantitative

EXPECTED RESULT	INDICATOR	DATA COLLECTION	DATA TYPE
Result area: Project/programme outcomes			
	Number of technologies and innovative solutions transferred or licensed to promote climate resilience as a result of GCF support		
5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	5.1 Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation		
	5.2 Number and level of effective coordination mechanisms		
6.0 Increased generation and use of climate information in decision making	6.1 Use of climate information products or services in decision making in climate-sensitive sectors		
7.0 Strengthened adaptive capacity and reduced exposure to climate risks	7.1 Vulnerable households, communities, businesses and public sector services' use of GCF-supported tools, instruments, strategies and activities to respond to climate change and variability		
	7.2 Number of males and females reached by (or total geographic coverage of) climate-related early warning systems and other risk reduction measures established/strengthened		
8.0 Strengthened awareness of climate threats and risk-reduction processes	8.1 Number of males and females made aware of climate threats and related appropriate responses	Household survey of men and women	Quantitative

Source: GCF (2014)²⁴

Gaps in the GCF approach

Despite these positives, GCF has struggled to fully integrate lessons from some of the funds.

Results area of the fund may create perverse incentives to invest in GCF – rather than country – priorities:

One of the main positive findings of the GCF's independent review²³ was that its RMF helps countries focus their project proposals on GCF results. Conversely, we can also view this as a negative, as GCF's results areas are based on the fund's strategic impact areas, not those countries prioritise in their national climate change strategies and NDCs. Project proponents must make clear in their proposal how a project aligns with country priorities.²⁶ But the pre-formulated indicators under the adaptation PMF on

increased resilience focus on specific areas – such as health, infrastructure, ecosystem-based services, water and food security – which may skew the prioritisation of projects towards GCF objectives rather than country objectives, needs and programmes. Ideally, countries should be allowed to define their own measures of improved resilience according to the goals they have set in their national strategies and the projects they have prioritised in their specific contexts. A strong example of this is the UK's ICF KPI 4, which allows for a more flexible, targeted and country-driven approach to adaptation M&E (see 3.4 below).

Measuring country or portfolio-level results could be more explicit: GCF has taken a less programmatic approach to results measurement than PPCR. Different entities report on different projects through separate

RMFs rather than together as a country. The role of the GCF's central coordinating body between the fund and the country – the NDA or focal point – is limited beyond granting no-objection letters. Although NDAs are mandated to ensure that countries own and use the results of GCF investments, this is not evident, primarily because accredited entities are responsible for project or programme-level results management and there is no coherent country-level reporting of GCF outcomes. At country level, the initial monitoring and accountability framework for accredited entities encourages NDAs to organise participatory reviews, but there is little in terms of substantive guidance and the extent to which that is happening is unclear. Furthermore, there is no practical direction on how to bring together the M&E processes at different result levels to assess impacts at a higher level.

Disconnect with national M&E systems and country monitoring indicators: The GCF's results reporting systems do not align with national M&E systems or the indicator frameworks designed to assess the outcomes of national climate change strategies.²³ To increase the usability of indicators, country governments could also use some of the fund-level indicators to assess national adaptation performance, ensuring more buy-in for collecting this information. Several indicators under the PPCR and GEF RMFs explicitly address the national level and others have the potential for use at national level. Unfortunately, the GCF RMF does not currently capture these indicators.

Lack of measurement approaches to assess long-term impacts: The GCF's results framework includes indicators that track aspects of human and ecological wellbeing, ensuring it assesses long-term impacts. But it lacks clarity on how project implementers should assess long-term impacts in the absence of adequate protocols and definitions for impacts and outcomes, most projects report on outputs, not impacts. There is little clarity on key concepts, such as how to define resilience and paradigm shift or how to link development projects to climate-resilient outcomes. So, many funding proposals fail to mention impact indicators or establish causal linkages between impacts and climate resilience; and many gaps remain. Linking up with national systems can also ensure the use of country-defined measures of resilience to establish contextual impact indicators and therefore monitor the long-term impacts of GCF projects.

Lack of capacity development for M&E: PPCR offers financial support and technical assistance to establish M&E systems or integrate its RMF into the existing systems. GCF, on the other hand, makes very little provision for capacity development and support for implementing its RMFs. And despite their lack of a clear understanding of how to coordinate their M&E

responsibilities, no NDA has sought to use readiness funds to develop M&E capacity.

3.3 Global Environment Facility's Least Developed Country Fund

The GEF adopted OECD's definition of results-based management (RBM) as a "management strategy focusing on performance and achievement of outputs, outcomes and impacts".^{27,28} The purpose of RBM is to "improve management effectiveness and accountability" by "defining realistic expected results, monitoring progress toward the achievement of expected results, integrating lessons learned into management decisions and reporting on performance".²⁸

As one of the oldest funds, GEF's approach has evolved over time. A 2013 independent review found that the "GEF's RBM system was overly complex and imposed a considerable burden on the agencies responsible for tracking project results". In 2014, the GEF's LDC Fund (LDCF) revised its Special Climate Change Fund's RMF to form the basis for portfolio-level monitoring and reporting.²⁹ This resulted in a simpler framework with fewer indicators (reduced from 52 to 14), seven of which request gender-disaggregated data.

GEF created the LDCF to implement the national adaptation programmes of action in LDCs. Each national programme has M&E integrated within it.³⁰ Like PPCR and GCF, GEF excludes output measurement at portfolio level. Its broad set of parameters includes number of direct beneficiaries, type and extent of assets strengthened and/or better managed to withstand the effects of climate change and population benefiting from the adoption of diversified, climate-resilient livelihood options.

Highlights of the GEF approach

Based on long-term experience of experimenting with RMFs, the most recent version of the GEF's RBM framework demonstrates several positive elements:²⁹

Portfolio-level monitoring and reporting on progress and outcomes: Similar to PPCR, the GEF's framework has evolved into a more programmatic portfolio-level M&R framework with clear, consistent definitions of methodologies, concepts and definition.

Simplified, but not over-simplified: Although it still has 14 indicators, it has been simplified over the years. Like PPCR, it no longer includes pre-formulated prescriptive outputs. It is consistent with the PPCR, GCF RMFs and UNFCCC requirements to allow uniformity and avoid subjecting countries to onerous new indicators. For example, it captures the two

Table 4: Global Environment Facility's adaptation programme results framework

OBJECTIVE	INDICATORS	OUTCOME
Result area: Increase resilience to the adverse impacts of climate change in vulnerable developing countries		
1. Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	Indicator 1: Number of direct beneficiaries	1.1 Vulnerability of physical assets and natural systems reduced
	Indicator 2: Type and extent of assets strengthened and/or better managed to withstand the effects of climate change	1.2 Livelihoods and sources of income of vulnerable populations diversified and strengthened
	Indicator 3: Population benefiting from adopting diversified, climate-resilient livelihood options	1.3 Climate-resilient technologies and practices adopted and scaled up
2. Strengthen institutional and technical capacities for effective climate change adaptation outcome	Indicator 5: Public awareness activities carried out and population reached	2.1 Access to improved climate information and early-warning systems enhanced at regional, national, subnational and local level
	Indicator 6: Risk and vulnerability assessments and other relevant scientific and technical assessments carried out and updated	
	Indicator 7: Number of people/geographical area with access to improved climate information services	2.3 Institutional and technical capacities and human skills strengthened to identify, prioritise, implement, monitor and evaluate adaptation strategies and measures
	Indicator 8: Number of people/geographical area with access to improved, climate-related early-warning information	
3. Integrate climate change adaptation into relevant policies, plans and associated processes environment	Indicator 9: Number of people trained to identify, prioritise, implement, monitor and evaluate adaptation strategies and measures	3.1 Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes established and strengthened
	Indicator 10: Regional, national and subnational institutions' capacities to identify, prioritise, implement, monitor and evaluate adaptation strategies and measures	
	Indicator 11: Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes	3.2 Systems and frameworks for the continuous monitoring, reporting and review of adaptation established and strengthened
	Indicator 12: Regional, national and sector-wide policies, plans and processes developed and strengthened to identify, prioritise and integrate adaptation strategies and measures	
	Indicator 13: Sub-national plans and processes developed and strengthened to identify, prioritise and integrate adaptation strategies and measures	
	Indicator 14: Countries with systems and frameworks for the continuous monitoring, reporting and review of adaptation	

Source: GEF (2014)²²

objectives of the NAP process: “to reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience; [and] to facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, development planning processes and strategies, within all relevant sectors and at different levels, as appropriate.” The good mix of indicators for measuring against a range of objectives in its indicator framework shows it has not been oversimplified.

Qualitative and quantitative mixed methods, consistent with other funds: The GEF RBM revisions have introduced qualitative tools and methodologies that go beyond quantitative outputs. The revised tracking tool introduces four qualitative scoring methodologies that are consistent with the PPCR and TAMD frameworks.³¹

Gaps in the GEF approach

Output, not outcome-oriented: Although it clearly mentions expected outcomes, very few GEF indicators help track long-term impacts. There are a wide range of indicators for measuring outcomes, but the extent to which some of them capture results at outcome and impact levels is arguable.²⁷ For example, the GEF associates indicators measuring the number of direct beneficiaries and the type and extent of assets strengthened with outcomes and uses them as a proxy for the number of people whose vulnerability to the adverse effects of climate change is reduced as a result of an LDCF-financed adaptation project. These do not measure whether people’s vulnerability has been reduced. Both could be output – not outcome – indicators, capturing support to beneficiaries and material interventions to improve physical or other infrastructure that are delivered as intervention outputs.

Minimal role in evidence-based decision making and learning: Like most other funds, the GEF’s RMF mentions learning. But this is mainly in the form of statements of intent to undertake knowledge management, production and sharing. There is little detail on how learning will be promoted and pursued. So, although the GEF’s RBM system has been instrumental in supporting reporting, accountability and communications, its role in evidence-based decision making and learning has been limited.³²

3.4 UK International Climate Finance (ICF) Key Performance Indicators (KPIs)

The UK ICF’s KPIs are designed to report results achieved from ICF spend by tracking progress towards expected outcomes and overall performance. The KPIs are a comprehensive set of indicators designed to monitor the impacts of diverse climate change programmes and help develop an evidence base for climate finance policy and programme decision making. They monitor results at both output (KPI 1: people supported to adapt to effects climate change) and outcome level (KPI 4: people whose resilience has been improved). The KPIs disaggregate the data collected along four axes – sex, disability, geography and age – and have informed the knowledge and result management systems of CIFs, the GEF, GCF and MDBs.

KPI 4: measuring resilience in the ICF

One of the challenges associated with assessing climate fund outcomes is a lack of understanding around how to measure or conceptually define improved resilience/reduced vulnerability as an outcome of climate fund investment. As a result, many funds tend to measure relatively short-term output indicators to assess improved resilience in terms of number of beneficiaries and extent of assets strengthened or made more resilient.

KPI 4 – the number of people whose resilience has been improved as a result of ICF – is the most relevant indicator for measuring resilience. It explicitly advocates identifying context-specific indicators based on factors that influence resilience with beneficiaries. Project staff and beneficiaries agree the number of indicators to use and the nature of changes needed to show that resilience has improved, according to their context.

Defining ‘improved resilience’ in reference to contextual indicators can be a challenge, but there are well elaborated methodologies and guidance to help project implementors develop them. Once countries define improved resilience themselves, they can use context-specific proxies of vulnerability or resilience that they are already measuring within national systems instead of pre-formulated indicators.

Table 5: ICF key performance indicators

KPI	INDICATOR
1	Number of people supported to cope with the effects of climate change
2	Number of people with improved access to clean energy as a result of ICF programmes
3	Number of forest-dependent people with livelihoods benefits protected or improved as a result of ICF support
4	Number of people with improved resilience as a result of ICF support
5	Number of direct jobs created as a result of ICF support
6	Change in greenhouse gas emissions as a result of ICF support
7	Level of installed capacity of clean energy as a result of ICF support
8	Number of hectares where deforestation and degradation have been avoided through ICF support
9	Number of low-carbon technologies supported (units installed) through ICF support
10	Value of ecosystem services generated or protected as a result of ICF support
11	Volume of public finance mobilised for climate change purposes as a result of ICF funding
12	Volume of private finance mobilised for climate change purposes as a result of ICF funding
13	Level of integration of climate change in national planning as a result of ICF funding
14	Level of institutional knowledge of climate change issues as a result of ICF support
15	Extent to which ICF intervention is likely to have a transformational impact

Source: Summary of ICF key performance indicators³³

This is one indicator that does represent outcomes involving improvements in people's or systems' ability to manage and accommodate climate (change) hazards. International climate funds can learn a lot from KPI 4's strengths and weaknesses.³⁴ ICF's updated methodology includes guidance for ensuring consistency in defining climate resilience while retaining the flexibility of KPI 4 across different contexts. It suggests that ICF programming should adopt the 3As model, based on a set of interrelated resilience capacities to **adapt** to, **anticipate** and **absorb** climate extremes and disasters.³⁵

Highlights of the KPI 4 approach

Flexible, context-specific and allows aggregation:

KPI 4 does not suggest preformulated indicators or prescribe specific aspects of resilience indicators. Projects are free to identify context-specific resilience indicators for KPI 4 reporting and can determine their criteria for establishing whether resilience has improved, according to context and circumstance. This allows them to base improvements in resilience on number of people reporting, or associated with, changes in those indicators in a particular direction. This approach may offer some useful insight from a methodological

perspective. It also gives flexibility within a broader M&E system to identify and develop resilience indicators measured at project outcome level, allowing the use of different approaches and methodologies according to context and capacity.

Using climate data alongside resilience outcomes and wellbeing impact indicators:

ICF guidance provides for using climate data, measuring project impacts and linking outcome-level resilience indicators with impact-level wellbeing indicators. Analysing climate data alongside context-specific resilience indicators allows us to measure development performance against a backdrop of climate change, which we can interpret as a measurement of adaptation success (see Box 4).

Expressed in terms of individual resilience and disaggregated by age, disability, geography and age:

Measuring the number of resilient individuals makes the indicator more measurable and comparable across a large portfolio of programmes. It is easier to draw proxies of individual-level resilience indicators from national databases than household or community-level resilience indicators. They are also easier to disaggregate by gender, age and so on.

BOX 4: USING ICF INDICATORS IN MALI AND SENEGAL UNDER BRACED

A DFID Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) project in Senegal and Mali aims to build resilience by enabling communities to implement public good investments that are prioritised and funded through locally managed climate adaptation projects. All BRACED projects must assess adaptation against the ICF's KPI 4 and work with beneficiaries to develop context-specific project outcome indicators, based on bespoke dimensions of resilience.² Implementing partners report against these indicators to demonstrate changes in resilience attributed to the project.

In Mali and Senegal, they use information on climate risk management from IIED's TAMD scorecards and household survey data, theories of change, resilience scales and self-assessment to measure the performance, outcomes and impact of community-managed funds. Adaptation parameters developed and used in these countries include:

- Process indicators to measure institutional performance of community-managed funds in terms of using climate information, integrating climate into planning, coordination, financing and budgeting, participation and awareness among stakeholders
- Outcome indicators to measure improved resilience of beneficiaries in livestock communities; access to climate information through forecast, radio, TV, newspaper and the meteorological department; and access to and management of natural resources including dry pastures, agricultural land, flooded pastures, fishing waters.
- Impact indicators to measure improved beneficiary wellbeing in terms of household income, nutritional status and herd numbers.

Source: Fisher and Anderson (2018)³⁶

Gaps in the KPI 4 approach

Possibly complex and resource-intensive definitions of improved resilience: The principle behind KPI 4 is relatively simple, but defining improved resilience through contextual indicators can be challenging and the participatory approach can make reporting against it resource-intensive. But using the 3As resilience model, as suggested in recent guidance, can help get around these issues.³⁵

Examples of country-led M&E systems

4

Several countries have developed M&E systems for climate change adaptation to gather robust information on the effectiveness of adaptation interventions and policies. Country-led M&E frameworks are results framework developed by countries to measure their own national targets and goals rather than one developed by global partners. They include frameworks for climate change and adaptation, development M&E systems that integrate climate indicators within them and frameworks that link sector and subnational to national systems.

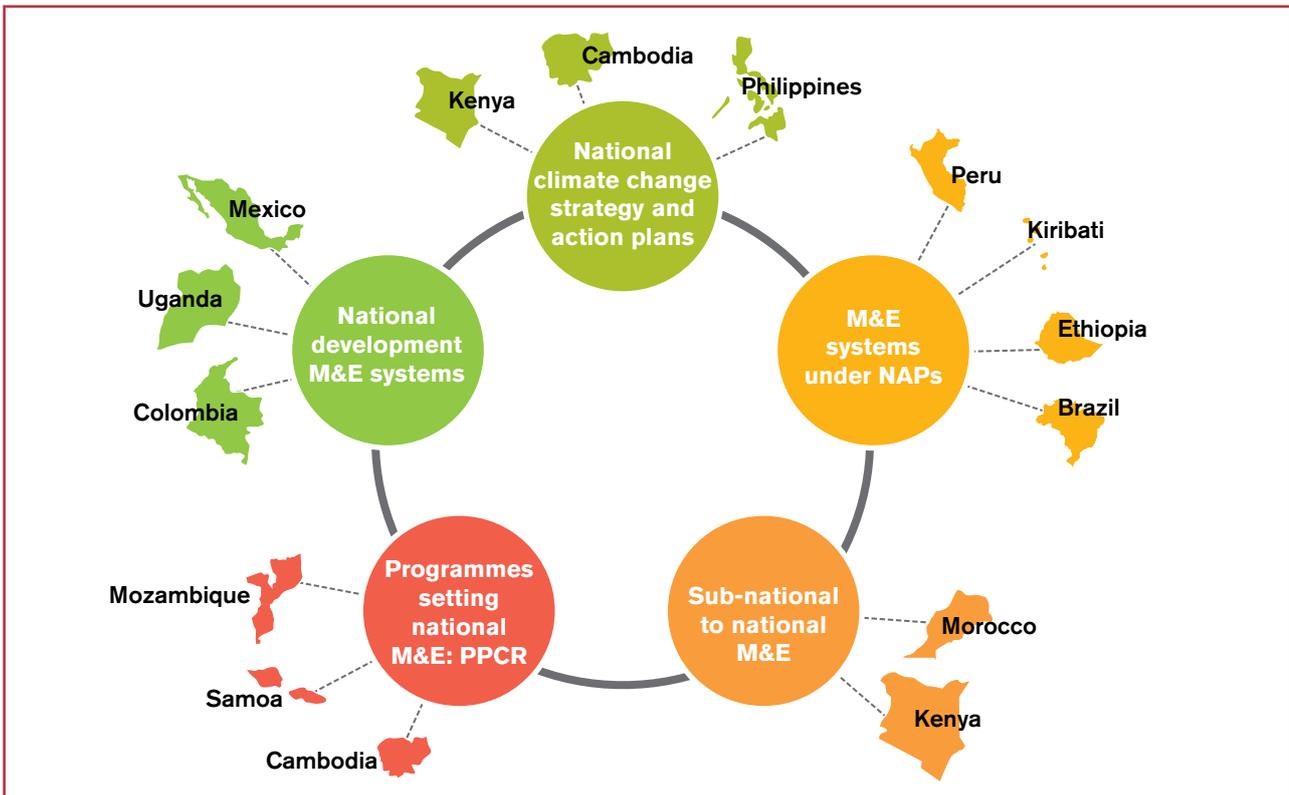
While national-level adaptation M&E is relatively nascent, it is evolving quickly, revealing new opportunities and challenges. By building on country-led systems, development partners can ensure that their actions and intentions align with country priorities and help build countries' capacities to monitor and evaluate. This section offers examples and characteristics of those operational elements to demonstrate why alignment is desirable.

4.1 M&E to assess adaptation targets in national strategies and plans

There are many reasons countries establish country-level M&E systems for adaptation.

- In response to **UNFCCC requests**³⁷ for reports on adaptation M&E. These have incentivised countries to invest in the following country-level systems:
 - National communications:** Guidelines encourage Parties to provide information on and evaluate strategies and measures for adapting to climate change³⁸
 - NAP technical guidelines:** The LDC Expert Group (LEG) mentions M&E as one of the key elements of NAP technical guidelines³⁹
 - Paris Agreement:** Article 13.8 states that Parties shall include “monitoring and evaluating and learning from adaptation plans, policies, programmes and actions” and can report this information under the framework for transparency of action, and
 - NDCs:** Nearly 50% of countries that mention adaptation refer to the importance of M&E.⁴⁰
- To monitor the implementation and results of NAPs, climate change strategies and action plans. Figure 5 shows the different types of M&E systems countries are developing to assess results from adaptation assessments.

Figure 5: National M&E approaches



4.1.1 National climate change strategies and action plans

Countries have set up a wide range of M&E systems to monitor the implementation and results of national adaptation strategies, policies and action plans.

Kenya has developed a national monitoring, reporting and verification (MRV) framework to track the results of mitigation and adaptation actions under its national climate change action plan (2013–17). The plan describes Kenya's integrated National Performance and Benefit Measurement Framework (NPBMF) for measuring, monitoring, evaluating, verifying and reporting results of mitigation actions, adaptation actions and the synergies between them. The NPBMF uses TAMD to combine MRV of greenhouse gas emissions, mitigation activities and adaptation M&E into an MRV+ system. This is a relatively novel approach; Kenya was the first developing country to design a combined MRV+ system encompassing mitigation and adaptation actions and interactions between what are traditionally discrete thematic areas.⁴¹ In developing MRV+, Kenya explored potential synergies and trade-offs across multiple sectors. Applying criteria for mitigation, adaptation and development, this screening process included synergy indicators to measure and evaluate benefits and harm and help ensure the government could take a suitable response to maximise positive impacts while minimising undesirable impacts. Scoring each proposed climate action against these criteria for positive and negative impacts provides a view of potential synergies and trade-offs for each action.⁴² The MRV+ system has several other features that merit further investigation, such as subnational-to-national aggregation and observing changes in institutional capacity.

The **Philippines'** M&E system focuses primarily on evaluating the outcomes of its adaptation plans. Its Results-Based Monitoring and Evaluation System (RBMES) measures the results of implementing its National Climate Change Action Plan (2011). The Climate Change Commission, responsible for developing and implementing the RBMES, used a participatory and iterative processes to set measurement and evaluation priorities, construct an advanced theory of change, select indicators that draw from existing and new sources and gauge stakeholder capacity to report on indicators and analyse results.⁴³

In 2013, the **Cambodian government** developed the Cambodia Climate Change Strategic Plan (CCCSP) (2014–2023), its central umbrella policy for tackling climate change impacts. The CCCSP makes explicit provision for establishing a national framework for M&E of climate change activities covering both adaptation and mitigation, with the vision of integrating the framework into national and subnational development

planning processes.⁴⁴ It states that the M&E system must be mainstreamed into national, sectoral and subnational development planning and is expressly linked to the National Strategic Development Plan and sectoral development plans. The government will integrate procedures and indicators for tracking climate change responses into the national M&E system. This is the main reference point for tracking the effectiveness of climate change sectoral strategic and action plans, which will implement adaptation activities – including M&E – at both national and subnational levels.⁴⁴

4.1.2 National adaptation plans

Countries have set up M&E systems to measure progress against their NAPs. In its 2012 technical guidelines for the NAP process, the LEG recommends countries establish systems as early as possible, encouraging them to build capacities to facilitate progress on adaptation with the final goal of reducing their vulnerability to climate impacts. A GIZ/LEG/Adaptation Committee guidebook for developing national adaptation M&E systems further explains the building blocks for developing and implementing adaptation M&E systems.⁴⁵ The NAP process provides mechanisms for broader transparency on adaptation – such as acting as a vehicle for operationalising adaptation commitments in NDCs and SDGs and establishing national systems for adaptation – as well as reporting to the UNFCCC's Conference of Parties.

Peru's NAP process is helping establish a national M&E system. As well as developing an overarching theory of change for adaptation, it is building M&E around water, agriculture, forests, fisheries and health. The NDC identifies these thematic focus areas and adaptation goals, results, measures and indicators for each.

Kiribati follows a vulnerability assessment approach to collect data on community vulnerability to environmental, climatic and developmental changes. This allows for aggregation and comparative analysis of vulnerability across sectors and levels. The assessment provides data to develop the M&E system for the NAP process and informs planning by identifying people and places that are particularly vulnerable to climate change.

4.1.3 Climate funds investing in M&E systems

Climate funds are making efforts to invest in establishing M&E to help countries assess adaptation progress effectively. For example, PPCR and DFID are providing technical assistance to help **Mozambique** establish a national M&E framework for assessing adaptation progress against the objectives set out in its ENAMMC. **Samoa** and **Cambodia** are using additional PPCR technical assistance to integrate climate M&E within

The Ministry of Planning, sectoral ministries and development planning frameworks (see Box 1 for details on Mozambique and Samoa).

4.1.4 Subnational to national M&E

Some countries are using subnational M&E systems to get a more granular picture of adaptation progress on the ground. They can use these data to inform national climate M&E and development planning.

Morocco is piloting an adaptation M&E system that is integrated with the country's Regional Information System of Environment and Sustainable Development (SIREDD). Once rolled out to all regions, it will generate the country's annual state of the environment report and inform its NAP.

Kenya developed its national MRV+ system in 2013 and its NAP in 2016. But changes in climate policy and delays in implementing the Climate Change Act

meant it did not use adaptation M&E until 2018. During 2013–2015, the Adaptation Consortium used TAMD scorecards and existing data systems to develop and test the feasibility of a county-level M&E system. This assessment provided robust insights into how subnational governments could measure adaptation benefits. Isiolo County used TAMD to measure how well its government was managing climate risks, resilience and wellbeing. In consultation with local pastoral communities, technical local government staff developed indicators and theory of change pathways based on the impact of climate risks on these communities. The national government drew lessons from the subnational system when it developed its NAP indicators and refined the MRV+ framework, selecting similar parameters to aggregate subnational ones nationally.

Table 6 summarises the different types of national M&E system and the policies that underpin them.

Table 6: Country-level M&E systems and policies underpinning them

COUNTRY	TYPE OF M&E SYSTEM	POLICY/STRATEGY THAT PROVIDES M&E MANDATE
Kenya	MRV to track the results of mitigation and adaptation actions	Climate Change Response Strategy Climate Change Action Plan NPBMF
Philippines	Results-based M&E, focused primarily on evaluating outcomes of country adaptation plans through the RBMES.	The RBMES was designed to measure results of National Climate Change Action Plan implementation
Cambodia	National M&E framework for adaptation	CCCSP Sector action plans
Peru	Establishing an M&E system around thematic areas: water, agriculture, forests, fisheries and health	NAP process
Kiribati	Integrated vulnerability assessment approach	NAP process
Ethiopia	NAP document identifies 18 adaptation options, with associated outcomes and indicators	NAP process
Mozambique	National M&E climate change framework that integrates climate fund indicators	PPCR technical assistance for measuring progress against ENAMC
Samoa	National development framework integrating climate fund indicators	PPCR technical assistance

Key takeaway 1: National country strategies can guide climate fund projects and results areas. Countries are already developing M&E systems to monitor progress against national objectives and climate funds can help them design results areas that are aligned with national RMFs. This will incentivise project proposals that are linked with country targets and priorities as stated in their national plans and strategies. Countries whose key planning documents clearly articulate their priorities and targets provide direction for themselves and clarity for their development partners.

4.2 Using a wide range of parameters to assess adaptation

Several countries have designed and rolled out national-level M&E systems to track progress towards their national adaptation goals. The diversity of approaches to defining indicators reflects different countries' contexts and adaptation priorities. These indicator frameworks have the potential to align with global frameworks.

The countries developing national systems use climate risk indicators that fall into four broad categories, which we explore below.³⁷

4.2.1 Process indicators

These help countries assess how their institutions and governments are managing climate risks, particularly institutional processes and governance mechanisms that directly address climate risks or influence how

people and systems respond to them. Many countries have adopted indicators that assess institutional capacities, mechanisms, policies, plans, legislation.

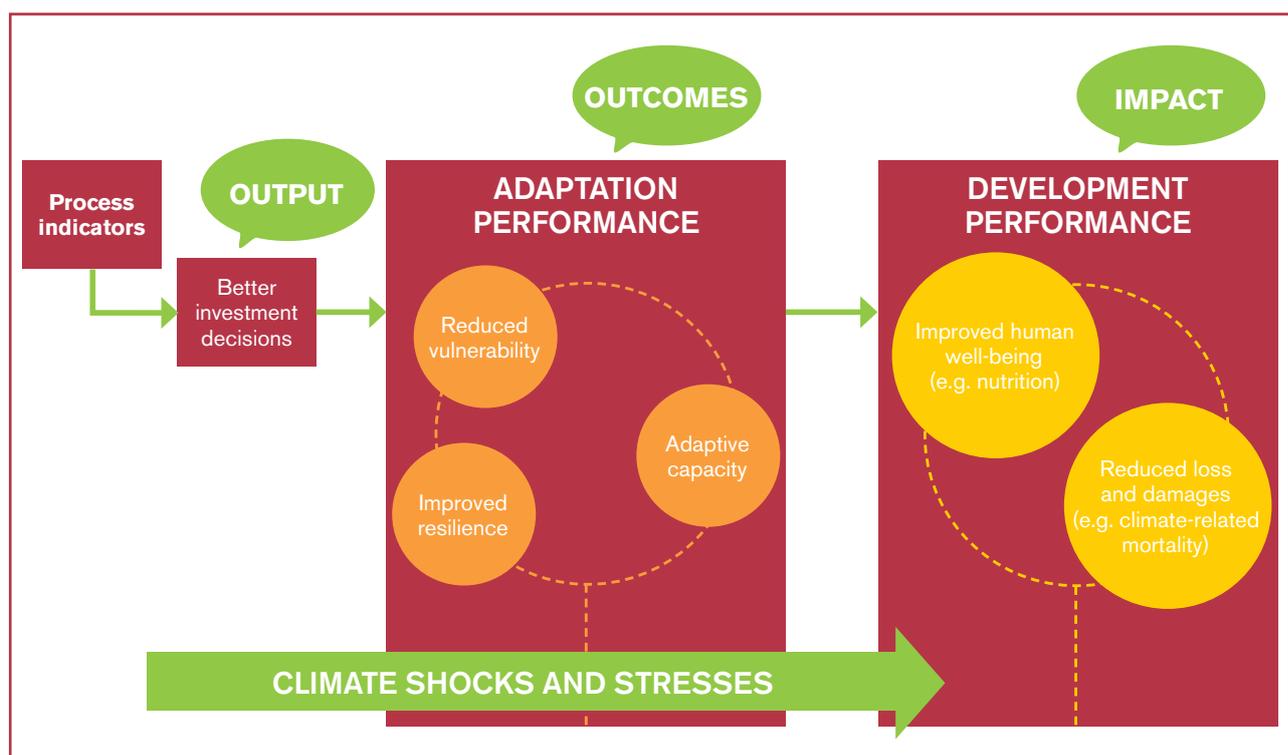
Cambodia, Mozambique and Kenya have developed indicators that assess institutional readiness to manage climate risks in their country, including:

- The status of climate policy and strategies
- Levels of climate integration into development planning
- Functionality of national coordination mechanisms
- Climate information systems, and
- Levels of climate integration into financing.

Drawn from the TAMD framework, they use these indicators to report to international climate funds such as LDCF and PPCR.

Countries use several methods to assess institutional capacity, including qualitative scorecards, participatory workshops, document reviews and focus group

Figure 6: Broad categories of adaptation indicators



discussions at national and sectoral levels to assess the strength of governance arrangements to manage climate risks.

4.2.2 Outcome indicators

These help countries assess how the actions of their institutions and governments influence the vulnerability, resilience and adaptive capacity of people and systems on the ground. Resilience is the ability to continue functioning in the face of shocks and stresses and vulnerability is the susceptibility to being harmed when exposed to an external shock or hazard. Countries use a range of context-specific indicators related to capacities, assets, resources, behaviours, enabling environments and so on to measure resilience in a national context. But many climate funds refrain from assessing long-term outcomes due to difficulties with attributing them to short-term project investments, defining resilience in specific country contexts and identifying metrics for measuring outcomes in terms of reduced vulnerability or improved resilience.

Some national examples offer interesting insights into using proxies of resilience drawn from national databases.

Cambodia has developed a hazard-specific vulnerability index to measure national-level resilience to climate change captured by the indicator “% of communes vulnerable to climate change”. This composite index comprises proxies of vulnerability (development indicators) selected from the national commune database by correlating predictors of vulnerability – poverty, agriculture, health, education and environment – with indicators of hazard-related impacts, such as families affected by storm, droughts and floods. These include proxies of:

- Poverty with a strong correlation with climate impacts, such as: % families with motors; % houses with electricity; % families with water less than 150m from house
- Agriculture: % of irrigated rice farms; number of tractors per 1,000 families, and
- Health: Dengue deaths per 100,000 population.

Morocco’s monitoring system identifies climate vulnerability in core sectors – biodiversity and forests, agriculture and tourism – based on their exposure and sensitivity to climate risks. Using participatory mechanisms to establish theories of change or causal links between sectoral vulnerability and impact, regions establish their indicators based on available data. This ensures low-cost, unduplicated monitoring that builds on the existing SIREDD.

In **Kenya**, local pastoral communities and technical local government staff developed indicators and theory of change pathways to measure resilience of livestock communities at the local level, based on the impact of climate risks on the communities. Many are climate-relevant development indicators that they can use for different purposes. The national government drew lessons from the subnational system, selecting similar parameters when it developed its NAP indicators and refined its MRV+, so it could aggregate subnational ones nationally. The NAP indicators are based on a theory of change that links climate resilience with national development and economic and social transformation. Lessons from subnational evidence also guided national and county governments when tracking the implementation of medium-term and county-integrated development plans.

4.2.3 Long-term development impact indicators

In the longer term, the success of adaptation will be measured in terms of the extent to which it helps secure development goals and maintain and improve human and ecological wellbeing, in the face of climate change that would otherwise undermine both.

We can measure development outcomes in terms of how improvements in resilience and adaptive capacity – and reductions in vulnerability – contribute towards improving human wellbeing and reduce the costs of climate-related stresses and shocks. These include indicators or standard measures of human, economic, environmental wellbeing or avoided health and economic losses, such as “number of families affected by storms, droughts and floods” (Cambodia) or loss and damage indicators (Kenya).

Over long timescales, stability or improvement in development and wellbeing metrics will imply successful adaptation. However, even where adaptation is delivering benefits, these metrics will continue to vary as a result of climate hazards. To understand adaptation trajectories, we need to interpret them in the context of data describing such hazards. For example, stability in development and wellbeing metrics can be the result of effective adaptation in the face of intensifying climate hazards or of ineffective adaptation where hazards are not changing significantly. Climate data can also help us compare the impacts of similar climate hazards over time, enabling us to identify hazards that are comparable in nature and severity using indicators related to changes in precipitation, flood and drought intensity, increase in number of hot days and so on.

Table 7 summarises the different indicators types by country.

Table 7. Examples of indicator types, by country

COUNTRY	PROCESS INDICATORS	OUTCOME INDICATORS	IMPACT INDICATORS
Kenya (national)	62 national-level, process-based indicators measuring institutional adaptive capacity	Human development index National vulnerability index Population living below the poverty line Data source: NAP	% climate-related national loss and damage Data source: NAP
Kenya (sub-national, county-level)	Institutional knowledge or capacity to manage climate risks Use of climate information Extent of climate coordination Budget allocated to addressing climate change issues Integration of climate change into development planning	To measure resilience of livestock communities in Isiolo County: Quantity of livestock Access to water during dry season Months when water is available from constructed water points Prevalence of livestock disease outbreaks per year	To measure wellbeing: Household expenditure patterns Number of families migrating due to climate hazards Number of families receiving food relief
Cambodia	To measure institutional readiness: Status of climate policy and strategies Status of climate integration into development planning Status and functionality of national coordination mechanism Status of climate information Status of climate integration into financing. Data collection method: qualitative scorecards	Resilience/vulnerability indicators % of communes vulnerable to climate change. This is based on hazard specific vulnerability index, which is a composition of indicators related to poverty, agriculture, health, education and environment Data type and source: quantitative data from national commune database.	% of families affected by floods, storms and drought Data type and source: quantitative data from national commune database (collected annually).
Mozambique ³²	To measure institutional and human capacity and explore opportunities for access to technological and financial resources to implement the ENAMMC: Mainstreaming climate change into the national planning process Level of coordination of climate change response Institutional capacity building and knowledge management in climate change response Planning to the local level, taking climatic aspects into account Inclusion of climate change aspects in the budgeting process Data source: qualitative score cards or rosters.	Variations in the climate change vulnerability index aggregated by households. This is a composite index of indicators from following priority sectors: Disaster risk reduction Water resources Agriculture Social protection Biodiversity Forests infrastructure Data type and source: quantitative (National Institute of Statistics)	
Morocco (sub-national)	To measure adaptive capacity: Multi-risk agriculture insurance Global monitoring of the state of crops through an agricultural information system	To measure vulnerability or resilience: Yield of rain-fed cereals Farmers' income in rain-fed areas Data sources: regional database and SIREDD	To measure wellbeing: Regional agricultural GDP Data sources: regional database and SIREDD

Key takeaway 2: Nationally determined indicators can provide a range of parameters to assess adaptation success, particularly to measure long-term outcomes and impacts. The Paris Agreement established the global goal on adaptation of “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the global temperature goal.” Yet there is little consensus around how to assess effective adaptation and the parameters for doing so. But national examples show that countries are developing a range of generic indicators to measure resilience and adaptive capacity. Global RMF indicators can draw from these contextual indicators that countries develop based on climate risks they experience and climate-relevant national development indicators.

4.3 Using existing data sources to reduce additional burden

Linking adaptation M&E and development indicators can promote government buy-in and facilitate data collection and aggregation at national level. The ultimate purpose of adaptation is to secure and improve human wellbeing and development in the face of climate change, which could otherwise undermine and reverse development gains. So, the ultimate measure of adaptation success is the extent to which development performance and wellbeing exhibit stability or improvement under climate change. Several countries are building on national data systems to develop local wellbeing or resilience indicators.

By choosing development indicators that already existed within their national or regional information systems, **Morocco** and **Kenya** increased coherence between national and subnational data processes. Under the Paris Agreement, communication and reporting should build on existing systems and tools to reduce the reporting burden, particularly on developing countries. Integrating subnational and national systems is a good way to harmonise data.

Cambodia is using its national commune database to measure resilience based on proxies of resilience, which are climate-relevant development indicators they collect annually.

Key takeaway 3: Using national repositories or data systems may not provide the detailed granularity offered by primary or project-specific data, but it can be an effective way to collect sustained data on a regular basis.

4.4 Institutionalising climate M&E in national development systems

Many of the nascent climate M&E systems countries are investing in depend on donor support for development and implementation. Financing M&E can be costly for developing country governments, as relevant public authorities often have to invest in coordination, design, data gathering, analysis and information dissemination to report against adaptation performance.⁴⁷

The high costs of M&E systems can inhibit their sustainability. Because monitoring, evaluation and learning efforts in developing countries are often funded through technical assistance and support, they can become unsustainable once funding cycles are complete. Allocating national budget for M&E or institutionalising it within nationally funded country systems can ensure more sustainability. Doing this would require more political backing at country level; by designing and funding systems that are relevant to the country interests rather than their own, donors can help bring this about.

Some countries are making efforts to strengthen climate M&E within their existing systems to ensure more stable M&E systems.

In financial year 2016/17 **Uganda's** Ministry of Finance Planning and Economic Development set out that climate change considerations were to be incorporated into national budget and national standard climate change indicators were to be integrated into the output budgeting (and now performance-based budgeting) and local government assessment tools. The Ministry of Finance, Planning and Economic Development further requires all ministries adequately budget for climate action within their annual budget requests and uses the performance-based budgeting tool to determine standard national development indicators that are monitored and reported across all sectors in the country.

In 1994, **Colombia** introduced a government-wide M&E system to improve the efficiency of public funds and democratise public administration, leading to the establishment of SINERGIA, one of the world's oldest government M&E unit. SINERGIA's mission is two-fold: to help policymakers make evidence-informed decisions and to strengthen the M&E culture in Colombia and Latin America more widely. SINERGIA sits within the National Department of Planning. To safeguard its impartiality, it contracts external consultant to conduct evaluations.⁴⁸ M&E conditionalities attached to funding from multilaterals such as the World Bank and the Inter-American Development Bank helped establish the unit and created of a culture of evaluation. Today, SINERGIA receives funding from the national budget and other national sources such as the Colombian General Royalty System, alongside bilateral project funding.⁴⁸

Mexico has made critical institutional reforms to develop an M&E system for social policy, setting up an independent technical body – the National Council for the Evaluation of Social Policy, or CONEVAL – to manage M&E processes. This agency has high technical capacities and a broad mandate. The federal government was heavily involved in setting up a system for performance evaluation, passing legislation to

provide a modern budget framework and develop sound M&E tools and arrangements. The system relies heavily on a country-led strategy, which increases the likelihood of long-term sustainability. The political mandate and clout that M&E has received in Mexico has ensured its success. Direct mandate from federal government and high-level backing is probably due to the recognised use of M&E results for national planning and budgeting processes.

Key takeaway 4: Investing in integrated adaptation and development M&E systems will allow countries to assess the benefits of adaptation and sustaining climate M&E within nationally funded development M&E. Climate funds can play a key role in funding capacity development for M&E or institutionalising it within national systems by investing in long-term capabilities and M&E system development. Designing systems that are most relevant to countries rather than funders' objectives will also ensure more in-country political backing for M&E.

Linking up climate fund RMFs and country-led M&E systems

5

As countries prepare to assess adaptation progress through the different strands of global M&E processes, it makes practical and technical sense to connect the dots between climate funds' RMFs and country-led M&E approaches. Drawing from our analysis, this section recommends how global funds can align their RMFs with strong country systems and support or nurture less sophisticated, country-level M&E systems. Figure 7 outlines these two broad routes, and the different options under each.

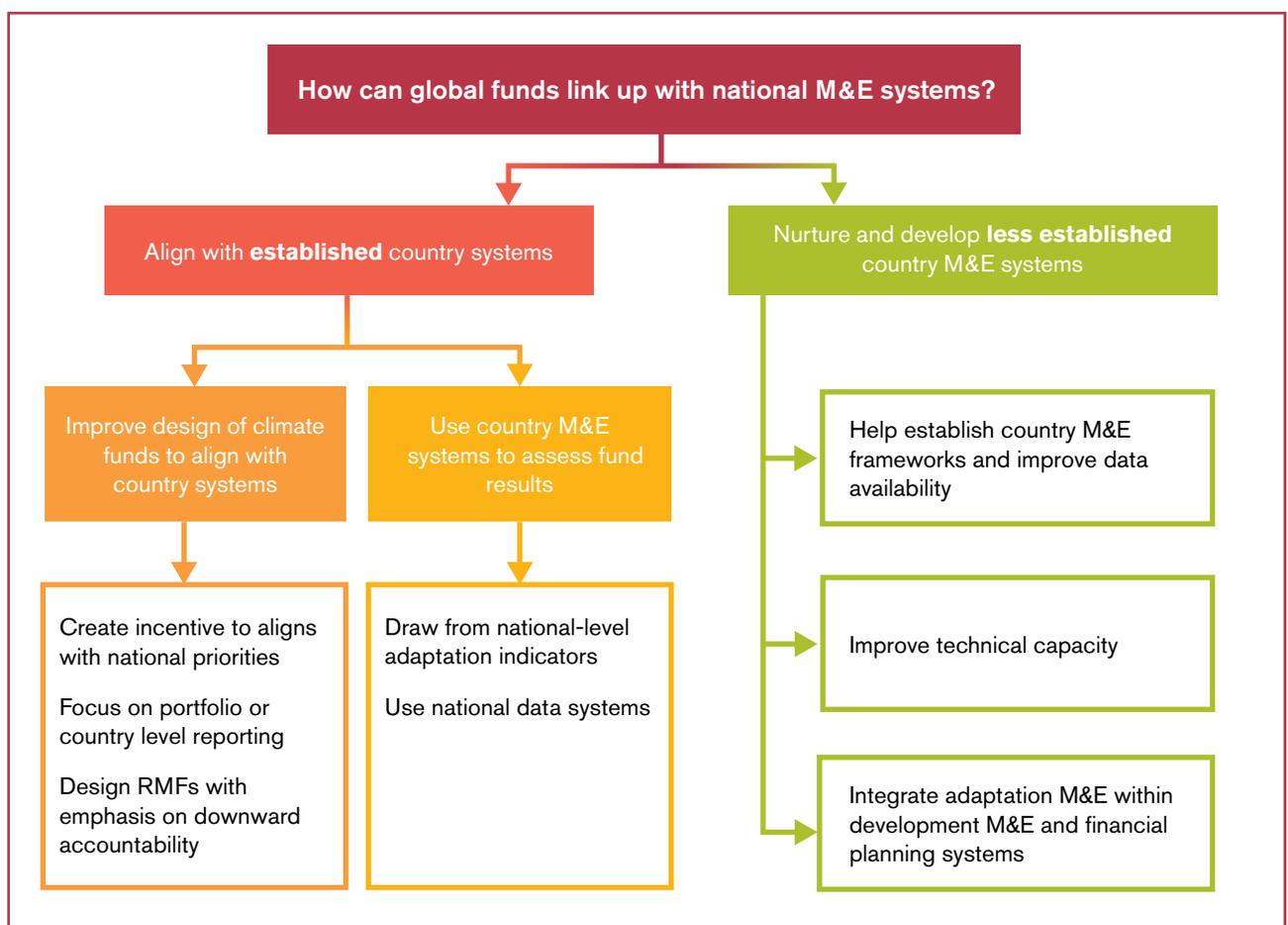
5.1 Aligning with established country systems

Several countries have invested in national climate change strategies, sectoral strategies, action plans and ways to assess adaptation progress. Climate funds can align with nascent systems in these early stages, funding interventions that draw their objectives from country-level results frameworks, plans and strategies and using indicators from existing country frameworks and data sources while providing clear mandates to country focal points for programmatic reporting.

5.1.1 Improving international climate fund design to harmonise with country-led results frameworks

1. Creating incentives to align with country priorities. Our review shows that different funds' RMFs help countries focus their project proposals on results areas based on the climate funds' strategic priorities. Aligning proposals with country priorities instead would allow countries to assess adaptation progress against their own specific goals. Climate fund designs should include proposal development guidelines and criteria for assessing proposals based on alignment with country and sector priorities, adaptation goals and targets as outlined in national climate change strategies, NAPs and NDCs. Aligning and integrating global RMFs with national systems can help countries develop and entrench national climate change M&E systems. This will generate buy-in from M&E implementers and support the integration of climate change M&E across different government ministries, allowing for more accurate reporting against country priorities through context specificity.

Figure 7: Routes for global funds to align with country-led M&E systems



2. **Focusing on portfolio or country-level reporting by mandating country focal points with monitoring responsibilities.** Funds that provide reporting mandates to accredited implementing entities or project implementers tend to incentivise projectised assessment of adaptation rather than programmatic, country-level analysis of fund results. With the right support, country government focal points could play a greater role in ensuring countries own and use the results of climate fund investments. Funds can outline monitoring roles for country focal points and provide guidance and capacity building to help them coordinate M&E processes at different results levels to assess the impact of investments. This will increase alignment with country policies and results by ensuring more ownership and use of results.
3. **Emphasising downward accountability when designing RMFs and using results for better decision making.** Many RMFs focus on upward reporting, how money is spent or how projects are delivered. They rarely use results to improve learning and decision making. This is understandable, given the importance of assessing that project money is generating outputs. However, it leads to an emphasis on output-focused metrics. Building an ethos of using results for downward accountability and better decision making into fund design and principles, on the other hand, would ensure funds measure the long-term benefits of an investment and stop developing project-specific, detached indicator frameworks. National-level indicators cannot always provide a comprehensive picture of results achieved throughout a project cycle, especially during the early stages. As such, we recommend that funds complement portfolio-level results assessed by country governments with project-level reporting. Implementing entities or project management units can use project-level as well as high-level core indicators.
4. **Going beyond short-term project-level outputs to assess long-term impacts.** One way to do this would be for multi-donor undertakings at country level to collaborate with national research institutions, universities, national statistics bureaus and so on to monitor longer-term outcomes and impacts for all donors in their areas of investment.

5.1.2 Assessing fund-level results with existing M&E systems

1. **Using national monitoring systems to inform their own RMF indicators.** Country-led M&E systems are still in their infancy, but they are developing robust indicator frameworks that use nationally determined indicators to provide a range of parameters to assess adaptation success – particularly long-term benefits. Country-led M&E systems are still in their infancy, but they are developing robust indicator frameworks that use nationally determined indicators to provide a range of parameters to assess adaptation success – particularly long-term benefits. National examples show that countries are developing capacities and a range of generic indicators to measure resilience, vulnerability and adaptive capacity, based on the climate risks they experience and climate-relevant national development indicators. Global RMF indicators can and should draw from these contextual indicators and country capacities. The UK's ICF KPI 4 offers a useful approach to measuring resilience which other RMFs could also adopt.
2. **Using national repositories and data systems for sustained reporting.** While this may not provide the detailed granularity offered by primary or project-specific data, it can be an effective way to collect sustained data on a regular basis. Niger, Saint Vincent and the Grenadines and Morocco are all investing in online data portals and sharing protocols, which they could harness for climate fund reporting. Several countries – including Cambodia, Kenya and Mozambique – are building on national data systems to develop local wellbeing or resilience indicators. Others, such as Morocco, are choosing existing development indicators from their national or regional information systems to increase coherence between national and subnational data processes. Governments and climate funds should synergise data infrastructure and monitoring systems and link up M&E systems.
3. Although national systems can inform fund-level assessment, data quality and capacity in developing countries can both be a huge challenge. Funds may also want to assess specific project performance aspects that countries do not collect data on. Bearing these issues in mind, we recommend they invest in building M&R and evaluative capacities at country level and evaluating specific, project-level impacts that country-level results may not unravel. They should also complement portfolio-level results assessed by country governments with project-level reporting.

5.2 Supporting less established country M&E systems

Not all country systems have well designed M&E systems to align with and several barriers to alignment remain. Some have invested in developing M&E frameworks but lack the sustained resources or capacities to operationalise them. Underuse of results information, weak statistical capacities and poor data availability and quality can all hinder the usefulness of a country system. It is also important to guide country governments to adopt a joined-up approach to M&E and put safeguards in place to guarantee the longevity of systems. We therefore recommend that funds:

1. Provide technical assistance to establish M&E frameworks and improve data availability:

Tracking adaptation at the fund or national level requires considerable investment and improvement in national systems, data systems, methodologies and metrics for assessing progress. If funded through outside technical assistance and support, developing countries' M&E efforts can become unsustainable once funding cycles are complete. By investing in national M&E systems, nurturing their data collection tools and developing joint metrics, funds could help countries build databases that can assess adaptation progress across a range of reporting requirements. Harnessing existing national M&E systems by drawing on indicators from country-led frameworks and using well-entrenched and operational institutions and processes as well as existing data sources can help make M&E sustainable. For example, the CIFs are designed to support countries to develop their national systems.

2. Improve countries' technical capacities:

Operationalising M&E processes requires investment in technical capacity, including collecting and maintaining data. Many countries have limited

capacity for gathering, managing and analysing relevant data and little understanding of adaptation, how it relates to development and how to assess it. There must be a concerted global effort to ensure that countries have the technical capacity they need to identify and implement adaptation actions and track their performance. PPCR has considerably invested in country capacity for M&E and several bilateral donors are helping develop M&E capacity at national level. Funds can deploy readiness support to help scale up capacity development efforts.

3. Integrate adaptation M&E within national budgetary systems or M&E for development:

To sustain climate M&E beyond donor-funded assistance, countries will need to integrate M&E for adaptation into existing development structures and processes. They are already developing M&E frameworks to measure and report against global requirements for NDC review, the Global Stocktake, the Sendai framework for disaster risk reduction and the SDGs. Building capacity to identify streamlined data sources, indicators and institutional arrangements that complement existing reporting requirements and synchronise monitoring frameworks will allow them to deliver against global reporting requirements without increasing the reporting burdens. Investing in integrated adaptation and development M&E systems will allow countries to assess the benefits of adaptation and sustain M&E for climate within nationally-funded development M&E. Climate funds can play a key role in institutionalising M&E and funding capacity development within national systems by investing in long-term capabilities and systems. Linking up climate results with national budgeting processes, medium-term financing and expenditure frameworks and national development planning processes can also ensure sustainability of M&E beyond short-term funding.

Endnotes

- 1 OECD (2017) Linking and aligning the results frameworks of provider and country partners. Evidence from the 2016 monitoring round of the Global Partnership for Effective Development Co-operation. See <https://tinyurl.com/y6vnnvfo>
- 2 Development Gateway (10 February 2016) Are government and development partner M&E systems effectively aligned and harmonized? See www.developmentgateway.org
- 3 Global Partnership for Effective Development Co-operation (2016) Nairobi outcome document. See <http://effectivecooperation.org/wp-content/uploads/2016/12/OutcomeDocumentEnglish.pdf>
- 4 OECD (2011) Busan Partnership for Effective Development Co-operation. Fourth High-Level Forum on Aid Effectiveness. Busan, 29 November–1 December 2011. See www.oecd.org/dac/effectiveness/49650173.pdf
- 5 Brooks, N and Rai, N (2018) Benefits of investing in national monitoring and evaluation systems. Webinar. IIED, London
- 6 Bourous, S (2017) Morocco: adaptation monitoring and evaluation as part of the Regional Information Systems, GIZ, Eschborn.
- 7 Holvoet, N, Gildemyn, M and Inberg, L (2012) Taking stock of monitoring and evaluation arrangements in the context of poverty reduction strategy papers: evidence from 20 aid-dependent countries in sub-Saharan Africa, ODI, London
- 8 Development Gateway (26 January 2016) Are results data from government M&E systems effectively collected, analyzed and used? See www.developmentgateway.org
- 9 IIED (2018) How bottom-up M&E insights can inform national adaptation planning and reporting. See <http://pubs.iied.org/pdfs/17488IIED.pdf>
- 10 CIF AU (2017) PPCR operations and results report.
- 11 OECD (2014) Measuring and managing results in development co-operation: a review of challenges and practices among DAC members and observers. See www.oecd.org/dac/peer-reviews/Measuring-and-managing-results.pdf
- 12 Wood, B, Kabell, D, Sagasti, F and Muwanga, N (2008) Synthesis report on the first phase of the evaluation of the implementation of the Paris Declaration, Copenhagen.
- 13 CIF (2017) Report on PPCR monitoring and reporting stocktaking review. See <https://tinyurl.com/ycpkalrh>
- 14 CIF (2016) PPCR monitoring and reporting toolkit. See <https://tinyurl.com/y2swhxmc>
- 15 Roehrer, C and Kouadio, K (2015) Monitoring, reporting and evidence-based learning in the Climate Investment Fund's Pilot Programme for Climate and Resilience
- 16 CIF (2018) PPCR monitoring and reporting toolkit. See <https://tinyurl.com/y85ufgov>
- 17 Kouadio, E (8 June 2017) PPCR monitoring & reporting (M&R) stocktaking review. Presentation, CIF Administrative Unit. See <https://tinyurl.com/yxkt8dxb>. Also CIF (2017) Report on PPCR monitoring and reporting stocktaking review (summary). PPCR/SC.20/4.
- 18 IIED (28 October 2014) The Tracking Adaptation and Measuring Development (TAMD) Framework. See www.iied.org/tracking-adaptation-measuring-development-tamd-framework
- 19 Neha Rai, Nick Brooks, Tin Ponlok, Neth Baroda and Erin Nash (2015). Developing a national M&E framework for climate change: Tracking Adaptation and Measuring Development (TAMD) in Cambodia. Research Report, IIED, London. <http://pubs.iied.org/10118IIED>
- 20 It should also be noted however, that beyond the RMF, the CIFs have recognised there is still a requirement for evidence-based learning and recently established the Evaluation and Learning (E&L) Initiative to undertake range of strategic and demand-driven evaluations.
- 21 A useful initiative that seeks to build longer-term M&E capacity within countries is the Centers for Learning on Evaluation and Results (CLEAR), a global M&E capacity development programme that brings together academic institutions and donor partners to foster the collection, measurement, analysis and subsequent use of robust evidence in developing countries' policy and programmatic decision making. See www.theclearinitiative.org
- 22 GCF (October 2018) The IEU's independent review of the GCF's results management framework: a summary. *DEvalNote no 2*. GCF Independent Evaluation Unit. See <https://tinyurl.com/lydhtokus>
- 23 GCF (2018) Independent review of the Green Climate Fund's results management framework. Final Report. GCF Independent Evaluation Unit. See <https://tinyurl.com/ybqre45a>
- 24 GCF (2014) Decisions of the board: eighth meeting of the board, 14–17 October 2017. See GCF/B.08/45, Annex VIII.

- 25 GCF (2018) Readiness and preparatory support guidebook.
- 26 GCF. Funding proposal template. Sections E.2.4 & E.4.
- 27 OECD (2002) Evaluation and aid effectiveness No. 6. Glossary of key terms in evaluation and Results-based management.
- 28 GEF (2007) Results-based management framework. See GEF/C.31/11.
- 29 GEF (2014) Updated results-based management framework for adaptation to climate change under the Least Developed Countries Fund and the Special Climate Change Fund. GEF/LDCF.SCCF. 17/05/Rev.01. Washington, DC: GEF. See <https://tinyurl.com/yaydxhh7>
- 30 Williams, A (2016) Options for results monitoring and evaluation for resilience-building operations. World Bank and GFDRR. See <https://tinyurl.com/y7w9dka6>
- 31 IIED (28 October 2014) Tracking Adaptation and Measuring Development (TAMD) framework. See www.iied.org/tracking-adaptation-measuring-development-tamd-framework
- 32 GEF IEO (2017) Review of results-based management in the GEF. See www.gefio.org/sites/default/files/ieo/evaluations/files/rbm-study-2017_2.pdf
- 33 UK ICF. Summary of ICF key performance indicators. See <https://tinyurl.com/y7ssmd4r>
- 34 Brookes, N, Aure, A and Whiteside, M (2014) Final report: assessing the impact of ICF programmes on household and community resilience to climate variability and climate change. See <https://tinyurl.com/y8cs8bty>
- 35 Bahadur, A, Peters, K, Wilkinson E, Pichon, F, Gray, K, Tanner, T (2015) The 3As: tracking resilience across BRACED. ODI, London
- 36 Fisher, S and Anderson, S (2018) Developing meaningful local metrics of climate adaptation: learning from applying the TAMD framework at local scales. In: Christiansen, L, Martinez, G and Naswa, P (eds) *Adaptation metrics: perspectives on measuring, aggregating and comparing adaptation results*. UNEP DTU Partnership.
- 37 Vallejo, L (2017) Insights from national adaptation monitoring and evaluation systems. OECD and IEA. Climate Change Expert Group paper no 2017(3). See <https://tinyurl.com/yaldsfrf>
- 38 UNFCCC (2003) Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention, paragraph 35.
- 39 LEG (2012) Technical guidelines for the national adaptation plan process. http://unfccc.int/resource/docs/publications/publication_ldc_nap_techguidelines.pdf
- 40 Kato, T and Ellis, J (2016) Communicating progress in national and global adaptation to climate change. OECD/IEA Climate Change Expert Group Papers, No. 2016/01, OECD Publishing, Paris. See <http://dx.doi.org/10.1787/5jlww009v1hj-en>
- 41 Ricardo-AEA / LTS International / baastel (2012) NPBMF and MRV+ system design, road map and guidance report.
- 42 Government of Kenya (2013) Kenya National Climate Change Action Plan 2013–2017
- 43 MacClune, K, McGinn, C, Asif, F and Venkateswaran, K (2017) Climate resilience in the Philippines: monitoring and evaluation approaches. Guidance paper. ISET-International.
- 44 National Climate Change Committee (2014) The Cambodia Climate Change Strategic Plan (CCCSP) 2014–2023. Royal Government of Cambodia.
- 45 GIZ & IISD (2015) Developing national adaptation monitoring and evaluation systems: a guidebook. See www.adaptationcommunity.net/?wpfb_dl=268
- 46 Republic of Mozambique National Council for Sustainable Development (2014) National Climate Change Monitoring and Evaluation System (SNMAMC). See <https://tinyurl.com/ycqozpk4>
- 47 Barrett (2014) Cost and values analysis of TAMD in Kenya, IIED, London
- 48 Cassidy, C and Tsui, J (2017) Global evidence policy units. Sistema Nacional de Evaluación de Gestión y Resultados, COLOMBIA: SINERGIA, ODI.

The Paris Agreement provides a foundation for the most robust climate change transparency system to date, requesting countries to provide information on their progress to adaptation targets. Linking up country-led and global M&E systems can be mutually beneficial. It would help streamline workflows and reduce reporting burdens, minimise waste and win 'buy-in' from the people responsible for making sure these systems work. This paper examines the M&E approaches of major climate funds and national frameworks to draw lessons for aligning country systems and fund-level results frameworks in order to assess adaptation success more effectively.

IIED is a policy and action research organisation. We promote sustainable development to improve livelihoods and protect the environments on which these livelihoods are built. We specialise in linking local priorities to global challenges. IIED is based in London and works in Africa, Asia, Latin America, the Middle East and the Pacific, with some of the world's most vulnerable people. We work with them to strengthen their voice in the decision-making arenas that affect them – from village councils to international conventions.



International Institute for Environment and Development
80-86 Gray's Inn Road, London WC1X 8NH, UK
Tel: +44 (0)20 3463 7399
Fax: +44 (0)20 3514 9055
www.iied.org

Funded by German Federal Ministry for the Environment (BMU)

On behalf of:



of the Federal Republic of Germany

On behalf of the German Federal Ministry for the Environment (BMU), the Support Project for the Implementation of the Paris Agreement (SPA) implemented by GIZ GmbH strengthens the capacities of partner countries to successfully implement their climate policy, reduce greenhouse gases and increase adaptive capacity, and thus helps them to contribute to achieving the long-term objective of the Paris Agreement. SPA provides a link between Germany's international climate policy and development cooperation.



Knowledge
Products